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

#### **Contributors**

Port of Spain (Trinidad and Tobago). Public Health Department.

### **Publication/Creation**

[Port of Spain] : G.P.O., [1938]

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# ANNUAL REPORT

OF THE

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

FOR THE YEAR

1938

BY

RODERICK MARCANO, M.D. (Lond.); M.R.C.P. (Lond.); D.P.H. (Lond.).

MEDICAL OFFICER OF HEALTH.

TRINIDAD:
PRINTED BY THE GOVERNMENT PRINTEE,
GOVERNMENT PRINTING OFFICE,
PORT-OF-SPAIN.

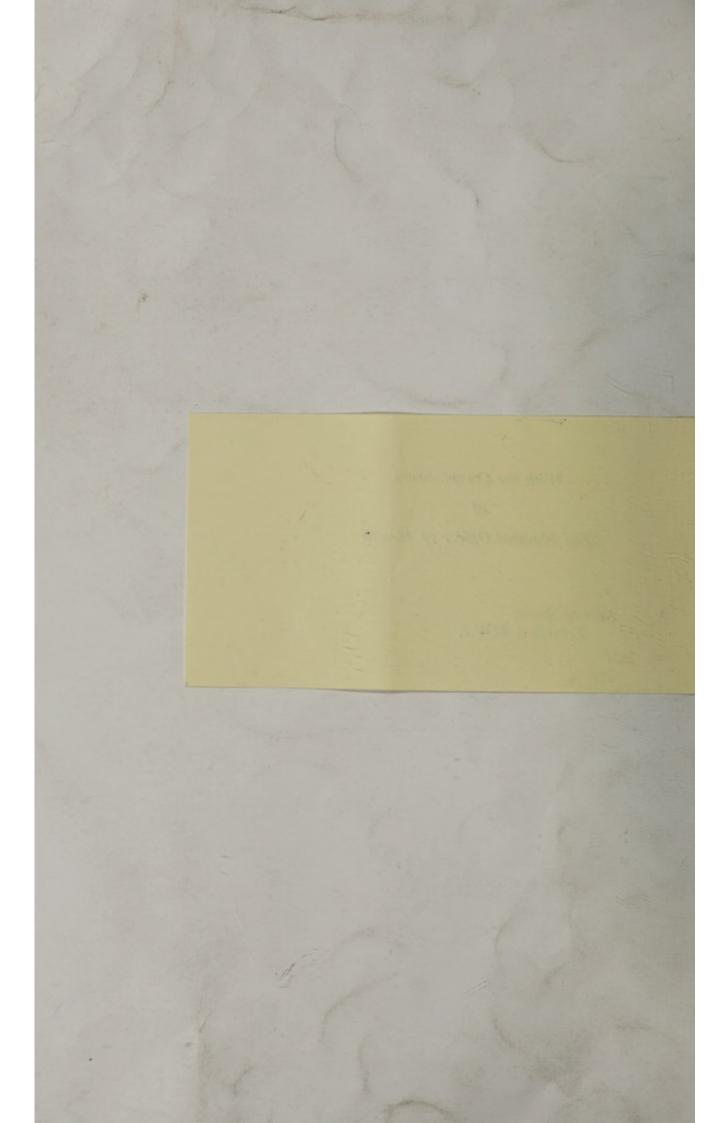


With the Compliments

of

The Medical Officer of Health

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





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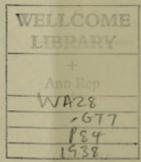
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Public Health Department of the City of Port-of-Spain

FOR THE YEAR

1938

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

1937-38.

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### Deputy-Mayor.

COUNCILLOR THE HON. MICHAEL A. MAILLARD.

#### Aldermen.

HON. A. A. CIPRIANI.

H. A. DE FREITAS.

GASTON JOHNSTON, K.C.

Alfred Richards.

MURCHISON RIGSBY.

### Councillors.

N. K. ABLACK.

V. D. GORMANDY.

Dr. T. P. Achong.

MISS AUDREY JEFFERS, M.B.E.

A. P. T. AMBARD.

J. E. Lai-Fook.

R. J. M. BLACKETT.

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L. A. PUJADAS.

A. GOODING.

L. B. THOMAS.

L. WALCOTT.

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

1987-88.

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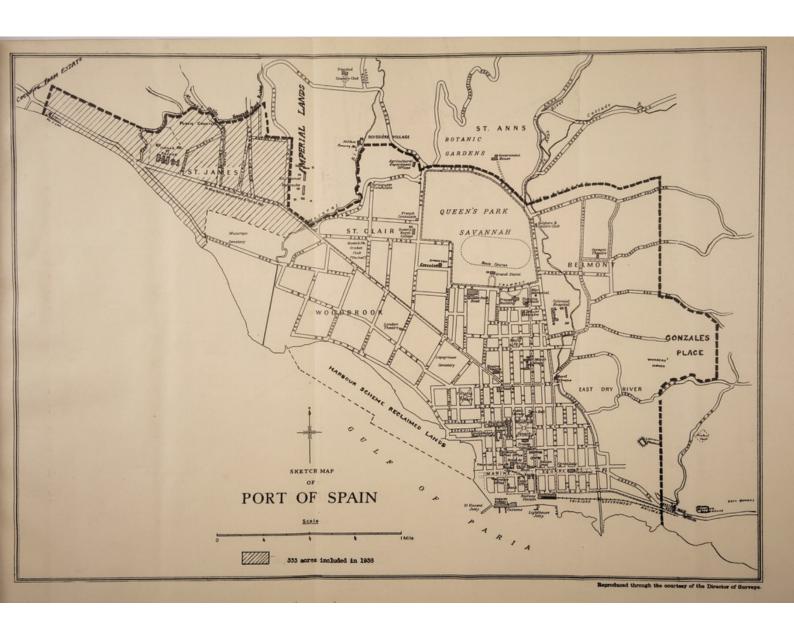
City of Port-of-Spain showing the newly included St. James Area.

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Public Health Department, 35, Frederick Street, Port-of-Spain, Trinidad, B.W.I.

21st August, 1939.

### 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, 1938.

The year under review is entitled to a special niche in the annals of the Local Authority by reason of at least four outstanding events:

(a) The transfer, on the first day of May, of the Public Health Department to more comfortable and commodious quarters next door to the Town Hall at No. 35, Frederick Street.

For a long time previously, it was realised that the old quarters on the ground floor of the Town Hall, which had been the seat of the Department since 1917, were inadequate to meet the demands of an expanding City and a growing population with all the requirements of increased sanitary work and additional staff incidental thereto. Besides, the old quarters harboured certain sanitary defects as regards light and ventilation which called urgently for remedial measures.

At No. 35, Frederick Street there is ample room for the staff of the Public Health Department which now number 116: the Medical Officer of Health, the Sanitary Inspectors, and the rest of the technical staff being housed in the main building, and the different units—anti-rat, anti-mosquito, and anti-bat—occupying the buildings in the yard.

(b) Early in May the bye-laws with respect to the sale of foodstuffs approved by the Central Board of Health on the 9th day of August and confirmed by the Governor in Executive Council on the 24th day of August, 1937, were put into force.

By the end of the year under report, good progress had been made in securing compliance with the provisions of these bye-laws, and a satisfactory number of hotels, restaurants, cookshops, provision shops, parlours, milk bars, &c., and a still larger number of itinerant vendors had sought registration and were in sufficiently good sanitary state, as laid down in the bye-laws, as to receive certificates of registration.

Much more, however, remains to be accomplished and the work of rounding up those who have failed to apply for registration continues, work which is greatly hampered by the almost universal lack of understanding of the reason for the various requirements demanded by the provisions of the bye-laws.

Compliance and co-operation, I am happy to state, when once the necessary explanation has been vouchsafed, are given both freely and wholeheartedly.

(c) On 26th May the St. James Area Improvement Ordinance (No. 17 of 1937) authorising the inclusion of the St. James and part of the Cocorite districts within the limits of the City was proclaimed, and on 1st June—

the day on which the Ordinance commenced and came into operation—the Department undertook its share of activities in this area. A programme of major works has been laid down and at the time of writing is actively under way. As the work of drainage and street widening proceeds the sanitation of these districts advances, but it is obvious that until the necessary works have been completed, effective sanitary control cannot be achieved, a fact that becomes apparent when the vital statistics for the St. James and Cocorite sub-district, as presented in the monthly reports, are compared with those for the other sub-districts of the City.

The inclusion of St. James adds a population of 10,233 and an area of 333 acres to the Urban Sanitary District making Port-of-Spain the most

thickly populated city in the West Indies.

(d) It is with great gratitude and delight that I record the fact that a measure designed to rid the Colony in general and the area of the Local Authority in particular, of the scourge of bad and insanitary housing conditions, with special reference to the needs of the working classes, has been placed on the statute book. I refer to the passing by the Legislature of the Slum Clearance and Housing and the Town Planning and Regional Planning Ordinances. This event took place on the 9th day of December, 1938.

The enforcement of these Ordinances calls for the establishment of a Planning and Housing Commission on whom devolves the duty of carrying out the provisions of these two Ordinances. Last year I drew attention to the fact that the problem of providing suitable dwellings for the members of the working classes with the consequent abolition of the barrack system was an urgent one demanding speedy solution. The necessary machinery for tackling this problem has been set up by these two Bills and I am in the happy position of being able to state that an encouraging start has been made.

The state of the public health during 1938 was, as far as the City was concerned, quite satisfactory, the only unusual occurrence being the prevalence of a mild epidemic of chicken pox which was responsible for 142 cases, the largest number since 1934 when 201 cases were notified. This is the second time in the last ten years that this infectious disease has attained epidemic proportions.

The birth rate was 30.69 per 1,000, a figure a little above the average—29.17 per 1,000—for the preceding ten years.

The death rate, in spite of the inclusion of the St. James Area which once more brings the House of Refuge within the City's limits, was 16.70 per 1,000, 0.83 per 1,000 below the average—17.53 per 1,000—for the preceding ten years.

The infantile mortality rate was 78.73 per 1,000 live births, a low figure and well below the average—107.59—for the preceding ten years.

Deaths from notifiable infectious diseases numbered 225 with a death rate of 2.66 per 1,000 population and a case rate of 5.45 per 1,000 population—again lower than the average for the preceding decennium.

The killing diseases — cancer and other malignant diseases, cardiac and vascular diseases, Bright's disease and nephritis, diseases of the nervous system including cerebral haemorrhage—still continue unabated to take their toll of human life, and though there has not been any marked increase in the total number of deaths attributable to these chronic system diseases as a whole, the death rates for the individual diseases, with the notable exception of that certified to Bright's disease and nephritis, still continue to exhibit that slight upward trend that has been noticeable for the past ten years.

So much for the past.

As regards the future, the prospects of the Urban Sanitary District of the City of Port-of-Spain widening its boundaries, increasing its population, maintaining and even improving the satisfactory state of its public health, are very bright indeed.

The picture of the City as Queen City of the Caribbean, with its wide streets and open spaces, its substantial buildings of concrete—public as well as private—its outlying suburbs increasingly urbanised, its population in large measure industrialised, with ocean liners docking alongside its new deep water wharf, and aircraft landing at its sea and air bases, is certainly an alluring one; but it is a picture not without certain potential dangers from a public health point of view.

The path of progress is not always a steady, uninterrupted, upward one; it is often strewn with temporary setbacks, the result of conditions and circumstances which are almost inevitable to its forward march.

It is the duty of a pilot to point to the shoals on which the ship may be wrecked so that timely and effective action may be taken and a catastrophe averted.

It is a fact that, with the exception of a mild outbreak of alastrim in 1926 when 16 cases occurred, this Colony has been for the best part of half a century, free from other dangerous infectious diseases.

With the advent of cargo ships from infected ports alongside the new quays and of aircraft plying their trade to and from infected countries where these diseases occur with disturbing regularity, an added danger threatens the City if, by some unfortunate chance, an infected rat or mosquito were to find its way inland and were to succeed in transmitting its infection to the countless hosts of its non-immune brethren which are known to exist in the various parts of the sanitary district.

The Local Authority, already alive to this potential danger, will, I know, give its sanction to any legislative action that it may be necessary to take to protect the community, and will, I feel sure, lend its fullest support to further measures designed to exterminate the vectors of these dread and alarming diseases.

I have the honour to be,

Sir.

Your obedient Servant,

RODERICK MARCANO, Medical Officer of Health. 

#### NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

Since the writing of my last report, certain changes involving the size and population of the Urban Sanitary District have occurred. The size of the City is now two thousand three hundred and seventy-two (2,372) acres due to the inclusion of the St. James Area with an area of three hundred and thirty-three (333) acres and the population is now estimated to be eighty-eight thousand six hundred and ninety-eight (88,698) souls distributed in the following way:—

Sub-District.	ESTIM	ATED PO	PULATION	PART I	Estima	ted Mean	Population.
City Proper				***		31,955	
St. Clair	***	***		***		1,477	
East Dry River	***	***	***	***	***	18,984	
Belmont Woodbrook		***	***		***	14,975	
*St. James		100	***	100	***	10,233	
Julia Julia							
Total		-	****			88,698	THE NAME AND ADDRESS OF

As included, the sub-district of St. James may be described concisely as the prototype of a typical rural sanitary area such as can be found in any of the outlying areas of the Colony. A special committee of the City Council appointed in December, 1927, to consider the advisability of asking Government to include St. James within the limits of the City agreed, in both its minority and majority reports, that St. James was a nuisance to the health of Port-of-Spain by reason of the backward state of its sanitation.

The majority report stated "We are of opinion that in principle it would be very desirable that St. James by reason of its close proximity to Port-of-Spain should be included within the limits of the City so as to secure that it should come under the same sanitary control. But we find that St. James is in a backward and very insanitary state, with no street lighting, no properly paved streets, with few and generally defective drains, numerous cesspits and many other conditions". It further added that "It would entail a very great deal of expenditure to bring St. James to the level of sanitation now enjoyed by the existing suburbs of Port-of-Spain".

It is not unfair to state that the above description truly depicts the state of St. James on the 1st June, 1938, when it was finally included within the limits of the City, and it might, with advantage, have added that the population of the district is predominantly East Indian in type engaged to a large extent in the rearing and milking of cows for the supply of the needs of the City.

No description of the St. James Area, no matter how cursory, should fail to make mention of certainly its finest public building and, undoubtedly, one of the most imposing edifices in the whole City of Port-of-Spain. I refer to the new House of Refuge.

Occupying the southern portion of a parcel of land about 19 acres in area at the foot of the Fort George Hill, it consists of a main block running east to west and four subsidiary buildings to the north-east for housing the inmates, in addition to Matron's quarters and Porter's lodge. The main block comprises five wings all connected up by means of corridors of moderate width. Two of these wings are for the accommodation of the male inmates and two for the female. On the ground floor of the centre wing is situated the Matron's office and immediately to the north of this lie the concert hall, the kitchen, and the Steward's office. The four subsidiary buildings to the north-east house (a) two wards, male and the male, of 30 beds each for mental patients transferred from the St. Ann's Mental Hospital, (b) a ward of 12 beds for babies who are either the offspring of leprous parents at Chacachacare or the victims of blindness from hereditary or congenital diseases—this ward is used occasionally as an Isolation Ward for cases of infectious diseases—and (c) the infirmary. In all there is accommodation for 700 aged and infirm.

In a building otherwise perfect for the purpose in hand, it is inevitable that time would disclose a few deficiencies. Of these the most serious is the contrivance whereby a drain of fairly wide proportions is made to pass underneath the extreme eastern and western wings. By reason of the obvious difficulty attendant on the thorough cleansing of these drains, a collection of foul, stagnant water is almost a constant finding. The kitchen, also, is of the antiquated type and is dark and somewhat badly ventilated.

The first batch of patients arrived on the 12th February, 1930, and by the end of March of that year all the inmates of the old House of Refuge were transferred.

The Bill, as its title "The St. James Area Improvement Ordinance, No. 17 of 1937" indicates, authorises the Port-of-Spain Corporation to carry out certain works for the improvement of the area at a total estimate of about three hundred and forty thousand dollars, such cost to be borne by Government, landowners, and the Port-of-Spain Corporation in the proportion of 161:107:72, respectively. It is calculated that this scheme will take a period of three years for its entire completion by which time the St. James Area, with its wide roads, properly paved drains, with its modern, up-to-date, solid buildings which have already begun to replace the old insanitary shacks and hovels, will be one of the finest suburbs of the City of Port-of-Spain.

At the time of writing the work is well under way and the improvements already effected in that area have served to change its face to a considerable extent.

Assuming, as a result of the inclusion of St. James, a shape more triangular than rectangular, the limits of the Urban Sanitary District are now defined in the following way:—

Starting at a point on the seacoast line to the immediate east of the Cocorite Dump, the western boundary runs northwards for about a quarter of a mile, abutting in its course on the lands of the Cocorite Farm owned by the City Council.

Turning north-easterly, the boundary next traces its course to the Fort George Road, thence along the Murray's and Bourne's Road ravines to the western limit of lands owned by the Imperial Government, along the northern side of Patna Street, the eastern side of Long Circular Road, the northern side of the Western Main Road to the commencement of the latter at the Maraval River Bridge. At this point there is an abrupt turn northwards along the course of the Maraval River to a point exactly opposite the St. Clair Pumping Station, then continuing eastwards along the Saddle Road, the boundary skirts the Circular Road to a line one hundred yards north of and parallel with the Belmont Circular and Valley Roads and so on to its eastern limit.

The eastern boundary is a line which starts from the seacoast near the Eastern Dump, goes due north across the south-eastern corner of the old Powder Magazine (St. Phillip's School), through upper Laventille Road, including the whole of Gonzales Place, and terminates at the eastern end of the northern boundary.

The southern boundary is, of course, the harbour and seacoast line.

#### SANITARY CIRCUMSTANCES.

#### Water.

The same six sources I referred to in my previous report, viz.: the Maraval River, the St. Ann's and Cascade Rivers, the Cocorite and Diego Martin Wells, and the Central Water Scheme continued to supply the inhabitants of the City and of certain contiguous districts with a regular supply of potable water drawn, as usual, directly from the rising mains. The daily supply averaged about 60.91 gallons per head, but it is important to bear in mind that this figure includes amounts supplied for trade purposes, for flushing street drains, public lavatories and for other similar public sanitary services.

As I have stated before, the river water from the St. Ann's and Cascade Rivers is filtered and chlorinated; and that from the Maraval River is first chlorinated and then filtered; and the well water from the Cocorite and Diego Martin Wells is chlorinated only, the purity of the water being such that preliminary filtration is not considered a necessity.

Three hundred and sixty-five samples, i.e. one sample a day, of the mixed water supply taken from taps at the Government Bacteriological Laboratory were subjected to the usual bacteriological examinations for B. coli by Dr. J. L. Pawan, Government Bacteriologist. The results are expressed in tabular form in the table below:—

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	4	1.10	361	98.90

The taking of weekly samples of raw and filtered and chlorinated waters at the different sources continued, with the following results:—

#### Bacteriological Examination of Water Supply.

#### Weekly Samples giving Positive Results.

Date of Sample. Where Derived.				Result of Examination. Remarks.
		St. Ann's Reservoi Ariapita Stream		B. coli present in 50 to 1 c.c After chlorination. B. coli present in 50 to 1 c.c Before chlorination.
November,	8 8 11	Maraval Cocorite St. Clair Cocorite Cocorite St. Ann's Reservoi		B. coli present in 100 and 1 c.c After chlorination. B. coli present in 100 c.c After chlorination. B. coli present in 100 and 1 c.c After filtration. B. coli present in 100 and 1 c.c Before chlorination. B. coli present in 100 c.c., absent Before chlorination.
		St. Ann's Reservoi Diego Martin		in 1 c.c.  B. coli present in 100 and 1 c.c Before chlorination.  B. coli present in 100 and 1 c.c Before chlorination.

The Local Authority wishes again to express its gratitude to Government for the excellent service rendered by Dr. J. L. Pawan on whose shoulders lies the responsibility of keeping a check on the measures adopted by the Municipality to secure and maintain the highest possible standard of purity.

The promptness with which he communicates any untoward results to this Department enabling measures directed to the elimination of pollution to be instituted with the least possible delay, is a source of great satisfaction to us,

An event of outstanding importance which may have a far reaching effect on the water supply

of the City, as far as the sources are concerned, occurred in June last year.

It was all the outcome of an application for water to the City Engineer by an owner of lands in the Four Roads district, who, at the time, was in the process of establishing a housing estate in a building area adjacent to the Cocorite Wells. Fearing that there was a potential danger to the purity of the Cocorite water supply in allowing house building on a large scale in its immediate vicinity, the application was refused and the Chairman of the Central Board of Health informed. Buildings operations were stopped and a meeting of the Central Board of Health summoned.

At the meeting held on the 7th October a resolution moved by Dr. S. M. Laurence and seconded by Dr. J. R. Dickson "That the Governor be requested to appoint a Committee upon which the City Council of Port-of-Spain and the Central Board of Health will be represented to consider and report on the entire water supply of the City of Port-of-Spain with a view to eliminating any dangers inherent in the present system of supply" was adopted. At the same meeting, in accordance with a suggestion put forward by the City Council, an area around the Cocorite Wellswas demarcated within which no building of any kind was to be permitted, pending the report of the Committee which was to be appointed.

The Committee, consisting of the Hon. R. S. Mackilligin, O.B.E., M.C., Inspector of Mines and Petroleum Technologist (Chairman), Dr. H. A. Gilkes, Deputy Director of Medical Services, Hon. H. A. Tyler Smith, A.M.I.C.E., A.M.I.M.E., Director of Works and Transport, representing the Central Board of Health; and Captain the Hon. A. A. Cipriani, Mayor of Port-of-Spain, Alderman Gaston Johnston, K.C., and Councillor Dr. T. P. Achong representing the City Council, was appointed on the 13th of February, 1938, and at the time of going to press they were still continuing their deliberations.

The report of this Committee is anxiously awaited.

#### Rainfall.

A comparison of the rainfall readings, as gauged at the two stations, St. Clair Experimental Station and Police Headquarters, where these readings are taken regularly throughout the year, shows that 1938 was a wetter year, on the whole, than 1937—the average rainfall being 73.66 inches, as compared with 53.11 inches. The month during which there was the greatest rainfall was November, the same as in 1937.

Monthly Rainfall gauged at Two Stations in Port-of-Spain with Averages for the years 1938 and 1937

				YEAR 1938.		Secretary of the second	YEAR 1937.		
Month			Sı	TATIONS.		Sr	ATIONS.		
et aquali			St. Clair. Police Headquarters.		Average Rainfall.	St. Clair.	Police Headquarters.	Average Rainfall.	
January			3.50	2.26	2.88	3.62	4.03	3.83	
February			2.63	0.52	- 1.58	1.24	0.44	0.84	
March			3.95	1.80	2.87	0.70	0.30	0.50	
April			6.47	3.06	4.77	2.59	2.23	2.41	
Мау			6.79	6.07	6.43	0.20	0.08	0.14	
June			5.87	3.85	4.86	4.33	2.93	3.63	
July	***	***	9.65	7.24	8.44	7.09	7.21	7.15	
August	0.4		10.47	7.84	9.16	8.69	5.68	7.18	
September			11.61	6.16	8.88	5.41	3.14	4.28	
October		794.	7.49	3.82	5.66	4.17	4.30	4.23	
November	1.10		10.32	8.11	9.21	12.08	10.66	11.37	
December		1	11.73	6.10	8.92	7.88	7.22	7.55	
Total			90.48	56.83	73.66	58.00	48.22	53.11	

# Comparison of Seasonal Rainfall, Infectious Diseases—Notifications and Deaths—and Deaths at Different Ages for 1938 and 1937.

		YEAR	1938.		YEAR 1937.				
Rainfall, Notifications and Deaths.	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 Infectious Diseases :	18.53	3.71	55.13	7.87	7.72	1.54	45.39	6.48	
Notifications	. 236	47.2	248	35.4	196	39.2	272	38.8	
Deaths	. 78	15.6	147	21.0	110	22.0	149	21.2	
Deaths under 1 year	93	18.6	111	15.8	111	22.2	126	18.0	
Deaths at ages 1-5	. 25	5.0	44	6.2	22	4.4	31	4.4	
Deaths at all ages	458	91.6	952	136.0	483	96.6	686	98.0	

These figures show that during the rainy season—June to December—notifications as well as deaths, not only from infectious diseases, but also from all causes, were higher, on the average, than during the months of the dry season—January to May.

#### Drainage.

Certain weak points in the drainage system of the City to which I drew attention in my report for the year 1937 were either entirely eliminated or were in process of being got rid of, at the close of the year under review.

The completion of the drainage system of the lands reclaimed as the result of the Deep Water Wharfage Scheme, which entailed the union of the drains of the latter with the City's main drains in the Woodbrook area north of Wrightson Road, got rid of the accumulations of stagnant water in these latter drains which were such a noticeable feature in this area towards the end of 1937 and which was the cause of no end of worry to the Department by reason of the persistent complaints of flooding of premises, of offensive odours, and of the breeding of mosquitoes.

An agreement having been arrived at between Government and the City Council whereby Government undertook to raise the level of the roads and the City Council the level of the contiguous premises, work, directed towards the permanent abatement of the recurring nuisance of collections of foul, stagnant water at the bottom of Sackville and Charles Streets and the adjacent area of Wrightson Road and London Street, was begun and by the end of the year had made great strides. At the time of writing this report, the work has been completed and the abatement of the nuisance an accomplished fact. No stagnation has since occurred and no complaint of any kind has reached the Department.

Every year in the programme of extraordinary works, the laying down of new roads, and the construction of main drains, all directed towards providing easy access to premises and to improving drainage, particularly in the outlying districts of the City, are set down. The year 1938 was no exception to this general rule and a number of new roads and main drains in the higher reaches of the Belmont District, in the East Dry River District, and in Gonzales Place were constructed.

The Maraval River, however, still remains untouched and, needless to say, still continues to provide a wide variety of nuisances along its banks—stagnant pools, offensive odours, and occasional flooding. These nuisances are kept in check by the Maraval River gang whose main function is the oiling of stagnant pools to get rid of mosquito larvae, admittedly a measure of a very temporary nature.

The writer is happy to be able to state that the paving of the bed of the Maraval River from Boissiere Village No. 1 to the sea has been set down in the "Five Year Plan" as necessary work to be undertaken in connection with anti-malaria and sanitation schemes and to be completed within the five-year period. This work is to be done by Government in co-operation with the City Council, but no appropriations for this specific purpose have yet been made.

#### Sewage Disposal.

The sewering of Woodbrook is now complete. Two main sewers convey the sewage of this area to the Mucurapo Pumping Station—one along Wrightson Road to which premises south of Ariapita Avenue are connected, and the other along Ariapita Avenue and Colville Street which serves premises north of Ariapita Avenue. This latter sewer is continued along Tragarete Road, Dundonald Street, then eastwards along Oxford Street, ending for the time being at the Dry River.

When the sewering of Belmont is undertaken—and there are signs that this project has not been relegated entirely to the limbo of things forgotten—the intention is to extend this sewer into the Belmont District and to let it serve as the main discharging sewer for that district.

Woodbrook has now been declared a sewered area and a fair number of premises had, by the end of the year under review, established the necessary connections with the water carriage system and had got rid of those offensive, overflowing, often mosquito-breeding cesspools for which Woodbrook had long been famous, particularly in the rainy season, it being no unusual happening for sub-soil water to reach to within two or three feet of the surface. The new outfall from the Mucurapo Pumping Station to which I made reference in my report of last year has been completed and the nuisance of faecal deposit on the foreshore, to which the old outfall by reason of its somewhat superficial location gave rise, has been abated. Situated well below the level of low tide, it is 24 inches in diameter and is carried on piles to a distance of 2,040 feet or 848 feet further out to sea.

In the unsewered portions of the City privy cesspits still abound; but whenever possible, and particularly in the case of new buildings designed to replace old, insanitary barracks, the Department insists on "septic tanks" with soak-away pits being installed. A gradual improvement is thus taking place, but nothing short of a comprehensive sewerage scheme for the whole of the Belmont and East Dry River Districts will suffice to meet the pressing needs of public health in these areas.

The East Dry River District and certain parts of the Belmont District still remain the most unhealthy of the sanitary districts in the urban area, judging from the number of notifications of infectious diseases received from, and the deaths certified to, these districts.

# 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	2,925	3,285	3,556	3,060	2,928	2,828	3,905	4,772	4,763	4,357	4,476	3,626	44,481

#### Scavenging and Refuse Disposal.

No outstanding change in the system and routine of scavenging in the Urban Sanitary District took place during the year under review, though it is true to say that improvements in one or two directions were noticeable.

The defects in the system to which I made reference in my last report are still apparent, though the detailing of a motor driven truck to collect, in the afternoon, refuse dumped at the various street corners by those women scavengers whose duty it is to collect refuse from premises on the hills in the East Dry River and Belmont Districts, has got rid of those unpleasant, often offensive and invariably scattered, heaps of refuse which, coupled with full and overflowing public dustbins, presented, in those areas, an afternoon spectacle that it is difficult to forget. I still do not consider the employment of women scavengers to head down refuse, collected from individual premises in broad galvanized pans, to central points convenient for the scavenging carts, absolutely satisfactory in these particular districts, where the lanes are narrow and the hills steep, and I repeat that a small motor driven vehicle would meet the case much more efficiently than obtains at present.

Again, the same unsightly and insanitary spectacle of dustbins full to overflowing with offensive refuse, parked either in front or to the sides of dwelling houses, still greets the stranger all day long on Sundays in the lower down-town business section of the City and this is aggravated by the inevitable littering of the streets with rubbish which is the direct outcome of limited yard spaces and the lack of dustbin accommodation, which I have just referred to.

The remedy is so obvious that it is hardly worth while repeating. Dwelling houses, in addition to streets, in the quadrangle Park Street to South Quay and Piccadilly Street to Richmond Street should be scavenged on Sundays, and the writer is not satisfied that the expense which such a course would entail, would be prohibitive.

One more dump has been added to the City by the inclusion of the St. James Area. The small Cocorite dump receives the refuse of the St. James and Cocorite Districts and controlled tipping here along the lines of the Bradford System has occasioned no difficulties.

The south-eastern dump has now become the main dump, refuse from the greater part of the City being tipped here. A properly drained, metalled road has been laid down and rubbish carts can get right on the edge of the dump in the rainy season with no fear of getting stuck in the mud. Reclamation is proceeding directly southwards as well as westwards.

The Woodbrook dump was in fine working order during the year under review and dumping proceeded evenly and uninterruptedly. There was no breakdown during the rainy season and complaints of fly nuisance were fewer than in the previous year. As a matter of fact, complaints of fly nuisance during the year were almost invariably traced to insanitary conditions resulting from the imperfect disposal of rubbish and refuse in the yards of individual premises. The keepers of cowsheds and the owners of flower gardens were the culprits in a large number of cases, manure being kept on the premises in a manner conducive to the breeding of flies. The use of fresh manure as a fertilizer for kitchen gardens, flower gardens, &c., is becoming rather widespread in the Urban Sanitary District and in view of the fact that fly nuisance in these circumstances, even under the very best conditions, is almost inevitable, the writer is of opinion that legislation prohibiting the use, within the City's limits, of fresh uncured manure will have to be intra fuced in the not too distant future.

#### SANITARY INSPECTION OF THE DISTRICT.

# A .- Premises and Occupations controlled by Bye-laws and Regulations.

#### BUSINESS PREMISES.

### (1) Dairies and Milk Shops.

The problem of dairies and milk shops is one that is engaging the very earnest attention of the Department, and the anxiety that I confessed to in my report for the year 1937, far from undergoing any diminution, has, if anything, been increased by events of the year under review. Though the number of cowshed licences issued was three (3) less than that of the previous year, the number of dairyman's licences issued to milk shops, milk bars, and refreshment parlours showed a definite increase.

DAIRIES ANI Sub-District.	D MILE	SHOPS.	Cowshed	Licences	Issued.
City Proper (sewered)	***	***	 	3	
East Dry River (unsewered)		***	 	1	
Belmont (unsewered)	***	222	 	6	
Woodbrook (unsewered)			 	13	
St. James (unsewered)	***		 ****	1*	
Total	3000	6	 	24	

#### DAIRYMAN'S LICENCES.

No. of Dairyman Do.	do.	do.	to cowk milk	shops,	and oth milk b	er purve ars, and	yors of milk refreshment	parlours		26 29
										-
Total		THE REAL PROPERTY.		0.930		200	- 1 Sept 50		19/6	55

Milk, both in its raw form and in the form of made-up milk mixtures like "Cremco", "Bosco", &c., is being consumed in larger and larger quantities within the City's limits. At least one large new milk bar and a number of smaller ones sought licences during the year and the number of parlours which sought dairyman's licences in addition to registration certificates as parlours, was legion.

This milk, in large measure, comes from the outlying districts like San Juan, Barataria, Aranjuez, Maraval, Diego Martin, that are within easy reach of the City, but where typhoid fever is prevalent to a marked degree and where, in spite of the greatest vigilance on the part of sanitary inspectors, the standard of sanitation often falls short of the irreducible minimum. When consumed at home, as was the custom in the past, the milk is brought to the boil, cooled and then drunk; but, as served in milk shops, milk bars and parlours, with the prominent exception of one firm which was the first in the field and which maintains a plant that turns out a very satisfactory pasteurised product, as judged by bacteriological standards, it is fresh cows' milk from the outlying districts, delivered in bulk to the owners of these shops and further contaminated by the handling that is inevitable in the bottling process even when done under the very best conditions, that is sold to the general public.

That no trouble, so far, has arisen is due to the fact that a massive dose of infection has not yet been delivered to the consumers sufficient in amount and virulence to start up an epidemic and, to a lesser extent, to the precautionary measures, such as, bottling in an enclosed cupboard protected by wire netting, immediate transference of the bottled milk to a cooler or frigidaire, &c., &c., insisted upon by the Local Authority; but sooner or later there will be a flare up unless universal pasteurisation is resorted to. The writer would like once again to draw the attention of the Municipality to this aspect of the milk supply of the City, and the question of the establishment of a pasteurising plant, large enough to ensure that all the milk consumed in the City is pasteurised, ought seriously to be considered.

City and Out-	districts.		Milk	Vendor's Licences.	Badges.
Port-of-Spain	****	****		55	48
Out-districts:					
San Juan and S	anta Cr	uz		86	111
Maraval and Di	bé			17	23
St. James	****	****		20	23
Diego Martin				10	10
St. Ann's and C	ascade		- 11	3	7
Four Roads		****		3	3
Laventille			100	3	3 -
St. Joseph	****			2	2
Long Circular F	Coad		****	ī	1
1					
Total	C229 (1)		1000	200	231

Since inclusion of St. James within the City from June, 1908.

Tuberculin testing of dairy cattle, a necessary preliminary to the granting of cowshed licences, shows that tuberculosis is a rare disease in the cattle of the City and of the outlying districts.

TUBERCULIN TESTING OF DAIRY CATTLE.

Out-districts. City. No. of Cows Tuberculin Tested with 799 687 Negative reaction

(2) Slaughterhouses. The new bye-laws with respect to the management of the Port-of-Spain Abattoir made under the provisions of Section 160 (3) of the Public Health Ordinance, Chapter 98, were passed by the City Council on the 23rd June, 1938, and received the approval of the Central Board of Health on the 7th day of October, 1938. At the end of the year they were awaiting the confirmation of the Governor in Executive Council and this was done on the first day of February, 1939. Publication in the Royal Gazette took place on the 23rd February, 1939.

These bye-laws were designed to secure changes which practice and experience deemed to be

necessary, and represent a distinct advance from a sanitary point of view on the old bye-laws.

Bye-law 25 in particular will secure the cleanliness and uniformity of apparel that has in the past been a feature conspicuous by its absence. It reads as follows: "Every licensed slaughterman shall wear a distinctive overall and washable cap of a type to be decided upon by the Manager and approved by the Mayor.'

(3) Bakehouses. The majority of the forty-one (41) bakehouses on the Register are housed in premises which fall far short of what modern standards of hygiene demand and with the additional power conferred by the new bye-laws with respect to the Sale of Foodstuffs which were passed by the Governor in Executive Council in August, 1937, a vigorous campaign is being pursued to secure that suitability and cleanliness of premises, persons, appliances, and of raw material which would ensure the delivery to the general public of a baked product that conforms to the highest sanitary requirements. Most of the buildings used as bakehouses are very old structures of antiquated design which were never constructed as such, but have been adapted for baking purposes in a way that can only be described as roughshod and primitive. Suffice it to say that there is a Statutory Notice on every one of these premises and the result has been that at least one large bakehouse has been constructed and another large one reconditioned in its entirety, in keeping with the bye-laws.

## PREVALENCE OF RATS AND MOSQUITOES.

Anti-Rat Measures.

With the inclusion of the St. James Area within the limits of the City, another gang consisting of a driver and five (5) men has been added to the anti-rat unit, making a total of six (6) gangs consisting of six drivers and twenty-two men.

Out of a total of 8,770 rats destroyed during the year under review 818 were caught in the

t. James Area in the seven months, June to December.

	Destr	ruction	a of	Rats	and	Mice.		-	-			-	-
Rats and Mice Pestroyed.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Rats caught by Trappers Rats bought Total Rats destroyed Mice caught and destroyed	139	9 105 8 750	119 739	537	609		86 776	975	940	626	68	580 72 652 214	997

Examinatio	n of l	Rats	by G	overn	ment	Bac	teriolog	ist.			-	-	-
Examination of Rats.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Rats examined for Plague	777	7 750	730	537	608	638	768	975	940	616	740	639	8,718
Italia Caminina and Late Tile	ï	i	9		ï					10		13	52

Anti-Mosquito Measures.

No undue prevalence of mosquitoes was apparent during the year. The complaints received were such as we are accustomed to receive the year round, waxing in the rainy season when there is a greater likelihood of pools of rain water after a downpour remaining stagnant for a sufficiently long time to enable the breeding of mosquitoes to take place, and waning in the dry season when that contingency hardly ever arises. The genus found is, in the large majority of cases, Aedes— Aedes acgypti being far and away the commonest species—, then members of the culicine family—culex fatigans being a common breeder in watery cesspits— and on the outskirts of the City at its eastern and western end a few anopheles-anopheles tarsimaculatus being the most important malaria carrying mosquito in this vicinity

Seven (7) gangs consisting of seven (7) drivers and 22 men are engaged in doing this work all the year round; house to house inspection is routine and the gang in any particular district works under the direct supervision of the sanitary inspector of the district. Seven (7) "Specials" also known as the "Tin Gang" assist the sanitary inspectors in the outlying district, particularly those, whose district extends on to the hills in the east and north of the City, their special duty being to rid premises of empty milk tins, pieces of broken crockery, old motor car tyres, coconut shells, old

bottles, and such like places where mosquitoes are likely to breed.

				odent		teration or trace commondent								-
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total Entire City— 12 months.	St. James only— 7 months— June to Dec
Number of inspections and re-inspections of premises	ons 2,804	2,762	3,099	2,929	3,116	3,514	3,839	3,682	4,185	4,227	4,114	3,263	41.534	1,035
Occasions found in good order	2,647	2,642	2,980		2,947	3,363	3,641	3,418	4,013	4,098	3,967	3,147	39,646	757
Defective Eaves Gutters	157	120	119	146	691	151	861	264	172	129	147	911	1,888	278
Defective Eaves Gutters containing water	33	22	27	36	49	28	14	34	37	30	41	39	417	10
Defective Eaves Gutters containing water with larvae	4	19	17	25	38	54	37	99	89	35	29	42	493	91
Occasions on which mosquito larvae were found in tubs, antiformicas, tin cans, &c	8	25	109	67	87	472	464	658	295	365	394	282	3,378	1,924

Larval Index.

Total.	149,980	3,871	2.58
city, St. James excluding only. St. James. (12 months) (7 months)	15,384	1,940	12.61
City, excluding St. James. (12 months)	134,596	1,931	1.43
0000	-	1	
	en)	Sanita	
	and Ladderm	on premises (	
	ectors	found	
	No. of Inspections (Sanitary Inspectors and Laddermen)	No. of occasions Larvae were found on premises (Sanitary Inspectors and Laddermen)	
	Inspections (	of occasions Larvae were inspectors and Laddermen)	arval Index
	No. of	No. of In	Larval

# B. Premises used for Human Habitation, Houses let in Lodgings, Common Lodging Houses.

The shortage of housing accommodation for members of the working classes has, since my last report, become much more acute and still continues to be the burning question of the day.

It is true, as I have mentioned before, that two Bills designed to remedy this unsatisfactory state of affairs have been passed—the Slum Clearance and Housing Ordinance and the Town Planning and Regional Planning Ordinance-and, as provided in these ordinances, a Housing Commission consisting of a chairman and ten other members has been set up; it is also common knowledge that it is the intention of Government to spend about \$4,800,000-a million pounds-on this project, this sum being considered the minimum necessary to provide for the erection of 6,000 to 6,500 workers' homes, including the necessary preliminaries of land acquisition and road construction; it is also well known that Morvant Estate, Laventille, the site which has been decided upon eventually as being the most suitable for the building of houses for workers in the City, has been extended by the acquisition of surrounding lands, that it is being opened up, and that roads are being laid down.

But the outstanding fact remains that up to the time of writing this report not a single workers'

home has been built.

In the meantime the elimination of the barrack system and the reconstruction of insanitary premises go on. The building boom which started in real earnest two years ago is still continuing and gradually the City is being transformed, family cottages and, to a lesser extent, two-room houses for members of the poorer classes making their appearance in greater and greater numbers. the greater provision of open spaces about buildings to secure increased sunlight and more adequate ventilation, building space within the City is being seriously curtailed, and where before twelve families used to be housed, there is now room for just four. The result is that dwellings in the up-town residential quarters and in the outlying districts of the City, originally built to house one family, are being used to house two or three families and the barrack system, with its well known attendant evils, is shifting its venue from town to suburbs.

It is hardly necessary to comment on the fact that such a result is the direct outcome of the shortage of housing accommodation and that it is inevitable, so long as additional houses, in places away from the built up areas to accommodate the excess population thrown out of lodging by the

reconstruction of insanitary premises, are not provided.

The writer, in the face of the circumstances he has detailed above, to avoid undue hardship, has been forced to go easy in the campaign against insanitary buildings, and though statutory notices are still being served, every facility in the way of extensions of time within which to comply, in the

holding up of notices, &c., &c., is being granted.

The writer sincerely hopes that the erection of houses on Morvant Estate, tenders for which have already been invited by the Chairman of the Housing Commission, will start in the not too distant future and that some relief of the hardship now being borne by the working man, as a result of the high rentals for very inadequate and often insanitary housing accommodation will soon be forthcoming.

Housing.

Manual Commission of the Commi		Resulting from Service of Nuisance Notices.	Voluntarily on Owners' part.	Total.
Barracks and other Premises reconstructioned Barracks demolished and Sites left vacant Barracks vacated	ted or	187	64 I 	251 12 8
Total		206	65	271

#### C .- Food.

Next in importance only to housing as a public health problem is the question of the food that is being offered for sale to the general public within the limits of the City. There can be no denying the fact that there is a good deal of leeway to be made up before the food supply of the City can

be considered absolutely satisfactory from a point of view of cleanliness and purity.

It cannot be said that there is a lack of legislation necessary to deal with the problem, for with the passing of the bye-laws with respect to the Sale of Foodstuffs in the City of Port-of-Spain in August, 1937, aided by the old bye-laws with regard to shops, restaurants, &c., and with the appointment of two special Food Inspectors, one for the control of shops, parlours, restaurants, &c.

food sold indoors—, the other for the control of markets, cowsheds, itinerant vendors—food sold outdoors— the necessary machinery has been set up. But the enforcement of the law is not the easy matter that it seems, because in the first place where there is a lack of understanding of the principles on which the law is based, a resort to prosecution will never secure the desired end, and in the second place, the dire indigence of the large majority of house to house and wayside vendors positively prevents them from obtaining the necessary desiderata for securing clean and wholesome food, as laid down by the bye-laws. The writer is impressed with the fact that informal talks on the reasons why protection of food from contamination by flies, dirt and dust is such a necessary procedure, are of much more lasting benefit and are more efficacious in securing compliance with the law than threats of prosecution or actual prosecution itself. And so, while the past year has quite definitely brought encouraging improvement, the campaign will have to go on, slowly but surely, persuading here, threatening there, resisting here, yielding there, until a better foundation both educationally and economically has been established. The result is certainly worth the energy expended, but one must be prepared to meet with many setbacks and above all one must be endowed with a large sense of humour. The diversity of people, of time and place, and of conditions, by whom and under which food is prepared and sold in the City of Port-of-Spain is a truly remarkable phenomenon!

On the 7th of May the bye-laws with respect to the Sale of Foodstuffs came into force and by the end of the year 445 shops and other places where food is sold, and 241 conveyers and itinerant vendors of food applied for registration. Of these latter, 114 received badges.

# SALE OF FOODSTUFFS BYE-LAWS.

9th May-31st December, 1938.

Registration	of	Shops	and	other	Places	where	Food	is	Sold.
--------------	----	-------	-----	-------	--------	-------	------	----	-------

Shops and Parlours				1111		79
Cookshops and Parlours					1	7
	****	****				109
Shops and Groceries		*****		****	****	183
Parlours and Restaurants		2000	****	****	****	6
Wine Shops		****	****	****	****	1
Ice Cream Shops			****	****	****	1
Aerated Water Factories	****			2012		5
Fruit Shops		****	****			4
Rum Shops		1000	100	****		5
Vegetable and Fruit Shop	s	****	****	****	****	14
Confectionery Factories		****	****	****	100	6
Bread and Cake Shops		****		****		3
Tea Shops		****	****	****	100	3
Fry Shops		****	****		****	14
Bakehouses		****	****		****	7
Meat Shops and Groceries		****		1111	****	1
Ice Cream and Palet Fact	tories	****	****		****	2
Hotels and Restaurants	****	****				1
Coffee Shops				****		3
Chocolate Factories		****				1
Breakfast and Tea Room	s	****	****	****	****	1
						455

#### Registration of Vendors.

Bread and Cakes		****	****	****			2
Confectionery			1000	****	****		
Cooked Food, in	cluding Fries,	Souse,	&c.	****	****		1
Fresh Fish		****		****		****	1
ce	****	****		****			
ce Cream and P	alets	****		****			1
Meat			****		****		
Peanuts				-	****		
weet Drinks		-		****			2
egetables, Gree							10
Miscellaneous							3
arscendinous	****	****	****	****	****	****	_
							24
To of Radone in	and to itinor	and mand	ore				11
No. of Badges is:				De	a larma	****	-
No. of Oyster Ve	endors mense	u under	sale of O	ysters by	e-laws	****	Pal

#### UNSOUND FOOD.

The amount of unsound food offered for sale in the various groceries, shops, parlours, restaurants, cookshops, &c., &c., of the Urban Sanitary District, as discovered by routine inspection on the part of sanitary inspectors, is far too high, and this applies particularly to goods of the tinned variety.

The fact is that already prepared foods of the tinned variety are finding a more and more ready sale, not only in the City, but throughout the whole Colony, and more and more tinned foods are finding their way into the Colony without the slightest attempt at control at the ports of entry by public health authorities. On this latter point, last year I referred to the lack of enabling legislation, urging that the necessary powers should be taken without delay. I regret to have to state that the matter stands in the same unsatisfactory state that it has been for years.

Food unfit for human consumption keeps coming regularly into the Colony, and the number of firms—particularly small firms of no great repute—which find Trinidad a ready market for their foodstuffs, often of poor quality and inefficiently tinned, is legion.

Why more outbreaks of food poisoning do not occur is, very likely, due to the fact that the old custom of heating, of even cooking, again, the contents of cans and tins, in large measure, still prevails.

I repeat that the usual practice of going round the various groceries and shops of the City, seizing and destroying hundred of blown tins of meat and fish, after an outbreak of food poisoning, involving the death of one or two people and the illness of a dozen or two more, has occurred, finds no established place in the science and art of modern preventive medicine.

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

Article	es.			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Tomato Paste		tins						2	3		5					7.
Sausage		tins								18						
Sardines		tins		***			171	71	41	58	49	7	71	11		
Contectionery		pound	8					***	***	***			200	***	***	
Currants		packag	es				***		***	***	***	***	***	111	***	-
Mayonnaise		bottles		***	3					***			***		***	1
Amelia		tins			1			222	***	200		***	***	***		
Tomato Juice		tins			1				***			***	***	***	***	
		tins			1				***	***	***	***	111		***	
Sardine in Tomato	Paste	lins			444						***	***				14
Bananas	***	barrels							***	***	-2.21		***	***		
Cakes	44.			***						***						
Sugar Cakes							8		***		100					1
Herring in Tomato	Sauce	tins			7.						241					
Lunch Tongue		tins						. 55						* ***	***	
Corned Beef		tins									3					
Peas		tins							7		1					0000
Condensed Milk	2	tins							1	***				22.0		
Cooked Ham		tins								27						2
Smoked Herring	(0.31)									10.77			***			
Potted Meats		***									14			1		1:
Roast Beef											1					10 33
Petit Pois				18						T			1			-
Herring													-	1		5
Lobster				1 728	3 770									. 1		
Salmon		tins		1000			. 5	2	1		2	2	. 1			

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

Butter Ham	 	pounds tins	324 21	Sardines Sausage	 	tins	
				Section 1997			

#### VITAL STATISTICS OF THE DISTRICT. Comparative Summary of Vital Statistics.

Unless otherwise stated rates are per 1,000 population. 1938 1937 1931 1936 1921 Area of City in Acres (pastures and open 2.372 1.793 1.793 1,990 2.039 spaces included) 75,680 77,044 88,698 Estimated Mean Population 70,462 61,386 37.4 37.7 Density of Population (persons per acre) 34.2 39.3 38 2,295 2,273 2,591 1.687 1.956 Total Live Births 30.69 30.33 29.50 Birth Rate 27.28 27.76 171 170 197 Still Births registered Still Birth Rate (per cent. of Live Births 7.41 8.67 6.60 9.13 7.11 registered) 892 737 Marriages registered 534 622 659 8.71 9.57 10.56 8.64 8.33 Marriage Rate .... 1,410 1,659 1,024 1.169 Total Deaths .... 1.223 16.70 15.17 26.83 17.36 13.53 Death Rate 1,181 28 1,271 1,104 733 Natural Increase of Population 204 222 149 237 287 Deaths under one year Infant Mortality Rate: Deaths under one year 78.73 113.50 64.92 104.26 170.12 per 1,000 Live Births .... Death Rates: 3.36 Notifiable Infectious Diseases .... 3.05 6.21 3.14 1.52 1.90 1.57 1.84 2.49 Pulmonary Tuberculosis .26 .09 .26 .10 .07 Tuberculosis (other forms) .09 .19 1.25 .16 .08 Enteric Fever .83 1.97 1.28 1.10 Pneumonia (all forms) .56 .32 .97 .41 Bronchitis .... .... 1.36 .05 05 Diphtheria .... .02 .0337 27 .89 .54 .17 Malaria .34 .26 .21 .23 .21 Syphilis 1.91 .40 .69 .50 .78 Diarrhoea and Enteritis .04 .06 .26 .06 .04 Influenza .08 .03 .03 .03 .15 Ankylostomiasis .89 2.09 .65 1.14 Bright's Disease and Nephritis 2.23 Diseases of the Heart and Blood Vessels 2.22 2.35 2.65 2.60 Diseases of the Nervous System including 1.41 1.70 1.15 1.00 1.31 Cerebral Haemorrhage .88 .83 .78 Cancer and other Malignant Diseases .... .63 .64

		900		100	1		100		Compa	rative	Summary	of Vi	tal Statist	ies	
				Pop	1928. pulation 56,383	Pop	1929. pulation 17,356	Pop	1930. pulation 58,703		1931. Population 70,462	Pe	932, opulation 71,066	Por	1933. sulation 2,005
	Port-of-Spain.			Num- ber.	Rate per 1,000 population.	Num- ber.	Rate per 1,000 population.	Num- ber.	Rate per 1,000 population.	Num- ber.	Rate per 1,000 population	Num ber.	Rate per 1,000 population	Num- ber.	Kate pe 1,000 populatio
Total Births		****	****	1,868	28.14	1,895	28,13	1,935	28.16	1,956	27.76	2,021	28.44	2,167	30.1
Total Death		4000	****	1,476	22,23	1,503	22.31	1,308	19.04	1,223	17.36	1,125	15.83	1,304	18.1
Marriages				636	9,58	670	9,95	610	8.88	622	8,83	660	9,29	658	9.1
Natural iner	ease or degrouse	****		+392		+392		+ 627	****	+733	2000	+896		+863	
Deaths of In	fants under 1 yea	ır		238	*127.41	250	*131.93	233	*120.41	222	*113.50	207	*102,42	264	*121.8
Deaths from	Notifiable Infect	ious Disc	nases	228	3.43	222	3.30	229	3.33	221	3.14	182	2,56	236	3.2
Do.	Enteric Fever	***		14	0.21	13	0.19	16	0.23	11	0.16	- 4	0.06	10	0.14
Do.	Pulmonary Tube	erculosie		141	2.12	129	1.02	141	2.05	134	1.90	112	1.58	129	1.79
Do.	Tuberoulosis (oth	her form	s)	19	0,29	24	0.36	14	0,20	7	0.10	10	0.14	21	0.20
Do.	Pneumonia (all f	(orms)	****	51	0.77	56	0.83	55	0.80	65	0.92	55	0.77	76	1.00
Do.	Diphtheria	****		3	0.05			1	0.01	2	0.03		****		
Do.	Encephalitis Let	hargica		****		-		1	0.01			1	0.01		
Do.	Acute Poliomyel	itis						1	0.01	2	0.03		1	334	-
Do.	Malaria		****	57	0.86	38	0.56	40	0.58	38	0.54	36	0.51	15	0.2
Do.	Dysentery		****	20	0.44	23	0.34	11	0.16	18	0.26	12	0.17	10	0.14
Do.	Ankylostomissis		****	11	0.17	4	0.06	1	0.01	2	0.03	1	0.01	1	0.01
Do.	Syphilis			31	0.47	36	0.53	30	0.44	18	0,26	26	0.37	22	0.31
Do.	Influenza	-		4	0.06	8	0.12	9	0.13	4	0.06	3	0.04	9	0.12
Do.	Diarrhoes and E	Interitis		63	0.95	53	0.79	58	0.84	55	0.78	56	0.79	42	0.58
Do.	Bronehitis	****	****	71	1.07	77	1.14	67	0.98	68	0.97	51	0.72	51	0.71
Do.	Cancer and othe Diseases	or Malig	nant	48	0.72	53	0.70	-					1	TAI	
Do.	Cardiac and Vas Diseases		-	214	3,22		0.79	33	0.48	45	0.64	44	0.62	57	0.79
Do.	Bright's Disease				9.22	267	3.96	194	2.82	183	2.60	175	2.46	182	2.53
Do.	Nephritis Diseases of the	Nervous	Sys.	120	1.81	82	1.22	94	1.87	80	1.14	71	1.00	69	0.96
	tem includ Haemorrhaj	ing Cere	ebeal	112	1.69	136	2.02	99	1.44	81	1.15	82	1.15	107	1.49
Still Births		****	-	158	18.46	158	+8.34	138	+7.13	139	<del>†</del> 7.11	160	17.92	200	†9,23

"Infant Mortality Rate-Per 100 Live Births.

for the years 1928 to 1938.													
Po	1934. pulation 73,071	Po	1935. pulation 74,301	Po	1936. opulation 75,689	Pe	1937. opulation 77,044	‡Po	1938 pulation 88,698.	precedir	rage for ng 10 years 8-1937.		
Num- ber.	Rate per 1,000 population.	Num- ber.	Rate per 1,000 population.	Num- ber.	Rate per 1,000 population.	Num- ber.	Rate per 1,000 population	Num- ber	Rate per 1,000 population	Num-	Rate per 1,000 population.		
2,185	29:90	2,319	31,21	2,295	30,33	2,273	29.50	2,591	30,60	2,071.4	29.17		
1;228	16:81	1,169	14:93	1,024	13,53	1;169	15.17	1,410	16:70	1,246.9	17.53		
63.5	8,69	659	8.87	659	8,71	737	9.57	892	10.56	654.6	9:15		
+957		+1210		+1271		+1104	****	+1181		+ 844.5			
243	*111.21	181	*78.05	149	*64.92	237	*104.26	204	78,73	222,4	107.59		
264	3,61	213	2.87	231	3,05	259	3,36	225	2.66	228.5	3.19		
25	0.34	19	0.26	6	0.08	7	0.09	16	0.19	12.5	0.17		
125	1.71	109	1.47	119	1.57	162	1.84	128	1.52	128,1	1.79		
10	0.14	7	0.09	5	0.07	20	0.26	8	0.09	13.7	0.20		
99	1.35	76	1.02	97	1.28	85	1.10	70	0.83	71.5	0.99		
5	0.07	2	0.03	4	0.05	4	0,05	3	0.04	2.1	0.03		
***	-	-	****						***	-			
					-	1	0.01		***	-	-		
26	0.36	22	0.30	13	0.17	21	0.27	31	0.37	30.6	0.44		
5	0.07	4	0.05	5	0.07	7	0.09	6	0.07	12.4	0.18		
1	0.01	2	0.03	2	0.03	2	0.03	7	0.08	2.7	0.04		
27	0.37	26	0.35	16	0.21	18	0.23	29	0.34	25.0	0.36		
2	0.03	4	0.05	3	0.04	3	0.04	5	0.06	4.9	0.07		
40	0.55	35	0.47	30	0.40	53	0.69	42	0-50	48.5	0.69		
45	0.62	50	0.67	31	0.41	25	0.32	47	0.56	53.6	0.77		
52	0.71	48	0.65	59	0.78	68	0.88	70	0.83	50.7	0.71		
160	2.19	143	1.92	178	2,35	171	2.22	186	2.23	186.7	2.63		
48	0.66	55	0.74	49	0.65	63	0.82	75	0.89	73.1	1.04		
87	1.19	95	1.28	76	1.00	101	1.31	119	1.41	97,5	1.38		
163	<del>†</del> 7.46	151	†6.51	170	†7.41	197	†8.67	171	6.60	163.4	7.82		
-		-		-		-	100000		-	-	- Committee		

<sup>†</sup> Still-birth Rate-Per 100 Live Births.

<sup>\$</sup> St. James district with a population of 10,233 was included in the City from 1st June, 1938.

#### Births and Birth Rates.

During the year under report, two thousand five hundred and ninety-one (2,591) live births took place of which 1,291 were males and 1,300 females, an excess of 9 females over males. In 1937 there was an excess of 77 males over females.

Monthly Births and Birth Rates according to Sex.

	Month.			Dittis title Di		Males.	Females.	Both Sexes.	Birth Rate per 1,000 population.
-31-								10000 00	
anuary	***					99	116	215	32.26
February				***		90	82	172	28.58
March						102	99	201	30.16
pril						91	88	179	27.76
						92	104	196	29.41
lay						108	104	212	29.08
June	***			***		122	99	221	29.34
July	***					108	108	216	28.67
August	***					100	116	225	30.86
September			***	***			1 11/2		
October	***	***	***	***	***	120	132	252	33-45
November				445	222	118	125	243	33-33
December						132	127	259	34.38
	Total		·			1,291	1,300	2,591	30.69

#### Deaths and Death Rates.

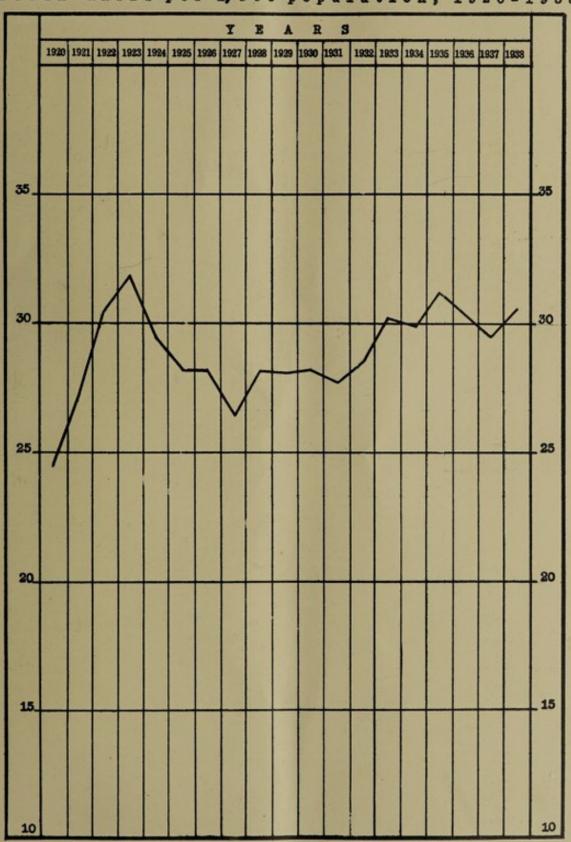
Six hundred and seventy-eight males and 732 females died during the year 1938, giving a death rate of 16.70, as compared with 15.17 per 1,000 population during 1937. In spite of the increase of 1.53 per 1,000 over the figures for 1937, due no doubt to the inclusion of the St. James Area within the City, this figure is still .83 per 1,000 below the average for the decennium 1928-37 which works out at 17.53 per 1,000.

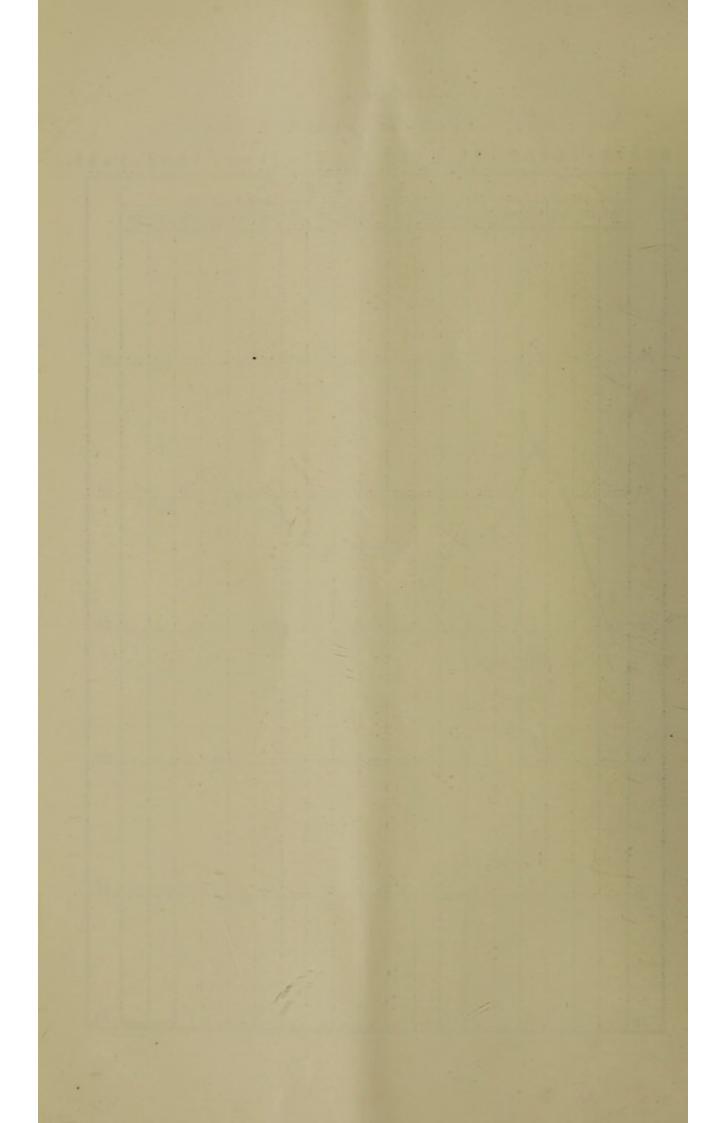
Monthly Deaths and Death Rates according to Sex.

	N	Ionth.	onth.			Males.	Females.	Both Sexes.	Death Rate per 1,000 population.
January						40	56	96	14.41
February						49	36	85	14.12
March						45	54	99	14.86
April						32	39	71	11.01
May			***			50	57	107	16.06
June						48	71	119	16.32
July						67	- 59	126	16.73
August			***			63	70	133	17.66
September						65	76	141	19.34
October		5				73	80	153	20.31
November		3				76	73	149	20.44
December						70	61	131	17.39
	Total					678	732	1,410	16.70

Chart A
Port-of-Spain

BIRTH-RATES per 1,000 population, 1920-1938.





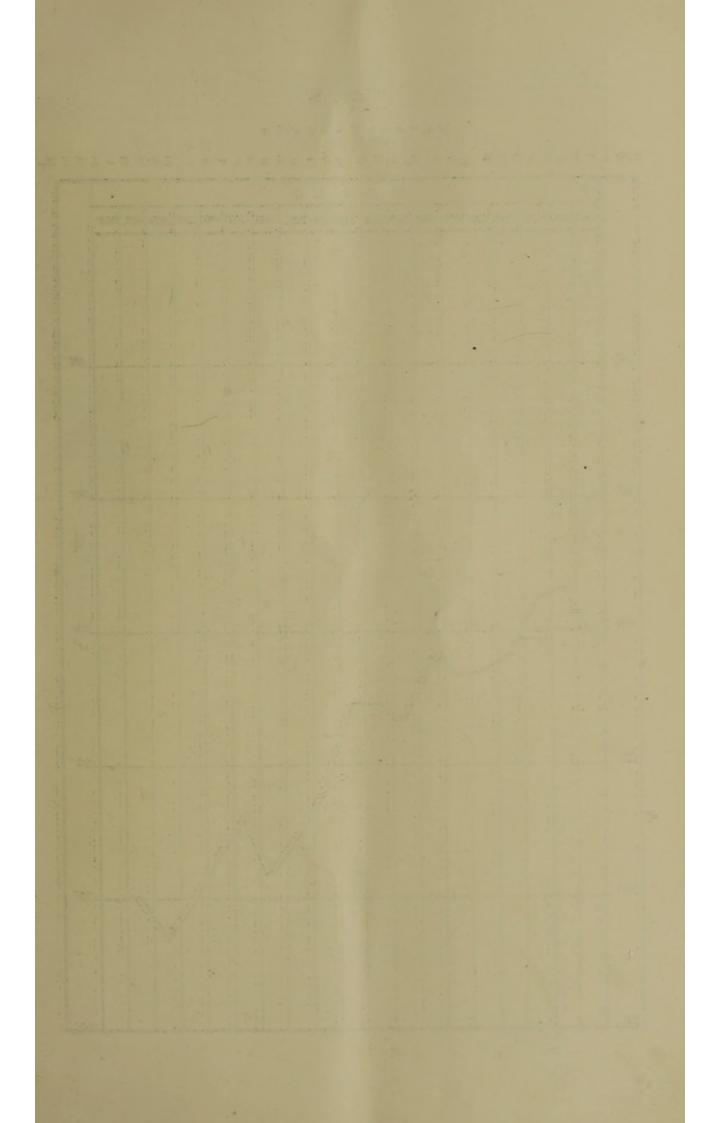
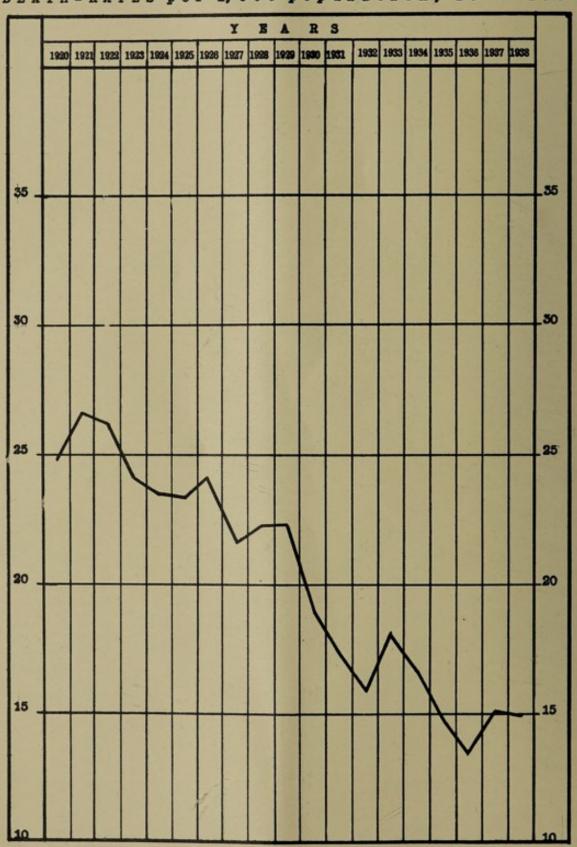


Chart B
Port-of-Spain

DEATH-RATES per 1,000 population, 1920-1938.



The newly included sub-district of St. James now displaces the East Dry River from pride of place in the mortality list, returning the highest death rate (49.84 per 1,000) of all the suburbs in the Urban Sanitary District of the City of Port-of-Spain, though East Dry River still shows the highest death rate of the previous five sub-districts.

Deaths and Death Rates in various Sub-districts of the City for 1938.

214 2 1 1 1 1 1 1 1 1	1. 0. 1.		DEA	THS.		AND THE REAL PROPERTY.	Mark to
	The Real Property lies		PLACE OF C	CCURRENC	Е	Total Deaths in	Rate per
Sub-District.	Population.	Home, &c.	Colonial Hospital.	Royal Gaol.	House of Refuge.	Sub- district.	population
City Proper	31,955	201	212	8	7	421	13.17
St. Clair		9	4	100		13	8.80
East Dry River	.0 .0.	159	165	***	***	324	17.07
Belmont	2.000	124	90			214	14.29
Woodbrook	** ***	92	47	11		139	12.55
St. James (June-Dec.)	10,233	62	40		197	299	49.84*
Total	88,698	647	558	8	197	1,410	16.70

<sup>\*</sup> Vide following table: "Comparison of Deaths and Death Rates for 1938".

It is important to bear in mind that not all deaths which have been listed as occurring in the St. James Area can indeed and in fact be attributed to disease arising from insanitary conditions within the district. The discrepancy is occasioned by the existence here of the House of Refuge. Housing, as it does, the aged, the infirm, and the destitute, a very high mortality is a natural outcome, as evidenced by the fact that out of a total of 299 deaths in the St. James Area during the period June-December, no less than 197 deaths occurred in the House of Refuge which works out roughly at a rate of one death a day.

Comparison of Deaths and Death Rates for the year 1938.

	No. of Deaths.	Death Rate per 1,000 population.
(r) City (St. James excluded)	1,111	14.16
(2) City, along with St. James* (Rate based on actual number of deaths and	1,410	16.70
(3) City, including St. James, on the assumption that the latter had been incorporated within Port-of-Spain, as from 1st January, 1938, and that		
the deaths in that district for January-May had occurred in the same ratio as those for June-December (4) St. James alone, calculated on the number of deaths that would have been	1,621	18.28
recorded in that district if the mortality for the entire year had taken place in the like proportion as that for June-December	510	49.84
(5) St. James, omitting 336 deaths that might have been registered at the House of Refuge for the whole of 1938	174	18.25
(6) City, as in (3) hereof, but with House of Refuge figures eliminated	1,285	15.35

<sup>\*</sup> City boundaries extended to take in St. James 1st June, 1938.

#### YEAR 1938.

#### Classification of Deaths from All Causes.

	Genera	l Disease.	S.			
					No. o	f Deaths.
(a)	Notifiable Infectious Diseases		****			225
(6)	Non-notifiable Infectious Diseases					79
	Other 1	Diseases.				
101	General Diseases (not included above	)				104
100	Diseases of the Central Nervous Syst	em and C			ense	119
(0)	Diseases of the Central Nervous Dyse					186
(c)	Diseases of the Circulatory System	****	****			79
(d)	Diseases of the Respiratory System	****	****	****		
(e)	Diseases of the Digestive System		2000	****		126
16	Non-Venereal Diseases of the Genito-	Urinary :	System			129
14	Diseases of the Puerperal State other	than Pu	erperal F	ever	****	18
(g)	Diseases of the Fuerperar State office					128
(h)	Diseases of Early Infancy	****			****	162
(1)	Old Age	1,5550	4111			2.22
(2)	Affections produced by External Cau	ses	****	****	****	29
16	Other Causes of Death					26
(4)	Other Causes of Death					-
	Total					1,410

	1				0			1000	rom /				01		m
Causes of Death.	7-20 19		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		1								1	- 1				
I.—GENERAL DISEAS	ES.											-			
Notifiable Infectious Di     Enteric Fever	SERECTO.		1	1	1			1	1	4	3	1	1	2	16
Diphtheria								1	1				**	1	3
Mombranous Croup									::	8	**	::		::	128
Dalmonary Tuberculosis			9	9	12	13	10	7	11	I	10	16	9	14	120
T. bereulosis (other torms	13		1	**		1	2	- 31	7	15	4	12	4	2	70
Pneumonia and Broncho-	Pneumon	na	4	4	3	5	3	7							
Chicken Pox															
Ophthalmia Neonatorum			::	::											
Plague ··															
Cholera															
Typhus Fever											20	**			
Vellow Fever								**	**	**	**			**	
Encephalitis Lethargica						**							12		
Acute Poliomyclitis			**	1000	**			**		**	*	11	::	::	
Cerebro-Spinal Fever	**		**					::	::	::	11	-	-		
Acute Ascending Myelitis	Dieses			**	**							-			-
b) Non-Notifiable Infectio	Mrs Disco.	363.		3	5	2	4	1	6	1	1	3	2	3	3
Malaria			1			-									
Whooping Cough													3	2	
Influenza  Dysentery							1	1	2	1				1	1
Ankylostomiasis			1					3	1		I		**	1	
Symbilis				2	3			2	2	4	2	7	4	3	2
Other Venereal Diseases							**	**			**		**	**	
Puerperal Fever										*				**	3
T. O. D.			1 - 2		100		400	100		100		100	100		
II.—OTHER DISEA	studed ab	nee												00	
(a) General Diseases not inc Cancer and other Malign	ant Dise	Ses	10	5	7	5	5	9	2	5	6	3	6	7	7
Reri-Beri	one proce			1 5											
Beri-Beri Pellagra				200					3.5	11			1		
Scurvy-Rickets			100	1 100									2	1	
Leprosy *													- 12	**	
Other General Diseases			3			1	3	6	1	2	2	4	4	6	3
(1) Diseases of the Nervou	s System	and													
Organs of Special Sens	e.			1	1 mills	100			1	1			1	2	1
Simple Meningitis			1 3			100			1	1	2	100	Ŷ		1
Tabes Dorsalis			1 1750		1 1	9 9 9	4 300	1		2	3	6	11	10	
Cerebral Haemorrhage	**							100	4	1		1	1	1	3
Apoplexy Convulsions of Children	under s v	ears				1000		100		1		1	1		
Other diseases of the Ne	rvous Sv	stem	1 2			9 000				3	2	7	4	4	
to Diseases of the Circulat	lovy Syste	995.		1			F	1							
Cardiac and Vascular Di	seases		12	11	10	9	12	12	18	18	23	25	15	21	18
(d) Diseases of the Respir	ratory Sy	stem		1	1	1	1 13			1 1/2	-				
Bronchitis				1 3	2 4	1		3	5	3	8	7	5	**	4
Other diseases of the Re	spiratory		113	1-	1113	3	-		1	100	-	-	-	1	1 34
System	· Curton	**	1	1 2	1	3 3	3	3 2	5	5	1	3	4	1	3
(e) Diseases of the Digestive	e System.			6 1		,		5		5	3	3	1	1	4
Diarrhoea and Enteritis Cirrhosis of Liver	**			100		3 .			4					I	7
Other diseases of the Di	restive	*				1000	-				- 10		120		
System	Bearing			5	7 :	5 3	3 1	4 5	3	9	8	2	8	7	7
(f) Non-Venereal Disease	s of the		1	1											1
Genito-Urinary System	91.		1	100	100										
Bright's Disease											**				
Nephritis				3				3 3	7	3	7	6	3 2	8	
Other Non-Venereal Dis	eases			2	6 1	0	4	1	4	5	4	3	1 8	2	1
(g) Diseases of the Puerper	rat State.			1	1							1			
(Other than Puerperal					The same	3	1	100	1 000	100	1	100	13000	1	1
Puerperal Haemorrhage	**		1	1 .				0.00					::		
Puerperal Haemorrhage				3 10 35	1 .										
Other Puerperal Disease (h) Diseases of Early Info							7 1	6 3	14	5 - 3					
10 011 1	incy				8	1		7 13		B1 04000					
(i) Old Age (j) Affections produced by E	xternal C	ause	5	1	1	1		1	1	1			1000		1 3
Burns and Scalds				1 .		1	1 .	. 2	2		1				1
Accidents and Injuries		0					_		2	4	1			2	1
(h) Other Causes of Death				2	i .			3	2 1	4	3	3	2	5	3
	1 -		-	-	5 9	9 7		100	126		-				-
Total				6 8		9 7									1,4

<sup>\*</sup> Notifiable under the Lepers Ordinance, Cap. 100.

House of Refuge (St. James) - Causes of Death-June to December, 1938.

44.00		Cause	of Deat	h.				No. of Deaths.	Percentage of Total Mortality from all Causes.
Old Age		***						103	52.28
Cardiac and Vascula			***	***		***		21	10.66
Diseases of the Nerv	ous Sys	stem inclu	ding Cer	ebral Ha	emorrhag	e		19	9.64
Syphilis	***	***		***				13	6.60
Diseases of the Dige	stive S	ystem						8	4.06
Diseases of the Geni	to-Urin	ary Syster	n					7	
General Diseases			***					7	3.55
		***					933	6	3-55
Diseases of the Resp							***		3.05
						255	***	3	2.54
Cancer and other Ma					***	***	***	3	1.52
Tabes Dorsalis	anguan.	. Er Ibeases			***	***	***	2	1.02
Pellagra				***	***	***	***	1	0.51
Malnutrition	***	***	***	***	***	***	***	1	0.51
Mannuti I tion	***	***	2.00	1000	***	***		1	0.51
Total			***	***	***	***		197	100.00

The two tables listed below detail the number of deaths certified during the year under review, and also the relative mortality at the different age periods. They show clearly that the age periods in which the greatest number of deaths occur are the under one year period with 204 deaths and a percentage mortality of 14.46 and the over 60 period with 484 deaths and a percentage mortality of 34.33. It is also evident from the second table that there has been during the eleven years 1928-38 a gradual diminution of the mortality at the earlier age periods with a corresponding increase in the later age periods.

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

1986	P	eriod.	NO STATE		Males.	Females.	Both Sexes.	Percentage of Total Mortality at All Ages.
Under 1 year					107	97	204	14.46
1- 5 years		111			35	34	69	4.89
6-10 do.				***	9	8	17	1.20
11-15 do.					7	3	10	0.71
16-20 do.		110	***		16	21	37	2.62
21-25 do.	***			***	25	36	61	-4.39
26-30 do.			***		27	43	70	4.96
31-35 do.					27	23	50	3.54
36-40 do.		***			44	40	84	5.95
41-45 do.			***		37	35	72	5.10
16-50 do.		200			42	39	81	5.74
51-55 do.			***		37	27	64	4.54
56-60 do.					56	51	107	7.58
Over 60 year	8			***	209	275	484	34.33
	Total				678	732	1,410	

## Comparison of Deaths at different Age Periods for 11 years, 1928-38.

911	Total Deaths		THS UNDER I YEAR.		DEATHS 5 YEARS.		DEATHS 60 YEARS.		ATHS OVER 0 YEARS.
Year.	at All Ages.	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

Still	Births	and	Still	Birth	Rates

	Month				No. of Still Births.	Still Birth Rate per 100 of Live Births.
January	****		****	****	21	9.77
February					. 14	8.14
March					10	4.98
April				****	14	7.82
May	****		****		8	4.08
June		****	****		14	6.60
July		***	****		11	4.98
August					16	7.41
September	****				19	8.44
October		144			18	7.14
November			-		11	4.53
December				1 2225	15	5.79
	T	otal			171	6.60

Infant Mortality.

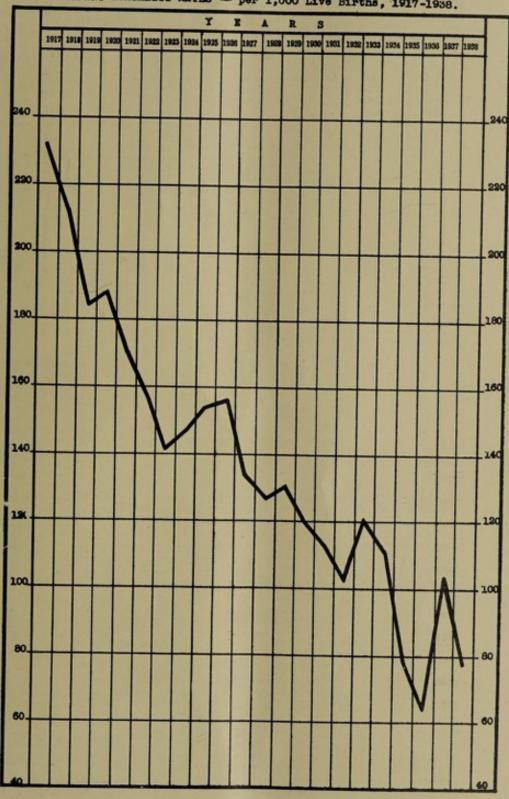
Births and Deaths under 1 year and Infant Mortality Rates for 22 years 1917-1938.

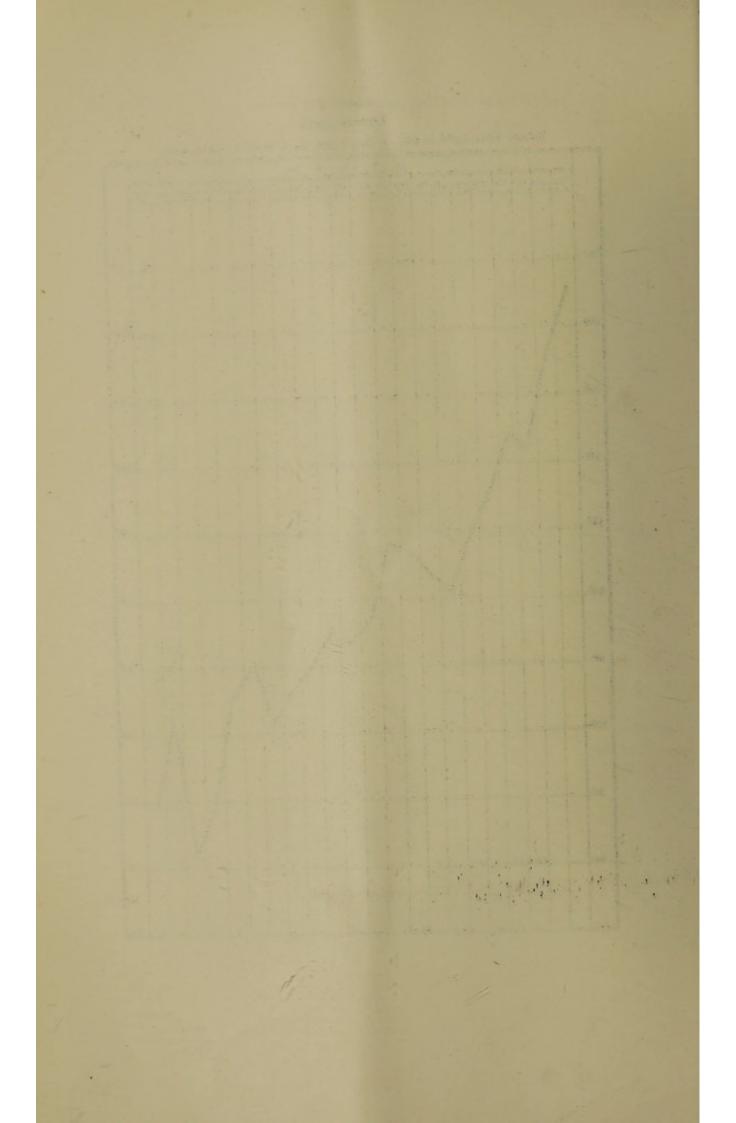
	Year.	No. of Births.	No. of Deaths under 1 year.	Infant Mortality Rate.	Year	r.	No. of Births.	No. of Deaths under 1 year.	Infant Mortality Rate.
1917		1,770	412	232.77	1928		1,868	238	127.41
1918		1,625	347	213.54	1929		1,895	250	131.93
1919		1,590	294	184.91	1930		1,935	233	120.41
1920		1,716	323	188.23	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

The figure of 78.73 is the third lowest since 1917 when the Local Authority was first constituted and one hopes that the fact that, the three lowest figures were obtained during the last four years, 1935-38, is no mere coincidence, but a positive indication that the work of the Child Welfare League, of the Health Department, and of the other bodies interested in the welfare of mother and child is beginning to be reflected in that low infantile mortality that is a feature of all the big countries of the civilized world.

Chart C Port-of-Spain

INFANT MORTALITY RATES - per 1,000 Live Births, 1917-1938.





Causes of Deaths of Infants under 1 year for 1938 and 1937 contrasted.

	1938	8. 193	7.			1	938	3.	18	37	
Causes of Death.	M F.	Sexes M F.	Sexes.	Causes of Death.		M.	F.	Both Sexes.	M.	F.	Both
Abscess of Kidneys	1	1		Icterus Neonatorum	***	***			3		
Abscess of Lung		1 1	2	Infantile Atrophy		2		2	-		
Acute Indigestion	1	1			ia	1		1			
naemia (Sickle Cell)	1	1	100	Intestinal Obstruction				****	***	2	
Asphyxia (mucus in air				Intussusception	***	1		2	2		
	iges) 1	1	***	Malaria	***				1	2	
Asphyxia Neonatorum	5 2	7 2 2	4	Malnutrition	***	2	3	5	9		
Asthma		1	1	Marasmus			10		7		1
Atelectasis	3	3 2 1	3	Meningitis		3			2		
Bronchitis	7 6	13 2 2	4	Meningo-Myclocele		1		1	***		1
Cephalhaematoma		2	2	Miliary Tuberculosis					2		
erebral Abscess	********	1	1	Morbus Vasculosus Neonator	um	***	1	1			13
erebral Anaemia	1	1	111	Neo-natal Death	***	2	4	6	4		
erebral Haemorrhage	3 2	5 2	2	Neo-natal Haemorrhage	***	1	1	2	5		
irrhosis of Liver		1	1	Nephritis		1		1			1
olic	1	1		AND THE STREET		-3.11		***	***	1	
Colitis		1 1	2	Peritonitis			1	1	2		
Congenital Debility	8 10	18 9 7	16	Pleurisy		1		1			1
Congenital Syphilis	4	4 2			***	8	6	14	9	15	
Convulsions	1	1 2 1		Prematurity		26	24	50	23	24	
orrosive Poisoning		1	1	Pulmonary Congestion		4	1	5		5	
Cystic Hygroma	1	1	-	Pulmonary Tuberculosis		***				1	
Diarrhoea	3 1	4 1 2		Pyaemia, Septic Arthritis		1		1	***		
Diphtheria		1		Pvioric Spasm			1	1	***		13
Dysentery		1		Retention of Urine				1			163
Enteritis	1	1 5 3				1		1			
Entero-Colitis	2	2 3 2								1	
Fatty Degeneration of I				Spina Bifida		1		1			
and Liver		1	1	Strangulated Hernia					1		
Fibrosis of Liver						1		1			
Gangrenous Proctitis		1	8 3	The second secon	***			1		1	
Gastro-Enteritis	7 7	14 15 15					1				
Gastro-Intestinal		10 10	1	Intestines					1		
Haemorrhage	1	1 1	1	Ulceration of Intestines							
Haemangioma-Septicae				Umbilical Haemorrhage			1		1	1	_
Haemorrhagic Enteritis		***				-	10				1
	3000 1 001 00	2100				107	97	204	126	111	2
Hepatitis	1	A 100 100	1	10000	-	1	100	100000		100	177

The table given below divides the causes of death of infants under one year into the six well known groups. It is intended to show which particular group of causes is responsible for the greatest mortality, and it also points out the disastrous effect of parental disease on the new born infant. It is apparent that while the tide of post-natal disease is being stemmed to a fair extent, very little impression is being made on the ante-natal causes of infantile mortality which, as Chart D clearly demonstrates, has shown no diminution during the last ten years. It is the firm conviction of the writer that no further material reduction of the infant mortality rate is likely to take place unless the causes of disease in both parents are eradicated and, particularly, until the accidents and diseases associated with pregnancy and parturition are reduced to a still lower figure.

Group.	Grouping of Causes of Deaths of Infants under 1 year	No. of Deaths.	Percentage of Total Infant Mortality.
1	Congenital Syphilis and other diseases and conditions commonly attributed to ante-natal causes, including atelectasis, atrophy, congenital debility, malnutrition, marasmus, meningo-myclocele, prematurity, spino bifida		49.02
II	Diseases of the Alimentary System	32	15.68
ш	Diseases of the Respiratory System	35	17.16
IV	Tuberculosis (all forms)		
v	Malaria		13 7
VI	Seventeen other causes of death, including abscess of kidneys, anaemia, asphyxia neonatorum, cerebral haemorrhage, convulsions, cystic hygroma, meningitis, morbus vasculosus neonatorum, neo-natal death, neo-natal haemorrhage, nephritis, pyaemia, septic arthritis, retention of urine, septicaemia, tetanus neonatorum, toxaemia, umbilical haemorrhage		18.14
	Total	204	100.00

Of the total infant mortality for the year under review, 117, or 57.35 per cent. took place in the first month of life, as compared with 110, or 46.41 per cent. for the previous year.

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

	133	193	8.			193	7.	
Duration of Life.	Males.	Females	Both Sexes.	Per- centage of total deaths under 1 year.	Males.	Females	Both Sexes.	Per- centage of total deaths under 1 year.
Under I day	. 15	10	25	12.25	10	7	17	7.17
	. 32	21	53	25.98	31	20	51	21.52
	. 6	6	12	5.88	14	7	21	8.86
4 1 1 0 1 1	. 7	13	20	9.80	4	12	16	6.75
	. 3	4	7	3.43	2	3	5	2.11
Total under 1 month	. 63	54	117	57.35	61	49	110	46.41
the state of the s	. 12	7	19	9.31	13	11	24	10.13
0 0 4- 0 4-	. 6	5	11	5.39	8	5	13	5.49
0 1- 1 1-		4	4	1.96	4	8	12	5.06
	. 4	5	9	4.41	5	7	12	5.06
2 10 0 10	. 4	5 3	7	3.43	7	6	13	5.49
0 1 7 7	. 3	2	5	2.45	5	5	10	4.22
	. 5	4	9	4.41	8	4	12	5.06
0 4- 0 4-	. 5	3	8	3.92	8	6	14	5.91
0 1- 10 3-	. 2	7	9	4.41	4	5	9	3.79
10 4 11 1	. 2	3	5	2.45	3	5	8	3.38
,, 11 months and under I year			1	0.49				
Total	107	97	204		126	111	237	

Infant Mortality under one month for the years, 1930-38.

		Year.				No. of Deaths under 1 month,	Percentage of Total Deaths under 1 year
1930			***			92	39.48
1931		***		***	***	79	35.58
1932						75	35.58 36.23
1933						106	40.15
1934						101	41.56
1935		***				91	50.28
1936		***				61	40.94
1937	****	***	***	***		110	46.41
1938		***				***	57-35

## Causes of Death of the Pre-School Child.

Sixty-nine (69) deaths of children aged 1-5 occurred during the year 1938, as compared with 53 in 1937. As parental disease contributes in some measure to the mortality of these children, it is again customary to group the causes of death here under the same six headings as in the case of the infants under one year.

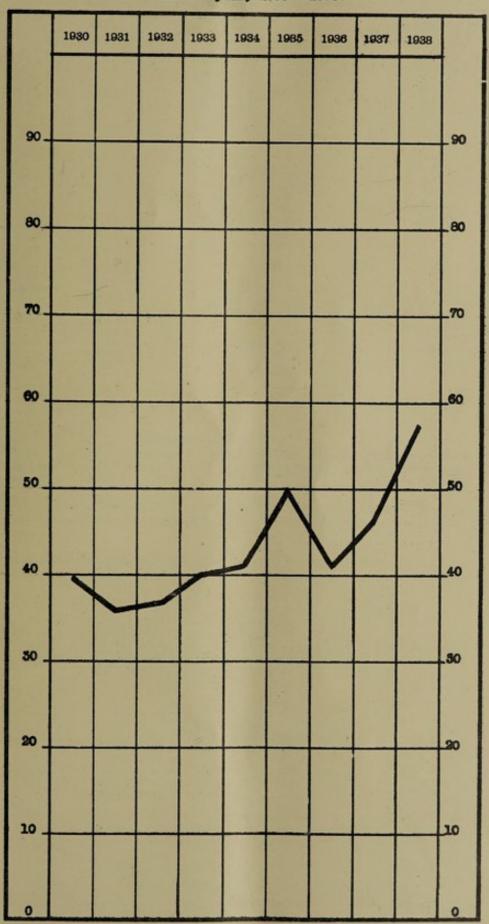
Grouping of Causes of Deaths of Children 1 to 5.

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 congenital debility, malnutration,		
.81.1	marasmus	7	10.14
II	Diseases of the Alimentary System	9	13.04
III	Diseases of the Respiratory System	28	40.58
IV	Tuberculosis (all forms)	3	4.35
V	Malaria	2	2,90
VI	Thirteen other causes of death, including anaemia, bilious remittent fever, convulsions, diabetes, fever of unknown origin, useningitis, multiple injuries, nephritis, osteo-		
	myelitis, scalding, scurvy-rickets, tetany, toxaemia	20	28.99
	Total	69	100.00

It will be seen that ante-natal causes are responsible for 10.14 per cent. of the total mortality.

Chart D
Port-of-Spain

Percentage of ANTE-NATAL GROUP to TOTAL DEATHS of Infants under 1 year, 1930 - 1938.



- ALL COLUMN TO SERVICE

# Causes of Deaths of Children at Ages 1 to 5 for years 1938 and 1937.

	19	38.	19	937.			1	193	8.		193	37.
Causes of Death.	MF	Both Sexes.	MF	Both Sexes.	Causes of Death.	200	M	F. :	Sexes.	м	F	Both
Abscess of Lung	1	100			Malaria			2	2	12	1	
cute Alcoholism	*** ** ***		I	1	Malformation of Brain					100		
naemia	I	1			Malnutrition						10000	
nkylostomiasis		***	1	1	Marasmus		3	-	4	1000		1
scariasis		225	1	1	Meningitis				5			1
Silious Remittent Fever	1	1		1	Multiple Injuries		1					1
ronchitis	1 2	3	1 1	2	Nephritis		1					
ongenital Debility	2	2		***	Osteomyelitis			7				
ongenital Heart Disease			1	1	Pertussis			1	1		I	100
ongenital Syphilis			2	2	Pneumonia		8	_	15		2	
onvulsions	I 2	3	1	1	Pulmonary Congestion		1	1000	4			
iabetes Mellitus	I	I	***		The transfer of the transfer o		1	1			-	
iphtheria	2	2	1	1	Scalding-Shock		T		1		***	
nteric Fever	I I	2	7	1	Scalding-Toxaemia		7		100			
nteritis	2	2			Scurvy-Rickets		Ŷ					
ntero-Colitis			I	1	Septic Pharyngitis		II.	7	î	1	***	
all—Meningitis			1	1	Strangulated Inguinal Hernia		7		-			
ever (origin unknown)	I	1			Tetany			I			"	
astro-Enteritis	2 2	4	1 5	77393	Tonsilitis and Laryngitis		1			-		
aemorrhagic Colitis			2000		Toxaemia		1		1	1	20	
aemorrhagic Laryngitis		10000	1	1	Tuberculosis of Hip Joint and		A	***				
ifluenza	I	1		1	Mesenteric Glands					Y		
	100	-			Tuberculous Meningitis			2000				
	1 100		11		The state of the s	***	***	1	1	-	3	
	11 13 13		10	1 150								11
with the same of t				100	Total		35	34	60	29	24	

## Maternal Mortality.

The physiological function of child bearing claimed 18 victims during the year under report, giving a maternal mortality rate of 6.95, as compared with 11 victims and a maternal mortality rate of 4.84 during the previous year.

The maternal mortality rate gives a fairly accurate picture of the amount and kind of ante-natal care and of obstetric help that can be placed at the disposal of the expectant mother.

Causes of Maternal Deaths according to age for the years 1938 and 1937.

					193	8.						193	7.		
Causes of Maternal Deaths.		15 and under 20	20 and under 25	25 and under 30	30 and under 35	35 and under	40 and upwards	Total All ages	15 and underl	20 and under 25	25 and under 30	30 and under	35 and under	40 and upwards	Total All ages.
and the same of th															
Puerperal Sepsis							* * 1		**	1					1
Puerperal Eclampsia			1		1	1		3	2			2			4
Puerperal Haemorrhage				2	183	1		3					10.0		
Pernicious Vomiting					1			1					1		1
Other Causes		1	4	5		1		11	2	2		1			5
200			7			1			-				-	-	
Total		1	5	7	2	3		18	4	3		3	1		11

Comparison of Birth, Death, Infant and Maternal Mortality Rates in Port-of-Spain for Quinquennium 1983-37 and yearly averages for that period with corresponding rates for 1938.

						MATER	NAL MORT	TALITY.		
Year.	Birth-	Death-	Infant Mortal- ity rate.	No. of		Rate per	1,000 liv	e births ro	egistered.	
110			40 43	Deaths.	Sepsis.	Eclamp- sia.	Haemor- rhage.	Pernicious Vomiting.	Other Causes.	Total.
1933	30.10	18.11	121.83	17	0.46	2.77	1.38	0.46	2.77	7.84
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
Yearly Average for quin- quennium									distant.	- ald
1933-1937	30.21	15.71	96.05	14.8	0.98	1.87	0.72	0.36	2.67	6.62
Year 1938	30.69	16.70	78.73	18		1.16	1.16	0.39	4.25	6.95

Under the heading "Other Causes" are included such diseases as toxaemia of pregnancy, anaemia of pregnancy, septic abortion, extra-uterine gestation, pelvic abscesses, &c., and it does seem that efforts directed towards the elimination of these causes are a prime necessity, if any permanent reduction of the maternal mortality rate is to be expected.

## PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

The work undertaken by the Local Authority with a view to determining the prevalence of infectious diseases in the first place and to exercising the necessary measure of control in the second place, is of the greatest possible importance to the health of the inhabitants of the City of

The following diseases are notifiable (Section 103, Public Health Ordinance, Cap. 98):—diphtheria, membranous croup, enteric fever, pulmonary tuberculosis, tuberculosis (other forms), pneumonia, ophthalmia neonatorum, chicken pox, encephalitis lethargica, cerebro-spinal fever, acute anterior poliomyelitis and acute ascending myelitis, in addition to plague, cholera, yellow fever, small pox (inclusing alastrim), and typhus fever which are the dangerous infectious diseases and are quarantinable.

Four hundred and eighty-four notifications of infectious diseases were received at the Public Health Department during the year under review of which 142 were cases of chicken pox, 134 cases

of pulmonary tuberculosis, 101 cases of pneumonia, and 59 cases of enteric fever.

Cases of enteric fever showed an increase of 11 over the corresponding figure for the previous year, but this was undoubtedly due to the inclusion of the St. James Area within the City. During the period 1st June—the date of the inclusion—to 31st December, 27 cases of typhoid were reported from the latter area leaving 32 cases notified from the other sub-districts of the City-15 less than the corresponding figure for the year 1937.

Comparison of Notifications for decennium 1928-37 and 1938.

Notifiable Diseases.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	Yearly average for decennium 1928-1937.	1938
Diphtheria	19	24	29	31	61	11	38 85	17	22	30	28.2	16
Enteric Fever	54	35	55	47	20	28	85	76	32	47	47.9	59
Pulmonary		-	-				-		-	40	41.2	39
Tuberculosis	152	142	124	137	130	135	181	148	143	131	142.3	134
l'aberculosis	10000	1000		31	-3-	-30		200	-43	-3.	144.3	*34
(other forms)	16	17	14	10	16	22	20	9	10	8	14.2	6
Pneumonia	60	70	83	71	71	135	208	165	193	125	118.1	101
Ophthalmia		10	-3	15	100	-33	-	3	-93		110.1	101
Neonatorum	31	35	20	22	18	40	32	24	24	22	28.7	
Chicken Pox	23	73	29	30	34	39	201	77	48	32 84		24
Encephalitis	-3	130		30	34	39	201	"	40	0.4	63.8	142
Lethargica		1/2			1		- m			1		
Acute		7	**		4						0.3	**
Poliomyelitis				- 2	10000	2000			2	922	1	
ronomyenus			**	5	**	3	**	**	3	10	2.1	2
Total	0.00	200	46.0	TO SECURE			-6-					1000
Total	355	397	363	353	351	413	765	516	475	468	445.6	484



Chart E
Port-of-Spain
IMPECTIOUS DISEASES - Notifications and Deaths, 1922 - 1938.



NOTIFICATIONS.

DEATHS.

A study of the table recorded below shows that an epidemic of chicken pox occurred in the months of March, April, May, and that there was a great increase in cases of pneumonia in the middle months of the rainy season, August, September, October—an event which is usually expected about this time of the year.

The epidemic of chicken pox was at its height in March, 56 cases being reported. On the whole the disease was of a mild type. A complicating factor, just about this time, was the reported occurrence of alastrim in the neighbouring republic of Venezuela and practitioners, who had been warned by circular to keep a look out for possible cases of alastrim, were, on occasions, in difficulty as to whether a comparatively severe case of chicken pox was not in reality a case of alastrim. The writer was asked to see about half a dozen such cases, but in none of these was the diagnosis of alastrim arrived at. Incidentally, the last occasion on which the Urban Sanitary District was visited by alastrim was in the year 1926 when sixten (16) cases were reported.

## Monthly Notifications of Infectious Diseases.

Diseases	-	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.	Total,
Diphtheria		 1	2	1	2	×		2	2	1	1	1	2	16
Enteric Fever		 2	3	2	-1	2	4	1	15	11	5	9	4	59
Pulmonary Tuberculosis		 17	2	11	11	9	12	11	14	18	11	11	7	134
Tuberculosis (other forms	1	 1						1	2	1	1			6
Pneumonia (All forms)		 5	3	5	5	8	14	5	16	15	15	7	3	101
Ophthalmia Neonatorum		 1	4	2	2	1		1	1	6	2	2	2	24
Chicken Pox		 2	2	56	49	22	2	4	2	3				142
Acute Poliomyelitis		 	1							1				2
				- 4		Marie L				150				
Total		 29	17	77	70	43	32	25	52	56	35	30	18	484

## Deaths from Notifiable Infectious Diseases.

Two hundred and twenty-five deaths (225) were certified to notifiable infectious diseases. One hundred and ninety-eight (198) of these were due to pulmonary tuberculosis (128) and pneumonia (70).

The case mortality of both these diseases is unduly high—128 deaths as against 134 notifications and 70 deaths as against 101 notifications, respectively.

Comparison of Deaths from Notifiable Infectious Diseases for Decennium 1928-37 and 1938.

Diseases.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	Yearly average for decennium 1928-37.	1938
Diphtheria	3	****	1	2	****		5	2	4	4	2.1	3
Enteric Fever	14	13	16	11	4	10	25	19	6	7	12.5	16
Pulmonary Tuberculosis	141	129	141	134	112	129	125	109	119	142	128.1	128
Tuberculosis (Other forms)	19	24	14	7	10	21	10	7	5	20	13.7	8
Pneumonia	51	56	55	65	55	76	99	76	97	85	71.5	70
Encephalitis Lethargica	2	1	1		1		-		7 ****	****	0,2	
Acute Poliomyelitis	-		1	2		****			****	1	0.4	
Total	228	222	229	221	182	236	264	213	231	250	228.5	225

Monthly Deaths from Notifiable Infectious Diseases.

Diverses.	and a	Janua: y.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diphtheria		 		****	****		1	1			****		1	3
Enteric Fever		 1	1	I			1	1	4	3	1	1	2	16
Pulmonary Tuberculosis		 9	9	12	13	10	7	11	8	10	16	9	1.4	128
Tuberculosis (other forms)		 1		****		2	1	****	1	1	2	****	****	8
Pneumonia (all forms)		 4	4	3	5	3	7	7	15	4	12	4	2	70
														-
Total		 15	14	16	18	15	17	20	28	18	31	14	19	225

It is customary to group cases of notifiable infectious diseases and deaths therefrom according to the sub-district of the City in which they arise. This is done with a view to showing which sub-district of the City gives rise to the largest number of cases of infectious diseases and the largest number of deaths therefrom.

The table given below records the fact, which has been brought home to the Local Authority in more ways than one, that the East Dry River sub-district is the most unhealthy suburb of the Urban Sanitary District. There can be no doubt that the three factors of over crowding, poverty of the population who are mostly members of the working classes, and insanitary premises are responsible for this regrettable state of affairs.

Distribution of Cases and Deaths from Notifiable Infectious Diseases.

Population,		Proper. 955		Clair 177	Ri	Dry ver 984		mont 975		lbrook 974	(Jun	James e-Dec.)
Diseases.	Cases noti- fied.	Deaths	Cases noti- fied.	Deaths	Cases noti- fied.	Deaths	Cases noti- fied.	Deaths	Cases noti- fied.	Deaths	Cases noti- fied.	Deaths
Diphtheria	6				4	2	I	1	5	I	-	0
Enteric Fever Pulmonary	10	2	***		6	-4	12	2	4		27	8
Tuberculosis Tuberculosis	49	51	1		36	41	28	19	13	14	7	3
(Other forms) Pneumonia	1	2			1	2	3	3	1		***	1
(All forms) Ophthalmia	29	21	1	2	33	22	19	1.4	11	5	. 8	6
Neonatorum	7	Ores			5		9		2		1	Timb.
Chicken Pox	0-		3		9	***	15		26	***	2	
Acute Poliomyelitis	1				1							0000
Total	190	76	5	2	95	71	87	38	62	20	45	18
Rate per 1,000 population in each sub-district		2.29					- 0.		- 60		1000	
each sub-district	5.95	2.38	3-39	1.35	5.00	3.74	5.81	2.54	5.60	1.81	7.52	3.03
Rate per 1,000 population of City	2.25	0.90	0.06	0.02	1.13	0.84	1.03	0.45	0.73	0.24	0.91	0.37

N.B.—The Case Rate, and the Death Rate from Notifiable Infectious Diseases in St. James are calculated on 77 cases and 31 deaths, respectively, these being the figures that might have been recorded had the prevalence of and mortality from these diseases occurred in that district throughout the year 1938 in the same ratio as they did in the seven months, June-December.

The extent to which the hospital facilities for controlling and treating cases of infectious diseases were made use of during the year under review -a practice which is encouraged on every occasion when isolation and treatment at home are not practicable -is indicated by the table detailed below

Deaths in Magnital from Natifiable Infectious Dis

		Deaths	m Hos	Ditar	HOIL	MOSI	mante	Inte	cuou	S DE	seases	3.				2000
21 7	Diseases.			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total
Diphtheria Enteric Fever Pulmonary Tu Tuberculosis (c Pneumonia	berculosis	······································		5 1	7 3	7  2	9	7 2 2	5 6	1 t 8 4	3 5 1 9	3 6 1	I 12 1 8	1 5 	1 2 12 	3 14 88 6 40
Total				0	11	10	11	11	12	14	18	10	22	9	15	151

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

Diseases.	100		Died at Home.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1937.
Diphtheria				3	3	100,00	50.00
Enteric Feve	****		2	14	16	87.50	85.71
Pulmonary Tuberculosis		****	40	88	128	68.75	66.00
Tuberculosis (other forms)			2	6	8	75.00	75.00
Pneumonia			30	40	70	57.14	62.35
Total	****		74	151	225	67.11	66.02

The figure 225, of course, represents deaths from notifiable infectious diseases of residents within the City's limits. As pointed out in a previous table 151 of these took place at the Colonial Hospital, Port-of-Spain.

## Non-Notifiable Infectious Diseases.

The diseases here considered are: malaria, dysentery, syphilis, ankylostomiasis, whooping

Malaria and syphilis are responsible for the majority of deaths under this heading—sixty out of a total of seventy-nine deaths. Of these sixty deaths, malaria was responsible for thirty-one (31) and syphilis twenty-nine (29).

All deaths within the City's limits certified to malaria are subjected to a very careful

investigation with a view to determining the probable source of infection.

The results of these investigations during 1938 proved conclusively that not one of these fatalities could be attributed to infection by malaria carrying mosquitoes within the City's limits.

#### Monthly Deaths from Non-Notifiable Infectious Diseases.

Diseases.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Tota
	100					****			100			1	
Malaria Whooping	11	3	5	2	4	T	6	1	1	3	2	3	31
Cough	1				***		20		1135.4	1835	- 11	***	1
Influenza								***			3	2	5
Dysentery Ankylos-					1	1	2	1				1	6
tomiasis	1			1	7.7	3	1		1			1	7
Syphilis		2	3		***	2	2	4	2	7	4	3	29
Total	2	5	8	2	-5	7	11	6	4	10	9	10	79

Twenty-two (22) of the deaths here recorded were certified as having occurred in the St. James Area: malaria 1, dysentery 1, ankylostomiasis 6, syphilis 14=22.

Deaths in Hospital from Non-Notifiable Infectious Diseases.

Diseases.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Malaria Whooping	1	2	3	1	1		3		1	1		1	13
Cough									**				
Influenza	**									-			wii.
Dysentery Ankylos-						1	1	1					3
tomiasis	1											**	1
Syphilis			1				1	1		2	1		6
Total	1	2	4	1	1	1	5	2	1	3	I	1	23

Of the 7 deaths from ankylostomiasis 6 took place at the House of Refuge, St. James, and one at the Colonial Hospital, and of the 29 attributed to syphilis 13 took place at the House of Refuge St. James, 6 at Hospital, and 10 in private practice.

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

Disease	5.	7	Died at Home &c.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1937.
Malaria			18	13	31	41.94	33-33
Whooping Cough Influenza			5	::	5		100.00
Dysentery Ankylostomiasis			3 6	3	6	50.00 14.29	71.43 100.00
Syphilis			23	6	29	20.69	72.22
Total			56	23	79	29.11	53.85

The returns of the Colonial Hospital, Port-of-Spain, which are sent to the Public Health Department, contain records of all deaths that take place in that Institution and the table given below recording the deaths of patients coming from addresses outside the City's limits is instructive. Of course, the method of distinguishing residents from non-residents by a reference to the addresses given is not strictly accurate, as it is a common practice for the town addresses of relatives or friends to be given with a view often to facilitating correspondence, sometimes to ensuring that no difficulty in the way of admission for treatment is encountered.

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

Notif	iable Infectious Diseases, o	Sec.				Λ	o. of Deaths.
	Diphtheria	****				****	2
	Enteric Fever		-		6		16
	Pulmonary Tuberculosis	****				****	66
	Tuberculosis (Other form	is)					2
	Pneumonia	****					55
	Acute Poliomyelitis					****	1
	All other Causes			****		****	330
	Total		****		****	****	472

#### TUBERCULOSIS.

#### Pulmonary Tuberculosis.

In spite of the very happy auspices as regards the treatment and control of tuberculosis that I referred to in my last report, it is with regret that I have to record that no further offensive against the ravages of this disease was undertaken during the year under report. The expectation that, at the very least, the site of the proposed sanatorium would have been chosen has not materialised, and, in spite of a series of questions bearing on this point which have been asked in the Legislative Council, the decision of the Sanatorium Committee which may mean so much for the unfortunate victims of this disease, as well as for the public in general, is still being anxiously awaited.

It is not intended to say that nothing is being done for the sufferers from tuberculosis. Far from it, the Association for the Prevention and Treatment of Tuberculosis continues its labours in this field and, within its comparatively slender resources, provides for diagnosis and treatment at the Dispensary—Knox Street—, for home visiting and the discovery of contacts by Health Visitors, and for the removal to the Tuberculosis Ward, Colonial Hospital, of dangerous infected "open cases", which, by reason of the bad insanitary environment in which they live and the unavoidable contact with susceptible children and young adults, are considered potent sources for the spread of infection.

That this is inadequate is evident from the heavy toll of life and invalidism that tuberculosis, particularly in its pulmonary form, exacts and, when we bear in mind the fact that tuberculosis occupied third place during the year under review in the list classifying the causes of death, and that the disease has a mortality of 80 to 90 per cent, within two years of its onset, it is evident that further measures in the direction of facilities for sanatorium treatment of early cases, in the provision of a "colony" where arrested cases can live and work under conditions conducive to their well being, in the formation of after-care committees for the promotion of their economic and social rehabilitation, are very urgently called for.

At the same time those essential preventive measures of better housing conditions, a better general economic state and a wider educative campaign designed to raise the standard of resistance of the general population and the eradication of conditions suitable for the propagation and spread of tuberculosis, must be vigorously pursued.

In this wide field of constructive effort the duties that devolve upon the State and the Municipality are as plain and clear cut as those obligations that attach to the individual himself.

In the year 1938, 134 cases of pulmonary tuberculosis were notified and 128 deaths certified As has been observed during the past ten years, the age periods of greatest incidence and also of greatest mortality are the 21 to 25 and 26 to 30 periods. The two tables listed below give details of these facts and demonstrate the gradual decline in the death rate from this disease since 1918.

Pulmonary Tuberculosis in Port-of-Spain, 1938—Age Distribution of Notifications and Deaths according to Sex.

		-	accordi	ng to Sex.			
Age Periods,	1		Notification	s.		Deaths.	
Age Periods.		Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes
Under 1 year			1				1
1- 5 years		1		1	1	1	2
6-10 do	11.	SOLD, HA	mon to had	A COLUMN	Signature of the last of the l	1	1
11-15 do		2	4	6	1	2	3
16-20 do		1	11	12	1	10	11
21-25 do		10	15	25	7	13	20
26-30 do	36.50	9	17	26	10	14	24
31-35 do		7	8	15	6	6	12
36-40 do		5	4	9	9	3	12
41-45 do	17.	6	4	10	5	4	9
6-50 do		7	4	11	4	4	8
31-55 do		4	W W	4	6		6
56-60 do		4	4	8	5	4	9
Over 60 years		4	. 3	7	9	2	11
Total		60	74	134	64	64	128

32

Pulmonary Tuberculosis in Port-of-Spain-Notifications, Deaths and Death rates, 1918-38.

(1.31	and the same	Year.	No.	Months of	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 .	actional to		10 10.2	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	m : 10			137	134	1,90
	1932				130	112	1.58
	1933				135	129	1.79
	1934	It was but			181	125	1.71
	1935				148	109	1.47
	1936				143	119	1.57
	1937		***		131	142	1.84
	Yearly av	erage 1918-37		Charles .	171.7	150.6	2,22
	Year 1938	8			134	128	1.52

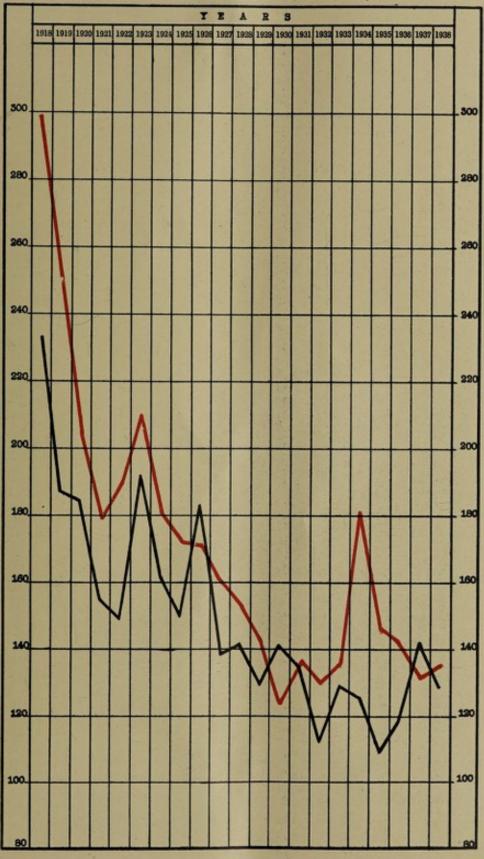
At the a e periods 16 to 25 and 26 to 31, which I have already referred to as being far and away the most usual time for the disease to manifest itself the table given below shows that tuberculosis was responsible for 30 per cent. of the total mortality from all causes that occurred during the year. In other words one out of every three people who died at these age periods were victims of that veritable scourge—pulmonary tuberculosis.

Proportion of Deaths from Pulmonary Tuberculosis to Deaths from All Causes in Port-of-Spain according to Age and Sex in 1938.

					I	DEATHS.				0000
And Destroit	1		MALES.			FEMALES.		Bo	TH SEXES.	10000
Age Periods.		All Causes.	Pulmon- ary Tubercu- losis.	due to	All Causes.	Pulmon- ary Tubercu- losis.	Per- centage due to Pul. Tub'sis,	Ali Causes.	Pulmon- ary Tubercu- losis.	due to
Under 1 year		107			97			204		
1- 5 years	***	35	I	2.86	34	1	2.94	69	2 0	2.90
6 10 do.	***	9		***	8	I	12.50	17	1	5.88
11-15 do.	***	7	1	14.29	3	2	66.67	10	3	30.00
16-25 do.	***	41	8	19.51	57	23	40.35	98	31	31.63
26-35 do.	***	54	16	29.63	66	20	30.30	120	36	30.00
36-45 do.		81	1.4	17.28	75	7	9.33	156	21	13.46
46-55 do.	***	79	10	12.66	66	4	6.06	145	14	9.66
56-65 do.	***	113	13	11.50	III	4	3.60	224	17	7-59
Over 65 years		152	1	0.66	215	2	0.93	367	3	0.82
Total		678	64	9.44	732	64	8.74	1,410	128	9,08

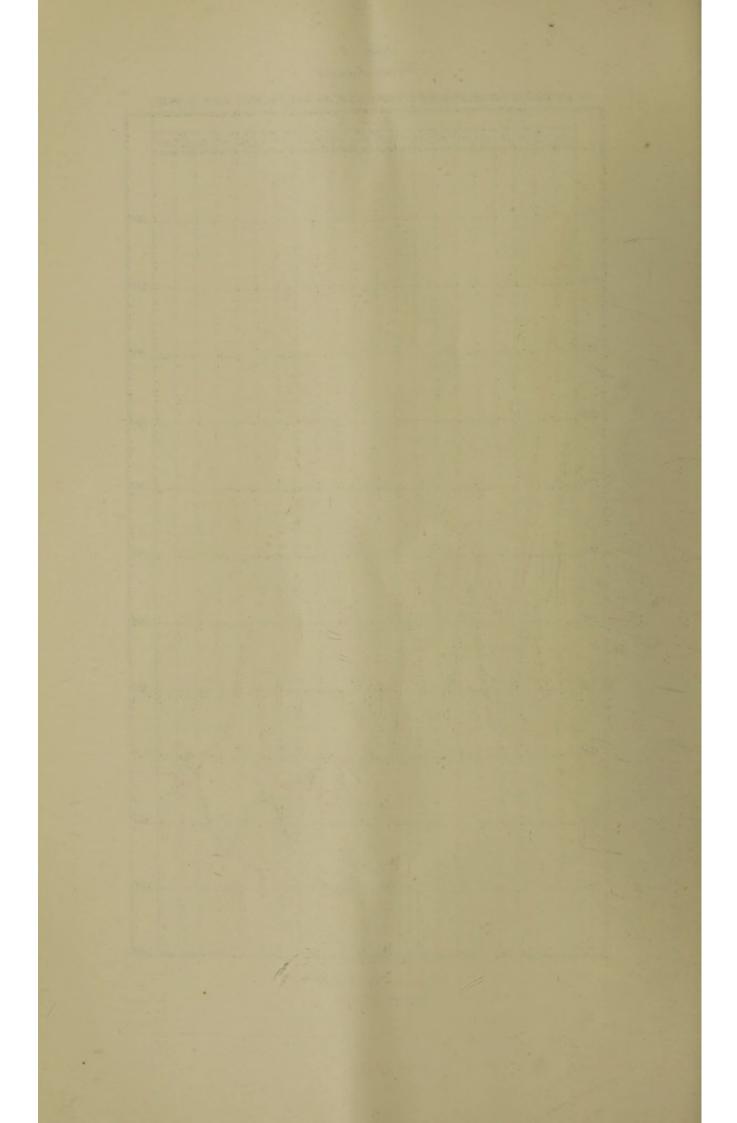
Chart F Port-of-Spain

PULMONARY TUBERCULOSIS - Notifications and Deaths, 1918 - 1938.



NOTIFICATIONS.

DEATHS.



The changes which have taken place during the twenty (20) years 1918-1938 in the distribution of the mortality according to age and sex can be gleaned from the figures recorded in the table below.

Pulmonary Tuberculosis in Port-of-Spain-Deaths by Age and Sex in 1918 and 1928 contrasted.

	model and a			1918.			1938.	
Ag	e Periods.		Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes
c-5 years			2	6	8	i	1	2
6-10 do.		****	2	3	5	****	1	1
11-15 do.			3	6	9	1	2	3
16-20 do.	-121	****	10	16	26	1	10	11
21-25 do.	100	****	13	17	30	7	13	20
6-30 do.	-ii.	****	21	22	43	10	14	24
31-35 do.			11	16	27	6	6	12
6-40 do.	***		17	17	34	9	3	12
11-45 do.	****		10	11	21	5	4	9
6-50 do.	****		6	7	13	. 4	4	8
1-55 do.			****	3	3	6		6
5'-60 do.		-	5		5	5	4	9
Over 60 year	rs	1000	2	7	9	9	2	11
To	tal		102	131	233	64	64	128

It is obvious that, though the mortality has declined in numbers, the age periods of greatest mortality remain substantially the same during the 20-year period.

Deaths and Death-rates from Pulmonary Tuberculosis in the Colony from 1917 to 1938.

MA S	Y	ear.	No. of Deaths.	Death-rate per 10,000 population.	No.	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		144	 500	12.9	1937	 	 409	9.0
1927			 474	12.1	19:8	 1000	 381	8.3

#### Non-Pulmonary Tuberculosis.

Under this heading are grouped cases of tuberculosis of bones and joints, of intestines and peritoneum, of the meninges, of the kidneys—in fact of the genito-urinary system as a whole. While not occasioning such a high mortality as pulmonary tuberculosis it can be and actually is responsible for a great deal of crippling, and in certain forms, e.g., miliary tuberculosis and tuberculosis of the meninges, the mortality is one hundred per cent. Non-pulmonary tuberculosis is caused in the majority of cases by the bovine type of the tubercle bacillus, and it is an accepted fact that the bacillus gains access to the human body via the alimentary tract, commonly in milk and rarely in meat infected with the causative organism. With the increase in the consumption of milk, often subjected to no form of heat whatsoever, that has been apparent in the Urban Sanitary District during the past two years, the writer fears that the morbidity and mortality due to this form of tuberculosis is likely to show a definite upward trend.

Non-Pulmonary Tuberculosis in Port-of-Spain, 1938-Notifications and Deaths by Age and Sex.

	A D	4-4-	1		NOTIFICAT	IONS.		DEATHS.	
	Age Per	ious.		Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1	year								
1- 5 y	ears				2	2		1	1
6-10	do.			***	1	1		1	1
11-15	do.			1					
6-20	do.				1	1	***	1	1
1-25	do.						* ***	*	
6-30	do.							2	2
1-35	do.						1		1
6-40	do.	***		1		1		1	1
over 65	Years			- 1		1	1		1
	Total			2	4	6	2	6	8

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

	Notifica	TIONS.			DEATHS.						
Ages.	Forms of the Disease.	Males.	Fe- males.	Both Sexes.	The second secon	Males.	Fe- males.	Both Sexes			
1- 5 years	Tuberculous Meningitis		13	1	Tuberculous Meningitis		1	onsy			
do.	Tuberculosis of Spine	1	1	i i	The second secon		100	- 10			
6-10 years	Tuberculous Peritonitis	133	9	1	Tabes Mesenterica		1	LEGY			
11-15 do.			-				1				
16-20 do.	Acute Miliary Tuber- culosis—Tuberculous Meningitis		ï	1	Acute Miliary Tuber- culosis—Tuberculous Meningitis		ï	ï			
21-25 do.											
26-30 do.			1000		Tuberculous Meningitis		***	\$500g			
do.		31500	***	***	Tuberculous Peritonitis	***	-	1			
31-35 do.	1	1	***			ï	2	7.000			
36-40 do.	Tuberculade of Cale	100	***	***	Miliary Tuberculosis	- 20	***	1			
	Milliams Talkamentante	200	2000	1 2	Tuberculous Peritonitis	***	1	1			
50 710	dinary Tuberculosis	1	***	1	Miliary Tuberculosis	1	***	1			
	Total Notifications	2	4	6	Total Deaths	2	6	8			

1936 1937 TUBERCULOSIS - Deaths, 1918-1938. 1933 1934 1935 1930 1931 1932 Port-of-Spain 1929 Chart G 1928 1925 NOM-PULMONARY 1923 1924 1922 1918 1919 1920 1921 10 2 8

28

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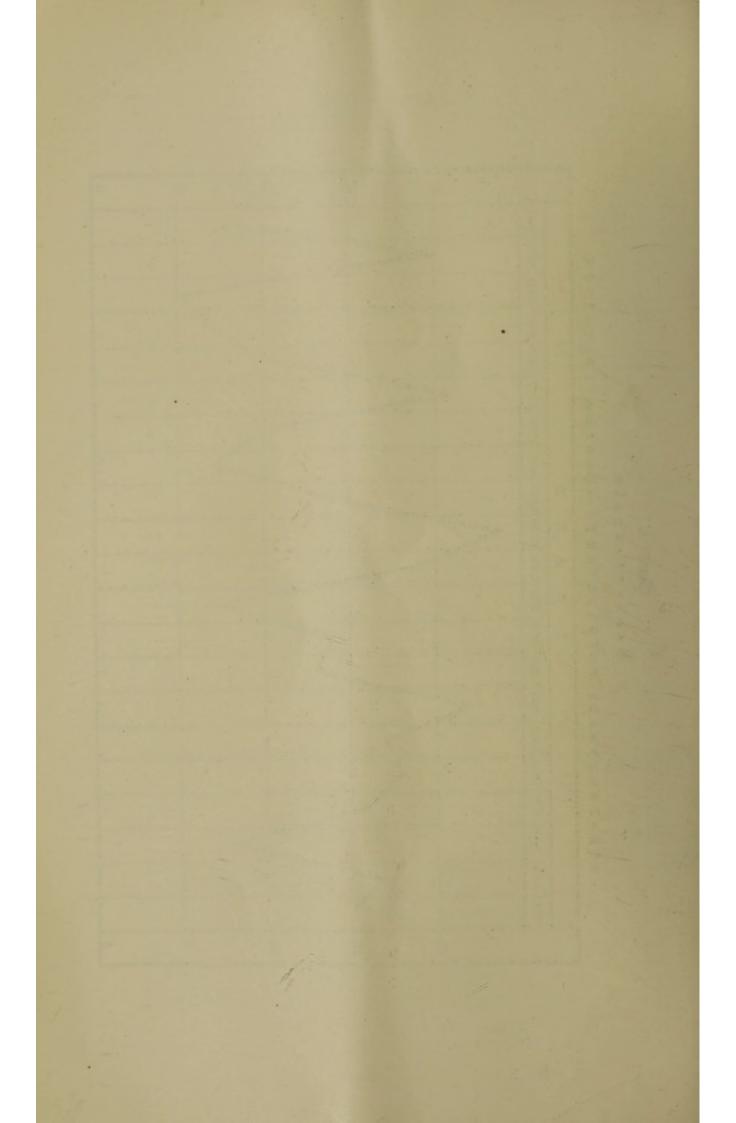
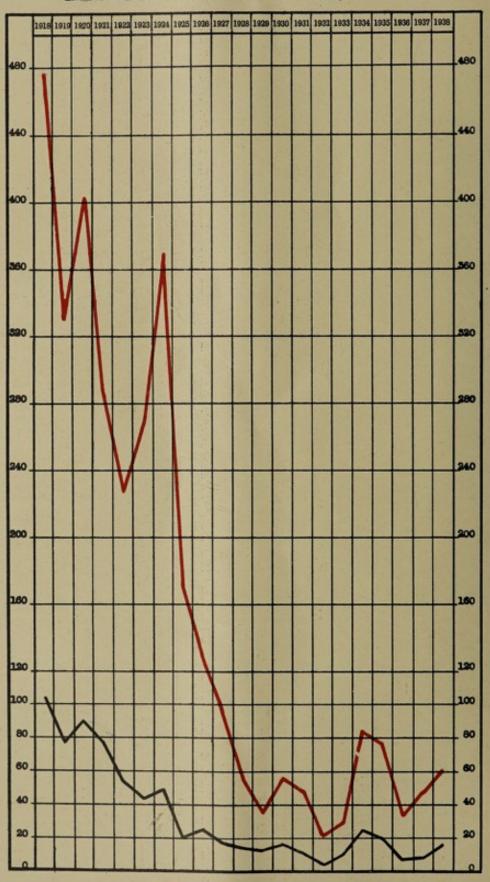




Chart H
Port-of-Spain

ENTERIC PEVER - Notifications and Deaths, 1918 - 1938.



NOTIFICATIONS.

DEATHS.

The same decline in incidence and mortality that has been a feature in the case of pulmonary tuberculosis during the past 15 years is also apparent in the case of non-pulmonary tuberculosis though the rate of decrease has been slower on the whole. It is reasonable to assume that the same causes, to which I have already attributed the decrease in the case of the one, are also responsible for the decrease in the case of the other.

Progress of Mortality from Pulmonary and Non-Pulmonary Tuberculosis for 15 years, 1924-1938.

1	DEAT	HS FR	OM PUL	MONA	RY TU	BERCUL	osis.		DEAT	HS FR	OM N	on-Pui	MON	ARY	Tuber	CULO	SIS.
Quinquennium Quinquennium 1924-28. 1929-33.			Quino	uenn 34-38		0.00	luenni 24-28.		Quinq 192	uenr 29-33		1 **		ennium 4-38.			
1924		162	1929		129	1934		125	1924		22	1929		2.4	1934		10
1925		149	1930		141	1935		109	1925		13	1930		1.4	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
Total		773		- 1	645			623			75			76	100		50
Yearly	av.	154-6	COLORD !		129	3 -11		124.6	100		15	I ledica		15.2	Late 5		10

#### ENTERIC FEVER.

It is customary to look upon the extent to which enteric fever is endemic in any given area as a very fair index of the state of sanitation prevailing and also of the efficiency of the essential sanitary services provided in the area. It is an undisputed fact that if the water supply of a sanitary district is pure, if the efficiency of the disposal of sewage is such that the escape of faeces into watercourses or streams or into places where flies have a ready access, is an impossibility, if the protection of food and drink is such that contamination with infected faeces cannot take place, then such a district will have a very low incidence of enteric fever. In other words, if efficient measures are taken to prevent the infected faeces of man from gaining access to the alimentary tract of his neighbour, then typhoid fever would automatically disappear.

It is with a view to securing this very desirable result that water is chlorinated, sewerage installed,

and foodstuffs of all kinds protected from contamination with dirt, dust and flies

It is, of course, a moot point whether the aim of public health measures should be the total and absolute eradication of the disease from a community or rather the attainment of such a low endemic threshold of infection that a mild subclinical variety of the disease exists which, whilst not causing mortality or endangering life in any way, is nevertheless of sufficient intensity to bring about a fair degree of immunity in the general population.

In communities which have been rendered practically free from infection by the measures referred to above, the experience has been that epidemics spread like wild fire, attaining great proportions

and taking a heavy toll in morbidity and mortality

The decline of typhoid fever in the Urban Sanitary District of the City of Port-of-Spain has been a marked feature ever since the Local Authority was constituted, but, coincident with the introduction of the practice of the chlorination of water in 1924, there has been a sudden and decided decrease in the number of cases which can only be attributed to the purification of the water supply by that measure. Another curious finding is that, after the full effect of the chlorination of the water supply had been obtained, no further decline in the number of cases has been noticeable, the fluctuations observed from year to year being such as are to be expected in all naturally occurring phenomena.

Enteric Fever. e the verse 1019-1099

Yes	ır.	Notifications.	Deaths.	Death-rates per 1,000 population.	Year.		Notifications.	Deaths.	Death-rates per 1,000 population.
1918		330	104 76	1.52	1928 1929 1930		54 35 55	14 13 16	0.21 0.19 0.23
1920 1921 1922	**	287 226	90 77 53	1.29 1.25 0.84	1931 1932	**	47 20 28	11 4 10	0.16 0.06 0.14
1923 1924 1925	11	370	43 49 20	0.68 0.76 0.31	1933 1934 1935		85 76	25 19	0.34 0.26
1926		125	26 17	0.39	1936	**	3 <sup>2</sup> 47	7	0.08
		0 00		800.0	1938		59	16	0.19

The table hereunder listed shows that the greatest incidence falls on the younger age periods the periods 1 to 5, 6 to 10, 11 to 15 being responsible for 10, 14 and 10 cases, respectively.

Enteric Fever, 1938-Age Distribution of Notifications and Deaths according to Sex.

				Notificatio	NS.		DEATHS.	100000000000000000000000000000000000000
Age Pe	eriods.		Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes
Under Luces	-			1	,			
Under 1 year	***	***	4	6	10	1	1	2
1- 5 years	***	13.1	7	0		-	1	-
6-10 do.	***	***	7	1	14	111	1	De section
11-15 do.	***	***	7	3	10	4	1	5
16-20 do.	***		2	4	6		2	2
21-25 do.			2 2 2 5	4	6		4	4
	***	000000	9	1	3			
26-30 do.	***	***	-		5	***	***	
31-35 do.	***	***	9	***	0	***	***	***
36-40 do.		***	***	1	1	***	***	***
41-45 do.			***	1	1	***	***	***
46-50 do.					***			***
51-55 do.			1		1	1		1
56-60 do.		4 1 2 2 3						
	***	***		1	1		1	1
Over 60 years	***	***				***	100000000000000000000000000000000000000	The state of the s
Total			30	29	59	6	10	16

As has been mentioned previously the recently included district of "the St. James Area" returned the highest number of cases—27 being notified in the 7 months—June to December, during which that area was under the jurisdiction of the Public Health Department.

Enteric Fever in Sub-District.	Sub-Di	stricts of	i City.	Fev	f Enteric er Cases lotified.
City Proper (sewered) 12 months	****	****	****	****	10
St. Clair (sewered) do.	****	****		****	****
East Dry River (unsewered) 12 m	onths	****	****		6
Belmont (unsewered) 12 months	****	****	****	****	12
Woodbrook do. do.	****		****		4
St. James (unsewered) 7 months	****	****	****	****	27
Total	****	****	****	****	59

Whenever a case of typhoid occurs in the Urban Sanitary District every effort is made and inducement given to remove the case to the Infectious Diseases Ward, Colonial Hospital, where current rather than terminal disinfection can be efficiently carried out, the premises as well as fomites are disinfected, and preventive inoculation given to those contacts who do not prefer to go to their own private doctors. During the year under review the number of contacts inoculated totalled 230, of whom 160 received one T.A.B. and 70 received two T.A.B. inoculations.

### PNEUMONIA.

Under the general heading pneumonia are included acute lobar pneumonia, acute primary broncho-pneumonia and secondary broncho-pneumonia, influenzal pneumonia and other atypical pneumonias. The classical lobar pneumonia is a rare disease in this Colony, most of the primary pneumonias being of the atypical or influenzal type.

It is not possible to say with any degree of accuracy what type of Pneumococcus is responsible for these infections, as no systematic investigations along these lines have been undertaken, but there can be no doubt that the disease is associated with a very high case mortality.

During the year under report 101 notifications were received and 70 deaths registered. During the last ten years there has been on the whole, a steady increase in the number of cases notified.

Peumonia (All Forms).

Notifications, Deaths, Death-rates and Case Mortality for the years 1922-1938.

Year.	Notifi- cations.	Deaths.	Death-rate per 1,000 population.	Case Mortal- ity.	Year.	Notifi- cations.	Deaths.	Death-rate per 1,000 population.	Case Mortal- ity.
1922 1923 1924 1925 1926 1927 1928	76 72 85 86 65 60	140 75 50 63 62 41 51 55	2.24 1.19 0.78 0.98 0.95 0.63 0.77 0.82	58.3 98.6 69.4 74.1 72.0 63.0 85.0 71.4	1930 1931 1932 1933 1934 1935 1936	83 71 71 135 208 165 193 125	55 65 55 76 99 76 97 85	0.80 0.92 0.77 1.06 1.35 1.02 1.28 1.10	66,2 91,5 77-4 56,3 47-5 46,0 50 2 68,0
	100			BRIT	1938	101	70	0.83	69.31

Infants under one year and children of 1 to 5 years are particularly susceptible; 17 cases and 14 deaths occurred in infants under one year and 27 cases with 15 deaths in the age period 1 to 5 years.

Pneumonia-Notifications and Deaths by Age and Sex.

				Notificati	ons.	DEATHS.				
Age Peri	ods.		Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.		
Under 1 year			8	9	17	8	6	14		
I to 5 years			18	9	27	8	7	15		
6 to 10 do.			2	3	5			100.000		
11 to 15 do.			1		1	I		1		
16 to 20 do.			3	3	6	2		2		
21 to 25 do.			4	3	7	1		1		
6 to 30 do.			5	2	7	3	2	5		
31 to 35 do.			4	1.0	4	3		3		
36 to 40 do.		2.0	4	3	7	I	1	2		
41 to 45 do.			6	1	7	0	2	8		
46 to 50 do.		**	3	1	4	1	I	2		
51 to 55 do.		2.1	3	15	3	2	I	3		
56 to 60 do.			**	1	1	6	1	3		
Over 60 years	**	"	2	3	5	0	5	11		
Total			63	38	101	44	26	70		

If these 101 notifications are considered from the point of view of relative prevalence in the various sub-districts of the City, it will be seen that the East Dry River sub-district furnished 33 cases—a figure which, in view of what has been said previously as to sanitary and health conditions in that district, is not altogether unexpected.

Sub-distri		nia in	Sub-dis	stricts of	City.	No. of F	of Cases
City Proper (	12 months) .		****		****		29
St. Clair (			2010	****	****	****	1
East Dry Riv	er (12 month	s)		****	****	****	33
Belmont (1	12 months) .	44.6	*****	****	****	****	19
Woodbrook (	do. ) .	***	****	****	****	****	11
St. James (7	7 months) .		****	****		****	8
Total	****	****			****	****	101

#### DIPHTHERIA.

Every year a certain number of notifications of this disease is received and a few deaths are recorded, the latter due mostly to the laryngeal form. The incidence, however, never seems to reach epidemic proportions and, on the whole, the disease is of a mild type.

In about one-half of the number of cases notified, clinical manifestations are either slight or entirely lacking, a positive swab furnishing the only clue to the diagnosis. I need hardly say that, even then, it is open to doubt whether the organisms detected on bacteriological examination are virulent or not.

I am inclined to think that routine virulence tests would show that there is very little genuine diphtheria in the Colony.

Diphtheria.

#### Notifications, Deaths and Death-rates for the years 1917-38.

	Year,		Notifi- cations.	Deaths.	Death- rates.	7	Cear.		Notifi- cations.	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		
100000			8	2	0.03	1933			11	100	
1922			10	3	0.05	1934	.,		38	5	0.07
1923			27	2	0.03	1935			17	2	0.03
1924		**	25	2	0.03	1936			22	4	0.05
1925		::	4	1	0.02	1937			30	4	0.05
			16	2	0.03		-	-			-
1927	**		10		-	1938			16	3	0.04

Diphtheria, 1938-Notifications and Deaths by Age and Sex.

		1000		NOTIFICATIO	NS.	DEATHS.				
Age	Periods.		Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.		
Jnder 1 year			***	***	***	***	***	***		
1- 5 years		***	4 2	3 3	7 5	2	***	2		
6-10 do.		***	2	3	5	1	***	1		
1-15 do.			***		***	***	1	1.0		
6-20 do.				2	2	***	***			
1-25 do.			1		1	***	***	1		
6-50 do.		***	1	***	1			The Bridge		
Tota	ı		8	8	16	3		3		

#### ACUTE ANTERIOR POLIOMYELITIS.

In contrast with the mild epidemic of ten (10) cases which I reported last year, only two (2) cases were notified in the year 1938. They were two females, each aged two (2) years.

Notifications of Acute Anterior Policmyelitis, 1927-38.

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

#### CHICKEN POX.

As I have stated in a preceding chapter there occurred during the year an epidemic of chicken pox, on the whole mild, but with occasional cases so severe as to give rise to the suspicion of alastrim. The age periods of greatest incidence were the 1 to 5, 6 to 10, and 11 to 15 age periods.

Chicken Pox in Port-of-Spain.

Notifications by Age and Sex for the year 1938.

Age Periods	Males.	Fe- males.	Both Sexes.	Age Periods.		Males.	Fe- males.	Both Sexes	
Under 1 year		1	6	7	31 to 35 years		3	5	10
I to 5 years		11	6	17	36 to 40 do.	- 22		2	2
6 to 10 do.		28	15	43	41 to 45 do.	33		1	I
11 to 15 do.		15	12	27	46 to 50 do.		1		1
16 to 20 do.		10	5	15	51 to 55 do.			I	I
21 to 25 do.		2	6	8	The state of the s				
26 to 30 do.		3	7	. 10					
					Total		76	66	142

No case of Encephalitis Lethargica or of Paralytic Rabies occurred within the limits of the City during the year.

None of the dangerous infectious diseases: Yellow Fever, Small Pox, Alastrim, Cholera, Plague or Typhus Fever were notified.

The City—in fact the Colony as a whole— has been free from quarantinable diseases for about thirty (30) years with the exception of the year 1926 when (16) sixteen cases of alastrim occurred, and the source of infection here was clearly traced to a traveller who had arrived in Port-of-Spain from the neighbouring republic of Venezuela while incubating the disease.

#### NON-NOTIFIABLE INFECTIOUS DISEASES.

#### MALARIA.

Among the very first enquiries made by a newcomer to a tropical city are questions directed towards ascertaining the relative prevalence of malaria and, during the course of the year under review, at least a dozen travellers from Europe and America called at the Public Health Department for the specific purpose of finding out how much malaria there was in the City and what precautions were necessary to guard against infection.

Eight years ago, in Council Paper No. 97 of 1931, Dr. Eric de Verteuil now Senior Medical Officer of Health, North-western Division, but at that time Government Malariologist, referring to the prevention and control of malaria in the City of Port-of-Spain and suburbs, wrote:

"... the control of malaria in the City and suburbs of Port-of-Spain under present conditions is almost absolutely dependent on the control of anopheles tarsimaculatus breeding places and ... the control of the breeding places can be sharply divided ... into:—

- (a) Local Control,-i.s. control of breeding places within the City, and
- (b) Long Distance Control.—i.e. control of breeding places in the suburbs and up to 1½ miles from the suburbs, e.g. Laventille, St. Ann's, Maraval, Debe, St. James and Cocorite.

#### Local Control.

"It is obviously not within the purview of this report to make any comments on the control of breeding places in the City of Port-of-Spain—these are dealt with by the Medical Officer of Health, Port-of-Spain—but it is impossible to refrain from commenting on the high pitch of excellence which has been attained by local control of anopheles breeding areas by the sanitary efforts of the Government up to 1916 and subsequently of the City Council. The City of Port-of-Spain stands to-day as second to none amongst large tropical towns so far as malaria is concerned, and that is due principally though not solely to local control."

#### Long Distance Control.

"Unfortunately we cannot be quite so free in our praises as regards the malaria control of the suburbs, not because of the absence of local control in these areas but principally because of the dangerous areas which breed anopheles tarsimaculatus on the outskirts of the suburbs, i.e. Laventille Mangrove Swamps on the east. These result in large migration with the onset of the wet season.

During the whole of the dry season the immediate suburbs of Port-of-Spain, i.e. St. James, Maraval, Debe, St. Ann's, Belmont Valley and John John Village were completely free of all breeding places. East of the City in the Laventille area anopheles breeding places were confined to a few definitely localised seeping areas in the low-lying swampy area between the Eastern Main Road and the railway line along the eastern edge of the mangrove swamp in Mendes' land near Shine's Trace. No breeding was in progress in the swamps south of the railway line from its eastern fringe to the La Basse dump due to the free tidal movement of sea water over the whole of this area.

West of the City, however, the Cocorite Farm provided a plentiful supply of anopheles breeding places during the whole of the dry season owing to the large amount of seepage which takes place at the foot of the hills along the Western Main Road in that area, thus maintaining a continuous supply of brackish water breeding places.

With the advent of the rainy season during July and August, however, the picture had completely changed and early in July breeding in two large long distance anopheles reservoirs, i.e. Laventille Swamp and Cocorite Farm, began to be very intense and towards the end of July and the beginning of August a large migration of anopheles adults from these reservoirs had penetrated through the suburbs into the City itself. . . in John John Village they could be easily found in most of the houses examined and further east in Success Village they were flying around in exceedingly large numbers.

On 30th August, I visited a number of houses on Laventille Hill north of Laventille Church (height about 500 feet above sea level) and I had no difficulty in getting adult anopheles tarsimaculatus on the partitions in the rooms. There could be no doubt that the adults were flying into Port-of-Spain from the Laventille Swamp on the East of the City, a distance of about two miles.

On 31st August, I made a close search for local breeding places in all the suburbs of the City using this as a further check to the migration and subsequent distribution of the adults with the following results: East of the City (where in December not a single larva could be found in what appeared to be ideal breeding places) breeding was exceedingly intense and larvae could be picked up in almost every conceivable collection of stagnant water from half an inch to two feet deep. They were particularly numerous on the La Basse dumping ground in brackish water.

West of the City numerous breeding places were found on the Aviation ground at Mucurapo, the Cemetery Savannah, west of the Cemetery, in Peru Village, in Extravanganza Village, at the foot of Fort George Road, in the House of Refuge Grounds and in Cocorite, whilst north and east of the City they were also found at Debe, Maraval, Cascade and Upper Belmont Valley.

In view of these findings therefore I recommend the immediate control by means of intensive oiling and the early institution of permanent local control in all the suburbs of the City as already outlined in my monthly reports and recommendations.

Long distance control of the Laventille and Cocorite breeding areas is, I think, also a measure which should engage early attention.

Recommendations for the permanent control in the Laventille area have already been dealt with by the Honourable Surgeon-General and await the final plan by the Public Works Department. The Cocorite Farm area requires further investigation during rainy season conditions before recommendations of a permanent nature can be made but intensive oiling should be of material assistance in abating the intensity of the breeding during the malaria season."

Today, eight years after, the position is substantially the same, though a great deal of improvement has been effected by the carrying out of anti-malarial works in the suburbs and particularly on the eastern side in the Laventille Swamp. In the dry season the whole Urban Sanitary District is free from anopheline larvae, but as soon as the rainy season starts the larvae of this species can be obtained in stagnant pools near the Woodbrook dump, in the Mucurapo pasture, in St. James and Cocorite in the west, in the upper reaches of the Belmont Valley Road and the St. Francois Valley Road in the north, and in the grounds of the Eastern dump in the east; and adult anopheles migrate from these areas to the adjoining parts of the City. It is just possible that the conditions obtaining here in the periphery of the City, may be responsible for a certain number of cases of malaria especially in the newly included St. James Area, but persistent investigation over a number of years has failed to link up any case of malaria with a source of infection within the limits of the Urban Sanitary District, prior to the inclusion of St. James on 1st June. In fact the evidence has consistently pointed the other way, i.e. that sufferers from malaria living within the City have acquired the infection in a malarious area outside the City.

Thirty-one deaths of cases, giving addresses within the limits of the City, were certified by

medical practitioners-19 in males and 12 in females.

Deaths	from	Malaria	hw	Age	and	Sex.
Deaths	HOM	TINGS COLUMN	N. J.	ARD V	STREET	March .

Age Periods.		Males.	Fe- males.	Both Sexes.	Age Periods.	Males.	Fe- males.	Both Sexes	
Under 1 year	1				41-45 years				. 1
1-5 years		****	2	2	46-50 do.		2	1	3
6-10 do.		1	2000	1	51-55 do.	****	100		****
1-15 do.				1000	56-60 do.		2	2	4
6-20 do.	****	3	1	4	Over 60 years		4	3	7
1-25 do.		1	1	2	AND DESCRIPTION OF THE PERSON				
e6-30 do.	****	1	****	1					
1-35 do.		2	****	2	The state of the s			_	-
36-40 do.		2	2	4	Total		19	12	31

#### Malaria-Local Distribution of Deaths.

mainta Docar Distribution of Destino.																
Sub-districts.					February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total
City Proper		****	****		3	2	I	****	1	3		1	2		1	14
St. Clair	****			hour	****		****		****						· ·····	
East Dry River			uni			2	I	3		1		****	1	2	2	12
Belmont			649			****	-									
Woodbrook		-				1	****	1		1	1	****		****		4
St. James	****	· · · · · ·								1						1
Total	****				3	5	2	4	1	6	1	1	3	2	3	31

## SYPHILIS.

Syphilis makes such widespread and serious incursions on all the tissues of the human body that its importance as a public health problem of the first order cannot be overestimated. In considering the effects of syphilis it is well to bear in mind:

Council No. 89 of 1919.

... "I. Syphilis is transmissible through either parent to innocent offspring. It is one of the principal causes of abortion, miscarriage, and debility at or soon after birth and largely contributes to the heavy infantile mortality of the colony. It is also a common source of developmental diseases, cranial deformities, water on the brain or hydrocephalus, hare lip, cleft palate, club foot and other malformations, retardation of growth, defective development of the brain with consequent mental deficiency or actual

idiocy. It is also one of the principal causes of deamess in conferen.

2. It is one of the chief causes of diseases of the heart and blood vessels including aneurism of which

it is perhaps the sole cause

3. It is a factor in the causation of Bright's disease of the kidneys, diabetes and cirrhosis of the liver. Stricture of the rectum, resulting from gummatous tumours of that portion of the large intestine, is also of frequent occurrence.

of frequent occurrence.

4. It is a predisposing cause of tuberculosis and also of cancer—especially cancer of the tongue for which it is responsible in 80 per cent. of cases.

5. It is the fundamental cause of general paralysis of the insane and locomotor ataxia, and also of optic atrophy and other blinding diseases of the delicate structures at the back of the eyes. It is the cause of cerebral haemorrhage and of gummatous tumours of the brain, leading to disorders of the special senses and to paralysis in various parts of the body.

6. It is often the cause of untold misery to innocent and guilty alike.

7. Through its degenerative influence on the organs and tissues of the body syphilis is one of the principal causes of premature old age and of death between the ages of 40 and 50."

A fair estimate of the rate of incidence of the disease on the general population would be about twenty per cent., of which ten per cent. would represent active syphilitic infection.

Alive to the urgent need of combating the ravages of this disease, Government has instituted a number of measures designed to secure the early treatment of the afflicted and their continuous attendance until a clinical cure has been established. I refer to the appointment of a whole-time Venereal Disease Officer, the erection of a modern up-to-date Venereal Disease Clinic in the Hospital grounds, the establishment of evening sessions for those who cannot attend during the day time, &c. and it is gratifying to state that these services are being taken advantage of by an ever increasing number of sufferers.

It is the opinion of the writer, however, that the preventive aspect of the problem is not receiving the attention that the well known ravages of the disease warrant, and a plea is here made for a wider and a more vigorous campaign for the education of the public as to the grave perils attending these diseases.

The Royal Commission on Venereal Diseases (November, 1913) in its Final Report stated:

"... The evils which lead to the spread of venereal diseases are, in great part, due to want of control ignorance and inexperience, and the importance of wisely conceived educational measures can hardly be exaggerated. If venereal diseases are to be stamped out, it will be necessary not only to provide the medical means of combating them, but to raise the moral standards and practice of the community as a whole. Such an improvement can only be brought about by closer co-operation between religious bodies, the teaching and medical professions, and educational authorities. Though we are not unmindful of much excellent work that is being carried on, we are strongly of opinion that there is an urgent need for more careful instruction in regard to self-control generally, and to moral conduct as bearing upon sexual relations throughout all types and grades of education. Such instructions should be based upon moral principles and spiritual considerations, and should by no means be concentrated on the physical consequences of immoral conduct."

Deaths and Death-rates from Syphilis during the quinquennium, 1933-37, and the year 1938, with percentages of decline or increase at different Ages.

			percenu	ages of deci	me or	mere	ease at unite	tens Maca		
Ages.		Annual Average Deaths, 1933-37.	Deaths, 1938.	Percentage of decline of Deaths in 1938 on average for 1933-37.	Percentage increase of Deaths in 1938	on average for 1933-37.	Annual Average Death-rates per 1,000 population for 1933-1937.	Death-rates per 1,000 population for 1938.	Percentage decline of Death-rates in 1938 on average for 1933-37.	Percentage increase of Death-rates in 1938 on average for 1933-37.
Under 1 year		5.2	4	23.08			0.07	0,05	28.57	ment garden
1- 2 years		0.6	ě.,	100,00			0,008	3.	100,00	1 11.11
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.	**	1,0	2		100	.00	10.0	0,02		100,00
21-30 do.		3-4	3	11.76			0.05	0.04	20,00	
31-40 do.		3.8	9		136	.84	0.05	0.11	September 1	120,00
41-50 do.		4.0	5	100	25	.00	0.05	0,06	or sport sind	20,00
51-60 do.		1.8	-4		122	.22	0.02	0.05		150,00
Over 60 years		1.2	. 2	No de la constitución de la cons	66	.67	0.02	0,02	- 1500	and .
		21.8	29	118.00	33	.03	0.29	0.34	1	17.24

#### DYSENTERY.

The term "dysentery" should be used solely and strictly in its medical sense to indicate a disease attended by "gripes" in the abdomen, by the passage of blood and mucus in the stools and caused either by the protozoon Entamocha Histolytica or Giardia Lamblia (amoebic or lamblial dysentery) or by bacilli of a special group (bacillary dysentery). Unfortunately, however, all kinds of ailments attended by diarrhoea and the passage of a certain amount of blood whether due to local disease or general disease, to cancer or to tuberculosis, are labelled "dysentery" by the lay public. A person who has been the victim of one of the last mentioned diseases may very well be given a certificate attributing death to dysentery, if the history of the case as given by relatives or neighbours, is the only index, as it so very often is, that the practitioner has to guide him.

Often called "one of the bowel filth diseases", the control of dysentery is the prevention of infected excrement from gaining access to the water or food of man and in proportion as sanitary measures secure a pure water and food supply, and the efficient disinfection and disposal of excrement, so too the morbidity and mortality due to dysentery disappear.

# Deaths from the Dysenteries for 21 years 1918-1938.

Y	ear.	Deaths,	Death- rates.	Year		Deaths.	Death- rates.	Year		Deaths.	Death- rates.
1918		43	0.63	1925		31	0.48	1932		12	0.17
1010		.0	0.70	1926		31	0.47	1933		10	0.14
1920		En	0.90	1927		27	0.41	1934		5	0.07
1921		4.4	0.50	1928		29	0.44	1935		4	0.05
1922	.,	7.00	0.38	1929		23	0.34	1936		5	0.07
1923		0.0	0.40	1930		II	0.16	1937		7	0.09
1924			0.66	1931		18	6.26			1000	
Yearly :	verage	39-4	0.60	Yearly ave	rage	24.3	0.37	Yearly av	erage	7.2	0.10
			200 700	14,00	-			1938		6	0.07

# Deaths from the Dysenteries by Age and Sex, 1938.

Age Periods.	Males.	Fe- males.	Both Sexes.	Age Periods.	Males.	Fe- males.	Both Sexes.
21-25 years	1	1	2	46-50 years	2		2
31-35 do	.1		1	61-65 do	1		1
and the second				Total	. 5	1	6

#### DIARRHOEA AND ENTERITIS.

Under this heading are classified all cases of bowel disease in which the cause is not at once apparent. From a purely medical point of view the classification does not mean very much, but from a public health point of view the question of infected excreta at once comes up for consideration and the aim here of all sanitary measures must be the disinfection and proper disposal of all infected excreta, so that none gets, either directly or through the agency of flies, to the food of man.

### Diarrhoea and Enteritis-Deaths by Age and Sex.

Age Periods.	Males.	Fe- males.	Both Sexes.	Age Periods.	-	Males.	Fe- males.	Both Sexes.
Under 1 year	 12	10	22	46 to 50 years			1	1
I to 5 years	 2	4	6	51 to 55 do.		1		I
6 to 10 do.	 	1	1	56 to 60 do.		2	I	3
26 to 30 do.	 	1	1	Over 60 years		3	4	7
		1		Total	2.	20	22	42

Where conservancy methods of sewage disposal, as opposed to the water carriage system, are in widespread use, where privy cesspits of the old unscreened type abound, where there is congestion and overcrowding, it stands to reason that there will be found the highest incidence of diarrhoea and enteritis.

#### Diarrhoea and Enteritis-Local Distribution of Deaths.

Sub	-district			Jan.	Feb.	Mar.	Apl.	May	Jun.	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
City Proper				5		2		2	1		1			1	1	13
St. Clair					***	***	***	***		***		***				
East Dry River		***			3	1	1	1	3	2	2	2	1	****		16
Belmont		141		1				1	2	1			i			6
Woodbrook	***			***	****				***		1	1	1			3
st. James		14.					1000		2	1	1	****				4
Tota	al		***	6	3	3	1	4	8	4	5	3	3	1	1	42

#### Deaths from Diarrhoea and Enteritis for 21 years, 1918-38.

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	22	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			
Yearly average		140.8	2.13	Yearly average	 65	0,98	Yearly average	 42.7	0.58
	100	13	17 7				1938	42	0.50

### ANKYLOSTOMIASIS.

For obvious reasons there is very little opportunity for barefooted people to tread on hookworm infested excreta in the City of Port-of-Spain and so ankylostomiasis is not a problem in the Urban Sanitary District. But the Colonial Hospital and now the House of Refuge, however, furnish a certain number of deaths every year and, as can be readily deduced, they represent the victims of a hookworm infestation acquired in country districts where the disease is prevalent.

# Deaths from Ankylostomiasis.

			1	Age	AND SEX.
	13/1/17			Male.	Female.
Died at Colonial Hospital	 		 		45 years.
Do. House of Refuge	 **		 	61 years	35,40,45,60,60 yrs.
	Total	Deaths	 	1	6

#### OTHER PRINCIPAL CAUSES OF DEATH.

CARDIAC AND VASCULAR DISEASES.

With the single exception of the notifiable infectious diseases, cardiac and vascular diseases claimed a greater number of victims during the year 1938 than any other cause of death. There can be no doubt but that the stress and strain of modern life are taking their toll on the delicate cardiac and vascular tissues, and it is instructive to note that the number of deaths from arterio-sclerosis exceeded all other cardio-vascular causes.

Of the diseases which attack the heart directly syphilis is by far the most important, and the number of cases of syphilitic heart disease which come under the daily care of practitioners is the surest evidence that the treatment which may have been given in the early stage of the disease was wholly inadequate and inefficient.

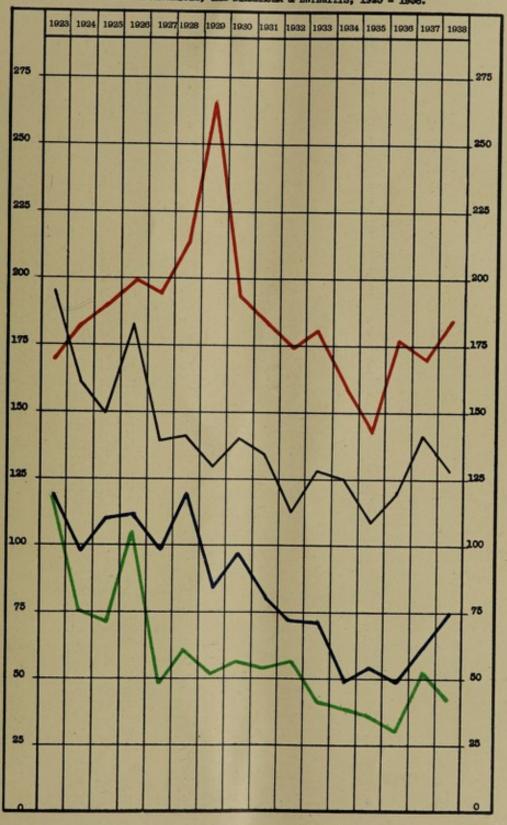
Deaths	registered	from	Cardiac	and	Vascular	Diseases	by	Age	and	Sex	in	1938.	
--------	------------	------	---------	-----	----------	----------	----	-----	-----	-----	----	-------	--

is contact some	9-6	years.	01-9	years.	51-11	years.	16-20	years.	21-25	years.	26-30	yours.	31-35 Vears.	26-40	years.	41-45	years.	46-50	years.	51-55	years.	36-60	years.	Over	60 yrs		Total.	0
FORMS.			M	F	M	F	м	F	M	F	M	F	M	F 7	M I	M	F	м	F	M	F	M	F	M	F	M	F	The state of
neurism of Aorta															1	2	1		4					1	7 2	10	10	0
neurism of Thoracic Aorta				-																	+	. 1		-		3		
neurism of Abdominal Aorta																									. 1	100	1	1
neurism of Coronary Artery																									. 1	1	1	1
cortic Incompetence													1		1 .		1			- 3	1					1	017	
Nortic Regurgitation							. 1		. 1															1	1	3	3 3	L
Aortic Stenosis						1 3.															+		-		. 1		. 1	I
Aortitis								-							1											1		
Aortic and Mitral Incompetent	e								. 3				1						. 7		-	I	1		. 1	1	5 4	4
ditral Incompetence							. 3	1									2		. 2	1	1				. 2	1	2	3
ditral Stenosis																							-					1
Cardio-Valvular Degeneration																									. 1			1
alvular Disease of Heart											. 2	1	2				1					1	1		2 5	1	8 7	7
Auricular Fibrillation																	1					1			. 2	2 1	1	3
dyocardial Degeneration											. 1				1	1			. 0		2	I	1	. 1	0 3	3 15	5 (	6
dyocarditis															1		3 -		1	ı		2	1	3	4 4	1 10	0 10	0
Myocardial Disease																			ı					4.	. 2	1	1 22	2
Endocarditis								1												1	I		3		2	. 18	7	1
Pericarditis					1.																							ı
Cardiac Disease	***																								1 7		1	1
Cardiac Insufficiency	***														***						1 -						i	
Congestive Cardiac Failure																1									,		1	2
Cardiac Syncope											1 1					1	1	2	1	I	3	3	1		2	1 1	0	9
Angina Pectoris																										1	000	1
Coronary Thrombosis	***											100			1	1		1.					-	2 .		100	1	4
Arterio-Sclerosis																						2 .		1	OI	7 10	0 1	9
Atheroma of Aorta										-																ı		1
Atheroma of Arteries	***	17.																								ı		1
Arterial Hypertension																			1							. 3	1	
Phlebitis																		1.									1949	1
Total ************************************	-		-	-				3 -		5	7	-	1 4	20	1000				5 1	0	01	2	0	03	04	8 0	4 9	12

contraded all other contract contract to the contract of the c

Chart I Port-of-Spain

Deaths from Fulmonary Tuberculosis, Cardiac & Vascular Diseases, Bright's Disease & Nephritis, and Diarredea & Enteritis, 1925 - 1938.



CARDIAC AND VASCULAR DISEASES.

PULMONARY TUBERCULOSIS.

BRIGHT'S DISEASE AND NEPHRITIS.

DIARRHEA AND ENTERITIS.



# CEREBRAL HAEMORRHAGE; APOPLEXY.

Sixty-five deaths were certified to this cause, and as is to be expected, more than one-half of these deaths occurred in the age periods 50 to 60 years and over 60 years.

# 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		****		100
1-5 years	****				36-40 do	-	2	1	3
6-10 do		****		***	41-45 do			7	7
11-15 do	1			112	46-50 do	****	6	5	11
16-20 do	and a		****	****	51-55 do		2	3	5
21-25 do					56-60 do		2	2	4
26 30 do	3000		4444		Over 60 years		12	18	. 30
	19				Total		27	38	65

#### BRONCHITIS.

# Deaths from Bronchitis by Age and Sex.

Age Periods.	Males.	Fe- males.	Both Sexes.	Age Periods.		Males.	Fe- males.	Both
Under 1 year	 7	6	13	31-35 years		1		1
1- 5 years	 1	2	3	36-40 do.	20	2	1	3
6-10 do	 1		I	41-45 do.	10.		- 4	
11-15 do	 			46-50 do.			1	1
16-20 do	 			51-55 do.		2	1	3
21-25 do	 2	1	3	56-60 do.	100	3	2	5
26-30 do	 	1	I	Over 60 years		7	6	13
				Total		26	21	47

# BRIGHT'S DISEASE AND NEPHRITIS.

This disease was responsible for 75 deaths in 1938, 37 males and 38 females. The age periods in which the greatest number of deaths occurred were again the 56 to 60 years and the over 60 years age periods.

#### Deaths from Nephritis by Age and Sex.

Age Periods.	700	Males.	Fe- males.	Both Sexes.	Age Periods.	Males.	Fe- males.	Both Sexes
Under 1 year		1		1	31-35 years		3	3
1- 5 years		1		1	36-40 do	4	5	9
6-10 do			1	1	41-45 do	3	2	5
1-15 do					46-50 do	3	1	4
6-20 do		1		1	51-55 do	1	1	2
21-25 do		2	1	3	56-60 do	5	6	11
26-30 do	1	2	2	4	Over 60 years	14	16	30
	200				Total	37	38	75

# CANCER AND OTHER MALIGNANT DISEASES.

Cancer is claiming more and more victims each year and withal the cause of the disease still remains as deep a mystery as ever. A possible explanation of the increase in the number of cases is furnished by the fact that, due largely to the more efficient means now at our disposal, greater accuracy in diagnosis is being achieved, as well as, that the greater expectation of life, which modern medical science has rendered possible, furnishes a larger population at the later age periods at which cancer is known to be prevalent. When every allowance, however, is made for these complicating factors, there is still no satisfactory explanation for the steady increase in the number of cases that has been the experience of all civilised countries.

Cancer and other Malignant Diseases Forms, Sites and Deaths.

	1					DEA	THS.					
Site.	C.	ARCINO	MA.	Eı	THELI	OMA.	1	IBROM.	۸.	U	NDEFIN	ED.
Site.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total
axillary Glands .		1	1		1							
44 4 3		1	1			111	***	***	127			***
		8	8			***	***					
		3	3		***	***	***		***	440	***	
		2	2			***	***			***	***	
	1	***	1									
ace and Neck .			***		***	200	200	***	111	1	200	1
		1	1					***	***		***	***
		1	1	***		2 111	***				***	***
		3	3		***	***	***		111		***	100
umbar Spine .		***	***		***	***	400	***	***	1	***	1
ung	1		1	***		-	411	***		144	100	
	1		1			***	***	- 444	***	***	***	***
)esophagus .	2	de	2	111		***	10000	***	111	***	***	***
Account to the second		1	1	***	***	100	115	***	***	1	***	***
	1		1	211	***	***	***	***	***	***	***	***
enis	1	***	1		***	***	243	***	***	***	111	444
Rectum	1	3	4	***	***	***	***	***	***		***	***
tomach	11	13	24									***
ongue		***	***	***	***	200	1111	***	***	***	1	1
**		7	7	***	***	***	***	1	1	***	1	1
		***	***	***	1	1			***	***	***	
Indefined .	1	***	1			***	***	***	***	***	***	***
Total .	20	44	64		1	1	100	1	1	2	2	4

Cancer and other Malignant Diseases-Deaths and Death-rates for 21 years, 1918-38.

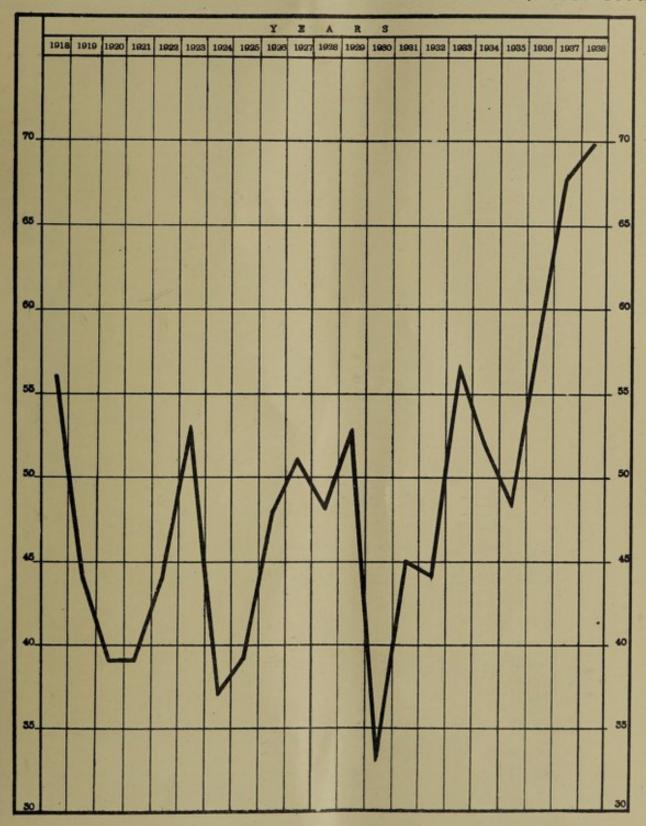
Y	ear.		Deaths.	Rate per 1,000 of population.	Y	ear.		Deaths.	Rate per 1,000 of population
1918			56	0.82	1928			48	0.72
1919			44	0.64	1929			53	0.79
1920			39	0.56	1930			33	0.48
1921			39	0.63	1931			45	0.64
1922			44	0.70	1932		2.	44	0.62
1923			53	0.84	1933			57	0.79
1924			37	0.58	1934			52	0.71
1925			39	0.60	1935			48	0.65
1926			48	0.74	1936			59 68	0.78
1927		100	51	0.78	1937		1100	68	0.88
					1938			70	0.83

Cancer and other Walignant Diseases -Ages at Death.

		Cance	or with	orner 1	M striktherr	, Disc.	MS 63 2	16.00 m	Dead			-
		Sexe	5.			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	4	1.7				1	2	5	6	6	2	22
Females						1	8	5	15	- 7	12	48
To	tal	10			mo	2	10	10	21	13	14	70

Chart J
Port-of-Spain

Deaths from CANCER and OTHER MALIGNANT DISEASES, 1918-1938.





# DISINFECTION.

Far and away the most important work undertaken by the disinfection gangs of the Department is the disinfection of common lodging houses and the spraying of cesspits with a mixture of crude and distillate oils which are routine daily procedures. The spraying of cesspits with oil is done for three reasons: (a) it prevents the breeding of mosquitoes of the culicine variety whose special breeding ground seems to be the full watery cesspits that are so common in the hilly districts during the rainy season, (b) it serves as a deodoriser and (c) the germs of typhoid fever and dysentery passed out in the faeces of those who have contracted these diseases are rendered innocuous.

Disin fection. Premises disinfected for Infectious Diseases and Vermin

Charles of the last	Diseases.			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total.
Tuberculosis				12	2	16	9	8	9	11	14	12	12	12	5	122
Enteric Fever				2	5	3	1	2	2	6	13	11	3	7	3	5
Pneumonia				4	2	6	3	3	8	5	10	10	7	7	1	66
Diphtheria	100				2	2	2			2	2	1	1		3	15
Chicken Pox		0	-	1	1	12	24	20	3	4	1	5	1			72
Ophthalmia Neo	natorum			1			3		2	1	1	4	3	1	2	18
Acute Poliomyel	itis				1											1
													IN THE	part!		
Total				20	13	39	42	33	24	29	41	43	27	27	14	352
Vermin	-			29	28	31	26	28	29	29	29	36	32	38	31	366

# Railway Coaches Disinfected.

	Diseases.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Yaws			 		1.										
Leprosy			 6	3	4			3	1	7	6	6	4		40
Tuberculosis	300 30	d.eng	 							0.0		11.5			

### Cosspits Sprayed with Crude and Distillate Oils (Principally for Infectious Di

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Enteric Fever, &c.	2,925	3,285	3,556	3,060	2,928	2,828	3,905	4,772	4,763	4.357	4,476	3,626	44,481

#### SANITARY ADMINISTRATION.

There was an appreciable increase of staff during the year 1938, the number of workers attached to the Public Health Department being now one hundred and sixteen (116) as compared with eighty-seven (87) in 1937. This has been, in large measure, due to the addition of the St. James Area to the City on 1st June and, to a lesser extent, to the undertaking of new activities necessitated by the enforcement of the bye-laws with respect to the Sale of Foodstuffs on the 9th May.

Sanitary Inspectors numbered twenty-two (22). There were seven anti-mosquito gangs consisting of seven (7) drivers and twenty men; six (6) anti-rat gangs consisting of six (6) drivers and twenty men; six (6) disinfection gangs consisting of one driver and eighteen men, one for the disinfection of premises, three for the disinfection of cesspits and two for the disinfection of pools of stagnant water, insanitary drains and swampy lowlying lands in the lower reaches of the Maraval River and certain areas around Woodbrook; and one anti-bat unit consisting of one driver and twelve men.

With the exception of the latter which works under the direct supervision of a Senior Sanitary Inspector especially seconded for the purpose, and also the gang detailed to disinfect premises which is controlled by the Sanitary Inspector in charge of Infectious Diseases, all these different units are under the immediate supervision of the Sanitary Inspector of the district in which they happen to be working.

The permanent staff was as follows:-

Medical Officer of Health .....George Roderick Marcano, M.D., B.S., (Lond.); M.R.C.S., M.R.C.P. (Lond.); D.P.H. (Lond.); D.L.O.,

(R.C.S. Lond.); D.O.M.S. (R.C.P. & S, Lond.).

Secretary, Local Authority ....E. PRADA, M.R.C.S. (Eng.), L.R.C.P. (Lond.).

Chief Clerk to the M.O.H. ....W. R. SMITH.

Chief Sanitary Inspector ....J. E. FERREIRA, Cert. R.S.I.

Sanitary Inspectors:

Grade I.

J. W. Parris.

G. Charles. J. W. Parris.

F. A. Howard. N. E. Guppy.

C. C. Assing O. E. FORDE, Assoc. R. San. I.

W., G. WILLIAMS .... G. F. ASHE.

F. P. Babb, Cert. R.S.I. T. M. MITCHELL, Cert. R.S.I.

H. St. Cyr, Cert. R.S.I.

Grade II.

A. B. Romain, Cert. R.S.I. J. A. Wood, Cert. R.S.I.

Grade III

I. Wilson, Cert. R.S.I. E. Boxill, Cert. R.S.I.

F. B. RIVERS. M. H. HINKSON, Cert. R.S.I.

F. E. Seon, Cert. R.S.I. G. PIERRE, Cert. R.S.I.

W. A. LAMONT, Cert. R.S.I. H. D. DE FOUR, Cert. R.S.I.

Messenger .... T. H. Christian.

One hundred and fifty-two thousand, six hundred and fourteen visits of inspection to dwelling houses, schools, common lodging houses, shops, factories, stables, cowsheds, &c., &c., were paid by Sanitary Inspectors during the year.

Inspection of Premises, &c., by Sanitary Inspectors.

	Insp	ection	of Pr	emises	s, &c.	, by S	Sanitar	y Insp	ectors				
Months.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Visits to dwelling houses Shops and other premises		13,170	13,875	11,176	12,006	11,212	11,248	13,525	11,670	14,304	14,691	11,660	152,614
No. of Inspections of Stores, &c.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Average per month.
Provision and Meat Shops	227	184	159	162	258	195	137	172	141	234	199	163	186
Provision Stores	35	25	32	25	32	18	17	20	21	15	30	28	25
Restaurants and Cookshops	14	29	25	31	56	39	15	31	33	36	29	29	31
Bakehouses	69	67	34	28	35	23	28	50	32	35	34	24	38
Bread Depôts	16	12	5	8	7	3	3	1	2	7	8	4	6
Cake and Ice Cream Shops	204	178	152	179	267	188	166	184	156	238	218	155	190
Fry Shops	12	9	4	10	13	6	12	6	6	15	6	10	9
Hotels	5	5	13	10	12	6	6	9	8	10	8	6	8
Markets	3	3	2	3	2	4	4	4	4	3	3	3	3
Spirit Shops	26	24	21	30	43	33	28	35	38	37	16	33	30
Ice Cream Carts and Pails	53	51	17	29	18	8	6	15	16	1	25		Par Barre
Cake Trays and Baskets		70	58	41	32	35	10	54	53	34	25 52	43	25
Provision Trays and					3-	33		34	33	50	3*	43	50
Baskets	70	43	60	43	47	14	60	88	58	119	99	80	65
Bread Carts and Baskets	52	53	32	20	29	12	14	19	22	14	29	26	27
Fresh Fish Trays	60	80	36	43	53	25	13	41	63	62	27	20	44
Oyster Vendors' Baskets	13	15	12	7	8	2	****	2	4	5	6	6	7
Plantain Carts	16	11	4	6	7	227	****	3	2	****	10	6	5
Sweet Drink Carts	27	15	7	10	6	12	15	18	12	17	10	18	14
Dairies and Cowsheds	87	86	39	24	29	40	59	110	63	63	61	55	60
Stables	35	70	37	33	25	42	56	70	43	51	46	37	45
Goat Pens	63	60	53	35	56	70	73	78	48	67	71	45	60
Aerated Water Factories	7	6	6	7	9	10	7	10	8	10	6	10	8
Soap Factories	2	3	3	2	2	2	4		3	3		1	2
Other Factories	24	15	23	9	20	19	16	11	14	28	20	17	18
Schools	33	24	33	25	21	30	34	30	34	30	28	25	29
Common Lodging - Houses	6	6	7	9	5	8	7	8	7	5	5	4	6
Barber Shops	22	27	25	34	30	30	19	25	32	19	33	39	28
Dyeworks	3	4	5	3	4	9	6	8	9	8	6	4	6
Laundries	15.	14	16	13	18	26	24	21	21	22	16	15	18
Garages	14	16	26	22	20	37	28	24	20	28	28	14	23
Tanneries	9	7	9	7	5	6	7		2	11		9	6
Public Urinais	9	5	9	7	4	5	6	4	4	5	5	5	5
Boats	15	10	16	9	9	19	27		5	6	1	32	12
					-	-	-	-	-	-	-	-	-

# Results of Notices and Verbal Directions.

Verbal directions and notices to remedy sanitary defects were complied with in 33,076 cases. Particulars of the work done are given in the table below.

Results of Not	ices and	Verbal	Directions.
----------------	----------	--------	-------------

	Resu	its of No	tices and	i verbai Directions.	11 1100	The same of	
Yards paved			46	Barracks repaired			65
Yard pavements repaired	***		110	Kitchens repaired		***	157
Yards filled in		***	221	Kitchens constructed		***	8
Yards cleaned		1	2,805	Goat pens repaired			1
Drains constructed		***	169	Stables repaired	***	***	2
Drains repaired	***		323	Houses ventilated			19
Drains cleaned	***		2,935	Roofs close-boarded			17
Washing troughs cleaned	***		157	Retail shops painted'			53
Sinks constructed	***		43	Floors of buildings repair	ed		1
Sinks repaired			41	Parlours painted			53
Sinks cleaned			478	Spirit shops painted			12
Gullies cleaned	***		339	Restaurants painted			8
Lavatories cleaned	***		53	Bread carts painted			24
Bath-rooms constructed	***	***	3	Hotels painted		***	2
Bath-rooms repaired			14	Barracks painted			51
Bath-rooms cleaned			. 8	Barber shops painted		***	7
Washing platforms cleaned			260	Cake and fruit trays scree	ned		14
Washing platforms repaired	1.		2	Concrete floors of retail sl	ops repaired	1	42
Sewer basins installed	***		32	Concrete floors of parlour	s repaired		24
Sewer basins repaired			2	Concrete floors of bakeho	uses repaired	1	36
Sewer basins cleaned			965	Concrete floors of cowshe	ds repaired		34
Flush tanks installed			36	Concrete floors of stables	repaired		41
Flush tanks repaired			38	Retail shops cobwebbed			338
New privies built			271	Provision stores cobwebb	ed		41
Privies repaired		***	735	Parlours cobwebbed			253
Privies made fly-proof			381	Bakehouses cobwebbed	***		67
New cesspits constructed			230	Cookshops cobwebbed	***********		28
Cesspits repaired			430	Spirit shops cobwebbed	***	***	55
Cesspits emptied			2,352	Barracks cobwebbed			66
Cesspits oiled (paid for)				Cowsheds cobwebbed			55
Urinals constructed	***		734	Stables cobwebbed			53
Urinals cleaned	***	***	106	Aerated Water Factories	scrubbed		55
Accumulations of manure re		***	327	Bakehouses scrubbed	***	***	116
Sanitary dustbins provided			1,819	Retail shops scrubbed			365
Dustbins repaired			398	Cookshops scrubbed		1	89
Dustbins cleaned and disint			1,002	Restaurants scrubbed			40
Uncovered dustbins covered			571	Parlours scrubbed			384
Rat holes stopped			100	Spirit shops scrubbed			81
Trees cut down			252	Hotels scrubbed			20
Trees trimmed			527	Barber shops scrubbed			42
Premises cleared of bush			535	Cowsheds scrubbed			87
Barracks and other premis	1200		333	Stables scrubbed			84
ted or reconditioned			187	Eaves gutters cleaned			15
Barracks demolished and si	ites left	vacant	11	Eaves gutters repaired			5
Barracks vacated	***	***	8	Water receptacles screen			29
				Total		-	-
				1		_ 3	33,076

Lim	man w	90000	 120.

March.	January.	35	April.	June.	July.	August.	September	October.	November	December,	Total.
	7										
	112	110	48 52	0.01		4.0	* * *				1
12	6	110	48 32	69	79	59	48	113	153	88	1,013
14	12	9	1 7	**	3		2	4	2	2	47
11	2	7	1 4	1	2		2	2	4	5	54
100	-	O	2 1	9	2	1	15	3	5	4	61
5	3	9	2 7		9	7		7	9	8	70
10	19	I						1	2	2	
3	**	5	2 2	2	2			2	4		25
1 .	***						1			19	-
	+ 4	2				2					3
	2	1	1 3		1	7			100	-	17
			1			7	5		***	-5	8
2	5	4	1 1	2			107.4	**	**	6	
1 .	1					**		1	5	0	31
2 .			3		2.5			2	***		4
	1		1 1	3	1	1	4	1		2	7
33 15	150	T 6 2	62 00	0.							1,368
3.	150	3	3 153	3 153 62 79						150 60	100 60

# Reports to Water and Sewerage Department.

Reports.	Jan.	Feb.	Mar.	Apl.	May	Jun.	Ju'y	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Leaks, defective taps, chokes, &c	49	45	42	37	47	25	37	39	42	63	43	26	495

#### Anti-Rabies Measures.

The anti-bat unit was established in June, 1935, as a direct result of a small outbreak of paralytic rabies in humans which had been going on spasmodically since 1930 in the southern part of the Island. Though no human case had occurred within the limits of the City—the nearest was about ten miles away—the reports of animals being bitten were fairly common, and as the vampire bat Desmodus Rufus was known to be on the outskirts of the City, it became imperative to undertake a campaign of destruction, working in conjunction with Government who were doing the same in the surrounding areas.

The unit consists of one driver and twelve men, who, armed with nets, strychnine paste, and pistols, visit caves, hollow trees and other well known roosts about the City trapping and destroying all bats in their hiding places. The brains of all captured bats are examined by the Government Bacteriologist for the presence of infection.

# TRAPPING, &c., OF BATS.

is inspec	cted for re	oosts of b	ats	****		30,187
	BA	TS CAUG	HT.			
****		1	****	****		743
****	****	****		****	****	****
****	****		****		****	17
****		****			****	81
inus				****	****	30
****	****					5
*		****		****	****	876
	inus	BA	BATS CAUG	inus	BATS CAUGHT.	BATS CAUGHT.

### Prosecutions

Twenty-eight prosecutions were undertakenduring the year; conviction was obtained in each case and fines totalled \$28.70.

- 1	Totals.	Total Fines.	2 00	8	3 60	6 30	8 30	10 00	28 70
	To	Total Cases,	9	-	7	00	*	-	88
	December.	Fines.	Repri- manded	1	L	1		- 1	
	De	Cases.	-			1			-
	November.	Fines.	1	1		1	1	1	-
	No	Cases.		1					
	October.	Fines.	1	1	1		1	1	1
		Cases.		-					
	September	Fines.	1 Repri- manded	1	-	-	1	1	1
	8	Cases.	-	-		- 1			-
sed.	August.	Fines.	2 00	1	1	1	1	1	5 00
odm	-	Cases.	-	-				- diameter	-
nulties	July.	Fines.	1	****	1		1	1	1
d pe		Cases.	1/2			1			
trate an	June.	Fines.	1	1	1	1	2 00	10 00	12 00
agis		Cases.				1	-	-	61
Cases determined by the City Magistrate and penalties imposed.	February. March. April. May.	Fines.	1 Repri- manded	1	1.	1	2 1 20 1 Repri- manded		1:0
y th		Cases.	-	1			01 -		4
mined by		Fines.	2 Repri- manded	1		5 10	- 1	1	5 10
eter		Cases.	61	1		9			00
Cases d		Fines.	Repri- manded		3 60	1 20			4 80
		Cases.	-	-	60	64			9
		Fines.	1 Closing Order 1 Repri- manded	1	1	1		of second land	1
-		Cases.			1		THE STATE OF THE S		61
	January.	Fines.	1 Repri- manded	99	1 Repri- manded	-	1	I makina	8
	THE .		英田	1000					60
	- rec	Cases		-	-	#		9	
	Jan				-	n not	2	òilduq	T
	Jan				-	-		a public	I
	Jan	"sastr.)			-	-		4 1	
	Jan	"sastr.)			-	-		a l	-
	Jan				-	-		excreta in a	I
	Jan	"sastr.)		Selling milk without having badges 1	oot kept	Exposing foodstuffs for sale not protected from contamination	Failing to provide proper dusthins	a l	-

# OBSERVANCE OF HEALTH WEEK IN THE CITY.

In response to the usual annual invitation extended by the Royal Sanitary Institute to the Local Authority, Health Week was again observed last year during the week, 12th November to

As regards the entry into the competition for the Bostock Hill Memorial Challenge Shield, it is gratifying to be able to record the fact that the observance of Health Week in November, 1937, came in for very honourable mention by the adjudicators. The Shield was awarded to the Lagos Health and Baby Week Committee, but the Port-of-Spain City Council was one of the other two entrants whose excellence of programme, as judged by the Report of the Committee, supplemented by newspaper accounts of the opening ceremony and by photographs of the various stalls at the Exhibition, received special commendation.

The Report of the Special Committee appointed to make the necessary arrangements for carrying out the observance here follows :-

#### REPORT ON THE OBSERVANCE OF HEALTH WEEK.

18TH NOVEMBER, 1938.

1.—At a meeting held on the 21st July, 1938, the City Council, sitting as the Local Authority for the City of Port-of-Spain, accepted the invitation of the Royal Sanitary Institute to carry out the annual observance of Health Week this year, and appointed the following special committee (with power to add to their number) to make the necessary arrangements :-

HIS WORSHIP THE MAYOR (Councillor G. J. McCarthy), Chairman. THE DEPUTY-MAYOR (Councillor the Honourable M. Aldwin Maillard).
ALDERMAN M. RIGSBY. COUNCILLOR A. P. T. AMBARD. COUNCILLOR T. P. ACHONG. THE TOWN CLERK (Dr. E. Prada, o.B.E.).
THE CITY ENGINEER (Mr. T. H. Scott, o.B.E.). THE MEDICAL OFFICER OF HEALTH (Dr. G. R. Marcano), and MR. H. W. FARRELL as Secretary,

with the following persons, who were invited to assist by serving on the Committee :-

THE DIRECTOR OF MEDICAL SERVICES (the Honourable Dr. A. Rankine).

THE DEPUTY-DIRECTOR OF MEDICAL SERVICES (Dr. H. A. Gilkes)

THE DIRECTOR OF EDUCATION (the Honourable Capt. J. O. Cutteridge).
THE PRESIDENT OF THE MEDICAL BOARD (Dr. V. J. Moralejo).
THE PRESIDENT OF THE DENTAL ASSOCIATION (Dr. G. A. Lyon).

THE PRESIDENT OF THE CHILD WELFARE LEAGUE.

THE PRESIDENT OF THE ASSOCIATION FOR THE PREVENTION AND TREATMENT OF TUBERCULOSIS (Archdeacon A. Hombersley).

THE PRESIDENT OF THE COTERIE OF SOCIAL WORKERS (Councillor Miss Audrey Jeffers, M.B.E.)

The Deputy Director of Medical Services was out of the Colony, and in consequence did not attend any of the meetings of the Committee. As the Honourable Dr. A. Rankine, the Director of Medical Services, was also President of the Child Welfare League, it was decided by the Council that Alderman H. A. de Freitas, the Vice-President of the League, should serve on the Committee.

- The Committee met on the 26th August, 1938, and decided as follows:—
  - (a) That Health Week be observed during the week commencing on Saturday, 12th November, 1938.
  - (b) That the programme of the observance include the following features :-

A Health Exhibition at the Prince's Building. References in Churches and at Sunday Schools to the objects of Health Week.

Lectures and addresses to pupils of High, Intermediate and Elementary Schools.

Lectures and addresses to clubs and associations, &c.

Free exhibitions of Health Films.

Distribution of leaflets on Health subjects.

Physical Drill displays

Opening of Public Institutions to inspection by the public.

(c) That the following members be constituted an Organising and Exhibition Committee with authority to carry out the programme for the observance of Health Week and to add such other features as they may think desirable :—

The Medical Officer of Health (Chairman), The Director of Medical Services, The Director of Education, The Deputy-Mayor (Councillor the Honourable M. Aldwin Maillard), The Vice-President of the Child Welfare League (Alderman H. A. de Freitas), The President of the Dental Association, Alderman M. Rigsby, Councillor T. P. Achong and the City Engineer, with the Mayor an ex-officio member of the Committee; that the following persons be invited to serve on this Committee:—Dr. W. G. L. Urich (Acting Medical Officer of Health, North-Western Division), Dr. C. L. de Boissiere (Municipal Inspector of Animals and Meat) and Dr. H. Metivier (Government Veterinary Officer) and that the Committee have power to co-opt such persons as they may think fif. they may think fit.

(d) That the Mayor, the Deputy-Mayor and the Town Clerk be constituted an Executive Committee with authority to incur out of the vote in the approved estimates for Health Week all such expenditure as might be necessary for the observance.

With the exception of Dr. C. L. de Boissiere, who regretted his inability to do so, all those persons invited to serve on the Organising and Exhibition Committee accepted the invitation.

3.—The Organising and Exhibition Committee held two meetings on the 2nd September and 7th November, 1938, and made all arrangements for the carrying out of the programme. This Committee also considered the following suggestions made to them by the Health Week Committee and agreed to include them in the programme

(a) Short talks over the Radio Distribution Service for about 5 or 10 minutes every evening.

(b) One or two performances of the play "Romance without Sanitation"

(c) Public Lecture on Venereal Diseases to audiences of one sex

The programme as carried out is described in the following paragraphs of this report.

#### The Health Exhibition.

4.—The Health Exhibition at the Prince's Building was, as in former years, the principal feature of the observance. Owing to the illness of His Excellency the Governor and to the inability of the Governor's Deputy, through pressure of duties, to be present at the opening, the Exhibition was opened by His Worship the Mayor, Councillor G. J. McCarthy, on Saturday, 12th November, 1938, at 4.30 p.m. in the presence of a large gathering which included representatives of all sections of the community. The Medical Officer of Health, as Chairman of the Organising Committee, in his address at the opening briefly described the principal features of the Exhibition and of the year's Health Week programme. He also explained that the Exhibition was the conjoint effort of Government, the Municipality and voluntary weekers and organisations. workers and organisations.

5.—The Exhibition was open free of charge to the public throughout the week from 4.30 to 6 p.m. and from 8 to 10 p.m. each day except on Sunday, 13th November, when it was open from 4 to 6 p.m. only. Large crowds not only from the city but also from the country districts attended the exhibition daily and it is estimated that the attendance was, if anything, larger than in the previous year. A few schools by arrangement visited the exhibition at special hours when they were able to view the exhibits in more comfort and with greater leisure than otherwise and have them explained without being unduly rushed. The Committee must again thank the Department of Agriculture for the services of Mr. R. E. Dean in decorating the Hall.

6.—Although the Exhibition followed the same lines as in previous years, yet it was slightly larger in its scope. There were changes in many of the sections and a few new features were added, the chief of which were a model dairy pen and a new section called the Clean Food Campaign. The exhibition comprised the following eleven sections:—

By whom arranged. Sections. ...The Domestic Science Lecturers of the Department of Education and of the St. Joseph's Convent, the Principal of the Archibald Institute, St. Augustine, Mrs. R. S. 1. Nutrition ... Grant, and Dr. J. A. A. Kernahan. 2. Detection of Unsound Food ... ... The Public Health Department. Clean Food Campaign ... ... The Public Health Department.
 Pure Milk Production and Marketing ... The Government Farm (Department of Agriculture). ... The Child Welfare League. Child Welfare
 Role of Insect pests, bats, &c.,
 in communicable disease Child Welfare The Government Medical Department. Vital Statistics, Charts and Diagrams ... The Public Health Department. ... The Tuberculosis Association. Tuberculosis Prevention ...The Government Bacteriological Department. 9. Bacteriological ... The Public Health Department. 10. Sanitary Appliances ... The Department of Agriculture. 11. Meteorology

7.—Nutrition.—This was one of the principal features of the exhibition and together with the sections on the Detection of Unsound Foods, the Clean Food Campaign and the Milk Production and Marketing took up a large portion of the exhibition. The section was arranged by Miss E. P. Clark, Domestic Science Teacher at the Government Training College and her assistant, Miss A. Hing King; Sister Vincent, the Domestic Science Teacher at the St. Joseph's Convent; Miss M. I. Ballachy, Principal of the Archibald Institute; and Mrs. R. S. Grant. Dr. J. A. Kernahan also gave valuable assistance in arranging diet charts and in having model diets cooked.

At one stall of this section useful information and advice were given on proper feeding and balanced At one stall of this section useful information and advice were given on proper feeding and balanced diets by means of charts, diagrams, posters and other exhibits both real and artificial. The protection, preservation and storage of foodstuffs were also demonstrated by means of a refrigerator and some inexpensive fly-proof safes within the means of small wage earners. Foods containing vitamins A, B, C and D and their uses; foods containing iron, calcium, phosphorus and other elements necessary to health; fuel foods, body building foods and energy producing foods were also exhibited, as also was a chart showing how a working man could supply himself with proper food at a cost of 27 cents a day.

Another stall of this section took the form of a model kitchen, which demonstrated the proper furnishing and arranging of a kitchen. Daily demonstrations in the actual preparation and cooking of meals were given. A different class of person, such as, an Indian labourer, a clerk, an artisan, was selected each day. The meals suitable to his needs for one day were written up on a black board at the back of the kitchen, regard being had to the amount of his wages in arriving at the cost of the meals. The daily demonstration of preparing and cooking each day was in respect of the meals suitable to the class of person selected. Stoves and ovens which could be made locally at a cost within the means of small wage-earners were on show at this stall.

8.—Selection of Foods,—This section otherwise known as the "Detection of Unsound Foods" was arranged by the Public Health Department and aimed chiefly at instructing the public in the selection of sound tinned foods and the detection of unsound ones. For that purpose blown, springy, rusty and stained tins were contrasted with fresh and sound ones. Specimens of common articles of food, cheese, rice, milk and sausage in sound and unsound condition were also exhibited. The detection of unsound meat and the preservation of meat before cooking were dealt with in a leaflet distributed at this section, and a tabular statement showing the food values and vitamin contents of various foodstuffs was also on exhibition. on exhibition.

9.—Clean Food Campaign.—This was an entirely new section arranged by the Public Health Department for the purpose of arousing public interest in the clean food campaign at present carried on by the Department and was particularly intended to instruct vendors of fruits, vegetables, cakes, &c., in sanitary ways of exposing their goods for sale. Models of carts, trays, safes, &c., used by vendors were contrasted with properly screened models designed for protection from contamination by flies, &c.

10 .- Pure Milk Production and Marketing .- This section was arranged by the Government Farm under the supervision of the Government Veterinary Surgeon, Dr. H. Metivier. In view of the importance of milk as a food and its ever increasing consumption, this section was largely an effort to teach and encourage cleanliness in the production and sale of milk. Some of the apparatus used and demonstrated, like the sterilizing, the cooling and straining plant, served as models which could on a smaller and less expensive scale be procured and used by owners of small dairies.

In order to popularize the use of goat's milk, and particularly to recommend a species of goat suitable to the needs of the Colony, a number of British Alpine Goats were exhibited in a pen with an enclosure constructed on the Eastern side of the Building, and demonstrations of sanitary methods of milking were

given in the enclosure.

A model cow pen was also constructed on the grounds of the Prince's Building for the specific purpose of instructing dairy owners as to how a proper sanitary pen could be made at reasonable cost. Further use was made of this pen by exhibiting in it a type of milch cow, a Holstein Zebu cross, suitable to local needs both from the point of view of production of milk and hardiness of constitution. Demonstrations of sanitary methods of milking and the testing of the butter fat content in milk were carried Demonstration s out at the new pen.

11.-Child Welfare.-This section, arranged as usual by the Child Welfare League, dealt with the teaching of mothercraft and by means of charts, diagrams, posters, models and other exhibits demonstrated the proper care and feeding of the baby. Balanced and unbalanced diets for young children were contrasted and the advisability and advantages of breast feeding were greatly stressed. Great emphasis was placed on cleanliness and the protection of food and the utensils used from contamination. Some attention was given to fathercraft or the teaching of fathers to be good mothers. A very encouraging result of the work of the League was the decline in the infant mortality which was shown on a chart.

Two interesting models, one of a Day Nursery with a playground and the other of a Child Welfare Clinic, attracted much attention. At each model there was a poster describing the model and the daily

routine to be carried on in real institutions of their kind.

12.—Role of insect pests, &c., in communicable diseases.—This section was organised by the Medical Department, and was under the supervision of Dr. L. G. W. Urich, the Acting Medical Officer of Health, North-Western Division. It was divided into the following sub-sections:—(a) mosquitoes, (b) flies,

(c) hookworm, and (d) bats.

(a) Mosquitoes.—By means of charts, diagrams, dead and live specimens and other exhibits the breeding places, life history and structure of Anopheles, Culex Fatigans and Stegomyia mosquitoes were fully illustrated, and measures for preventing mosquito breeding and the spread of diseases caused by

them demonstrated.

(b) Flies.—Charts, diagrams, models, live specimens and other exhibits illustrated the life history, breeding places and insanitary habits of flies and their danger as carriers of diseases. The necessity for protection of food from contamination and other protective measures for the purpose of preventing the

spread of Enteric Fever, Dysentery and other fly-borne diseases was greatly stressed.

(c) Hookworm.—Charts, diagrams, pictures, models, specimens and other exhibits demonstrated the life-history of hookworms, their breeding grounds and their entrance into the human body, the ill-effects of ankylostomiasis, and the methods of diagnosis and treatment of the disease. This stall was of particular interest to visitors from the country where cases of ankylostomiasis chiefly occur. A model of a village laid out on sanitary lines with proper drainage, freedom from grass, and with fly-proof privies was contrasted with an insanitary one.

(d) Bats.—Charts, diagrams, pictures, stuffed and live specimens, skeletons and other exhibits illustrated the physical characteristics, roosting places, habits and food of Vampyrus, Molussus, Artibeus, Desmodus, Phyllostoma and Noctilio Leporinus bats. The extent of the survey and control measures undertaken by the authorities was shown on a chart. Among the exhibits at this stall were bat parasites

and a drawing of a section of the brain of a bat showing nerve cells with negri bodies.

13 .- Vital Statistics. This section, arranged by the Public Health Department, illustrated by means of charts and diagrams the incidence and death rate of the principal killing diseases in the City for the past 20 years and the encouraging results which have followed the activities of the health authorities.

14.—Tuberculosis Prevention.—This section, arranged by the Association for the Prevention and Treatment of Tuberculosis, emphasized that Tuberculosis is preventable and curable. By means of posters, pictures and exhibits useful advice was given for preventing the spread of the disease and for building up resistance to infection.

15.—Sanitary Appliances.—This section was arranged by the Public Health Department and exhibited appliances, such as brooms, traps, disinfectants, soaps, food covers and Clayton's gassing machine, which are useful both in the home and in the work of the Public Health Authorities for cleansing, disinfecting and getting rid of noxious pests, dirt, &c. Cleanliness as a necessity for good health was stressed by means of sundry posters.

16.—Bacteriological.—This section was arranged by the Government Bacteriologist, Dr. J. L. Pawan, and his staff. In the Bio-chemical stall there were exhibits showing the test for urine and for albumen, sugar, urea, acetone, bile salts and blood in urine; for sugar and urea in blood; for occult blood in faeces; and fractional tests meals for free hydrochloric acid, acidity, starch, bile and blood. In the Bacteriological stall there were exhibits showing the examination of pure and impure samples of water, the preparation of acid typical stall there were exhibits showing the examination of pure and impure samples of water, the preparation of anti-typhoid vaccine, the Wassermann test for syphilis, while specimens of hookworm ova, malarial parasites and tubercle bacilli were on view under the microscope. In the Pathological stall there were exhibits of specimens of round worms and tape worms and of various human organs affected by diseases such as typhoid fever, tuberculosis and syphilis.

17.—Meteorology.—This section, arranged by the Department of Agriculture, exhibited wet and dry bulbs, the Stevenson Screen housing maximum and minimum thermometers, a sunshine recorder, a rainfall gauge, and a map showing the amount of rainfall in the Colony for several years. A leaflet which was distributed at this stall explained the bearing of rainfall and temperature on the health of the community.

18.—Leaflets dealing with a variety of Health matters, connected chiefly with the various sections of the Exhibition, were distributed at the Exhibition and to the schools and to householders. importance was attached to the distribution of leaflets to the schools where they were made the subject of object lessons to the pupils, thus spreading much useful information. Althgether about 100,000 leaflets were distributed.

References in Churches.

19.—Through the kind co-operation of the Heads of the various religious denominations in the City appropriate references to the objects of Health Week were made in the course of sermons delivered in the different Churches and in addresses at Sunday Schools on Sunday, 13th November. The Committee are grateful for the assistance rendered in this way year after year by the clergy.

Lectures and Addresses.

20.—Through the kind co-operation of the Education Department school children over the age of twelve from the elementary and intermediate schools in the City were grouped together at convenient centres and addressed on health subjects by medical practitioners. It is estimated that about 4,300 children were instructed in that way. The arrangements made for the addresses were as follows:—

Medical Practition	er. Schools.	Comme.
Dr. D. O. Maharajh	Eastern Boys' Government, Eastern Girls' Government, Nelson Street Boys' R.C., Nelson Street Girls' R.C.,	Nelson Street Girls' R.C. School.
Dr. J. Cook	Besson Street R.C., Piccadilly E.C. and St. Phillip's E.CProvidence Intermediate R.C., Belmont Intermediate R.C., Belmont Girls' R.C., St. Ann's R.C. and Belmont	Providence Inter- mediate R.C. School.
Dr. K. U. A. Inniss	MethodistTranquillity Girls' Intermediate Government, St. Rose's Intermediate R.C., Woodbrook Intermediate R.C., Sacred Heart R.C., Newtown Girls' R.C., and St. Vincen	Tranquillity Girls' Intermediate School.
Dr. E. S. Massiah	Street, E. CTranquillity Boys' Intermediate Government, Newtown Boys' R.C., Duke Street E.C., Woodbrook E.C., Moulton Hall Methodist, and Gaines Normal A.M.E.	Tranquillity Boys' Intermediate School.
Dr. R. G. Marcano	Belmont Boys' R.C., Belmont E.C., Quarry Street E.C., Escallier Land E.C., and Gloster Lodge Moravian.	Belmont E.C. School.
Dr. C. L. Joseph	Park Street R.C., Western Boys' R.C., Calvary R.C., Rose Hill R.C., and Richmond Street E.C.	Park Street R.C. School,
Dr. S. Jurawan	Mucurapo Boys' R.C., Mucurapo Girls' R.C., Mucurapo E.C., and Woodbrook C.M.	Mucurapo E.C. School.

The following lectures were also arranged :-

To the Trinidad Literary League, by Dr. S. Jurawan at the Government Training College on

Tuesday 15th, November at 8.30 p.m.

To the public (men only) on Venereal Diseases by Dr. V. J. Moralejo at the Royal Victoria Institute on Tuesday, 15th November at 8.30 p.m.—(Chairman—His Worship the Mayor).

To the Trinidad Labour Party, by Dr. C. L. Joseph at Liberty Hall on Thursday, 17th November,

To the Clerks' Union by Dr. J. A. A. Kernahan at St. John's Hall on Friday, 18th November,

at 5.00 p.m.

To the Police by Dr. A. R. McLean at the Police Headquarters on Friday, 18th November, at 4 p.m.

To the public (women only) on Venereal Diseases by Dr. D. R. Huggins at the Royal Victoria
Institute on Friday, 18th November, at 8.30 p.m.—(Chairman—Councillor Miss Audrey

Jeffers, M.B.E.)

Owing to unforeseen circumstances the lecture to the Trinidad Literary League and the lecture to men on Venereal Diseases did not take place. The Committee are very grateful to those medical practitioners who gave their services as lecturers, particularly in view of the increasing difficulty in getting volunteers to carry out this part of the Health Week programme.

Exhibition of Health Films.

21.—The showing of health films free of charge to the public at Woodford Square was as in past years one of the principal features of the Week's observance. Four such shows were given on Saturday, Monday, Wednesday and Friday the 12th, 14th, 16th and 18th November, and the showing was as hitherto in the capable hands of Mr. L. Tucker. Apart from one or two films borrowed from the Medical Department, such as the "Bat Film" and "Jinks", which had been shown at previous observances of Health Week, the programmes were made up of the following films:

- Loaned by the National Tuberculosis Association of England.

  (a) The Conquest of Tuberculosis, which dealt rather extensively with the measures taken for the detection and treatment of Tuberculosis.
  - (b) The Production of Certified Milk, which dealt with the sanitary measures to be adopted in producing the best milk.
  - (c) A Day in an Open-air School, which dealt with the routine in an open-air school for children, one of the many institutions which form part of the campaign against Tuberculesis.

Loaned by the British Social Hygiene Council.

Ways of Life.—Which dealt with social hygiene, and began by showing the most primitive forms of life, like the one-celled amoeba and led up to community life in man which depends a great deal for its highest development on the self-control of the individual.

Newsreels and "shorts" kindly loaned by the Metro-Goldwyn-Mayer of the West Indies Company

were shown in between the health films so as to relieve the programmes of their seriousness.

As in the past these shows were attended by large and attentive crowds whose numbers went into thousands on each occasion. The enthusiasm of the public over these shows always makes them one of the most popular and useful features of the Health Week observance.

# Inspection of Institutions.

22. The undermentioned institutions were opened to inspection by the public during suitable hours, so that persons might have the opportunity of gaining an insight into their work, and learn something of the provisions made by the Local Authority to ensure a pure and potable water supply and fresh sound meat for the City:

Reservoirs and Pumping Stations The Tuberculosis Dispensary The Abattoir

The Stephens Mothers' and Infants'

...Daily between 7 a.m. and 5 p.m. ...Daily between 9 a.m. and 1 p.m. ...From Monday 14th to Friday 18th November between

the hours of 9 a.m. and 4 p.m. Monday 14th and Wednesday 16th November between the hours of 1 and 3 p.m.

# Physical Drill.

Physical Drill.

23. It was arranged that a display of physical drill should take place on the grounds of the Prince's Building at 5 p.m. every day from Monday 14th to Friday 18th November. The 1st Trinidad Group of Sea Scouts undertook to give the display on the Monday and Thursday, the pupils of the Tranquillity Girls' Intermediate School on the Tuesday and Friday and the Police on the Wednesday. Owing to inclement weather the display fixed for the Monday did not take place.

These displays were very varied, the Girls of the Tranquillity Intermediate School doing a drill followed by a dance, the Sea Scouts doing exercises on parallel bars, and the Police what is known as "free movements". The many onlookers showed their appreciation of these displays by their loud and prolonged clapping and the committee are very grateful to the performers.

# Child Welfare League.

24. In addition to the section at the Health Exhibition the Child Welfare League invited the public to visit the Stephens Clinic and see its work as stated in paragraph 22 above, and also arranged the following lectures, &c., at the Stephens Clinic :-

Tuesday 15th November

...Lecture to nurses, midwives and voluntary workers by Dr. D. R. Huggins at 5 p.m.

Wednesday 16th November

... A talk on "Mothercraft" to school children by Mrs. A. E. Adamson, at 4.30 p.m.

Thursday 17th November

...Conference of Delegates from Branches and Members of the Executive Committee from 2.30 to 5 p.m., with an interval for refreshments at 2.30 p.m.

Friday 18th November

... A talk to mothers by Mrs. A. Daunt at 4.30 p.m.

The talk on Mothercraft was attended by two hundred of the senior girls from the primary and intermediate schools in the City.

# Theatrical Performance.

25. At the request of the Committee the teachers and pupils of the Nelson Street Boys R.C. School readily consented to give a performance of the play "Romance without Sanitation" at the Royal Victoria Institute on Wednesday 16th November, at 8.30 p.m.. The play was written by the headmaster of the school, Mr. A. R. Roberts. It is the story of a young man who against the advice of his parents marries a young lady from a consumptive family who are very careless about the observance of sanitary rules in their everyday life, and of the dire consequences that followed. The lessons which this play teaches are very forcibly brought home to the audience by reason of the fact that the play having a local setting dealt with insanitary practices common to the life of the community.

dealt with insanitary practices common to the life of the community.

In view of the large number of persons who were unable to see the performance owing to lack of accommodation, the play was repeated at the Prince's Building on Saturday 19th November, when many

had to be turned away again for the same reason.

# Radio Distribution Service.

26. In order that the public might be kept informed about Health Week through as many channels as possible the Radio Distribution (Trinidad) Ltd. was approached with a view to announcements pertaining to Health Week and short talks on health matters being given over their service during Health Week. The Company readily consented to assist the Committee, but as it was not found possible to arrange the talks, only announcements of the features of the programme to be carried out were made daily.

#### Sanitary Inspectors Conference.

The Sanitary Inspectors Association held its annual conference during Health Week at the Sailors' and Soldiers' Club on Wednesday 16th November. The morning session took place at 9 a.m., and the afternoon at 1.15 p.m. A number of school teachers and senior pupils of the schools in the City attended the afternoon session at which short papers on subjects connected with hygiene and sanitation were read.

# Other Matters.

28. The Committee desire to place on record their appreciation of the assistance generously received from all quarters in this year's successful observance of Health Week. In particular they would express their gratitude to the various Government Departments which assisted in many ways, to the medical practitioners who assisted by giving lectures to schools, associations, &c., and to the other helpers who assisted at the Health Exhibition. The Committee also record their appreciation of the valuable help rendered by the Press and Radio Distribution, Ltd., the former of which kindly published free of cost all notices in connection with the observance of Health Week, as well as reports, lectures and addresses given during the period. These publications served to keep the public informed of what was taking place, and helped to focus the attention of the public on health matters during the week.

The programme of this year's successful observance of Health Week was slightly larger than last year's, and in no way inferior. The attendances at the Exhibition, film shows and other functions were if anything generally larger that in past years. On the whole the observance may be considered as one of the best ever carried out in the City. For the purpose of the City's entry into the Bostock Hill Memorial Challenge Shield Competition this report will be supplemented by newspaper accounts of the opening of the Health Exhibition and of the various lectures, copies of the leaflets distributed, photographs of the various stalls at the Exhibition, and statements giving further details of the sections at the Exhibition and of the various films shown.

20. The following was the programme carried out :-

Saturday 12th November.

Health Exhibition at the Prince's Building, 4.30 to 6 p.m. and 8.30 to 10 p.m.

Exhibition of Health films at Woodford Square, 8 to 10 p.m.

Distribution of Leaflets.

Opening of Institution to inspection by the public.

Sunday 13th November.

Reference to Health Week in Churches and Sunday Schools. Health Exhibition at Prince's Building 4.00 to 6 p.m.

Monday 14th November.

Health Exhibition at Prince's Building 4.30 to 6 p.m. and 8.30 to 10 p.m.

Address to school children at the Nelson Street Girls' R.C. School by Dr. D. O. Maharajh at 2.30 p.m.

Exhibition of Health films at Woodford Square at 8 p.m.

Distribution of leaflets.

Opening of Institutions to inspection by the Public.

Tuesday 15th November.

Health Exhibition at Prince's Building 4.30 to 6 p.m. and 8.30 to 10 p.m.

Physical drill by pupils of the Tranquillity Girls' Intermediate School at Prince's Building at 5 p.m. Addresses to School children by Dr. J. Cook at the Providence Intermediate R.C. School at 2.30 p.m. and by Dr. K. U. A. Inniss at the Tranquillity Girls' Intermediate School at 2.30 p.m.

Lecture to nurses, midwives and voluntary workers at the Stephens Clinic at 5 p.m. by Dr. D. R. Huggins.

Distribution of leaflets.

Opening of Institutions to inspection by the public.

Wednesday 16th November.

Health Exhibition at Prince's Building 4.30 to 6 p.m. and 8.30 to 10 p.m.

Physical Drill display by the Police at Prince's Building at 5 p.m.

Sanitary Inspectors' Conference at the Sailors and Soldiers Club 9 a.m. (Morning session) and 1.15 p.m. (Afternoon session).

Talk to school children on "Mothercraft" by Mrs. A. E. Adamson at the Stephens Clinic at 4.30 p.m.

Play "Romance without Sanitation" at Royal Victoria Institute at 8.30 p.m.

Exhibition of Health films at Woodford Square at 8 p.m.

Opening of institutions to inspection by the public.

Thursday 17th November.

Health Exhibition at Prince's Building at 4.30 to 6 p.m. and 8.30 to 10 p.m. Addresses to school children by Dr. E. S. Massiah at Tranquillity Boys' Intermediate School and by Dr. R. G. Marcano at Belmont E.C. School at 2.30 p.m.

Lecture to Trinidad Labour Party by Dr. C. L. Joseph at Liberty Hall at 8.30 p.m.

Physical drill at Prince's Building by the 1st Trinidad Sea Scouts at 5 p.m.

Conference of delegates from branches and members of the Executive Council of the Child Welfare League at the Stephens Clinic at 2.30 p.m.

Distribution of leaflets.

Opening of Institutions to inspection by the public.

Friday 18th November.

Health Exhibition at the Prince's Building, 4.30 to 6 p.m. and 8.30 to 10 p.m.

Addresses to school children by Dr. C. L. Joseph at the Park Street R.C. School and by Dr. S. Jurawan at the Mucurapo E.C. School at 2.30 p.m.

Lecture to the Police by Dr. A. R. McLean at Police Headquarters at 4 p.m.

Lecture to the Clerks' Union at St. John's Hall, Pembroke Street, by Dr. J. A. A. Kernahan at 5 p.m. Lecture at the Royal Victoria Institute, under the Chairmanship of Councillor Miss Audrey Jeffers, M.B.E., by Dr. D. R. Huggins at 8.30 p.m.—Subject—Venereal Diseases.

Talk to mothers at the Stephens Clinic by Mrs. A. Daunt at 4.30 p.m.

Physical Drill display by pupils of the Tranquillity Girls' Intermediate School at the Prince's Building at 5 p.m.

Health films at Woodford Square at 8 p.m.

Saturday 19th November.

Play "Romance without Sanitation" at 8.30 p.m. at Prince's Building.

# Reports, 1938.

The following is a list of the principal reports on public health matters submitted by the Medical Officer of Health:—

of Health .—			
1. Regular.			
<ul> <li>(a) Weekly—Consular Sanitary Reports (U.S. Consulate)</li> <li>(b) Monthly—Health of the Urban Sanitary District of Port-of-Spain and</li> </ul>		morle	52
of the Sanitary Staff		WOLK	12
(c) Quarterly—Classification of Causes of Deaths (d) Quarterly—Sanitary Conditions of Primary Schools in the City	****		4
(e) Progress—Health of the City for 9 months to 30th September, 1938		****	1
(f) Annual—Report of the Public Health Department of the Port-of-Spain, 1937	City	of	1
The state of the s			
2. Special.			
(i) Discovery of anthrax bacillus in shaving brushes	****		1
(ii) Preparation and Sale of bread in the City	****		1
(iii) Nuisance arising from sewerage fittings at 46 Frederick Street		- Peres	1
(iv) Layout of building lots at Farrell Lane	****	10 m	2
(v) Sale of Foodstuffs byelaws	****		1
(vi) Wearing of aprons by clerks in spirit Shops		****	1
(vii) Draft bye-laws with respect to ventilation and sufficiency of sp	ace a	about	1
	****	****	
(viii) Absence of roadway at Soubrian Place	****	****	1
(ix) Meat and Fish Market at St. James	****	****	1
(x) Reclaimed lands east of Petroleum Warehouse at South Quay			1
(xi) Insanitary condition of banks of Dry River	****	****	1
(xii) Absence of roadway at Escallier Terrace	****	****	1
(xiii) Building areas in need of streets, drains, &c	****		1
(xiv) Provision of covers to fruit vendors' trays	****	****	1
(xv) Prevalence of typhoid fever in St. James			1
(xvi) Layout of Jeffers's lands at St. James		****	1
(xvii) Insanitary drain at 1c, McCarthy Lane			1
(xviii) Proposal to erect building on undrained lot at St. Thomas Street	t		1
(xix) Cooking of food at Eastern Market		****	1
(xx) Insanitary barracks and other premises	****		28
3. Leases in Woodbrook.			
Reports on applications for leases of building lots in Woodbrook	****		72
4. New Buildings.			
Reports on plans for new buildings	****		539
The state of the s			
5. Building Alterations and Repairs.  Reports on notices of alterations and repairs to buildings	****		208
The state of the s			
6. Building Operations.  Number of premises in which building operations were in progress reported.	d to t	he City	
Engineer's Department			395

# Meetings ..

The Medical Officer of Health was summoned to and attended all the regular and special meetings of the Council and, also, all committee meetings at which matters affecting the public health were down for discussion.

# Financial.

The expenditure incurred by the Public Health Department during 1938 amounted to \$52,006.43 as compared with \$42,096.92 in the previous year; and the revenue collected \$464.70, as compared with \$393.06 in 1937.

A detailed statement of Income and Expenditure is given below:-

	Ivo	OME.					\$ c.
Contribution from Government	and.						16,080 00
Contribution from General Purp		****	****	****	****	****	33,379 68
Sale of Disinfectants		****					70 08
Disinfecting Cesspits			****	****	****		161 28
Cleansing Eaves Gutters	****			****		****	9 60
Sale of Milk Badges					****		55 44
Dairyman's Licences		****			****	****	34 20
Milk Vendor's Licences	****	*****	****	****	****	****	46 80
Sale of Food Badges	****	****	*****		****	****	27 36
Oyster Vendor's Licences	****	****	****	****	****		3 84
Fines	****			****	****	****	28 70
Miscellaneous Receipts	****	****	****	****	****		27 40
From Woodbrook Estate and Ge	neral Pu	irposes f	or oiling	Pools an	d Drains	****	2,082 05
		No The				-	
							\$52,006 43
	EXPEN	NDITURE					\$ c.
Staff	****		****	****		****	23,702 00
Anti-Rat Measures:							
Trapping and destroying ra	its						5,363 87
Purchase of Materials							419 74
Purchase of Rats				****	****	****	55 00
							61
Anti-Mosquito Measures:							
Inspecting Eaves Gutters					****		6,204 94
Oiling of Pools and Drains		****	****				2,082 05
			-	1000	****	****	2,002 00
	Disin	fection.					
Oiling of Cesspits	****	****	****	****		****	4,285 12
Spraying premises with Che	emicals	****		****			1,212 13
Purchase of disinfectants fe		Public	****	****			147 69
						1758	
Other Expenditure:							
Purchase of Milk Badges	****		****	****	****		29 47
Furniture							559 79
Purchase of Bicycle				****	****	****	53 32
Purchase of Typewriter	****	****	****			****	
	****	****	****	****	****	****	135 00
Stationery, Books, &c.	****	****	****		****	****	240 92
Printing	****	****	****	-	****	****	1,145 00
	****			****	****	****	894 96
Telephones	****		****	****	****	****	182 61
Notification of Infectious I	Diseases				****	****	123 36
Messenger's Uniform	****	****	****	****	****	****	43 25
Postage		****		****	****		27 64
Dissecting Rats (Medical L	epartme	nt)			****		91 00
Advertisements		****	****			****	102 80
	1000	1000	1000		-	1	102 00
Anti-Rabies Measures	****		****	****	****	****	4,904 77
						-	950 00C 40
							\$52,006 43

#### Changes in the Staff.

The following changes took place in the Staff of the Public Health Department:-

# 1. Resignations:

Resignation of Mr. George B. Charles, Sanitary Inspector, as from 13th June, 1938, after 22 years service.

# 2. Appointments:

Appointment of Mr. Frederick Seon
Do. Mr. Gregory Pierre
Do. Mr. Winston Lamont
Do. Mr. Hubert De Four

as Sanitary Inspector as from 1st September, 1938.

NOTE.-Public Health Department removed from Town Hall to No. 35, Frederick Street on 1st May, 1938.

#### Leave of Absence.

. 1	acation Leave:						
W. G. Williams		Sanitary Inspector			7th March to 30th June.		
	C. C. Assing	****	****	do.	11th April to 5th June.		
	F. A. Howard	·	****	do.	1st June to 4th October.		
	J. W. Parris		****	do.	20th June to 31st July.		
	T. M. Mitchell			do.	1st July to 8th September.		
	H. St. Cyr	****		do.	1st August to 9th October.		
	F, Babb		****	do.	2nd August to 10th October.		
	F. B. Rivers	****	·	do.	1st to 28th November.		
-	E. Boxill			do.	11th to 31st December.		
Si	ick Leave:						
	F. B. Rivers	****	Sanitary Inspector		5th to 11th January.		
	W. R. Smith		Clerk to M.O.H.		17th to 24th January.		
	G. B. Charles		San	itary Inspector	6th May to 11th June.		
	C. C. Assing	****	****	do.	23rd December, 1938, to 11th January, 1939.		

# Acknowledgments.

In conclusion I offer my sincere and grateful thanks to His Worship the Mayor, Aldermen and Councillors for the patient hearing, unstinted support and ready encouragement they gave me during the year under report in all matters affecting the public health which were brought to their notice. Their advice in such matters was all the more appreciated in that it reflected and emphasised always the lay point of view, without a careful consideration of which all public health work would be a nullity.

The staff of the Department gave of their very best and were unfailing in their loyalty and devotion to duty. Every member of both the sanitary and clerical staff, aided and encouraged by the shining example of their respective heads, Mr. J. E. Ferreira, Cert. R.S.I. and Mr. W. R. Smith, pulled his weight.

For this I am deeply grateful and it is my duty to commend their valuable services to the favourable notice of the Local Authority, in the fervent hope that, as the years roll by, the benefit of the work performed by Sanitary Inspectors, as a whole, will receive greater and greater recognition.

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