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

ANNUAL REPORT

OF THE

PUBLIC HEALTH DEPARTMENT OF THE CITY OF PORT-OF-SPAIN

FOR THE YEAR

1937

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

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

1938.

With the Compliments

of

The Medical Officer of Health

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

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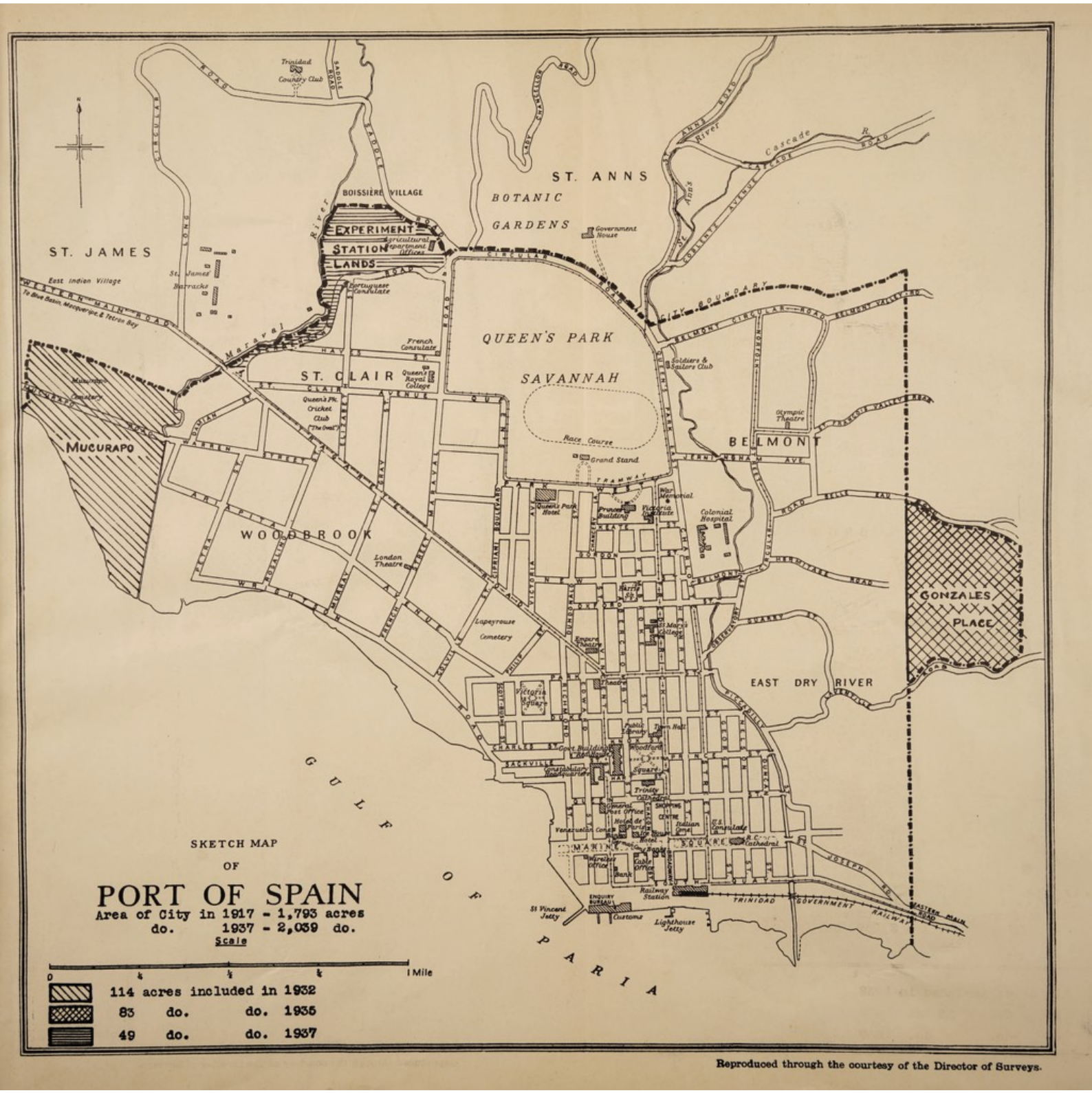
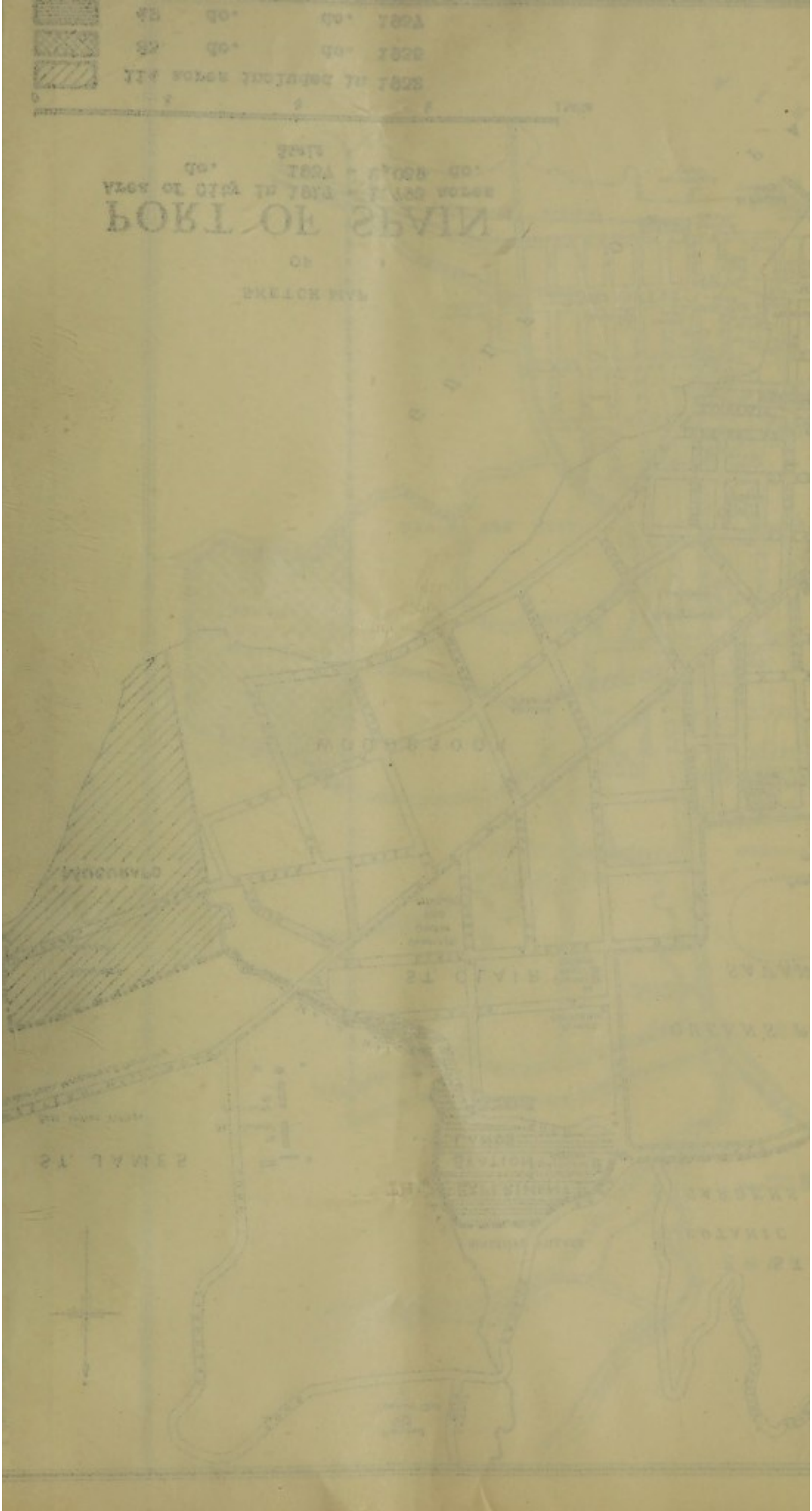




PUBLIC HEALTH DEPARTMENT,
35, FREDERICK STREET,
PORT-OF-SPAIN,
TRINIDAD, B.W.I.

3rd November, 1938.

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 of the Urban Sanitary District of the City of Port-of-Spain for the year ended 31st December, 1937.

On taking, as I have done, the reins of office from an illustrious predecessor it would, I am sure, not be considered altogether amiss if I were to make this report more in the nature of a survey report than that of a mere record for the past year and in so doing I shall endeavour to follow, as far as it is possible to do so, the lines laid down by the Ministry of Health, England.

It will be apparent from the facts and figures set out that there has been great progress in nearly every direction and considerable improvement in many respects.

The past year, in particular, has been comparatively a very healthy one, there being no major worries of any kind to disturb the even tenor of the Public Health Department.

This does not, of course, mean that we have reached the zenith of public health achievement and we have no problems of any kind confronting us.

As long as human life lasts disease will always be with us and past experience shows that as one disease is checked or brought under control, another new one raises its ugly head. Such are the changes wrought by the increasing complexity of modern life.

A public health officer's main concern is to safeguard the health of the community by applying knowledge of the cause of disease to check its incidence in the first place, and to limit by recognized methods its spread, in the second place.

His aims and ideals are necessarily utopian, but he has often, from the nature of things, to be satisfied with a little, if indeed there is such a thing as satisfaction in his professional make-up.

The problems, as I see them, that demand urgent consideration and solution are firstly the provision of suitable dwellings for the members of the working classes and the abolition of the barrack system, and secondly the putting of the food supplies of the City as served indoors in hotels, restaurants, parlours and other such places, and as sold outdoors in public places, at street corners, &c., &c., on a sound public health basis of purity and cleanliness.

The Department will, I have no doubt, in the future as in the past, meet with the ready co-operation and encouragement of the Local Authority in framing and carrying out the necessary measures to effect an efficient, speedy and satisfactory solution of these urgent problems.

I have the honour to be,

Sir,

Your obedient Servant,

RODERICK MARCANO,
Medical Officer of Health.

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

The City of Port-of-Spain is an urban sanitary district situated in the County of St. George West at the foot of the northern range of hills.

It is roughly rectangular in shape, being bounded on the east by a line that runs from the tanneries just west of the Eastern Dump, through the south-eastern corner of the old Powder Magazine, north through the upper part of Laventille Road including now the whole of Gonzales Place, to a point 100 yards north of the Belmont Valley Road.

The western boundary starts at a point opposite Ethel Street on the sea coast, goes north across Mucurapo Road and along Ethel Street to the north of the Mucurapo Cemetery, then follows closely the course of the Maraval River up to the Circular Road, including the lots on the old Experimental Station which have recently been added to the City.

The northern boundary line joins the northernmost end of the eastern and western boundary tracing its course along the Circular Road to a point 100 yards north of Belmont Circular Road, then parallel to Belmont Circular and Belmont Valley Roads to the north-eastern limit.

The southern boundary is the sea coast line.

The major portion of the City is in the plain at the foot of the hills above-mentioned, but withal exhibiting a slight progressive gradient towards the sea which is the basic factor responsible for the excellent drainage system with which the City is blessed.

The highest points of this gradient are Gonzales Place, approximately 510 feet above mean sea level or 607 feet approximately above Trinidad Government Railway datum on the east, and the Grand Savannah at a point opposite the Band Stand in the Botanic Gardens which is approximately 100 feet above mean sea level or 197 feet approximately above Trinidad Government Railway datum on the west.

The tendency is for the City to extend on to the high ground and plateaux which form part of the northern and eastern boundaries, and there has been a decided increase in the number of dwellings on the hillside for the housing of both the poorer and better classes—a movement which is sure to expand with the completion of the Central Water Scheme which will enable water to be distributed to the houses at the highest levels.

Port-of-Spain has grown progressively larger and larger with the passing of years, including now an area of two thousand and thirty-nine (2,039) acres. In 1917 the area included was estimated at one thousand seven hundred and ninety-three (1,793) acres, in 1932, one thousand nine hundred and seven (1,907) acres, in 1935, one thousand nine hundred and ninety (1,990) acres.

The layout of the City is one of its best features, consisting as it does of wide streets running parallel with and at right angles to each other, which divide it up into square blocks.

The St. Ann's River—otherwise known as the Dry River—which courses from north to south along the eastern portion of the district has been concreted right on to the sea and the periodic overflowing of the banks of that river during the rainy season, entailing great loss of life and property, is now practically a thing of the past.

There are a number of squares and open spaces throughout and a fine array of brick and concrete buildings in the lower business sections and in the better class residential quarters, and even the houses of the poorer classes are gradually assuming a more solid and more hygienic type.

The population is calculated to be 77,044; in 1917 it was estimated by the logarithmic method to be 67,328, but that figure was in all probability wrong as the census of 1921 gave a return of 61,580. In 1927 the estimate, using the Registrar-General's new method, was 65,573, and in 1931 when a census was taken it actually was 70,034.

It is of a very mixed type made up of descendants of the original French, Spanish and the imported African and Indian immigrants, all speaking a common language—English—and living on terms of complete amity with each other.

They are employed mainly as clerks, office hands, artisans and labourers. Some have their own businesses, others are employed in factories, workshops, hotels, restaurants, &c.

It is true to say that there is among the members of the poorer classes a good deal of unemployment which, coupled with the high cost of living index, is having an adverse effect on the higher standards of health and living which a liberal education is endeavouring to inculcate.

SANITARY CIRCUMSTANCES.

Water.

Port-of-Spain is supplied with a constant supply of pure water in ample proportions drawn directly from the rising mains. The average daily supply per head is about 63.44 gallons.

The water is derived from a variety of sources: the Maraval and St. Ann's River, the Cascade River, the Cocorite and Diego Martin wells, and the Central Water Scheme, the Municipality having recently contracted with the latter to take one million gallons of water per day.

At all sources the water is subjected to chemical treatment, liquid chlorine being added by means of Paterson's Chloronome in varying proportions according to the nature and the amount of water flowing into the reservoir as measured by means of a Palatine Weir Recorder.

The water of the Maraval reservoir is conveyed to St. Clair after chlorination and there filtered by a battery of twelve (12) rapid pressure (Bell's) filters. There is no doubt that a certain danger exists from the inadequacy of these twelve Bell's filters to deal with a very rapid flow of chlorinated water through them, as sometimes happens. Designed for a maximum output of 5,000 gallons

per hour there have been times when as many as 12,000 gallons of water have been forced through them in that time—a circumstance which reduces the filtration efficiency by as much as fifty per cent. Happily, with the purchase of one million gallons per day from the Central Water Scheme the need for this rapid filtration does not now arise and the danger of a breakdown is practically non-existent.

Treating water with chlorine always gives rise to occasional complaints of "iodoform taste" in the water unless this is specifically reduced or eliminated by adding small quantities of potassium permanganate. This is done as a regular routine in the proportion of about .75 parts per million gallon at the Maraval reservoir and about .175 to .350 parts per million gallons at the other sources.

Admittedly a very frequent complaint in the early days of chlorination, when the regulation of the dose did not attain the accuracy that obtains nowadays, it occasionally is heard especially in the rainy season when the Maraval River is likely to get heavily polluted with organic matter, thus necessitating larger doses of chlorine.

As has been so constantly advocated by my predecessor, if filtration were resorted to before chlorination, most of this excessive amount of organic matter would be eliminated and a more constant dose of chlorine could be added, with a consequent diminished liability to peculiarities of taste.

Perhaps, this problem which has been with us for far too long a time, could now at long last be solved on a more economic basis by transferring the intake of the Maraval reservoir to a higher and safer point above the village, the loss of water thus entailed being made good by the purchase of an additional amount from the Central Water Scheme. Grave doubts, however, have recently been expressed as to whether any further supply from the latter source can be put at the disposal of the City.

Every day in the year the mixed water supply from the Maraval, St. Ann's and Cascade Rivers and from the Cocorite and Diego Martin wells is examined for evidence of pollution by the Government Bacteriologist, Dr. J. L. Pawan.

Of 365 samples of the mixed water taken from the water taps at the Bacteriological Laboratory during the year under review, not one was found to contain B. coli in 50 c.c. of water.

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	...	...	365	100

Samples of raw and of filtered and chlorinated water are taken week by week during the course of the year from the several stations and examined by the Government Bacteriologist. During the year under review no sample was found to contain B. coli in 50 c.c. or less after treatment. This represents a distinct improvement on a few years ago when occasional samples used to be encountered which contained B. Coli in 50 c.c. of water and which, of course, must be set down as potentially dangerous water.

To any one familiar with the sanitary conditions existing particularly at Maraval Village through which the river passes on its way to the reservoir, it will be obvious that the possibility of pollution with faeces is a real and ever present one, which could only be eliminated by the transfer of the intake to a point above the village as already mentioned.

I cannot conclude this section without again recording the gratitude of the Municipality to Government, which, through its Bacteriologist, Dr. J. L. Pawan, is largely responsible for the very effective check which we are able to hold on the water supply of the City.

I would, however, feel much more satisfied, and it would conduce greatly to my peace of mind, if samples were taken every day instead of every week at the various sources and sent to the Government Bacteriologist for the usual examinations.

The detection of B. coli in 50 c.c. or less of water from any particular source would lead immediately to the shutting off of the particular reservoir affected and the institution of measures designed to eliminate pollution instead of having to wait for a day or two before the reservoir distributing this polluted water could be located, as would inevitably happen under the present routine.

Rainfall.

Nineteen thirty-seven was a fairly dry year, the average rainfall recorded at two stations in Port-of-Spain—St. Clair and Constabulary Headquarters—being 53.11 inches as compared with 56.83 inches, the corresponding figure for the preceding year, 1936.

In the months of the dry season—January, February, March, April and May—7.72 inches fell, being 1.72 inches less than the corresponding figure, 9.44 inches, for the preceding year. The driest month of the year was May when 0.14 inches was the average rainfall, and the wettest November when 11.37 inches fell.

In the previous year the month with the least rainfall was March (0.16 inches) and that with the most, July (10.21 inches).

The table given below demonstrates these facts in greater detail.

Monthly Rainfall gauged at Two Stations in Port-of-Spain with Averages for the years 1937 and 1936.

Month.	Year 1937.			Year 1936.		
	Stations.		Average Rainfall.	Stations.		Average Rainfall.
	St. Clair.	Constabulary Headquarters.		St. Clair.	Constabulary Headquarters.	
January	3.62	4.03	3.83	1.16	0.88	1.02
February	1.24	0.44	0.84	0.28	0.67	0.48
March	0.70	0.30	0.50	0.11	0.22	0.16
April	2.59	2.23	2.41	2.43	1.79	2.11
May	0.20	0.08	0.14	5.62	5.72	5.67
June	4.33	2.93	3.63	10.52	9.78	10.15
July	7.09	7.21	7.15	11.33	9.08	10.21
August	8.69	5.68	7.18	5.93	6.55	6.24
September	5.41	3.14	4.28	8.13	3.84	5.98
October	4.17	4.30	4.23	4.95	3.57	4.26
November	12.08	10.66	11.37	7.06	3.65	5.36
December	7.88	7.22	7.55	5.53	4.86	5.19
Total	58.00	48.22	53.11	63.05	50.61	56.83

Rainfall has some relation to the incidence of infectious diseases, particularly to those infectious diseases which affect the respiratory tract.

The statement presented below in tabular form compares seasonal rainfall with notifications and deaths from infectious diseases and, also, with deaths from all causes at different age periods for the years 1937 and 1936.

Comparison of Seasonal Rainfall, Infectious Diseases—Notifications and Deaths—and Deaths at Different Ages for 1937 and 1936.

Rainfall, Notifications and Deaths.	Year 1937.				Year 1936.			
	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 ...	7.72	1.54	45.39	6.48	9.44	1.89	47.39	6.77
Infectious Diseases :								
Notifications ...	196	39.2	272	38.8	199	39.8	276	39.4
Deaths	110	22.0	149	21.2	87	17.4	144	20.5
Deaths under 1 year	111	22.2	126	18.0	59	11.8	90	12.8
Deaths at ages 1-5 ...	22	4.4	31	4.4	14	2.8	44	6.2
Deaths at all ages ...	483	96.6	686	98.0	421	84.2	603	86.1

Drainage.

There can be no doubt as to the intimate relation between public health and drainage; and the splendid and efficient drainage system of the City of Port-of-Spain proper, is one of the things that the Municipality can justly take great pride in.

Within a few minutes of a heavy downpour, streets and drains are completely dry, and stagnation of flood water is a thing unheard of.

The City and the suburbs, in large part, are supplied with a fine and very efficient interlacing network of paved drains which discharge either into the Dry River or the Maraval River or the sea.

There still remain, however, areas in Belmont and in the higher reaches of the East Dry River District where paved drains are lacking and the existing earthen channels collect stagnant pools of water—a potential breeding ground for mosquitoes of the culicine and anopheline variety, necessitating the constant application of oil. Such is also the case in the building lots about the St. Francois Valley Road and the Belmont Valley Road. Here, houses have cropped up without proper drainage of the lots, nor have main drains been constructed to carry off the storm water from the drains of the individual premises, the result being a state of recurring nuisance. And yet, section 2 of Ordinance No. 4 of 1930 specifically provides against this contingency !

Perhaps, the outstanding problem in drainage the Department has to deal with at the moment is the Maraval River, and this has been rendered more acute by the inclusion of the Experimental Station lots within the limits of the City and the erection, thereon, of a number of imposing residential dwellings. At one time a notorious breeding ground for mosquitoes, these lots have been properly laid out and drained, mainly by concrete channels which flow to the Maraval River. But the Maraval River itself has been left untouched and, besides, there are a number of natural depressions on its banks where stagnant water collects and where mosquitoes breed in abundance. This nuisance is kept in check only by the regular and daily application of oil to these pools; but in the rainy season a heavy downpour sweeps the oil away and the nuisance recurs with a consequent flood of complaints.

The writer feels that before long the Maraval River will have to be tackled in the same way as the Dry River, and already he has heard of plans for the straightening of the river, by diverting it to a channel passing through lands west of the Mucurapo Cemetery to the sea, and also for the entire paving of its bed. When that day dawns the Medical Officer of Health will heave a deep sigh of relief, as there is no doubt that right through its present course to the sea, the Maraval River is a continuous and perpetual source of anxiety from a public health point of view.

The Dry River Scheme, which entailed the paving of the entire bed of the river from Chaytor's Causeway to the sea, has been an unqualified success, water flowing rapidly and directly to its outlet and the bed presenting a dry, clean appearance throughout, with the one little exception of the lower end which, on account of its level, is flooded at high tide and silted up with dirty mud and débris possessed of a most offensive smell, necessitating the continuous employment of a gang of labourers for clearing the lower end of mud, branches of trees, silt, &c., &c.

With the reclamation of lands south of Wrightson Road, which has been going on during the year as part of the Deep Water Wharfage Scheme, and with the laying down of new main drans to connect up with those of the City north of Wrightson Road, an inevitable dislocation and interruption of the drainage in the adjoining area of Woodbrook have resulted, especially as this work has necessitated the construction of a temporary earthen timber drain along the south side of Wrightson Road and parallel with it. This drain is by its nature constantly filled with mud and the concrete gutters in the vicinity cannot get a ready outlet.

The complaint of mosquito nuisance has been constant and insistent, and this has been aggravated by the construction of underground drains along the northern side of Wrightson Road, which, by reason of the blocking of the culverts with thick mud and by reason of their roughness, become easily silted up with mud and collect stagnant water in which mosquitoes breed abundantly. Representations having been made to the Public Works Department, it was arranged that the City Council should see to the regular, daily cleansing and flushing of the latter drains which, coupled with the completion and connecting up with the City's drains of the main drains of the Harbour Scheme opposite Gatacre and French Streets, aided by regular oiling, have led to the abatement of this nuisance and no complaints have reached the Public Health Department during the last few months.

Inadequate drainage, by reason of altered levels, the result also of reclamation work in connection with the Deep Water Wharfage Scheme, has been responsible, as well, for the stagnation of storm and high tide water at the bottom of Sackville and Charles Streets and the consequent complaints of offensive odours, flooding of adjoining premises and occasional mosquito nuisance.

By detailing a number of labourers specially to scavenge and oil that area, the nuisance has been abated, and with the decision of Government and City Council to raise the levels at the bottom of Sackville, Charles and London Streets and the adjoining portions of Wrightson Road, the necessary gradient for efficient drainage to the sea ought easily to be attained, and this nuisance ought never to recur.

Sewerage.

Sewage disposal in the Urban Sanitary District, is by a combination of conservancy and water carriage systems.

The City proper is sewered and houses are provided with water closets for the flushing of which there has always been and there is always, an ample supply of water.

Faecal matter finds its way eventually into the sea adjoining the Mucurapo Pumping Station by means of an outfall which runs out to the sea. As a result of the continuous sedimentation which has been going on in that area of the Gulf, the outfall apart from being almost on the surface at low tide, is not deep enough at full tide to ensure the complete dispersal of the faecal matter to sea by the currents in the vicinity, with the result that the foreshore at that point is often found littered with faeces.

It has therefore been decided to construct a new and deeper outfall which goes out further to sea, and with the completion of this, on which work is actually proceeding at the present moment, this nuisance ought to be abated and ought never to recur.

Sewering is proceeding rapidly in Woodbrook where the cesspools and soak-away pits often give trouble owing to the high level of the subsoil water and, with the completion of this scheme and with the declaration of Woodbrook a sewered area, a drive will be made to substitute water closets for cesspools and privy cesspits.

In Belmont and East Dry River privy cesspits abound, only a few of the more sanitary contrivances such as cesspools and soak-away pits existing. Owing to irregular layout of the lots on these suburbs and to the insufficiency of the old Building Regulations, these areas present in certain parts a veritable jumble of houses and privy cesspits, cheek by jowl, and this is especially the case in the East Dry River District where it is common to find a privy cesspit actually ventilating into a dining room or bedroom, so overcrowded is this area.

The reflection of this state of affairs on the public health of the locality is inevitable, and East Dry River and certain areas of Belmont are among the unhealthiest of the Sanitary Districts. There are here more cases of infectious fevers notified and more deaths certified both of adults and of infants relative to the population, than in any other division of the City.

It is my opinion that such conditions will only cease when these districts are sewered and I know, as soon as the Woodbrook Sewerage Scheme is completed, it is the intention of the City Fathers to proceed to the sewering of the Belmont and East Dry River Districts.

In the meantime regular and routine oiling of cesspits with a mixture of crude and distillate oil goes on daily with a view to checking the breeding of mosquitoes, and the contamination of flies, and to getting rid of offensive odours, this work being done at the owners' expense; in addition, whenever a case of enteric fever or dysentery is reported, extensive oiling of the cesspit on the premises and of those in the immediate vicinity is resorted to.

Emptying of full cesspits and of cesspools is a routine measure and is undertaken by the Water and Sewerage section of the City Engineer's Department at the expense of the respective owners. The faecal matter is collected in barrels and conveyed to the Pumping Station where they are emptied in the main sewers and discharged into the sea through the outfall.

In suitable soil, especially at the higher levels, the majority of the cesspits empty themselves by a process of seepage and one often hears of a cesspit which is emptied only once in five years or even once in seven years.

The modern type of privy cesspit, *i.e.* with concrete lining—a model of which is in the Public Health Department—is the one recommended and is the one in common use. A few pail closets exist—the City Council's houses in South Quay and one or two schools being supplied with this system. These are emptied twice a week and are oiled every day.

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

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Enteric Fever	3,154	3,105	3,411	3,704	3,029	3,459	3,606	3,396	3,694	3,106	3,389	3,102	40,155

Scavenging and Refuse Disposal.

Scavenging of the premises and streets of the Urban Sanitary District of Port-of-Spain is by means of carts into which the dustbins, which owners and occupiers of premises are required to provide, are emptied and which are drawn by mules to two dumps, one at the south-eastern end of the City and the other at the south-western end.

These carts are of an average capacity of forty-five and a half cubic feet and are covered with tarpaulins to prevent refuse from being blown from the carts on to the streets during the voyage to the dump.

Judging by the general state of cleanliness of the City as a whole, the system works very well indeed. There are, however, certain aspects of this system which call for consideration, with a view to securing improvement.

For instance, in the higher reaches of the City where the roads are comparatively narrow, the scavenging carts are unable to call at the different premises and women with buckets and pans are employed by the Council to head the refuse down the hills to suitable street corners, where it is deposited in heaps, to be subsequently picked up by the scavenging carts. It is no uncommon sight to see putrid heaps of rubbish left overnight to be collected by the carts in the mornings. This should easily be adjusted by a little co-operation between the women and the drivers of the carts. Collection should be arranged in such a way and at such times that there will be no dumping of refuse at street corners after the carts have already passed, and when it is certain that they will not be returning for the day.

Then again the littering of the streets with rubbish of all kinds seems inevitable on Sundays in the lower congested portions of the City, where there is comparatively little yard space, for the reason that there is no scavenging of premises done on Sunday mornings. The dustbins, the capacity of which must not exceed two and a half cubic feet as fixed by the bye-laws, are full on Sunday mornings with the previous day's rubbish, and there being no alternative means of disposal, refuse is dumped on the pavement, into the drains and the streets. The streets in consequence present an appearance which contrasts strongly with that of the other days of the week and, on account of the putrescible nature of the refuse, smells of a most offensive nature often pervade the atmosphere of these areas.

The remedy, in my opinion, as has been so consistently advocated by my predecessor, is scavenging of these portions of the City on Sunday mornings and no question of expense ought to stand in the way of abating what is undoubtedly a positive and disagreeable nuisance.

The system of refuse disposal by controlled tipping is, in my opinion, the most feasible in an urban district like Port-of-Spain, which is invested with a swampy foreshore just outside its south-eastern limit and also at its south-western end.

That it is a successful system is evidenced by the efficiency with which refuse is disposed of, resulting, as it does, in a considerable area of reclaimed lands and also by the relative immunity of the City of Port-of-Spain from flies and mosquitoes, except on rare occasions during the rainy season when the process breaks down.

The refuse is tipped in a regular manner on the edge of the foreshore, the men employed thereon banking it into as rectangular a pattern as it is possible to attain, and covering it on three sides with a layer of earth nine inches thick.

On account of the roadway leading to the edge of the dump getting practically impassable with mud during the rainy season, carts which convey both refuse and dirt dump their contents on the nearest available spot, the result being rubbish deposited in an irregular manner and imperfectly covered with dirt—an ideal breeding ground for flies, apart altogether from the fact that the stagnant water which collects in various hoof holes and other depressions on the dump form an ideal medium for the development of mosquitoes.

On such occasions resort is had to white lime, which has to be distributed in large quantities to check the hatching out of flies and, of course, the stagnant pools are dosed with oil.

With the construction of a proper, firm roadway to the very edge of the dump and with skilled supervision of the dumping process to see that it is done thoroughly and in the approved manner, this difficulty ought in a very large measure to disappear.

SANITARY INSPECTION OF THE DISTRICT.

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

BUSINESS PREMISES.

(1) *Dairies and Milkshops.*

The number of cowsheds within the limits of the City is steadily diminishing as a result of the gradual urbanisation of the outlying districts and the consequent taking up of the available space for building purposes. In 1937 only twenty-seven cowshed licences were issued, the distribution being as follows :—

Sub-districts.	*No. of Cowsheds.*	
City Proper (sewered)	3	
East Dry River (unsewered)....	1	
Belmont (unsewered)	5	
Woodbrook (unsewered)	18	Total 27

In 1926 there were 46 registered cowsheds ; in 1931, 25 and in 1936, 27.

Milkshops, on the other hand, show an increase and, in spite of efforts to get the owners to comply with the regulations, a certain number sell milk without being licensed. Coincident with this increase of milkshops in the City is the great increase in the amount of unboiled, unheated milk that is being consumed. The milk is bought in bulk from some dairy, generally out of town, is bottled on the premises and sold to customers across the counter. The Local Authority is insisting on the milk being bought from a reputable, licensed dairy already bottled and capped so that no handling of the milk except during the process of actual selling, takes place in the milkshops.

There is a positive danger in the drinking of this milk sold in milk bars, without subjecting it to heat treatment of some sort, seeing that the milk is often obtained from dairies whose water supply is not altogether above suspicion.

Milk Vendor's licences and milk badges issued in 1937 amounted to 180 and 214, respectively There were distributed as follows :—

City and Out-districts.	*Milk Vendor's Licences.*	*Badges.*
Port-of-Spain	51	51
Out-districts :—		
San Juan and Santa Cruz	84	106
St. James	16	20
Maraval and Dibé	14	19
Diego Martin	6	6
Long Circular Road	3	4
Cascade	2	4
Laventille	2	2
St. Ann's	1	1
Four Roads	1	1
Total	180	214

In keeping with the bye-laws which state that every application for a licence to keep cows for the sale of milk in any place within the City, shall be accompanied by a certificate from or approved by, the Council's Inspector of Animals and Meat, to the effect that every cow in the proposed cowshed has, within a period of six months previous to such application, come from an accredited herd or has been tested by the tuberculin test without reaction, the number of tuberculin certificates submitted were, from Port-of-Spain, 27 and from the rural districts, 121, representing 123 cows tested with negative reaction in Port-of-Spain and 618 with a negative reaction in the rural districts.

The object of this bye-law is the stamping out of tuberculosis from herds. The amount of bovine tuberculosis in the colony is estimated to be in the vicinity of two per cent. of cattle infected.

(2) *Offensive Trades.*

Under this heading can be placed the eight tanneries within the limits of the City. They are now all situated on the reclaimed lands near the south-eastern limit—known as Sea Lots.

At one time situated, in some instances, in the heart of the City, they have gradually been relegated to the area east of the abattoir and not far from the eastern dump. They are inspected regularly on an average once a month and it can truly be said that their emanations create no nuisance.

(3) *Slaughterhouses.*

No private slaughtering is allowed in the City. All animals whose flesh is to be used for human consumption have to be slaughtered in the Municipal abattoir, whence the meat is conveyed to the various markets and meatshops, after being inspected by the Veterinary Officer attached to the Corporation. The abattoir is governed by bye-laws, one of the provisions of which is that slaughtermen must be examined by the Medical Officer of Health once a year and a certificate of freedom from infectious or contagious disease issued.

(4) *Shops, Groceries, Restaurants, Parlours, Spirit Shops, Cake and Ice Cream Shops, Aerated Water Factories, Ice Cream Carts, &c., &c., &c.*

These are subjected to the ordinary periodical inspections for the detection of nuisances which can be dealt with under the Public Health Ordinance, Chapter 98, section 70 and, also, for contravention of the relatively few bye-laws which control these various places ; but there was a long standing feeling that the powers of the Medical Officer of Health did not go far enough and there was no doubt that some of these places, where food was served to the general public, were

outside the application of the existing bye-laws. This defect has now been remedied by the passing in August, 1937, of the new bye-laws with respect to the Sale of Foodstuffs made under the provisions of section 156 of the Public Health Ordinance, Chapter 98, as amended by section 5 of the Public Health (Amendment) Ordinance, No. 5 of 1928.

These bye-laws give the Local Authority power to exercise effective control over these places and over the vendors or deliverers of food in any form, by ordering them to seek registration. With a strict enforcement of these bye-laws, food will be prepared, handled, sold and delivered under much more cleanly conditions than they have been in the past.

(5) *Bakehouses.*

Bakehouses on the Register number 45. They are regulated by bye-laws which enforce cleanliness, periodical limewashing, &c., and the main Ordinance prohibits a bakehouse from being used as a sleeping place.

Their number is gradually diminishing, as the smaller bakehouses are being absorbed into the larger concerns.

Since the new bye-laws with regard to the Sale of Foodstuffs give the Local Authority power to insist on a greater degree of cleanliness not only of premises, of appliances and utensils, but also of employees, it is confidently to be expected that cake, pastry, &c., will be produced under much more hygienic conditions than heretofore.

The number of visits paid to bakehouses during the year under review (1937) averaged 44 a month.

Disposal of the Dead.

The Local Authority owns two cemeteries, the Lapeyrouse Cemetery and the Mucurapo Cemetery, locally known as " Lapeyrouse " and " Maracaibo ", respectively.

The Lapeyrouse Cemetery is practically full and burial there nowadays takes place mainly in vaults and graves which have been bought up by private families.

Most of the regular burials take place in the Mucurapo Cemetery.

They are inspected regularly and a strict supervision is kept to ensure that no nuisance of any kind arises.

The Medical Officer of Health is occasionally called upon to supervise the exhumation of bodies for shipment abroad or for transference to other graves or from vaults to graves. The object is to see that no nuisance is created or, if created, immediately abated.

Prevalence of Rats and Mosquitoes.

Anti-Rat Measures.

Four gangs, each consisting of three men and a driver under the general supervision of an overseer, operate right through the year, armed with snap traps, cage traps, poison bait and a portable Clayton asphyxiating machine, the latter chiefly for gassing young rats in their holes and also for driving out adults which are instantly killed by the trappers. The bait used has to be changed at regular intervals, as there is a general complaint from the trappers that the rats soon get accustomed to one particular type of bait.

Baits used during the year were bread, cheese, smoked herring and bananas. On occasions, bait in which a trade preparation of phosphorus—Stearn's Electric Paste—is incorporated is laid in various places.

Rats are also bought across the counter at the rate of five cents for adults and three cents for immature specimens.

These gangs visit premises from which complaints of the prevalence of rats are received and, in addition, go regularly to the large warehouses on the quayside, to provision stores, groceries, hotels, restaurants, barrack yards and such other places where it is to be expected that the rat population is high. It is the writer's intention, however, to have these gangs do regular house to house inspection after having first attended to premises from which complaints have been received. This is particularly necessary in view of the early completion of the Deep Water Wharfage Scheme when it is expected that grain ships from India and ships from South American ports will dock alongside the quay.

During the year under review 8,868 rats were caught by the gangs and 1,834 were bought. These were all destroyed. In addition 875 mice were caught and destroyed.

The Government Bacteriologist examined 10,554 rats none of which was found to be infected with plague. Immature and other rats which were not subjected to examination numbered 148.

Destruction of Rats and Mice.

Rats and Mice Caught.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Rats caught by Trappers	653	705	616	663	552	747	892	747	831	814	821	827	8,868
Rats bought	174	155	183	200	150	148	185	167	162	102	100	108	1,834
Total Rats destroyed	827	860	799	863	702	895	1,077	914	993	916	921	935	10,702
Mice caught and destroyed ...	127	141	90	106	50	55	47	9	70	92	5	83	875

Examination of Rats by Government Bacteriologist.

Examination of Rats.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Rats examined for Plague	824	853	780	837	684	876	1,059	910	978	905	913	935	10,554
Rats found infected with Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Immature Rats not examined	3	7	19	26	18	19	18	4	15	11	8	...	148

Anti-Mosquito Measures.

All year round the anti-mosquito unit, consisting of five gangs and five special inspectors, pay house to house visits, each gang being allocated to a particular area of the City.

When complaints are received, the driver and ladder men which comprise the unit, armed with extension ladders and larvicide, proceed to the particular premises in the district and commence a survey in an effort to detect the breeding place of mosquitoes—a site which is invariably found either on the premises themselves or an adjoining premises in stagnant pools of water. Defective eaves gutters, often choked up with leaves, discarded milk tins, old motor car tyres, coconut shells, mud holes, antiformicas, &c., are the usual culprits.

In addition to the regular gangs, a number of anti-mosquito men are employed to assist the sanitary inspectors in house to house inspection. They pay particular attention to empty milk tins, pieces of broken crockery, old bottles, &c., where water is likely to collect and where mosquitoes are liable to breed.

The Sanitary Inspectors of the various districts are expected to enforce the bye-laws with respect to the prevention of the breeding of mosquitoes and when mosquito larvae are found, a notice is sent to the owners or occupiers informing them of this fact and drawing their attention to the mosquito bye-laws. When mosquito larvae are found on the premises three or more times, the owners are liable to be prosecuted, but this is seldom necessary, as the breeding places are very readily got rid of.

An oil gang, consisting of nine men, armed with larvicide oil operates daily in the lower reaches of the Maraval River, the reclaimed lands on the foreshore near the dump, in the earthen drains on the old Experimental Station, on the lowlying lands in Woodbrook, &c., the work being directed to checking the breeding of mosquitoes as far as possible by killing them in their larval stage.

By far the most outstanding feature of the year, as far as mosquitoes are concerned, was the frequent and persistent complaints of mosquito nuisance from residents of Woodbrook north of Wrightson Road, life being rendered hardly tolerable by swarms of mosquitoes—the direct result of stagnation of water in the main drains of the City in that vicinity.

This was occasioned by work that was going on in connection with the Deep Water Wharfage Scheme—work which entailed the building of drains to join up with the City's drainage system at the southern end of French and Gatacre Streets. Temporary earthen drains—flumes—had to be constructed, designed to carry storm and waste water westwards to the sea, but these were always filled with stagnant water and mosquitoes found a ready breeding ground here.

Regular daily intensive oiling was resorted to, the drain built by the Public Works Department on the northern side of Wrightson Road was cleared daily of mud and other accumulations by the City Council's labourers, the culverts under the road were cleaned regularly, the flume on the south side of Wrightson Road was cleared of mud as far as possible by gangs of labourers working daily, and construction of the main drains on the lands reclaimed in connection with the Deep Water Wharfage Scheme was expedited.

These measures all combined were instrumental in abating the nuisance, and the breeding of mosquitoes in that area is now well under control.

The anti-mosquito unit, during the year under review, paid 28,611 visits to premises. On these visits defective eaves gutters were found on 1,417 occasions, defective eaves gutters containing water and mosquito larvae on 265 occasions, and larvae were found in old motor car tyres, antiformicas, tin cans, &c., on 1,016 occasions.

Inspection of Eaves Gutters, &c.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Number of inspections and re-inspections of premises	1,706	1,600	1,978	1,792	1,599	2,458	2,593	2,464	2,978	3,169	3,302	2,972	28,611
Occasions found in good order	1,584	1,505	1,876	1,676	1,505	2,325	2,415	2,351	2,914	3,035	3,158	2,850	27,194
Defective Eaves Gutters...	122	95	102	116	94	133	178	113	64	134	144	122	1,417
Defective Eaves Gutters containing water ...	26	24	12	8	7	42	18	26	10	19	49	38	279
Defective Eaves Gutters containing water with larvae	38	15	4	7	...	11	64	43	9	24	25	25	265
Occasions on which mosquito larvae were found in tubs, antiformicas, tin cans, &c. ...	65	60	27	68	25	29	183	171	83	85	111	109	1,016
Eaves Gutters cleaned ...	5	3	...	5	7	3	23	5	5	4	4	4	68
Eaves Gutters repaired ...	...	...	...	2	...	...	...	11	11	...	1	...	25
Holes in trees filled with cement	...	2	...	...	...	...	2	...	4	...	...	...	8

Factories and Workshops.

There are not many business places in the City of Port-of-Spain that can truly be termed factories, but workshops number very many and some of them carry on trades that are somewhat curious.

Bye-laws have been framed to control the nine aerated water factories, the two match factories and the three soap factories that are within the City's limits. They are inspected regularly to detect any breach of the bye-laws. During the year 1937, three visits on an average per month were paid to soap factories, eight visits on an average per month to aerated water factories, four on an average per month to dye works and twenty-one on an average per month to other factories.

Among the workshops, barber shops are regulated by bye-laws, but not the others, of which tailor shops form the bulk.

B.—Premises used for Human habitation, Houses let in Lodgings, Common Lodging Houses.

In spite of repeated attempts to tackle the problem of overcrowding and shortage of housing accommodation, the housing question remained during the year as acute as ever. There can be no doubt that the number of premises available for housing the increasing population of the City falls well below the requirements, and overcrowding exists to quite a considerable degree. And the situation is rendered all the more urgent by the fact that more and more of the available housing accommodation is being converted into business premises—parlours, shops, restaurants making their appearance in countless numbers in just those areas of the City where the population is thickest. As a result of this change, and of the fact that the older barrack ranges are gradually being demolished and some of the newer ones altered to meet the Central Board of Health's requirements of not more than two tenements in series, premises in the upper parts of the City and in the various residential districts, which were originally meant for one family only, are being occupied as barracks.

A more pernicious system, with the easy promiscuity, with the exploitation of residents who mostly are members of the working classes by heartless owners and middlemen, and with the overcrowding that it lends itself to, is difficult to imagine. The number of houses in the City of Port-of-Spain amounts to 9,226. Of this number 3,473 are occupied as barracks housing a population of 42,820, which means that about 50 per cent. of the population live under barrack conditions.

What is the Local Authority doing to try and remedy this deplorable state of affairs?

First there is the Housing Commission—a body composed of members appointed by Government and by Municipality—set up in 1935 for the specific purpose of devising means and ways for providing houses for members of the working classes. It started to work in such dead earnest that a large sum of money was voted jointly by Government and by City Council for the purpose of laying out Morvant Estate, Laventille, as a building estate. That is as far as it got, however. First it was discovered that Morvant Estate, Laventille, might not be such a suitable site after all. Alternative sites were considered with a consequent delay in initiating building operations, until quite recently, when one heard that a final decision to open up the area originally agreed upon was taken. We do sincerely hope that before long Workers' Homes will go up in Laventille to relieve the congestion and the increased shortage of housing accommodation that public health activity in the City, in the direction of reconstruction of insanitary barracks and individual buildings, is occasioning.

Secondly, there is the fact that legal opinion has asserted that resolutions passed by the Council declaring certain areas of the City Slum Clearance Areas, were bad in law in that they did not comply with certain provisions of the Ordinance.

As a matter of fact, the actual working of this Ordinance proved somewhat impracticable, and these areas in the lower parts of the City, which I have just mentioned, are being held up until a new and more practicable Bill, which is in the course of preparation, has been passed.

There can be no doubt that this delay, inevitable to a large extent, has worked and is working a great deal of hardship to the working man by reason of the lack of sufficient housing accommodation and, incidentally, is causing a good deal of loss of income to the owners in these areas, particularly in Slum Clearance Area Block No. 1, the tenants of which were transferred to the Gonzales Place Workers' Homes erected by the City Council, as a preliminary step to the demolition and the erection of new dwelling houses in that area in place of insanitary barracks which had outlived their usefulness. The majority of owners here have prepared plans in accordance with the Building Regulations and are ready to go ahead with building operations but for this hold up.

I have already referred to the Gonzales Place Workers' Homes. Fifty houses of the two-room detached variety and twenty-five of the semi-detached type, with the necessary appurtenances, were erected here by the City Council in 1936 at a cost of $64,531.67, specifically for housing members of the working classes. The rent ranges from $3 to $3.50 per month. They were originally meant as a temporary housing station for tenants displaced from the slum clearance areas; but, by reason of the hold up above referred to, so far, they have been occupied permanently.

Outside the so-called declared slum clearance areas, insanitary premises can be, and are being, dealt with under the Public Health Ordinance, but here again the difficulty of alternative accommodation arises. It is inevitable that, when premises are reconstructed in accordance with the Building Regulations, quite a fair proportion of the displaced tenants have to seek accommodation elsewhere, even if they are in a position to pay the increased rents the owners find it necessary to charge to compensate them for the loss of income arising out of the necessary curtailment of actual housing space entailed by the modern public health demands of greater space around buildings to secure the free circulation of air.

Where are these people to go? That is the universal cry and that is the reason why insanitary property is often left standing even when the owners themselves are anxious and ready to remedy the insanitary defects and to put their houses in order. The writer has, on more than one occasion, had to ask owners to hold their hands for a time and not to proceed immediately to reconstruct insanitary premises in an effort to give tenants ample time to find alternative housing accommodation, for if eviction were resorted to, great hardship will be occasioned.

The weakness of this position and its possible exploitation by recalcitrant owners, happily in the minority, with a view to escaping the performance of necessary work, are obvious.

A circumstance that is causing much adverse comment is the obvious inability of members of the working class to pay the increased rent being charged for the new two room semi-detached type of building with appurtenances that is being substituted for the long barrack ranges which are all being condemned, be they in good or bad repair.

With the scale of wages of the working man, such as it is, it is frankly impossible to expect him to pay $5 to $6 for what he used to pay $3 before, even though he is not slow to appreciate the obvious advantages, from a health point of view, now being offered him.

The writer repeats that what is urgently needed to remedy the present acute shortage of houses is the immediate building, both by Municipality and Government in a joint effort, of a sufficient number of houses to accommodate members of the working classes, to be let at a rent that is within the range of their pockets, in places not too far distant from where they carry on their work or, alternatively, in places where easy and cheap transport can be had, and that every inducement and encouragement be given to these tenants to own their houses by a process of easy long-term payments.

If this were done, the congestion in the City would be relieved, the general outcry of "Where are we to go?" would cease, owners of insanitary property would be compelled speedily to get rid of sanitary defects, or else closing orders would be applied for, and in addition the present, prevalent high rents would inevitably come down to a lower level.

Common Lodging Houses.

Common Lodging Houses in the City of Port-of-Spain number eight. They are all situated in the lower, more thickly populated parts of the City and seem to be the special perquisite of the East Indian community, inasmuch as they are all run by and for, the benefit of East Indians, of the labouring class particularly.

It cannot be said that they are absolutely satisfactory as far as their running and upkeep are concerned, the Department having to keep constant supervision over them to ensure that compliance with the bye-laws regulating them is effected.

They are frequented at night mostly by dirty and vermin-infested vagrants who seek a bed and sometimes just a shelter from the rigours of the weather.

It is gratifying to be able to record that, on the whole, their number is diminishing; but the overcrowding that exists, when every inch of space is taken up by beds improvised for these people, does give rise to no end of anxiety on the part of the Health Department.

In addition to the very strict eye which we endeavour to keep on these common lodging houses, spraying with formalin is done regularly every week in an effort to get rid of vermin. During the year the number of visits paid averaged eight a month.

Retail Shops and Places where Food is prepared, sold, exposed or offered for sale or deposited for the purpose of sale or of preparation for sale.

By the irony of fate, a measure which my predecessor had been urging the Local Authority to adopt year after year since 1929 was passed by the City Council on the 22nd day of April, 1937, just after his retirement in March. I refer to the Sale of Foodstuffs Bye-laws, made under the provisions of section 156 of the Public Health Ordinance, Chapter 98, as amended by section 5 of the Public Health (Amendment) Ordinance, No. 5 of 1934, which were first drafted and forwarded to the Local Authority for adoption as far away as the year 1929.

As year after year passed by, and this very necessary and glaringly obvious piece of legislation to regulate premises and people connected with the retail food trade still remained a pious hope, there was general despondency as to the likelihood of these draft bye-laws ever obtaining the sanction of the City Council, but after numerous postponements and a great deal of unnecessary delay, they eventually became established law on the 24th August, when the confirmation of the Governor in Executive Council was obtained. They were subsequently published in the *Royal Gazette* on the 2nd September, 1937.

It now remains for the writer to set the machinery of the law working, by means of which the long awaited and very desirable improvements in the manner food is prepared, conveyed, sold and handled in the City will be effected.

C.—Food.

Milk Supply.

Milk, as in most countries of the civilized world, is an important source of food material and there is no doubt, considering the great number of milk shops and dairies which have been established about the City, that more and more milk is being consumed either pure or in milk mixtures, which seem to be such a favourite with that particular section of the population which frequents the various refreshment parlours of the City.

As is to be expected, the milk is taken raw and herein lies a source of great potential danger, and the danger is not so much tuberculosis, which is fairly well taken care of by the bye-laws with respect to the sale of milk, as it is typhoid fever.

Most of the milk so used is obtained from dairies situated outside the City's limits, where conditions are often not altogether satisfactory from a sanitary point of view. The water here is usually obtained from shallow wells or neighbouring streams, milking is not usually done under the very strict conditions imposed by the bye-laws, and the milkers are not always free from disease, which is such an absolute necessity, when such a commodity as milk is handled.

The writer was able, with the help of the Government Bacteriologist, to trace a couple cases of typhoid fever, which had occurred in a certain street of the City, to a vendor from San Juan, wherein lies by far the largest number of dairies supplying the City with milk, whose son was ill at the time with an attack of typhoid fever and who had been removed to Typhoid Ward, Colonial Hospital.

He has also had, in the course of the year, to refuse several licences to milk shops whose supply of milk was being obtained from dairies where sanitary conditions were not up to standard, or where bottling was being done under conditions which did not secure contamination from dirt, dust, flies, &c., or where further proper arrangements were not made for the cooling of the milk before being sold to the general public; and he has, as far as he could, urged the obtaining of pasteurized milk already bottled as being more safe and less liable to accidental contamination.

With regard to adulteration, there can also be no doubt that milk below statutory requirement, in one or other of its constituents, is fairly common. The country cowkeeper with one or two cows in his byre is a common offender.

Samples are taken regularly, chiefly by members of the Police Force, who are the main functionaries under the Food and Drugs Ordinance, but the Local Authority intends soon to issue orders to its Sanitary Inspectors to take samples in suspected cases with a view to ensuring the maintenance of the required standards, as soon as satisfactory arrangements have been made with the Government Analyst for their examination.

By reason of frequent complaints from the general public that the milk as sold in dairies was wanting in quality, the Police took a number of samples from different places in the City, with the result that a number of prosecutions had to be instituted.

Analysis of Samples of Dairy Milk (Taken 18th December, 1937).

Laboratory No.	Report.	Results of Prosecution.	
		Fines.	Costs.
		$ c.	s c.
3730	Genuine	...	...
3731	36 per cent. fat deficiency	10 00	2 50
3732	Genuine	...	...
3733	do.	...	...
3734	11.6 per cent. extraneous water	4 80	2 50
3735	Genuine	...	...
3736	23 per cent. fat deficiency	4 80	2 50
3737	23 per cent. do.	Reprimanded and discharged	2 50
3738	Genuine	...	...
3739	5.73 per cent. fat deficiency	Action pending.	

No arrangements exist at present for the bacteriological examination of samples of milk to detect tubercle bacilli, typhoid bacilli and other organisms, and though the writer is of opinion that only a very small percentage of milk is contaminated with the germ of tuberculosis, yet in its other aspects it is a measure that can be fruitfully undertaken to serve as a check on the conditions under which milk is produced, and it would undoubtedly be a distinct help in the clean milk campaign which the Local Authority has as its main and primary objective.

Milk in School Scheme.

No definite scheme is in actual existence, at the moment I write, for the supplying of milk to school children, but there can be no two opinions as to the good to the children that would come from such a procedure. The only question is whether a sufficiency of good, clean milk, produced under conditions that make for cleanliness and for freedom from contamination, can be procured. The answer, I feel, is definitely no.

The alternative is, of course, pasteurizing the milk obtained from different and not so reliable sources; but, as far as the writer knows, there are just two small pasteurizing plants in the Colony and their capacity would be sorely taxed if a constant supply of milk for the large number of school children in the Colony were demanded.

A sum of ten thousand dollars has been set aside in the estimates for the year 1938 for this purpose, and already Government has been calling for tenders with a view to very early initiation of this scheme.

Foods other than Milk.

For a long time there was felt the need for a more strict control of all the conditions and circumstances affecting the manufacture and selling of food to the general public. There was the growing conviction that all was not well from a hygienic point of view, that premises were not always suitable, that employers and employees did not all appreciate the value of cleanliness, the importance of a constant supply of running water, the imperative necessity of securing freedom from contamination with dust, dirt, flies, &c., of the various articles of food.

Bye-laws there certainly were on the Statute Book enforcing these desiderata in a general way, and very good ones too—but they did not go far enough, and the elementary hygienic principles they aimed at inculcating, did not touch the core of the trouble.

In August, 1937, were passed the bye-laws with respect to the sale of foodstuffs in the City of Port-of-Spain which give the Local Authority a great measure of control over the retail food trade and, at the end of the year under review, preparations were in active progress to secure the enforcement of these bye-laws.

Briefly, they call for the registration of all places where food is prepared, sold, exposed or offered for sale; of all persons engaged in the food trade; for the cleanliness of employees, for the wearing by them of clean clothes and aprons, and for their freedom from infectious or contagious disease. Premises, appliances, instruments, &c., must be kept clean. Vendors and conveyers of food from place to place must, in addition, wear badges which are to be obtained from the Local Authority.

Food Inspections.

The work of food inspection occupies the special attention of all the Sanitary Inspectors and proceeds regularly, as part of the usual daily district work of inspection.

During the year 1937, a monthly average of 219 visits were paid to the provision and meat shops of the City, an average of 31 per month to provisions stores, of 27 to restaurants and cookshops, of 193 to cake and ice cream shops, of 101 to fresh fish trays, of 11 to bread depots, of 11 to ice cream carts and pails, of 53 to cake trays and baskets, of 13 to oyster vendors' baskets, of 12 to plantain carts, of 59 to bread carts and baskets, of 31 to spirit shops, of 11 to fry shops, of 12 to hotels and of 22 to sweet drink carts.

The new bye-laws will necessitate the appointment of a special food inspector whose duties will be connected with the food trade only, and whose business it will be, to see that the much-needed improvement, which is such an urgent necessity, will be effected.

Unsound Food and Food Poisoning.

Inspection of places where food is exposed or prepared for sale to the general public reveals the surprising fact that unsound food is not the rarity that one often supposes it is or rather that one would like it to be.

It is possible to pick up, at any one time, in one place or another, food—particularly of the tinned variety—that is definitely and palpably unsound and unfit for human consumption, and which often is imported as such into the Colony—a circumstance rendered possible by the lack of bye-laws in the Statute Book designed to control the importation of foodstuffs into the Colony.

It must be admitted, of course, that a good deal of tinned food goes bad by reason of the length of time that some brands occupy on the shelves of the various smaller shops in the suburbs and outlying districts of the town, and also, undoubtedly, by reason of the rough handling and the violent shaking that they are subjected to in the course of transit to their destination, but the writer is firmly of opinion that goods of inferior quality and packed in tins by a process that falls below the strict conditions necessary for safety, arrive as such in this Colony, the direct result of the knowledge that no kind of inspection by trained food inspectors exists at the various ports of entry.

The result is that a number of foreign firms—very often smaller firms of no great repute—find Trinidad a ready market for their goods and it is with regret that one has to say that very often, they are found wanting. Herein lies a potential danger of very great magnitude as any one, who has experience of the menace that food inefficiently tinned presents, can testify to—a danger which took a practical form on the occasion of an outbreak of food poisoning which happened in the month of October and which is referred to later on.

The writer in his memorandum to the Local Authority on the details of that outbreak urged upon it the absolute necessity of getting bye-laws passed regulating the importation of food and drink into the Colony as provided for in Part XI (*a*) section 87 (1), (2), (3), (4) of the Public Health Ordinance.

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

Articles.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Salted Meat ...*pounds*...	70	...	...	...	...	...	...	...	...	...	...	...	70
Fresh Bread ...*loaves* ...	...	50	...	...	...	...	...	...	...	...	...	...	50
Cakes	...	100	...	...	...	...	...	...	...	...	...	...	100
Sugar Cakes	...	...	...	87	...	...	...	...	...	...	...	...	87
Salmon ... ...*tins* ...	...	...	...	...	...	12	...	...	...	2	56	...	70
Sardines ... ...*tins* ...	...	...	...	...	...	16	...	...	...	...	48	33	97
Petit Pois ... ...*tins* ...	...	...	...	...	...	2	...	...	...	...	1	1	4
Hams	...	...	...	...	...	...	...	3	...	...	...	...	3
Pickled Salmon ... *barrels* ...	...	...	...	...	...	...	...	1	...	...	...	...	1
Cheeses	...	...	...	...	...	...	...	...	...	17	...	...	17
Tomato Paste ... ...*tins* ...	...	...	...	...	...	...	...	...	...	93	77	...	170
Sausage ... ...*tins* ...	...	...	...	...	...	...	...	...	...	45	93	43	181
Pigs' Feet ... ...*tins* ...	...	...	...	...	...	...	...	...	...	...	3	...	3

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

Arrowroot	...*packets*...	852	Ham	...*tins* ...	273	Salmon	...*tins* ...	2,431
Cheese	...*pounds*...	350	Herring	...*boxes* ...	10	Sardine	...*tins* ...	1,197
Codfish	...*tierces* ...	15	Mackerel (salted)	...*pounds*...	50	Sausage	...*tins* ...	917
Corn Starch	...*packets*...	240	Meat (salted)	...*pounds*...	70	Tasajo	...*pounds*...	800
Corned Beef	...*tins* ...	1,073	Potato	...*barrels* ...	5	Tomato Paste	...*tins* ...	252
Cuttle Fish	...*barrels* ...	5	Salmon (salted)	...*pounds*...	100	Turtle Soup	...*tins* ...	1

Food Poisoning.

An outbreak of food poisoning of a mild type occurred at St. Ann's Mental Hospital on the 21st October, 1937, which, though it did not occur within the limits of the City, nevertheless entailed action on the part of the City's Health Department, resulting in the seizure and condemnation, as unfit for human consumption, of a large number of tins of a certain brand of tomato paste.

Briefly, after a mid-day meal which consisted of stewed beef, onions, chive, rice, peas, Irish potatoes, butter, cooking oil, garlic, pepper, vinegar, and tomato paste from a tin added to the stew just before serving, 35 persons—consisting of 13 male attendants, 20 nurses and 2 male inmates—were seized about six o'clock in the evening with nausea, vomiting, pain in the bowels and diarrhoea and, in the case of a few, fever to about 100 degrees Fahrenheit. One attendant only was sufficiently ill to be sent to hospital. There were no deaths. Only those who partook of the tomato paste developed the illness and, by a careful process of elimination, the causative agent was eventually tracked down to the tomato paste, though it must be admitted that bacteriological examination revealed no causative organisms of the food poisoning type, either in the tomato paste, or in the vomitus or in the excreta of the affected patients. Agglutination tests done with the blood of patients against known organisms of the food poisoning type, yielded negative results.

The grocery from which this brand of tomato paste was purchased being within the City's limits, examination of tins of this and other brands of tomato paste at the various groceries, wholesale and retail, was undertaken, and the surprising fact was elicited that more than fifty (50) per cent. of tins of this particular brand of tomato paste were blown and unfit for human consumption.

The whole consignment was therefore condemned and the agents were asked not to distribute any further consignments before the Public Health Department of the City was informed and an opportunity given it of examining tins of this particular paste. This they readily agreed to do and that arrangement, as mentioned elsewhere, is now working satisfactorily.

A memorandum was sent to the Local Authority urging it to point out to the Central Board of Health the pressing necessity of framing public health regulations governing the introduction of food into the Colony.

Food and Drugs Adulteration Ordinance.

Though the Medical Officer of Health is a functionary under this Ordinance and, as such, has imposed upon him the duty of taking and examining samples of food and drugs for possible adulteration and of initiating prosecution of guilty parties, this is a duty that has been and is still being honoured more in the breach than in the observance.

The difficulty has always been and still is that the Municipality has no analyst and no working agreement has been arrived at between the Government Analyst and the City Council as regards the examination of, and reporting on, samples of the various foods and drugs.

The practical outcome is that the Ordinance is administered by the other functionaries concerned, chiefly by the Customs Department and by the Constabulary.

In view of the fact that a few cases of food poisoning—very suggestive of metallic poisoning, the result of either excessive amounts of colouring matter or of solution of metal from containers by acid in the tinned contents—have been brought to the notice of the Health Department, the writer has urged and is still urging on the Local Authority the necessity of arriving at a speedy agreement with Government on this matter—an agreement which he feels will be accomplished as soon as the post of Government Analyst, which is at the moment vacant, has been filled.

VITAL STATISTICS OF THE DISTRICT.

Comparative Summary of Vital Statistics.

Unless otherwise stated rates are per 1,000 population.

	1921	1931	1936	Average for 10 years, 1927-1936	1937
Mean Population	61,386	70,462	75,680	70,460	77,044
Total Births...	1,687	1,956	2,295	2,039.4	2,273
Birth Rate	27.28	27.76	30.33	28.89	29.50
Still Births registered...	154	139	170	157.1	197
Still Birth rate per cent. of Live Births registered	9.13	7.11	7.41	7.72	8.67
Marriages registered	534	622	659	640.3	737
Marriage Rate	8.64	8.33	8.71	9.10	9.57
Total Deaths	1,659	1,223	1,024	1,273.3	1,169
Death Rate	26.83	17.36	13.53	18.20	15.17
Natural Increase of Population ...	28	733	1,271	766.1	1,104
Deaths under one year	287	222	149	222.3	237
Infant Mortality Rate: Deaths under one year per 1,000 Live Births ...	170.12	113.50	64.92	110.63	104.26
Death Rates:					
Notifiable Infectious Diseases ...	6.21	3.14	3.05	3.17	3.36
Pulmonary Tuberculosis ...	2.49	1.90	1.57	1.82	1.84
Tuberculosis (other forms) ...	.26	.10	.07	.18	.26
Enteric Fever	1.25	.16	.08	.19	.09
Pneumonia (all forms)	1.97	.92	1.28	.94	1.10
Bronchitis	1.36	.97	.41	.90	.32
Malaria...	.89	.54	.17	.48	.27
Syphilis	.21	.26	.21	.41	.23
Dysentery	.50	.26	.07	.21	.09
Diarrhoea and Enteritis	1.91	.78	.40	.69	.69
Bright's Disease and Nephritis ...	2.09	1.14	.65	1.11	.82
Diseases of Heart and Blood Vessels	2.65	2.60	2.35	2.70	2.22
Diseases of the Nervous System ...	1.70	1.15	1.00	1.47	1.31
Cancer and other Malignant Diseases	.63	.64	.78	.70	.88
Ankylostomiasis	.15	.03	.03	.05	.03
Influenza	.26	.06	.04	.07	.04
Diphtheria	.02	.03	.05	.03	.05

Published below is a short summary of the corresponding figures for the City of Georgetown, British Guiana, and for the City of Kingston, Jamaica, to whose respective Medical Officers of Health I am indebted for copies of their annual reports, whence this information has been culled.

Comparative Summaries of Vital Statistics for the year 1936.

	Port-of-Spain.	*Georgetown.*	*Kingston.*
Area of City in acres (pastures and open spaces included)	1,990	1,612	4,580
Estimated Mean Population	75,680	63,826	76,460
Density of Population (persons per acre) ...	38	39	16.69
Total Live Births	2,295	1,749	3,003
Birth Rate	30.33	27.4	39.30
Total Deaths	1,024	1,144	1,802
Death Rate	13.53	17.9	23.56
Natural Increase of Population	1,271	605	1,201
Deaths of Infants under one year	149	187	303
Infant Mortality Rate	64.92	106	100.89
Death Rates:			
Pulmonary Tuberculosis	1.57	1.04	1.62
Enteric Fever	.08	.62	.35
Malaria	.17	.86	.62
Dysentery	.07	.01	.36

Population.

The mean population estimated to the middle of the year (30th June) worked out at 77,044 souls —an increase of 1,364 on the figure for 1936. The population in 1917 was calculated to be 67,328, in 1927, 65,573—*a figure which is almost certainly misleading.*

The census enumeration for the year 1901 was 54,100; for 1911—59,796; for 1921—61,580; for 1931—70,334.

The natural increase of population, *i.e.*, excess of births over deaths, worked out at 1,104—a fall of 167 on the corresponding figure for last year.

The population was estimated to be distributed in the various districts of the City as follows:—

City Proper	31,376
St. Clair	1,450
East Dry River	18,640
Belmont	14,704
Woodbrook	10,874
	77,044

The area of the City of Port-of-Spain (including parks and open spaces) was 2,039 acres, representing an increase of 49 on that for 1936, due to the inclusion within the limits of the City of St. Clair Experimental Station lots. In 1917 the area was 1,793 acres (including Queen's Park Savannah, 279 acres); in 1932—1,907 acres (including Mucurapo lands, 114 acres); in 1935—1,990 acres (including Gonzales Place, 83 acres).

Births and Birth Rates.

One thousand one hundred and seventy-five males and 1,098 females were born during the year—an excess of 77 males over females.

The birth rate per 1,000 population was estimated to be 29.50 as against 30.33 for 1936.

The most fertile month was, for both sexes, April (114 males and 117 females); the least fertile for males was June (74 births), for females July (78 births).

Yearly Births and Birth Rates for the Decennium 1927-1936 are as follows:—

Year.	*Total Births.*	*Birth Rate per 1,000 population.*
1927	1,753	26.73
1928	1,868	28.14
1929	1,895	28.13
1930	1,935	28.16
1931	1,956	27.76
1932	2,021	28.44
1933	2,167	30.10
1934	2,185	29.90
1935	2,319	31.21
1936	2,295	30.33
1937	2,273	29.50

Deaths and Death Rates.

One thousand one hundred and sixty-nine (1,169) deaths were registered during the year under review, made up of five hundred and fifty-eight (558) males and six hundred and eleven (611) females.

The death rate per 1,000 population worked out to be 15.17 as compared with 13.53 for 1936 and 14.93 for 1935.

The general death rate of the entire Colony of Trinidad and Tobago for the year 1936 was reported to be 16.28.

Yearly Deaths and Death Rates for the Decennium 1927-36 and for 1937.

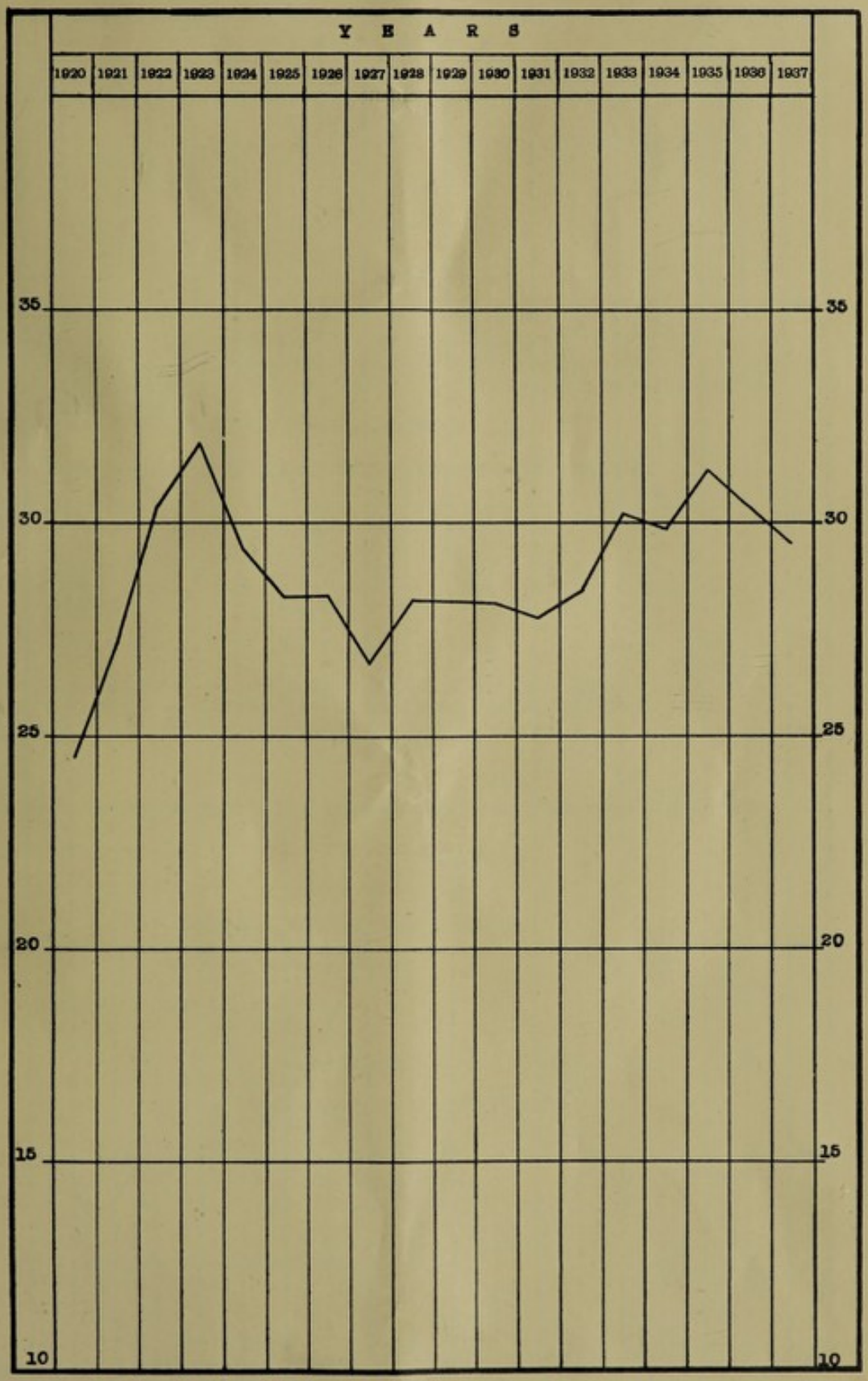
Year.	*Total Deaths.*	*Death Rate per 1,000 population.*
1927	1,433	21.85
1928	1,476	22.23
1929	1,503	22.31
1930	1,308	19.04
1931	1,223	17.36
1932	1,125	15.83
1933	1,304	18.11
1934	1,228	16.81
1935	1,109	14.93
1936	1,024	13.53
Average for Decennium 1927-36	1,273.3	18.20
1937	**1,169**	**15.17**

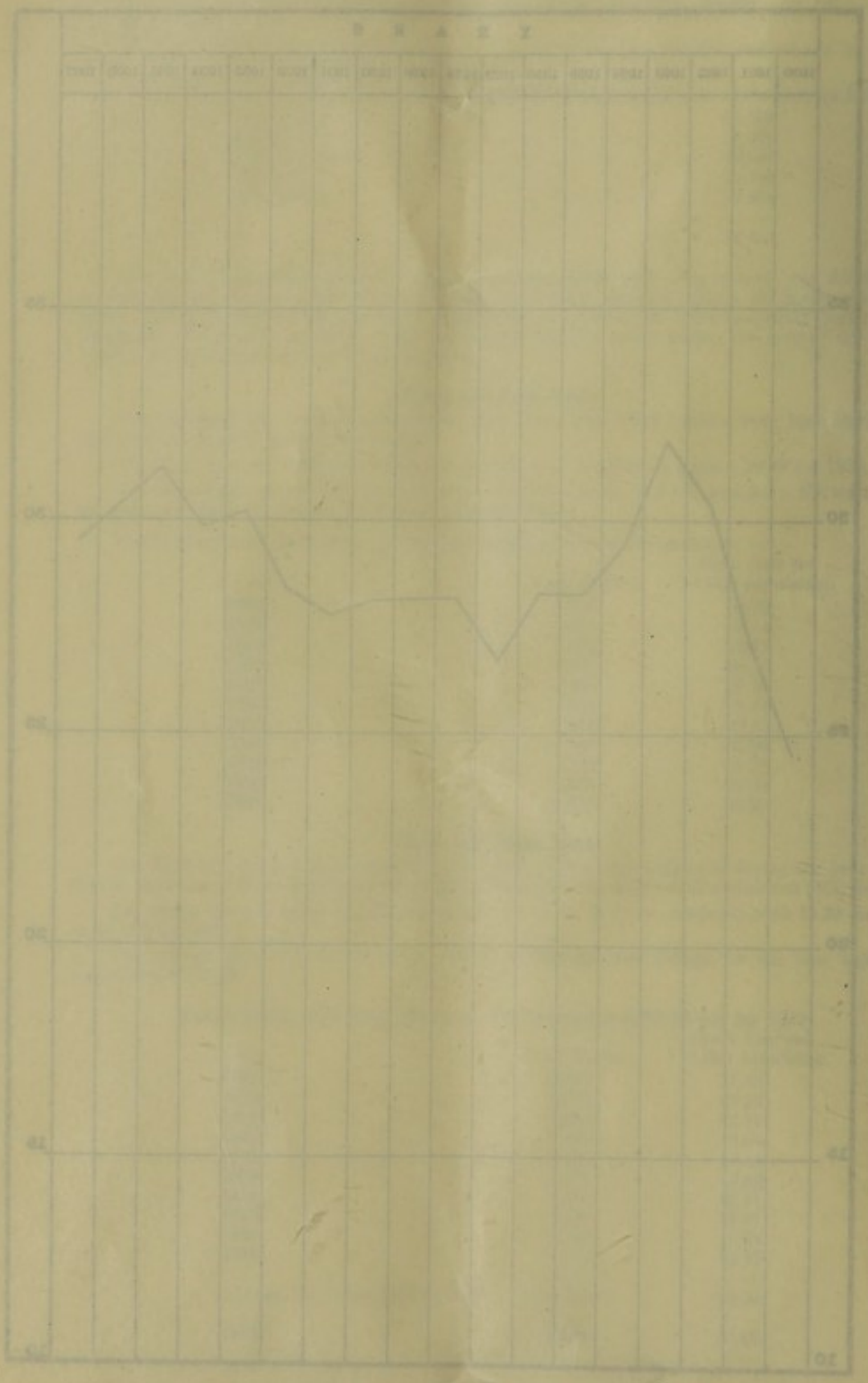
This table shows, on the whole, a steady decline in the death rate for the last ten years.

Chart A

Port-of-Spain

BIRTH-RATES per 1,000 population, 1920-1937.





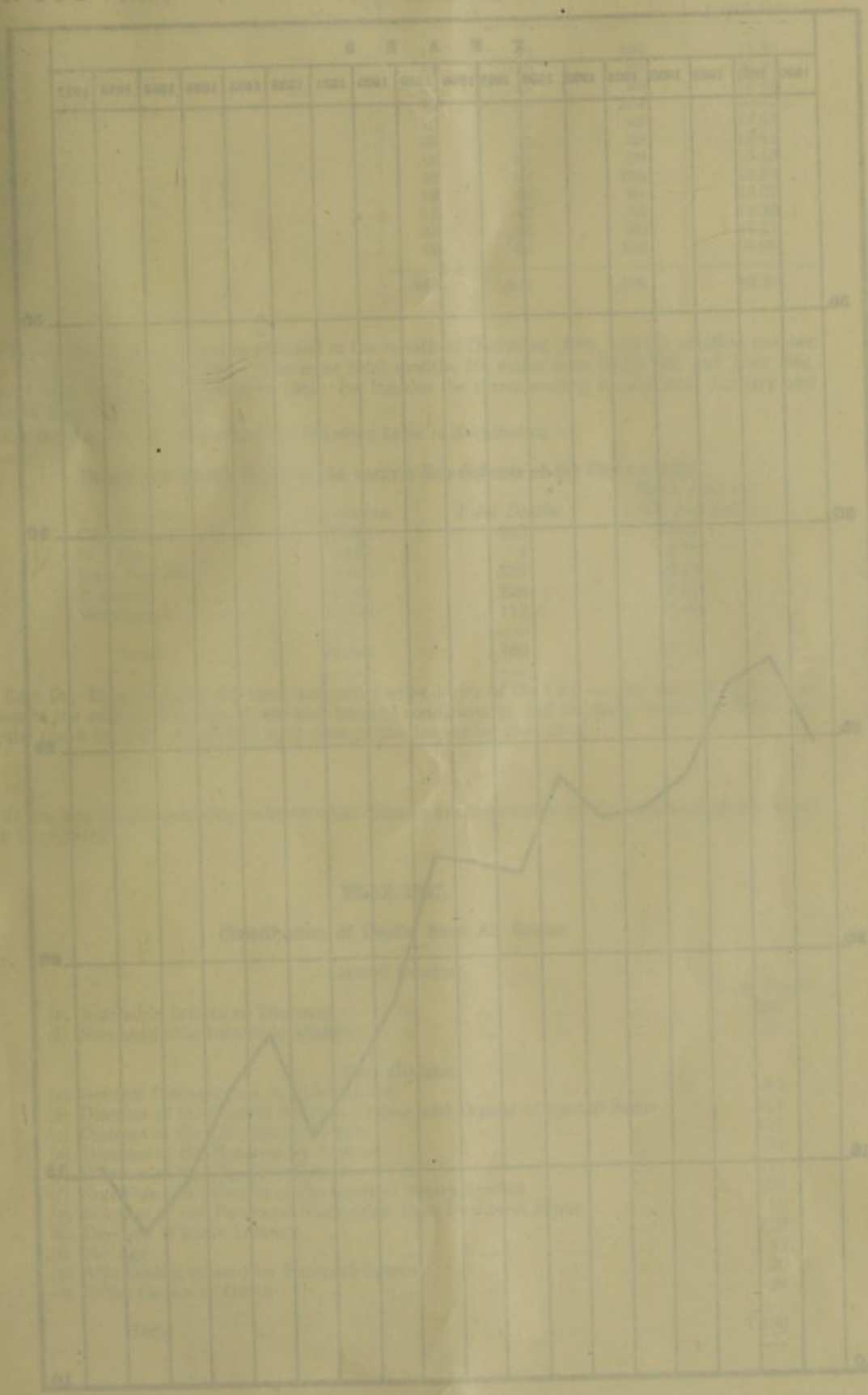
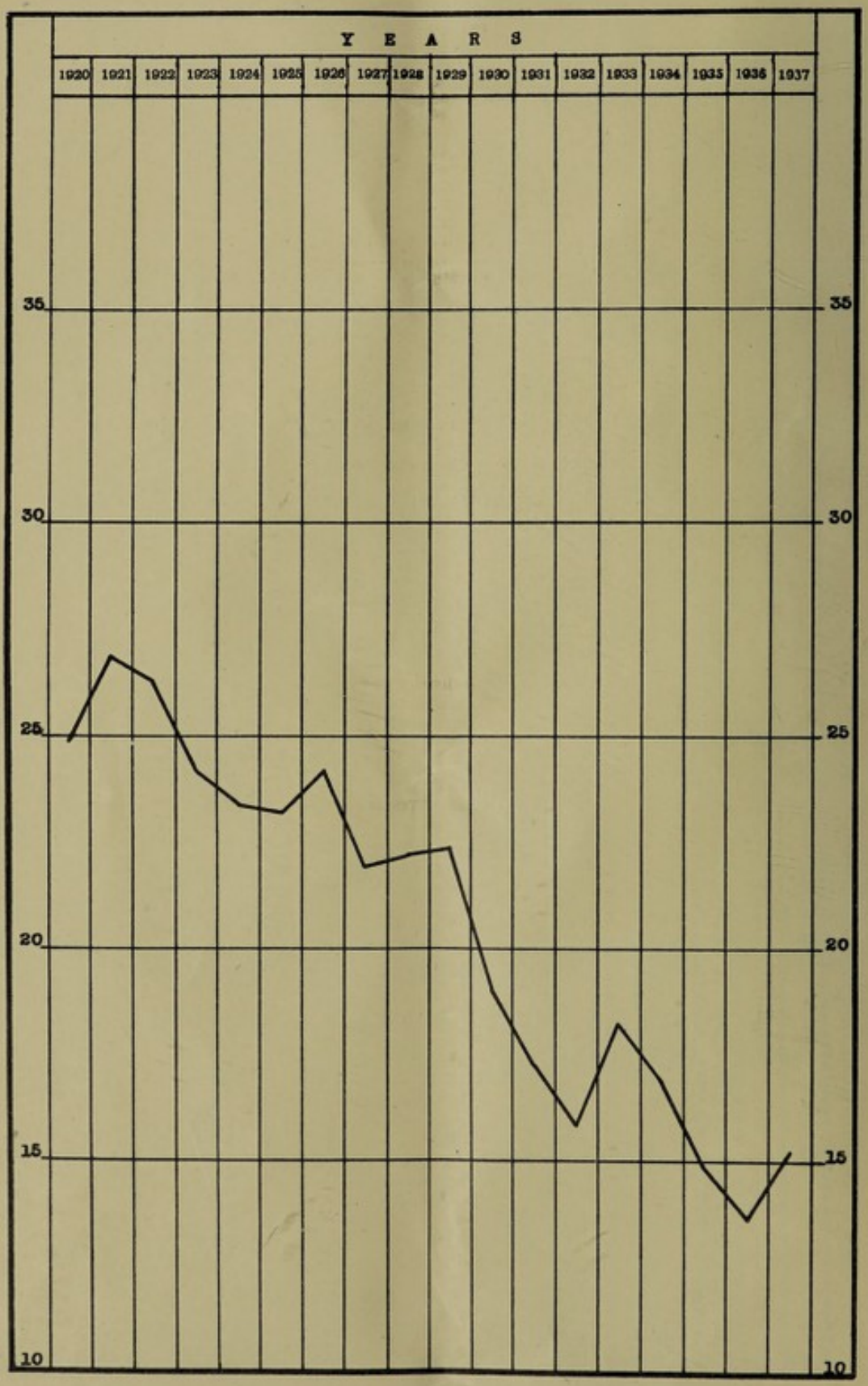


Chart B

Port-of-Spain

DEATH-RATES per 1,000 population, 1920-1937.



Monthly deaths and death rates are given in the following table :—

Monthly Deaths and Death Rates according to Sex.

Month.	Males.	Females.	Both Sexes.	Death Rate per 1,000 population.
January	42	60	102	15.58
February	44	52	96	16.24
March	45	43	88	13.45
April	56	48	104	16.42
May	46	47	93	14.21
June	56	42	98	15.48
July	48	51	99	15.13
August	46	62	108	16.51
September	38	46	84	13.27
October	51	47	98	14.98
November	37	53	90	14.21
December	49	60	109	16.66
Total	558	611	1,169	15.17

The largest number of deaths occurred in the month of December (109), and the smallest number in the month of September (84). The most fatal months for males were April (56) and June (56), the least fatal month was September (38) ; for females the corresponding figures were January and December (60) and June (42).

For the purpose of comparison the following table is illuminating :—

Deaths and Death Rates in the various Sub-districts of the City for 1937.

District.	*Population.*	*Total Deaths.*	*Death Rate per 1,000 population.*
City Proper	31,376	485	15.46
St. Clair	1,450	4	2.76
East Dry River	18,640	339	18.11
Belmont	14,704	226	15.37
Woodbrook	10,874	115	10.58
Total	77,044	1,169	15.17

East Dry River remains the most unhealthy sub-district of the City—a fact easy of explanation in view of the congested nature of, the bad housing conditions in, and the large number of insanitary cesspits, cheek by jowl, practically next door to the houses in, that area.

It is a matter of importance to know what diseases are responsible for the various deaths summed up in the returns.

YEAR 1937.

Classification of Deaths from All Causes.

General Diseases.

	No. of Deaths.
(*a*) Notifiable Infectious Diseases	259
(*b*) Non-notifiable Infectious Diseases	53

Other Diseases.

(*a*) General Diseases (not included above)	85
(*b*) Diseases of the Central Nervous System and Organs of Special Sense	101
(*c*) Diseases of the Circulatory System	171
(*d*) Diseases of the Respiratory System	51
(*e*) Diseases of the Digestive System	117
(*f*) Non-Venereal Diseases of the Genito-Urinary System	107
(*g*) Diseases of the Puerperal State other than Puerperal Fever	10
(*h*) Diseases of Early Infancy	122
(*i*) Old Age	45
(*j*) Affections produced by External Causes	20
(*k*) Other Causes of Death	28
Total	1,169

Year 1937.—Monthly Classification of Deaths from All Causes.

Causes of Death.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
I.—General Diseases.													
(a) *Notifiable Infectious Diseases.*													
Enteric Fever	..	..	..	2	..	2	..	1	2	..	..	..	7
Diphtheria	..	1	..	..	1	..	..	..	..	..	2	..	4
Membranous Croup	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis	16	15	11	6	12	12	11	12	11	14	14	8	142
Tuberculosis (other forms)	..	..	5	2	1	..	2	1	2	4	1	2	20
Pneumonia and Broncho-Pneumonia	8	8	6	6	9	2	6	6	5	13	9	7	85
Chicken Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis Lethargica	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute Poliomyelitis	1	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Fever	..	..	..	..	..	..	..	..	..	..	..	..	1
Acute Ascending Myelitis	..	..	..	..	..	..	..	..	..	..	..	..	..
(b) *Non-Notifiable Infectious Diseases.*													
Malaria	..	..	2	..	1	2	2	3	5	4	2	..	21
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	1	1
Influenza	..	..	1	..	..	..	..	..	1	1	..	..	3
Dysentery	..	2	..	..	..	1	2	1	..	..	..	1	7
Ankylostomiasis	..	..	..	..	..	2	..	..	..	..	..	..	2
Syphilis	3	1	4	2	..	1	..	3	1	1	..	2	18
Other Venereal Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	..	..	..	..	..	..	..	1	..	..	..	..	1
II.—Other Diseases.													
(a) *General Diseases not included above.*													
Cancer and other Malignant Diseases	7	6	5	5	6	3	5	6	1	11	4	9	68
Beri-Beri	..	..	..	..	..	..	..	..	..	..	..	..	..
Leprosy *	..	..	..	..	..	..	..	..	..	..	..	..	..
Other General Diseases	1	3	1	1	2	..	2	2	2	1	..	2	17
(b) *Diseases of the Nervous System and Organs of Special Sense.*													
Simple Meningitis	..	..	1	2	..	3	..	..	..	..	..	..	6
Cerebral Haemorrhage	2	2	4	5	4	..	9	1	..	2	4	4	37
Apoplexy	..	..	..	..	..	2	2	1	1	1	..	1	8
Convulsions of Children under 5 years	..	1	..	..	1	1	..	..	..	..	..	1	4
Other diseases of the Nervous System	3	7	4	3	5	5	2	2	5	2	3	5	46
(c) *Diseases of the Circulatory System.*													
Cardiac and Vascular Diseases	14	17	11	16	8	17	7	23	10	12	16	20	171
(d) *Diseases of the Respiratory System.*													
Bronchitis	1	..	..	3	5	4	2	2	3	3	1	1	25
Other diseases of the Respiratory System	4	2	3	4	2	2	1	1	..	3	4	..	26
(e) *Diseases of the Digestive System.*													
Diarrhoea and Enteritis	9	2	..	3	2	2	9	11	4	1	6	4	53
Cirrhosis of Liver	..	..	..	..	1	..	..	..	..	..	..	2	3
Other diseases of the Digestive System	5	4	6	6	6	2	8	5	3	3	7	6	61
(f) *Non-Venereal Diseases of the Genito-Urinary System.*													
Bright's Disease	..	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis	4	3	7	12	4	6	7	6	1	3	6	4	63
Other Non-Venereal Diseases	1	3	2	3	1	5	4	7	6	5	2	5	44
(g) *Diseases of the Puerperal State.* (Other than Puerperal Fever):													
Puerperal Eclampsia	..	..	..	..	..	..	2	..	..	..	..	2	4
Puerperal Haemorrhage	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Puerperal Diseases	..	1	1	..	..	2	..	1	..	..	..	1	6
(h) *Diseases of Early Infancy*	11	13	7	15	17	8	9	8	11	6	7	10	122
(i) *Old Age*	7	3	3	3	2	9	5	2	4	6	..	1	45
(j) *Affections produced by External Causes.*													
Burns and Scalds	..	..	..	..	..	..	..	..	..	1	..	..	1
Accidents and Injuries	3	1	1	1	1	1	1	1	1	1	1	6	19
(k) *Other Causes of Death*	2	1	3	4	2	4	1	1	5	..	1	4	28
Total	102	96	88	104	93	98	99	108	84	98	90	109	1,169

* Notifiable under the Lepers Ordinance, Cap. 100.

Figures showing relative ages at death are of value in that they give an idea of what changes, if any, are taking place at the earlier age periods and at the later age periods—in other words—they relate to the expectation of life.

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

Period.	Males.	Females.	Both Sexes.	Percentage of Total Mortality at All Ages.
Under 1 year	126	111	237	20.27
1- 5 years	29	24	53	4.53
6-10 do.	7	6	13	1.11
11-15 do.	9	9	18	1.54
16-20 do.	20	28	48	4.11
21-25 do.	20	26	46	3.93
26-30 do.	22	26	48	4.11
31-35 do.	24	26	50	4.28
36-40 do.	33	38	71	6.07
41-45 do.	32	27	59	5.05
46-50 do.	34	40	74	6.33
51-55 do.	37	31	68	5.82
56-60 do.	62	43	105	8.98
Over 60 years	103	176	279	23.87
Total	558	611	1,169	...

Two hundred and thirty-seven deaths occurred in infants under one year and 279 in adults over 60, making a total of 516 or a percentage of 44.14 of all the deaths that occurred during the year. Outside these limits the most fatal age period was 56 to 60 with a death return of 62 males and 43 females, the least fatal were the 6 to 10 and 11 to 15 age periods with 13 and 18 deaths, respectively.

During the last 10 years the percentage of deaths at the earlier age periods has been diminishing and, correspondingly, the percentage at the later age periods has been increasing; in other words, as we all know, with better health and social conditions, the expectation of life is increasing.

Comparison of Deaths at different Age Periods for 10 years, 1928-37.

Year.	Total Deaths at All Ages.	Deaths under 1 year.		Deaths 1-5 years.		Deaths 56-60 years.		Deaths over 60 years.	
		No.	Percentage of Total Deaths.	No.	Percentage of Total Deaths.	No.	Percentage of Total Deaths.	No.	Percentage of Total Deaths.
1928	1,476	238	16.12	100	6.78	111	7.52	392	26.56
1929	1,503	250	16.63	96	6.32	100	6.65	420	27.94
1930	1,308	233	17.81	67	5.12	103	7.88	322	24.62
1931	1,223	222	18.15	75	6.13	80	6.54	287	23.47
1932	1,125	207	18.40	67	5.96	77	6.84	258	22.93
1933	1,304	264	20.25	68	5.22	72	5.52	332	25.46
1934	1,228	243	19.79	79	6.43	88	7.17	290	23.62
1935	1,109	181	16.32	51	4.60	79	7.12	292	26.33
1936	1,024	149	14.55	58	5.66	93	9.08	250	24.41
1937	1,169	237	20.27	53	4.53	105	8.98	279	23.87

Still Births.

Still births, or infants born dead after 28 weeks of intra-uterine life, numbered 197 during the year, giving a still birth rate of 8.67, as compared with a rate of 7.41 in 1936 and 7.11 in 1931 and a rate of 9.21 in 1921.

This figure is .95 per cent. higher than the average for the decennium 1927-1936 which worked out at 7.72 per cent. of the live births registered.

The number of still births registered during each month and the corresponding still birth rate are supplied in the table below.

Still Births and Still Birth Rates.

Month.	*No. of Still Births.*	*Still Birth Rate per 100 of Live Births.*
January	24	11.65
February	12	6.28
March	18	9.38
April	13	5.63
May	16	8.89
June	18	10.98
July	12	6.74
August	12	7.69
September	16	8.89
October	19	9.79
November	19	9.50
December....	18	8.96
Total	197	8.67

Infant Mortality.

Births and Deaths under 1 year and Infant Mortality Rates for 21 years 1917-1937.

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

Deaths of infants under one year during 1937 numbered 237, as compared with 149 during the previous year—the lowest number ever recorded.

Of these 126 were males and 111 were females, compared with 81 males and 68 females in 1936.

As the number of births registered was 2,273, the infant mortality rate is 104.26, as compared with 64.92 in the year 1936 which, one feels, was an abnormal year as far as the health of infants and children was concerned.

The average for the decennium 1927-1936 being 110.63, the rate for 1937 is 6.37 below the average and still, therefore, shows that downward trend which has been going on during the last 21 years.

Causes of Deaths of Infants under 1 year for 1937 and 1936 contrasted.

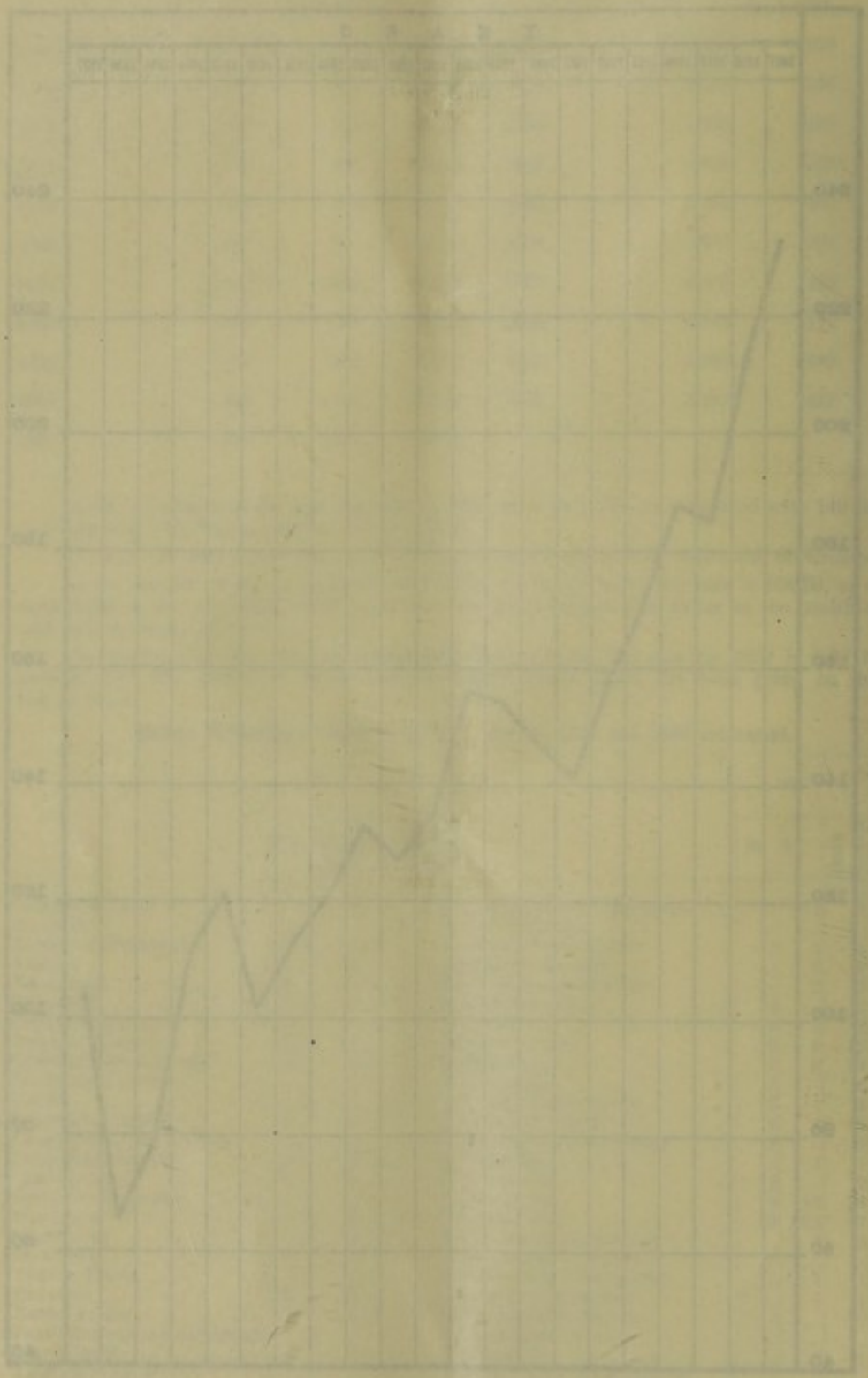
	1937.			1936.		
	M	F.	Both Sexes.	M	F.	Both Sexes.
Abscess of Lung ...	1	1	2	...	...	...
Ascariasis ...	...	...	...	1	...	1
Asphyxia Neonatorum ...	2	2	4	1	1	2
Asthma ...	...	1	1	...	...	...
Atelectasis ...	2	1	3	2	1	3
Bronchitis ...	2	2	4	4	4	8
Cephalhaematoma ...	2	...	2	...	...	...
Cerebral Abscess ...	1	...	1	...	...	...
Cerebral Haemorrhage ...	2	...	2	2	...	2
Cirrhosis of Liver...	...	1	1	...	...	...
Colitis ...	1	1	2	...	...	...
Congenital Debility ...	9	7	16	9	2	11
Congenital Heart Disease ...	...	...	...	...	1	1
Congenital Syphilis ...	2	...	2	2	...	2
Convulsions ...	2	1	3	4	...	4
Corrosive Poisoning ...	...	1	1	...	...	...
Diarrhoea ...	1	2	3	1	1	2
Diphtheria ...	...	1	1	2	...	2
Dysentery ...	1	...	1	1	1	2
Enteric Fever ...	...	...	...	1	...	1
Enteritis ...	5	3	8	...	...	...
Entero-Colitis ...	3	2	5	1	2	3
Fatty Degeneration of Heart and Liver ...	1	...	1	...	...	...
Fibrosis of Liver ...	...	1	1	...	...	...
Gangrene of Hands—Toxaemia ...	...	...	...	...	1	1
Gangrenous Proctitis ...	1	...	1	...	...	...
Gastro-Enteritis ...	15	15	30	5	11	16
Gastro-Intestinal Haemorrhage ...	1	...	1	...	1	1

	1937.			1936.		
	M.	F.	Both Sexes.	M	F.	Both Sexes.
Haemangioma-Septicaemia ...	...	1	1	...	...	...
Hydrocephalus ...	...	...	...	1	...	1
Icterus Neonatorum ...	3	1	4	...	1	1
Infantile Atrophy ...	...	1	1	...	1	1
Intestinal Obstruction ...	...	2	2	...	...	...
Intussusception	2	...	2	...	...	...
Malaria	1	2	3	...	...	...
Malnutrition	9	4	13	6	1	7
Marasmus	7	6	13	4	2	6
Meningitis	2	...	2	3	...	3
Miliary Tuberculosis ...	2	1	3	1	...	1
Neo-natal Death	4	1	5	2	2	4
Neo-natal Haemorrhage ...	5	...	5	...	...	...
Periostitis	...	1	1	...	...	...
Peritonitis	2	...	2	...	...	...
Pneumonia	9	15	24	9	12	21
Prematurity	23	24	47	12	13	25
Pulmonary Congestion ...	...	5	5	3	1	4
Pulmonary Infarction ...	...	...	...	1	...	1
Pulmonary Tuberculosis ...	...	1	1	...	...	...
Spasm of Intestines ...	...	1	1	...	...	...
Strangulated Hernia ...	1	...	1	...	...	...
Sub-hepatic Abscess ...	...	...	...	...	1	1
Toxaemia	...	1	1	...	1	1
Tuberculous Ulceration of Intestines	1	...	1	...	...	...
Ulceration of Intestines ...	...	1	1	...	...	...
Umbilical Haemorrhage ...	1	1	2	3	3	6
Whooping Cough	...	...	...	1	3	4
Total	126	111	237	81	68	149

Chart C

Port-of-Spain

INFANT MORTALITY RATES--per 1,000 Live Births, 1917 - 1937.



It is customary to classify these deaths under six groups, as by so doing a more accurate idea of where the largest number of deaths is occurring and in what direction the efforts of those working in this particular field must be directed, is obtained.

Grouping of Causes of Death of Infants under 1 year.

Group.	Diseases.	No. of Deaths.	Percentage of Total Infant Mortality.
I	Congenital Syphilis and other diseases and conditions commonly attributed to **ante-natal causes,** including atelectasis, atrophy, congenital debility, icterus, malnutrition, marasmus and prematurity	99	41.77
II	Diseases of the Alimentary System	62	26.16
III	Diseases of the Respiratory System	37	15.61
IV	Tuberculosis (all forms)	5	2.11
V	Malaria	3	1.27
VI	Fourteen other causes of death, including asphyxia, cephal-haematoma, cerebral abscess, cerebral haemorrhage, convulsions, corrosive poisoning, fatty degeneration of heart, haemangioma, meningitis, neo-natal death, neo-natal haemorrhage, periostitis, toxaemia and umbilical haemorrhage	31	13.08
	Total	237	100.00

Compared with previous years, it is evident that progress has been and is being made, and efforts to stem the tide of these causative factors are meeting with success—the figure for each group being lower than the average for the preceding ten years.

There still remains, of course, a good deal to be accomplished to bring the infant mortality rate down to what obtains in big countries, where maternity and child welfare schemes with more funds at their disposal are run on more liberal lines, with the result that a concentrated attack on the causative factors is kept up.

Group I, which represents ante-natal causes, still remains comparatively high and obviously can be materially reduced only by efficient and systematic ante-natal care to combat parental disease, aided by the powerful influence of the better education of parents and better economic conditions generally.

The duration of life of infants dying under one year of age is given in the table below. For purposes of comparison the figures for 1937 are placed alongside those for 1936.

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

Duration of Life.	1937.				1936.			
	Males.	Females	Both Sexes.	Percentage of total deaths under 1 year.	Males.	Females	Both Sexes.	Percentage of total deaths under 1 year.
Under 1 day	10	7	17	7.17	5	3	8	5.37
1 day and under 1st week ..	31	20	51	21.52	21	13	34	22.82
1st week do. 2nd week ..	14	7	21	8.86	3	5	8	5.37
2nd week do. 3rd week ..	4	12	16	6.75	2	1	3	2.01
3rd week do. 4th week ..	2	3	5	2.11	5	3	8	5.37
Total under 1 month	61	49	110	46.41	36	25	61	40.94
1 month to 2 months	13	11	24	10.13	8	10	18	12.08
Over 2 to 3 do.	8	5	13	5.49	3	6	9	6.04
,, 3 to 4 do.	4	8	12	5.06	4	6	10	6.71
,, 4 to 5 do.	5	7	12	5.06	6	5	11	7.38
,, 5 to 6 do.	7	6	13	5.49	5	..	5	3.35
,, 6 to 7 do.	5	5	10	4.22	4	2	6	4.03
,, 7 to 8 do.	8	4	12	5.06	4	3	7	4.70
,, 8 to 9 do.	8	6	14	5.91	3	4	7	4.70
,, 9 to 10 do.	4	5	9	3.79	5	3	8	5.37
,, 10 to 11 do.	3	5	8	3.38	3	4	7	4.70
,, 11 months and under 1 year..	..	..	..	..	..	..	..	..
Total	126	111	237	..	81	68	149	..

It will be seen that 110 deaths, or 46.41 per cent. of the total mortality for the year 1937, took place under one month, as compared with 61, or 40.94 per cent. for the previous year 1936. Of these, 68 did not not survive a week, as compared with 42 in 1936.

Infant Mortality under one month for the years, 1930-37.

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

Analysis of these tables shows that the decrease in the number of deaths of infants under one month is hardly perceptible, but that a definite decrease of mortality is evident in the later months which is, of course, another way of saying that during the last 10 or 20 years ante-natal causes of death have not diminished in any appreciable way.

Deaths of children aged 1 to 5 years for the year 1937 numbered 53, as compared with 58 for the year 1936.

Causes of death in this group are detailed in the table below; as in the case of deaths of infants under one year, grouping of the causes of death is resorted to.

Grouping of Causes of Deaths at Ages 1 to 5.

Group.	Diseases.	No. of Deaths.	Percentage of Total Deaths at ages 1-5.
I	Congenital Syphilis and other diseases and conditions commonly attributed to **ante-natal causes,** including malformation of brain and marasmus...	5	9.43
II	Diseases of the Alimentary System	11	20.76
III	Diseases of the Respiratory System	21	39.62
IV	Tuberculosis (all forms)	6	11.32
V	Malaria	3	5.66
VI	Six other causes of death, including acute alcoholism, convulsions, meningitis following a fall, simple meningitis and pertussis	7	13.21
	Total	53	100.00

The largest number of deaths (21) occurs in Group III and (11) in Group II which shows that at this age-group respiratory diseases and diseases of the alimentary system take the greatest toll.

Individual causes of deaths of children at ages 1 to 5 for the years 1937 and 1936 are here supplied.

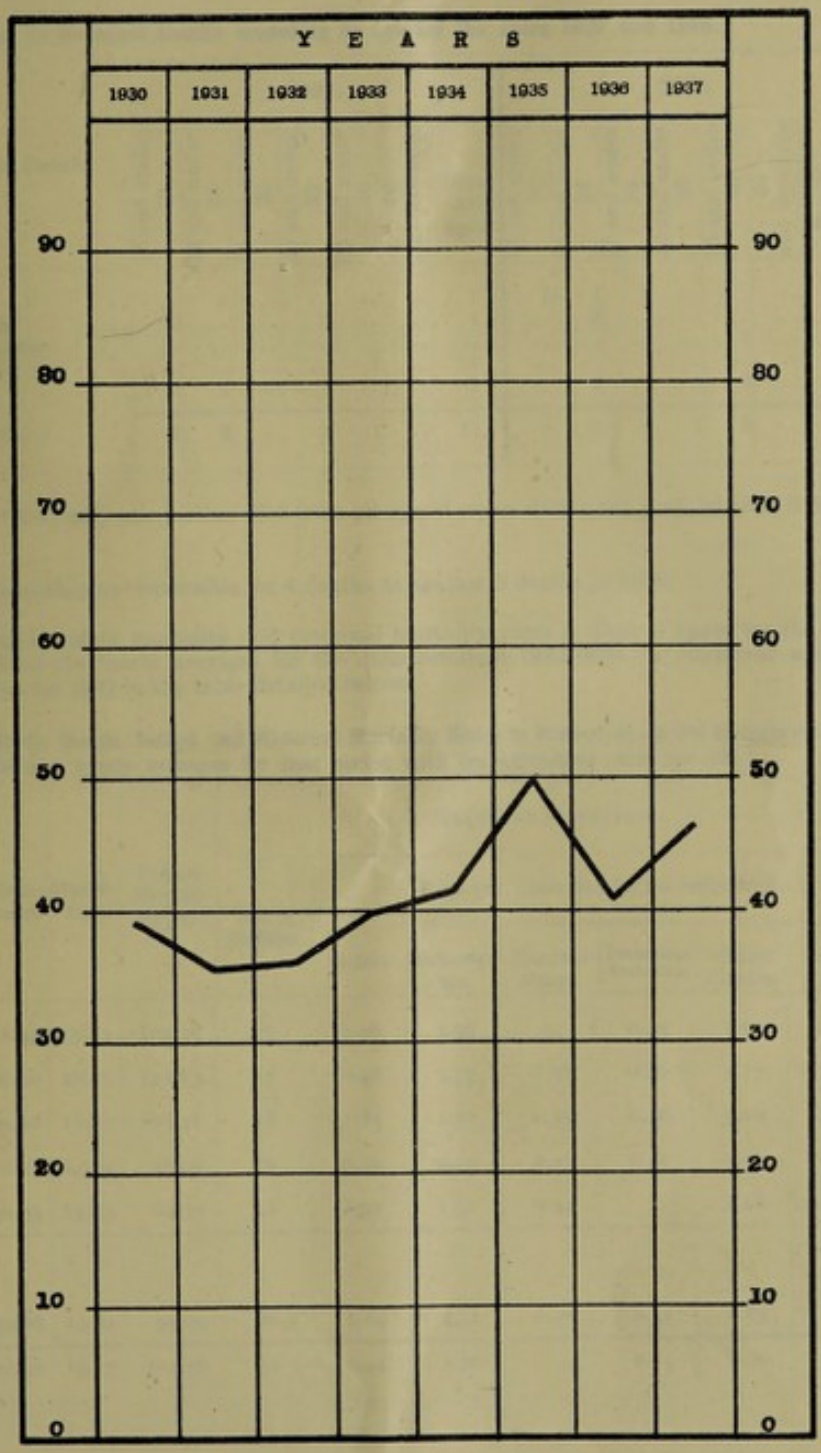
Causes of Deaths of Children at Ages 1 to 5 for years 1937 and 1936.

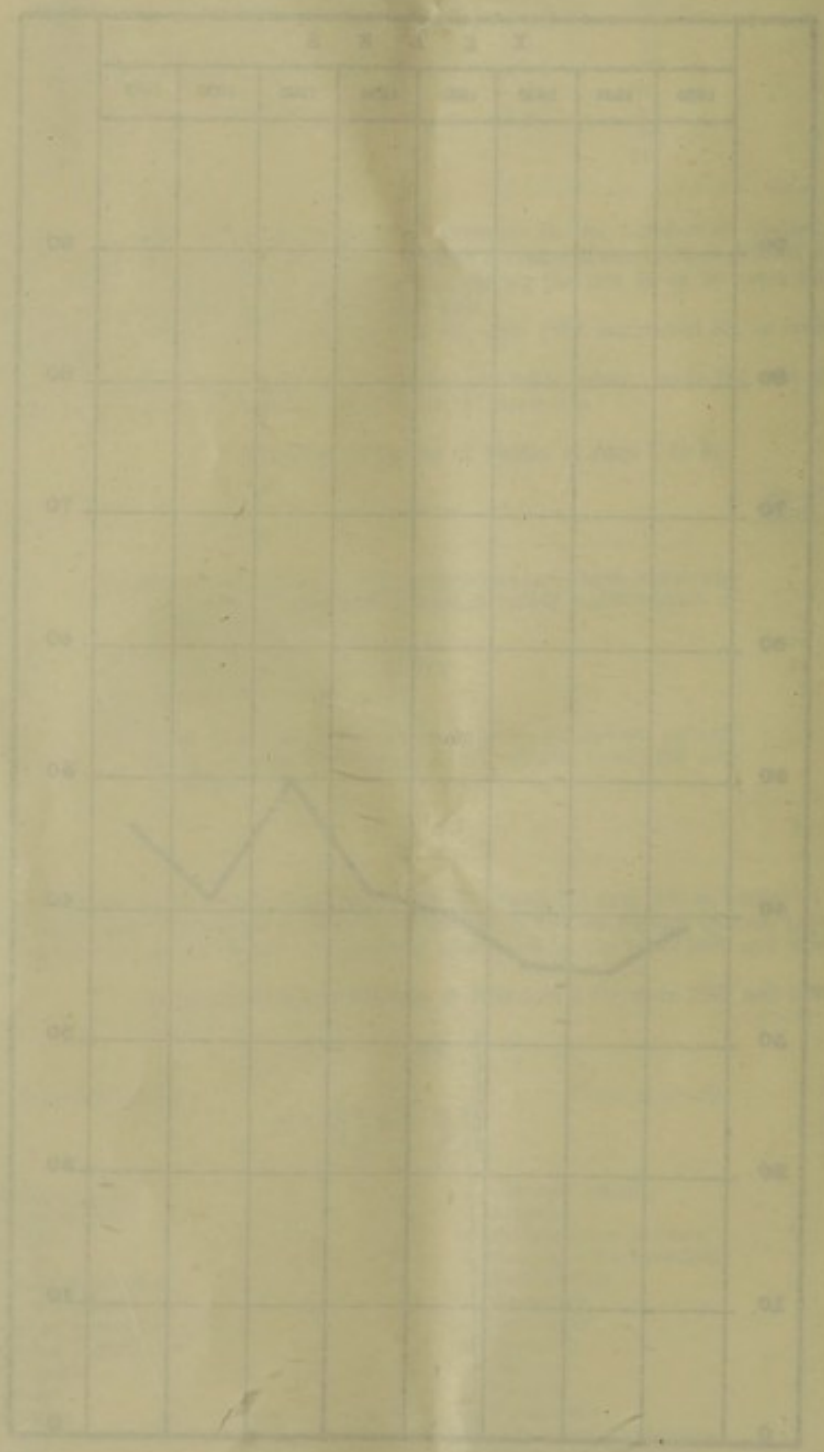
Cause of Death.	1937.			1936.		
	M	F.	Both Sexes.	M	F.	Both Sexes.
Acute Alcoholism	1	...	1	...	...	...
Ankylostomiasis	1	...	1	...	...	...
Ascariasis	1	...	1	...	2	2
Bronchitis	1	1	2	1	1	2
Cerebral Compression—Fractured Skull	...	...	...	...	1	1
Congenital Heart Disease	1	...	1	...	...	...
Congenital Syphilis	2	...	2	...	1	1
Convulsions	1	...	1	...	...	...
Diarrhoea	...	...	...	1	...	1
Diphtheria	...	1	1	1	1	2
Enteric Fever	...	1	1	...	1	1
Enteritis	...	...	...	1	...	1
Entero-Colitis	1	...	1	2	...	2
Fall—Meningitis	1	...	1	...	...	...
Gastro-Enteritis	1	5	6	3	3	6
Haemorrhagic Colitis	1	...	1	...	...	...
Haemorrhagic Laryngitis	...	1	1	...	...	...
Influenza	...	...	...	...	1	1
Infantile Atrophy	...	...	...	...	1	1
Malaria	2	1	3	1	...	1
Malformation of Brain	1	...	1	...	...	...
Malignant Endocarditis	...	...	...	...	1	1
Malnutrition	...	...	...	...	2	2
Marasmus	2	...	2	...	2	2
Meningitis	2	...	2	1	1	2
Nephritis	...	...	...	...	2	2
Pertussis	...	1	1	...	2	2
Pleurisy	...	...	...	...	1	1
Pneumonia	5	9	14	10	9	19
Pulmonary Congestion	1	1	2	1	...	1
Shock from Scalding	...	...	...	...	1	1
Shock from Burns	...	...	...	...	1	1
Tonsilitis and Laryngitis	1	...	1	...	...	...
Tuberculosis of Hip Joint and Mesenteric Glands	1	...	1	...	...	...
Tuberculous Meningitis	2	3	5	...	2	2
Total	29	24	53	25	33	58

Chart D

Port-of-Spain

Percentage of ANTE-NATAL GROUP to TOTAL DEATHS of Infants under 1 year, 1930 - 1937.





Maternal Mortality.

The number of deaths associated with the function of child-bearing is a very sensitive index of the amount of ante-natal care and skilled obstetric help that is afforded the expectant mother who, but for this accident, might have enjoyed many years of good health and usefulness.

Eleven women died during 1937 as a result of child-bearing, giving a maternal mortality rate of 4.84 per 1,000 live births, as compared with 12 and a maternal mortality rate of 5.23 in 1936.

In the table here detailed the causes of maternal deaths grouped in age periods for the year 1937 are compared with those for 1936.

Causes of Maternal Deaths according to age for the years 1937 and 1936.

Causes of Maternal Deaths.	1937.							1936.						
	15 and under 20	20 and under 25	25 and under 30	30 and under 35	35 and under 40	40 and upwards	Total All ages.	15 and under 20	20 and under 25	25 and under 30	30 and under 35	35 and under 40	40 and upwards	Total All ages.
Puerperal Sepsis	..	1	..	..	..	..	1	1	1	1	..	..	..	3
Puerperal Eclampsia	2	..	..	2	..	..	4	..	3	..	..	..	..	3
Puerperal Haemorrhage ..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Pernicious Vomiting	..	..	..	..	1	..	1	..	..	..	..	..	..	..
Other Causes	2	2	..	1	..	..	5	..	2	..	1	2	..	5
Total ..	4	3	..	3	1	..	11	1	6	1	1	3	..	12

It will be seen that only one mother died from puerperal sepsis during the year, whereas 3 deaths occurred in 1936.

Puerperal eclampsia was responsible for 4 deaths as against 3 deaths in 1936.

The birth, death, infant mortality and maternal mortality rates in Port-of-Spain for the years 1932-1936 as well as the yearly averages for the quinquennium 1932-1936 are compared with the corresponding rates for 1937 in the table detailed below.

Comparison of Birth, Death, Infant and Maternal Mortality Rates in Port-of-Spain for Quinquennium 1932-36 and yearly averages for that period with corresponding rates for 1937.

Year.	Birth-rate.	Death-rate.	Infant Mortality rate.	Maternal Mortality.						
				No. of Deaths.	Rate per 1,000 live births registered.					
					Sepsis.	Eclampsia.	Haemorrhage.	Pernicious Vomiting.	Other Causes.	Total.
1932 ..	28.44	15.83	102.42	19	1.98	3.96	..	0.49	2.97	9.40
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
Yearly Average for quinquennium 1932-1936 ..	30.00	15.84	95.69	16.4	1.29	2.31	0.72	0.37	2.83	7.53
Year 1937 ..	29.50	15.17	104.26	11	0.44	1.76	..	0.44	2.20	4.84

This table shows clearly that, while the sepsis and eclampsia rate shows on the whole a downward trend, the rate for other causes shows a decided tendency to remain constant.

An effort, therefore, to tackle energetically these latter disease-groups is the natural outcome of a study of these figures, and the writer suggests to the Maternity and Child Welfare League—the Body concerned with the care of mothers and children in this Colony—that these are the lines along which work should be undertaken to diminish further the causes of maternal mortality.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

Under the Public Health Ordinance, Chapter 98, section 103, the following diseases are notifiable :—

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 (including Alastrim) and Typhus Fever which are listed as dangerous infectious diseases and are quarantinable.

Four hundred and sixty-eight notifications were received from medical practitioners during the year—7 less than the figure for the previous year 1936, but 30.2 more than the yearly average for the decennium 1927-1936.

A review of the figures for the different infectious diseases shows that whereas notifications of pneumonia showed a substantial decline—193 to 125, the number of cases of chicken pox went up from 48 to 84. There were 15 more notifications of enteric fever in 1937 than in 1936 and 7 more of acute poliomyelitis than in 1936, when 3 cases were notified.

A comparative review of the notifications for the decennium 1927-36 and also for 1937, is gleaned from the table given below.

Comparison of Notifications for decennium 1927-36 and 1937.

Notifiable Diseases.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	Yearly average for decennium 1927–1936.	1937.
Diphtheria ..	16	19	24	29	31	61	11	38	17	22	26.8	30
Enteric Fever	95	54	35	55	47	20	28	85	76	32	52.7	47
Pulmonary Tuberculosis	160	152	142	124	137	130	135	181	148	143	145.2	131
Tuberculosis (other forms)	10	16	17	14	10	16	22	20	9	10	14.4	8
Pneumonia ..	65	60	70	83	71	71	135	208	165	193	112.1	125
Ophthalmia Neonatorum	27	31	35	29	22	18	40	32	24	24	28.2	32
Chicken Pox ..	17	23	73	29	30	34	39	201	77	48	57.1	84
Encephalitis Lethargica ..	..	..	1	..	..	1	..	..	..	..	0.2	1
Acute Poliomyelitis	..	..	..	..	5	..	3	..	..	3	1.1	10
Total ..	390	355	397	363	353	351	413	765	516	475	437.8	468

The relative prevalence of the various infectious diseases in the different months of the year is gathered from the table recorded below.

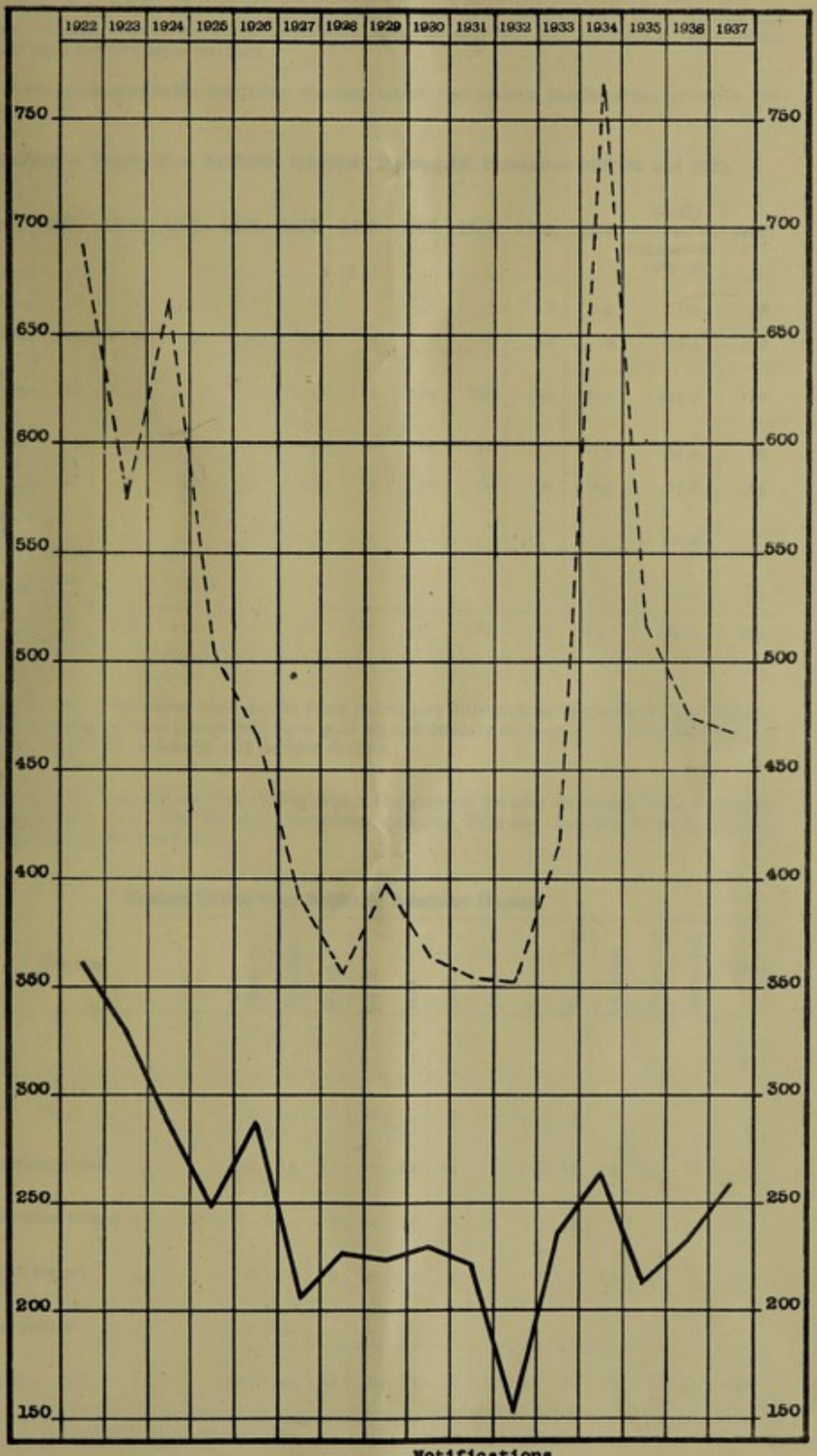
Monthly Notifications of Infectious Diseases.

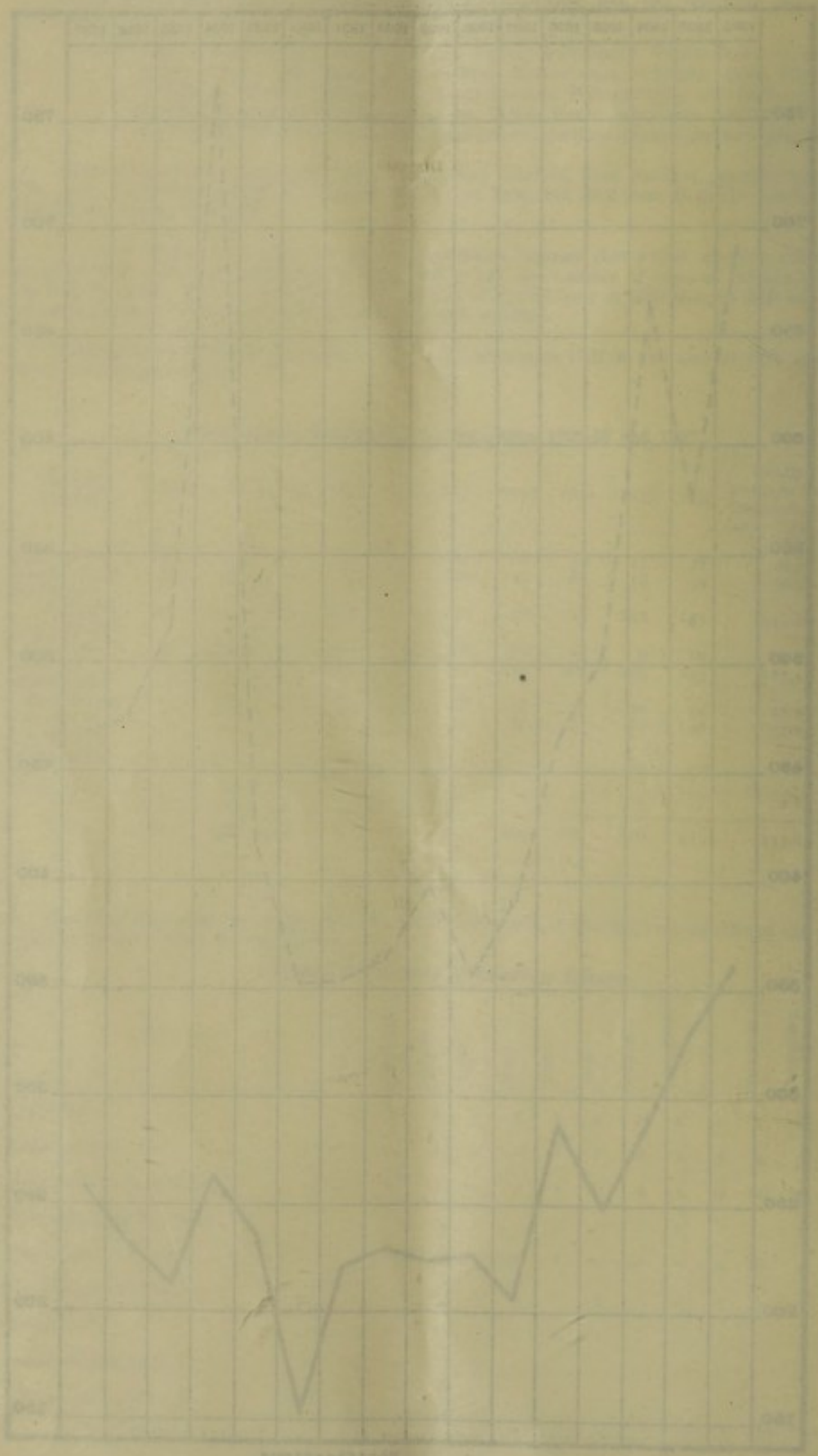
Diseases	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diphtheria	..	7	2	3	3	1	4	2	4	1	1	2	30
Enteric Fever	4	1	3	2	..	8	8	8	3	3	4	3	47
Pulmonary Tuberculosis	14	13	15	14	7	5	9	9	15	9	12	9	131
Tuberculosis (other forms) ..	..	..	1	2	..	1	1	1	1	..	..	1	8
Pneumonia (All forms)	9	10	9	14	12	6	9	10	6	13	18	9	125
Ophthalmia Neonatorum	4	4	4	1	4	1	3	2	2	2	2	3	32
Chicken Pox	4	1	4	3	11	34	14	7	2	2	2	..	84
Acute Poliomyelitis	8	1	..	1	..	..	..	..	..	..	..	..	10
Encephalitis Lethargica	1	..	..	..	..	..	..	..	..	..	..	..	1
Total	44	37	38	40	37	56	48	39	33	30	39	27	468

Chart E

Port-of-Spain

INFECTIOUS DISEASES — Notifications and Deaths, 1922 - 1937.





Deaths from Notifiable Infectious Diseases.

Two hundred and fifty-nine deaths from notifiable infectious diseases took place during the year, those mainly responsible being pulmonary tuberculosis, 142, and pneumonia, 85. Seven deaths from enteric fever were certified.

The deaths from notifiable infectious diseases under the various headings are given in the table below.

Comparison of Deaths from Notifiable Infectious Diseases for Decennium 1927-36 and 1937.

Diseases.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	Yearly average for decennium 1927-36.	1937.
Diphtheria	2	3	....	1	2	....	....	5	2	4	1.9	4
Enteric Fever	17	14	13	16	11	4	10	25	19	6	13.5	7
Pulmonary Tuberculosis	138	141	129	141	134	112	129	125	109	119	127.7	142
Tuberculosis (Other forms)	7	19	24	14	7	10	21	10	7	5	12.4	20
Pneumonia	41	51	56	55	65	55	76	99	76	97	67.1	85
Encephalitis Lethargica	....	....	....	1	....	1	....	....	....	....	0.2	....
Acute Poliomyelitis	....	....	....	1	2	....	....	....	....	....	0.3	1
Total	205	228	222	22	221	182	236	264	213	231	223.1	259

Analysis of this table shows that deaths from pulmonary tuberculosis diminished very slightly, if at all, and that deaths from pneumonia have gone up consistently each year. Deaths from enteric fever show, on the whole, a definite and decided decline.

A table showing that the months, during which the greatest number of deaths from notifiable infectious diseases occurred, were October, November, January, February and March, in descending order of magnitude, is listed below.

Monthly Deaths from Notifiable Infectious Diseases.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diphtheria	....	1	....	....	1	....	....	....	....	....	2	....	4
Enteric Fever	....	....	....	2	....	2	....	1	2	....	....	....	7
Pulmonary Tuberculosis	16	15	11	6	12	12	11	12	11	14	14	8	142
Tuberculosis (other forms)	....	...	5	2	1	....	2	1	2	4	1	2	20
Pneumonia (all forms)	8	8	6	6	9	2	6	6	5	13	9	7	85
Acute Poliomyelitis	1	...	....	...	....	....	....	....	....	....	...	....	1
Total	25	24	22	16	23	16	19	20	20	31	26	17	259

It is of some importance to know, which sub-districts of the City of Port-of-Spain returned the greatest number of notifications and the greatest number of deaths, from notifiable infectious diseases.

The distribution of cases and deaths, as well as the rate per 1,000 population in each sub-district and the rate per 1,000 population of the City as a whole, is shown in the figures tabulated below.

Distribution of Cases and Deaths from Notifiable Infectious Diseases.

Population.	City Proper 31,376		St. Clair 1,450		East Dry River 18,640		Belmont 14,704		Woodbrook 10,874	
Diseases.	Cases notified.	Deaths.	Cases notified.	Deaths.	Cases notified.	Deaths.	Cases notified.	Deaths.	Cases notified.	Deaths.
Diphtheria	11	1	1	..	4	1	10	1	4	1
Enteric Fever ..	15	1	..	..	14	4	11	1	7	1
Pulmonary Tuberculosis ..	53	59	..	..	45	47	21	25	12	11
Tuberculosis (other forms)	3	5	..	..	2	6	2	7	1	2
Pneumonia	36	38	..	..	40	23	38	14	11	10
Ophthalmia Neonatorum ..	7	..	..	..	14	..	9	..	2	..
Chicken Pox ..	16	..	2	..	5	..	49	..	12	..
Acute Poliomyelitis ..	3	1	..	..	4	..	1	..	2	..
Encephalitis Lethargica ..	1	..	..		..	..	..	..	..	..
Total ..	145	105	3	..	128	81	141	48	51	25
Rate per 1,000 population in each sub-district ..	4.62	3.34	2.07	..	6.87	4.35	9.59	3.27	4.69	2.30
Rate per 1,000 of the City population (77,044) ..	1.88	1.36	0.04	..	1.66	1.05	1.83	0.62	0.66	0.32

This table shows clearly that East Dry River, with a population a little more than one-half of that of the City Proper, is the most unhealthy district of the City, as far as notifiable infectious diseases are concerned—a fact that has been brought home to the Public Health Department in ways too numerous to relate—followed a close second by Belmont.

We feel sure that the multiplicity of privy cesspits in this area at less than statutory distance from dwelling houses or kitchens, some even ventilating directly into bedrooms and dining rooms; the congested and confused nature of the buildings, very often with little open air spaces about them; the density of the population, made up largely of members of the poorer working classes, are in great measure responsible for this deplorable state of affairs.

Deaths in Hospital from Notifiable Infectious Diseases.

Out of a total of 259 deaths from notifiable infectious diseases, 171 took place at the Colonial Hospital, Port-of-Spain, a total made up largely of deaths from tuberculosis, pneumonia and enteric fever.

When it is remembered that out of 7 deaths from enteric fever, which occurred during the year, 6 took place in the Colonial Hospital, and out of a total of 142 deaths from pulmonary tuberculosis 95 took place in that institution, it will be seen that removal to hospital, a practice which is to be encouraged, if efficient control of a possible source of infection is to be attained, and if current rather than terminal disinfection is to be carried out efficiently, is very often resorted to.

Deaths in the Colonial Hospital, Port-of-Spain, from notifiable infectious diseases, as they occur month by month, are detailed hereunder.

Deaths in Hospital from Notifiable Infectious Diseases.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diphtheria....	....	1	....	....	....	....	....	....	....	....	1	....	2
Enteric Fever	....	....	....	2	....	1	....	1	2	....	....	....	6
Pulmonary Tuberculosis	9	10	5	2	9	9	7	6	9	11	11	7	95
Tuberculosis (other forms)	....	....	5	....	....	....	2	1	2	2	1	2	15
Pneumonia	5	4	2	4	9	1	5	4	2	6	6	5	53
Total	14	15	12	8	18	11	14	12	15	19	19	14	171

A comparison of the number of deaths from notifiable infectious diseases in hospital with the number of deaths at home is set out in the table below.

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

Diseases.	Died at Home.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1936
Diphtheria	2	2	4	50.00	100.00
Enteric Fever	1	6	7	85.71	100.00
Pulmonary Tuberculosis	47	95	142	66.90	67.23
Tuberculosis (other forms)	5	15	20	75.00	60.00
Pneumonia	32	53	85	62.35	74.23
Acute Poliomyelitis	1	...	1	...	...
Total	88	171	259	66.02	71.43

Non-Notifiable Infectious Diseases.

The diseases listed under this heading are: Malaria, Whooping Cough, Influenza, Dysentery, Ankylostomiasis and Syphilis.

In the case of malaria, every case is subjected to a special investigation in an endeavour to detect the probable source.

The number of deaths from these diseases totalled 52, of which malaria claimed 21 victims and syphilis 18.

The table below gives the number of deaths as they occur from month to month.

Monthly Deaths from Non-Notifiable Infectious Diseases.

Diseases.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Malaria ..	..	..	2	..	1	2	2	3	5	4	2	..	21
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	1	1
Influenza ..	..	..	1	..	..	..	..	..	1	1	..	..	3
Dysentery	..	2	..	..	..	1	2	1	..	..	..	1	7
Ankylos-tomiasis	..	..	..	..	..	2	..	..	..	..	..	..	2
Syphilis ..	3	1	4	2	..	1	..	3	1	1	..	2	18
Total ..	3	3	7	2	1	6	4	7	7	6	2	4	52

Out of these 52 deaths from non-notifiable infectious diseases, 28 occurred in hospital, as shown in the summary tabulated below.

Deaths in Hospital from Non-Notifiable Infectious Diseases.

Diseases.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Malaria ..	..	..	1	..	..	..	..	..	2	3	1	..	7
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	1	1
Dysentery	..	1	..	..	..	1	1	1	..	..	..	1	5
Ankylos-tomiasis	..	..	..	..	..	2	..	..	..	..	..	..	2
Syphilis ..	2	..	3	1	..	1	..	2	1	1	..	2	13
Total ..	2	1	4	1	..	4	1	3	3	4	1	4	28

A comparison of deaths occurring at home and in hospital is useful in that it gives us an idea of how much use is being made of the hospital services in the case of these non-notifiable, yet, infectious diseases.

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

Diseases.	Died at Home.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1936.
Malaria	14	7	21	33.33	23.08
Influenza	3	..	3	..	..
Whooping Cough	..	1	1	100.00	16.67
Dysentery	2	5	7	71.43	60.00
Ankylostomiasis	..	2	2	100.00	100.00
Syphilis	5	13	18	72.22	56.25
Total	24	28	52	53.85	40.00

TUBERCULOSIS—PULMONARY AND NON-PULMONARY.

Prevalence of and Control over Tuberculosis—Pulmonary and Non-Pulmonary.

Among the many and varied medical problems which beset the Public Health Department, the question of the prevalence, incidence, as well as the treatment and control of, tuberculosis in its pulmonary and non-pulmonary forms, occupies a very prominent, if not actually pride of, place.

It may be true that the Public Health Department of the Local Authority has not much positive direct relation with the problem, in its active stage, as it occurs in the lives of the inhabitants of the City, this being the especial care of the Trinidad Association for the Prevention and Treatment of Tuberculosis which has been carrying on its splendid work since 1906, the year of its foundation; but the disease—tuberculosis—has such an important connection with the conditions of life of the people and with their social and economic state, and such a direct bearing on the public health, that it cannot fail to be among the primary concerns of those, wherever they may be, who are workers in the field of preventive medicine.

It cannot be said, by any stretch of the imagination, that those of us who have actually come to grips with the problem of the prevalence of and control over tuberculosis are, in spite of the progress that has undoubtedly taken place and is taking place since the beginning of the present century, satisfied that we in this City and in this Colony are giving the unfortunate victims, as well as the public in general, the benefit of those measures which have stood the test of time, as being of undoubted value in the treatment and prevention of this disease.

We have no organised system in operation, whereby those who have had the misfortune to be born of parents stricken with tuberculosis are removed to surroundings either in the country or elsewhere, where their chances of getting infected early in life would be greatly diminished and where they would get the benefit of medicine and food known to be of great value in the reduction of a susceptibility which they are, by accident of birth, heir to.

We have no sanatorium where early and incipient cases could get the type of treatment that would nip the disease in its bud, and would set them on the high road to recovery and so enable them to lead a happy and useful life.

In this latter direction it is only fair to state, however, that, as a result of an intensive drive, backed by newspaper propaganda which had been going on for quite a number of years, a sum of over fifty thousand dollars has been collected and is now lying in the bank; that a committee of management has actually been appointed; and that if one is to judge by what one hears, the final stages are within sight, all that is left to be done being the choosing of the site and the erection of the building.

We have, further, no After-Care Committee in operation to give help, advice and encouragement to those who have recovered to a sufficient extent as to be allowed to go back home, very often to the identical surroundings where they have contracted the disease and, needless to say, there is no colony where these latter cases can live in harmony and comfort under better and more suitable conditions, and where productive work of a type and amount commensurate with their respective capacities, can be undertaken.

It is a matter for gratification and, also, for serious consideration, as indicating undoubtedly that the other and very important factors of better education, better food, and more hygienic living, better social and economic conditions generally are quietly and unobtrusively playing their part, that, with the limited means of control at our disposal, viz.: the prompt notification of all cases to the Health Department, the ferreting out of contacts and suspects by Sanitary Inspectors and also by the Health Visitors attached to the Tuberculosis Association, and their examination and treatment at the Tuberculosis Dispensary, the removal of open and advanced cases as well as other cases unable to get proper lodging, care and attention at home to the Tuberculosis Ward, Colonial Hospital, the disinfection of premises and fomites by the disinfecting staff of the Public Health Department, the insistence by the Local Authority that cases leaving hospital be removed only to places and premises suitable for the purpose; the incidence of and death rate from tuberculosis in general has shown a steady downward decline as the accompanying chart clearly demonstrates.

The number of cases of pulmonary tuberculosis notified to the Public Health Department of the City during the year 1937 was 131, while the number of deaths registered totalled 142.

As the disease, when once developed, very rarely lasts more than two years, the latter figure, no doubt, includes cases which were notified in the years 1936 and 1935.

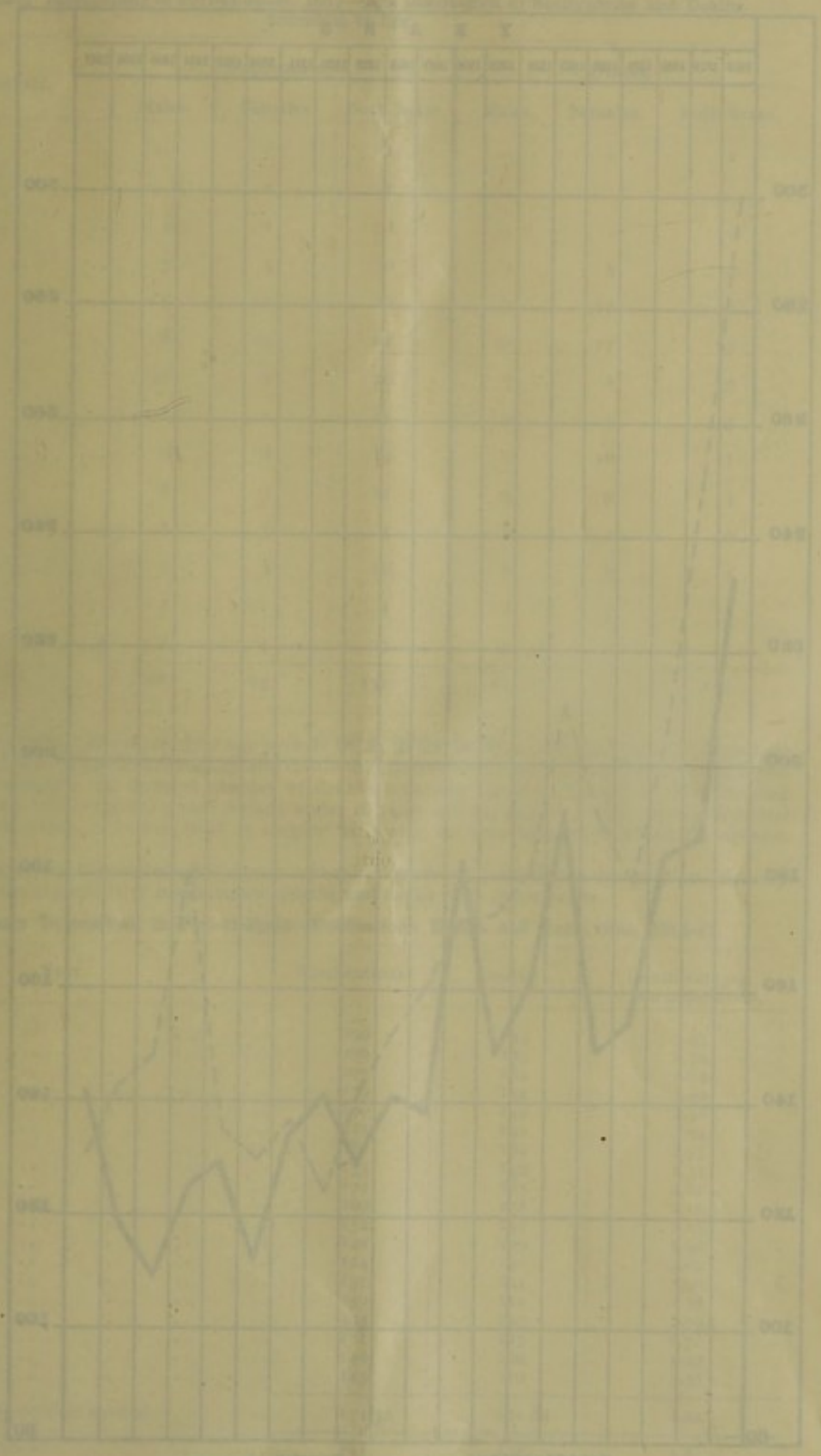
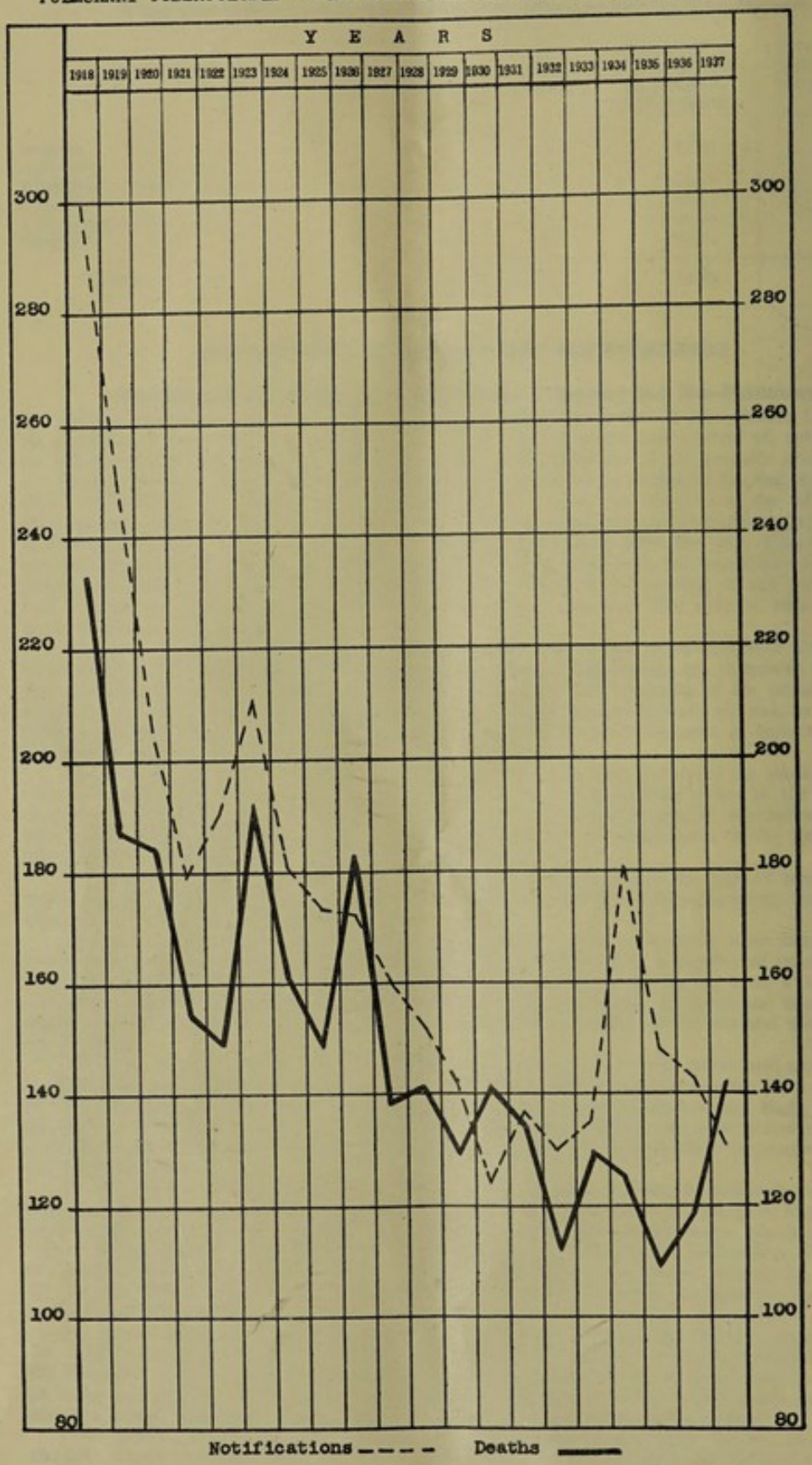


Chart F

Port-of-Spain

PULMONARY TUBERCULOSIS — Notifications and Deaths, 1918 - 1937.



In the tabular statement given below the distribution of notifications and deaths is detailed under fourteen age-groups.

Pulmonary Tuberculosis in Port-of-Spain, 1937—Age Distribution of Notifications and Deaths according to Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	..	1	1	..	1	1
1- 5 years	..	1	1	..	..	..
6-10 do.	1	1	2	..	..	..
11-15 do.	3	3	6	1	3	4
16-20 do.	5	11	16	7	13	20
21-25 do.	8	14	22	10	17	27
26-30 do.	11	9	20	7	8	15
31-35 do.	7	4	11	9	4	13
36-40 do.	6	8	14	7	10	17
41-45 do.	8	3	11	5	9	14
46-50 do.	1	3	4	6	4	10
51-55 do.	7	3	10	6	3	9
56-60 do. .. .	4	..	4	2	3	5
Over 60 years	5	4	9	5	2	7
Total ..	66	65	131	65	77	142

Analysis of this table shows that age periods 16-20, 21-25, 26-30 are far and away the important ones in this disease, as far as notifications and deaths are concerned, the greatest number of notifications and, correspondingly, the greatest number of deaths occurring therein. It will also be observed that pulmonary tuberculosis is a rare malady under 10 years and that only a single case was reported under one year which, of course, is all in keeping with what we have long learnt about this disease.

That pulmonary tuberculosis has shown a steady downward trend during the past two decades is seen from the statement of notifications, deaths and death rates given below.

Pulmonary Tuberculosis in Port-of-Spain—Notifications, Deaths and Death rates, 1918-37.

Year.	Notifications.	Deaths.	Death rate per 1,000 population.
1918	299	233	3.43
1919	250	187	2.71
1920	205	184	2.64
1921	179	154	2.49
1922	190	140	2.38
1923	211	192	3.04
1924	181	162	2.53
1925	173	149	2.31
1926	172	183	2.81
1927	160	138	2.10
1928	152	141	2.13
1929	142	129	1.92
1930	124	141	2.05
1931	137	134	1.90
1932	130	112	1.58
1933	135	129	1.79
1934	181	125	1.71
1935	148	109	1.47
1936	143	119	1.57
Yearly average 1918-36	174.32	151.05	2.24
Year 1937	131	142	1.84

The number of notifications, the number of deaths and the death rate per 1,000 population are thus definitely below the yearly average for the years 1918-36.

One is often asked what percentage of the total deaths is represented by deaths from pulmonary tuberculosis. The table below furnishes the answer.

Proportion of Deaths from Pulmonary Tuberculosis to Deaths from All Causes in Port-of-Spain according to Age and Sex in 1937.

Age Periods.	Deaths.								
	Males.			Females.			Both Sexes.		
	All Causes.	Pulmonary Tuberculosis.	Percentage due to Pul. Tub'sis.	All Causes.	Pulmonary Tuberculosis.	Percentage due to Pul. Tub'sis.	All Causes.	Pulmonary Tuberculosis.	Percentage due to Pul. Tub'sis.
Under 1 year ...	126	...	...	111	1	0.90	237	1	0.42
1- 5 years ...	29	...	...	24	...	...	53	...	...
6-10 do. ...	7	...	...	6	...	...	13	...	...
11-15 do. ...	9	1	1.11	9	3	33.33	18	4	22.22
16-25 do. ...	40	17	42.50	54	30	55.55	94	47	50.00
26-35 do. ...	46	16	34.78	52	12	23.08	98	28	28.57
36-45 do. ...	65	12	18.46	65	19	29.23	130	31	23.85
46-55 do. ...	71	12	16.90	71	7	9.86	142	19	13.38
56-65 do. ...	84	6	7.14	80	3	3.75	164	9	5.49
Over 65 years ...	81	1	1.23	139	2	1.44	220	3	1.36
Total... ...	558	65	11.65	611	77	12.60	1,169	142	12.15

The fact of importance that emerges from this investigation is that at the age periods 16-25 deaths from pulmonary tuberculosis constitute 50 per cent. of the total deaths, which is another way of saying that one-half of all persons who died at that age period in the year 1937 died from pulmonary tuberculosis.

Deaths from pulmonary tuberculosis by age and sex in the year 1937 are contrasted with the corresponding figures for 1918—twenty years ago—in the statement that follows.

Pulmonary Tuberculosis in Port-of-Spain—Deaths by Age and Sex in 1918 and 1937 contrasted.

Age Periods.	1918.			1937.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
0-5 years	2	6	8	....	1	1
6-10 do.	2	3	5	....	....	....
11-15 do.	3	6	9	1	3	4
16-20 do.	10	16	26	7	13	20
21-25 do.	13	17	30	10	17	27
26-30 do.	21	22	43	7	8	15
31-35 do.	11	16	27	9	4	13
36-40 do.	17	17	34	7	10	17
41-45 do.	10	11	21	5	9	14
46-50 do.	6	7	13	6	4	10
51-55 do.	....	3	3	6	3	9
56-60 do.	5	....	5	2	3	5
Over 60 years	2	7	9	5	2	7
Total	102	131	233	65	77	142

Examination of this table shows what has already been stated above that the most fatal age periods are 16-20, 21-25 and 26-30, and that the reduction in the mortality which has taken place during the past two decades has been most apparent in the age periods 26-30, 31-35, 36-40 and 41-45.

In 1937 there were 409 deaths from pulmonary tuberculosis in the whole Colony of Trinidad and Tobago as compared with 142 in the City of Port-of-Spain.

That there has been a steady decline in the number of deaths from pulmonary tuberculosis throughout the Colony exactly similar to what has been shown to be the case in the City, is clearly seen in the table published below.

Deaths and Death-rates from Pulmonary Tuberculosis in the Colony from 1917 to 1937.

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

Non-Pulmonary Tuberculosis.

It is customary to describe cases of non-pulmonary tuberculosis under a separate heading, though it is now definitely established that the old teaching which gave rise to this separation, viz. : that non-pulmonary tuberculosis was due to infection with the bovine type of bacillus mainly through the agency of milk from a tuberculous cow, is quite wrong, there being as many cases of non-pulmonary tuberculosis due to the human type of bacillus as there are of pulmonary tuberculosis due to the bovine type of bacillus.

It is, however, undoubtedly true that the large majority of cases of non-pulmonary tuberculosis are due to infection with the bovine type of bacillus—the result of consumption of food, chiefly milk, derived from tuberculous animals. The extent of this type of the disease is an index of the success or otherwise of the measures adopted to prevent food derived from tuberculous animals being consumed by man.

The tabular statement furnished hereunder gives the number of notifications and deaths from this type of tuberculous disease according to age and sex.

Non-Pulmonary Tuberculosis in Port-of-Spain, 1937—Notifications and Deaths by Age and Sex.

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

This table shows first an excess of 12 deaths over notifications, proving that some of these deaths have either been previously notified in the preceding year or two, or that no notifications have been made at all. Next it shows that the age incidence of this type of tuberculosis is chiefly in the early years of life—7 of the notifications, out of a total of 8, being under 10 years, and 13, out of a total of 20 deaths, occurring also under 10 ; and this is exactly what the known facts about this type of tuberculosis would lead us to expect.

It is a matter of some importance, as indicating what particular type of non-pulmonary tuberculosis has specifically to be controlled, to know the further details of the notifications and deaths which are presented in the statement below.

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

Ages.	Notifications.				Deaths.			
	Forms of the Disease.	Males.	Females.	Both Sexes.	Forms of the Disease.	Males.	Females.	Both Sexes.
Under 1 yr.	Miliary Tuberculosis ...	...	1	1	Miliary Tuberculosis ...	2	1	3
	Tuberculous Meningitis	1	...	1	Tuberculosis of Intestines	1	...	1
1- 5 years	Tuberculous Meningitis	1	1	2	Tuberculous Meningitis	2	3	5
	... ...	...	...	...	Tuberculosis of Hip Joint and Mesenteric Glands	1	...	1
6-10 do.	Tuberculous Peritonitis	1	1	2	Tuberculosis of Neck Glands	...	1	1
	Tuberculosis of Spine ...	1	...	1	Tuberculosis of Spine ...	2	...	2
11-15 do.	... ...	...	...	...	Miliary Tuberculosis ...	1	...	1
21-25 do.	... ...	...	...	...	Tuberculous Pericarditis... ...	1	...	1
26-30 do.	... ...	...	...	...	Tuberculosis of Pleura ...	...	1	1
36-40 do.	... ...	...	...	...	Tuberculosis of Mesenteric Glands ...	...	2	2
51-55 do.	... ...	...	...	...	Tuberculosis of Larynx	1	...	1
56-60 do.	Miliary Tuberculosis ...	1	...	1	Miliary Tuberculosis ...	1	...	1
	Total Notifications ...	5	3	8	Total Deaths	12	8	20

It will be seen that, though the body as a whole is fairly well represented, tuberculosis of the meninges is responsible for the largest number of notifications as well as the largest number of deaths.

Just as the incidence of and mortality from pulmonary tuberculosis have shown a steady, uniform decline during the last fifteen years, so also have the incidence of and mortality from non-pulmonary tuberculosis, though in a somewhat less striking way.

The table presented below gives the facts and figures in the form of three quinquennial periods.

Progress of Mortality from Pulmonary and Non-Pulmonary Tuberculosis for 15 years, 1923-1937.

Deaths from Pulmonary Tuberculosis.			Deaths from Non-Pulmonary Tuberculosis.		
Quinquennium 1923-37.	Quinquennium 1928-32.	Quinquennium 1933-37.	Quinquennium 1923-27.	Quinquennium 1928-32.	Quinquennium 1933-37.
1923 .. 192	1928 .. 141	1933 .. 129	1923 .. 17	1928 .. 19	1933 .. 21
1924 .. 162	1929 .. 129	1934 .. 125	1924 .. 22	1929 .. 24	1934 .. 10
1925 .. 149	1930 .. 141	1935 .. 109	1925 .. 13	1930 .. 14	1935 .. 7
1926 .. 183	1931 .. 134	1936 .. 119	1926 .. 14	1931 .. 7	1936 .. 5
1927 .. 138	932 .. 112	1937 .. 142	1927 .. 7	1932 .. 10	1937 .. 20
Total .. 824	657	624	73	74	63
Yearly av. 164·8	131.4	124.8	14.6	14.8	12.6

ENTERIC FEVER.

One of the most remarkable events in the public health history of the City of Port-of-Spain is the rapid decline in the number of notifications of and deaths from this disease which has taken place since the introduction of chlorination of water in February, 1924.

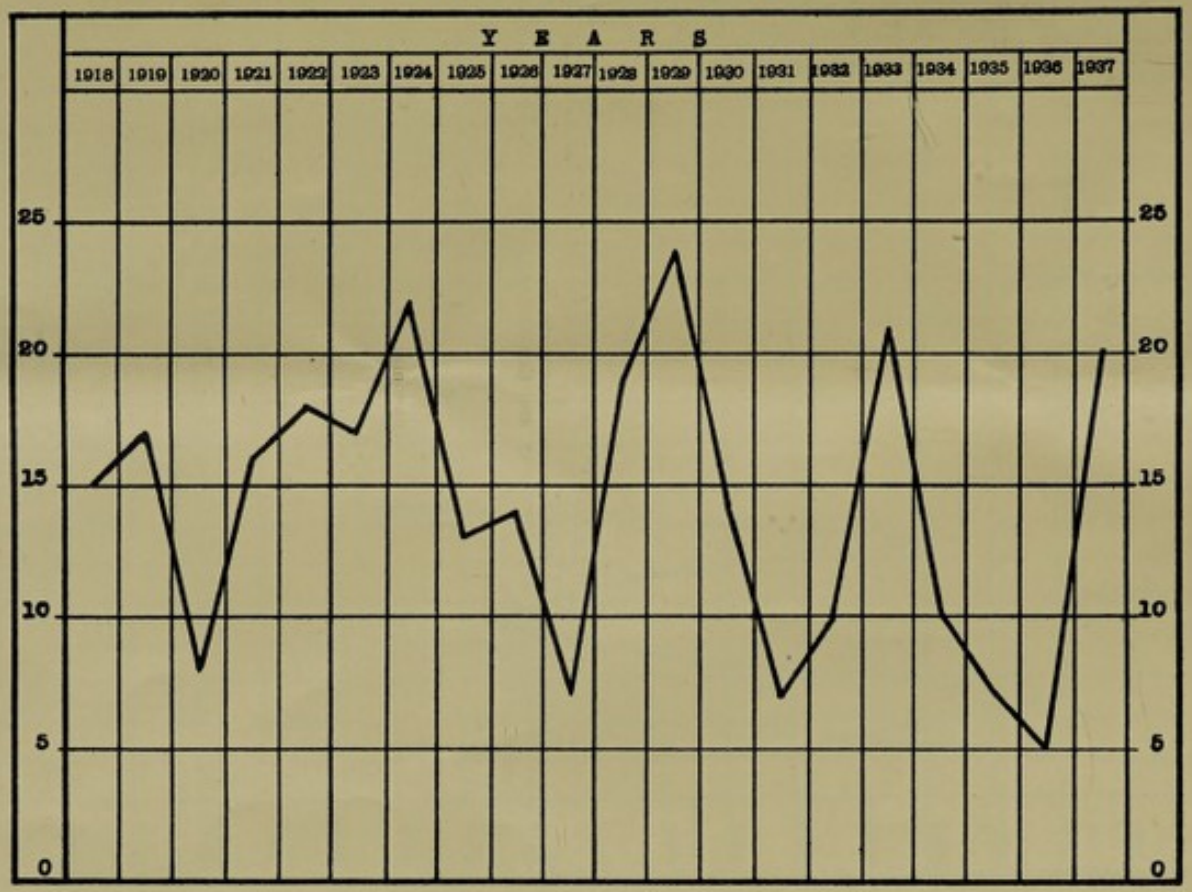
Whereas previous to that year the notifications were in the region of 400-300-250, they fell almost immediately, to about half that number and have declined steadily during the last decade, the notifications during the last quinquennium averaging about fifty a year.

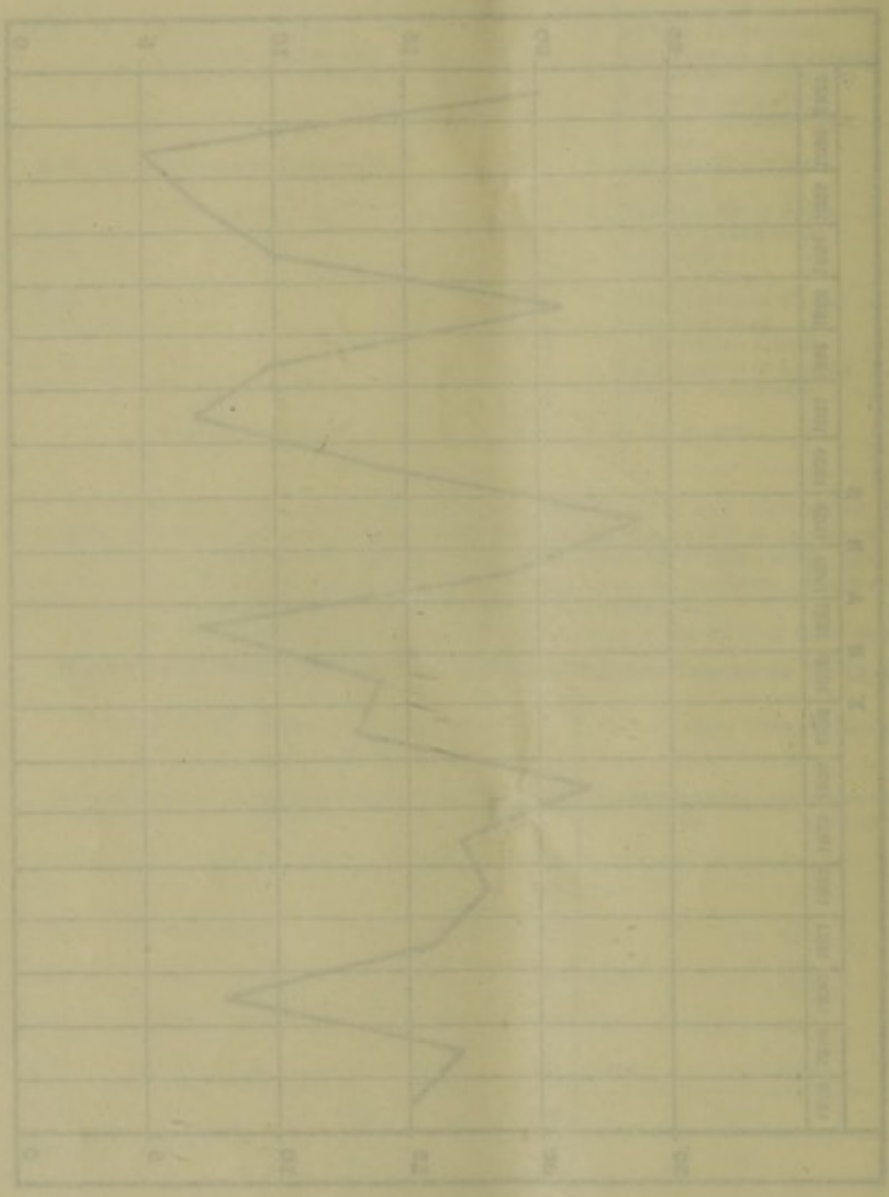
There can be no doubt that those other general sanitary measures which are part and parcel of a public health programme have contributed to this fairly satisfactory state of affairs; but the specific measures directed towards the control of this disease, which all aim at preventing infected faeces from reaching the alimentary tract of man of which the chlorination of polluted water is the chief, must have played a very considerable part.

Chart G

Port-of-Spain

NON-PULMONARY TUBERCULOSIS — Deaths, 1918-1937.





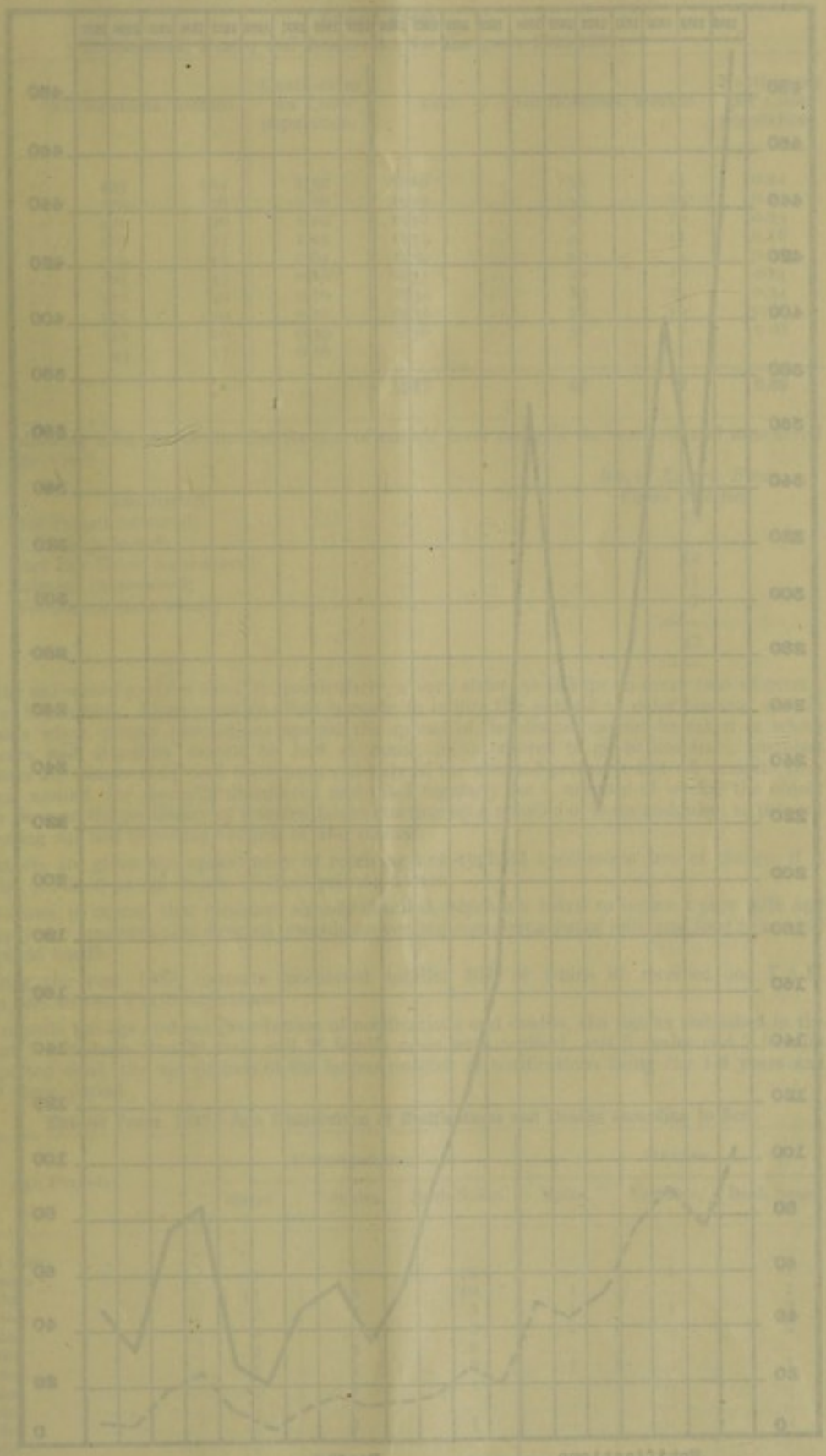
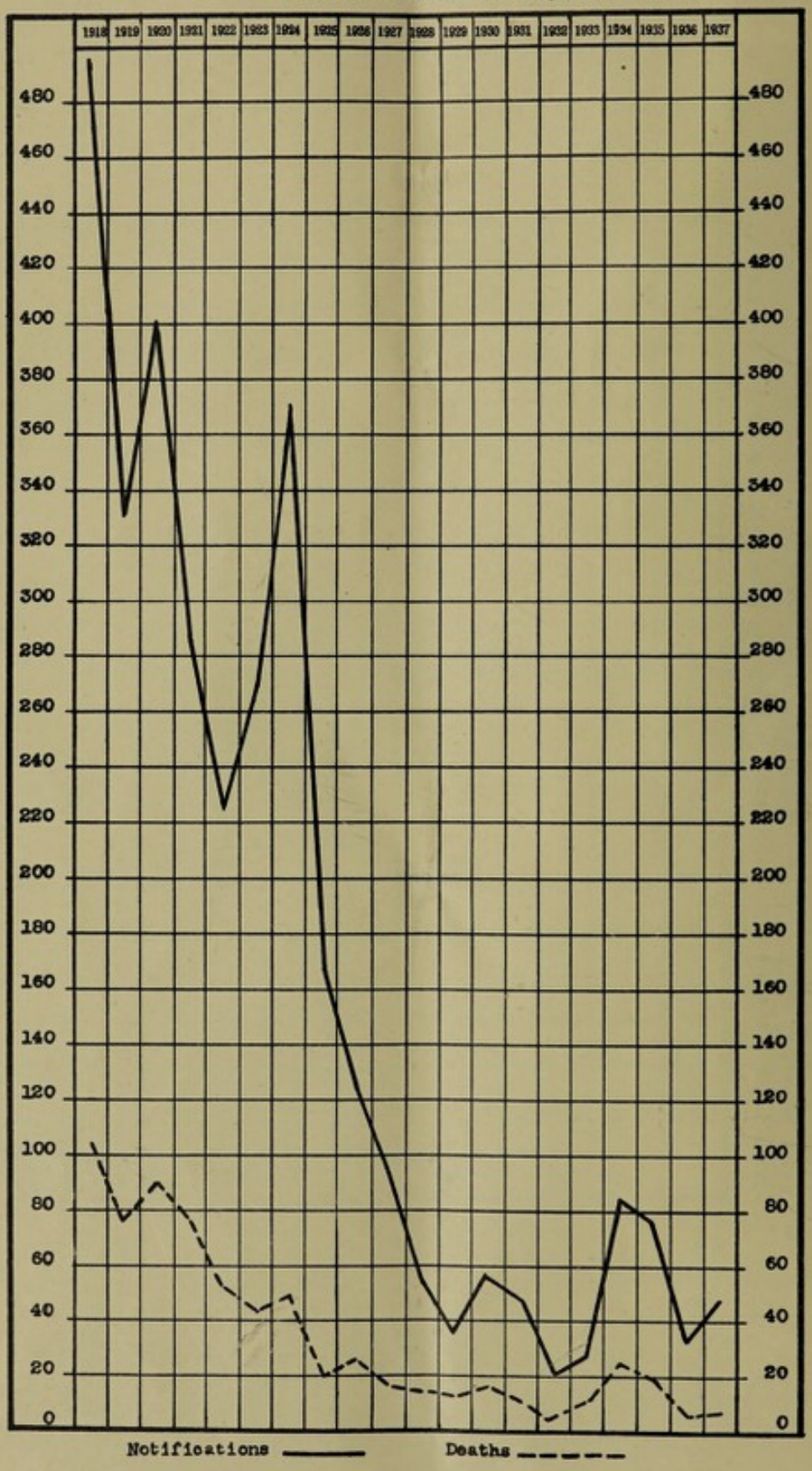


Chart H

Port-of-Spain

ENTERIC FEVER — Notifications and Deaths, 1918 - 1937.



A tabular statement, showing the number of notifications and deaths, and the death rate for 1918-1937 and demonstrating the steady downward trend of the disease, is furnished below.

Enteric Fever.

Notifications, Deaths and Death-rates for the years 1918-1937.

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

The following table shows the distribution of enteric fever cases in the sewered and unsewered parts of the City.

Sub-district.	*No. of Enteric Fever Cases Notified.*
City Proper (sewered)	15
St. Clair (sewered)	....
East Dry River (unsewered)	14
Belmont (unsewered)	11
Woodbrook (unsewered)	7
	47

In the unsewered parts of the City, particularly, a very strict eye is kept on every case of enteric fever that is notified. Every possible effort is made to induce the patient to enter hospital and, in some cases where proper precautions against the spread of the disease cannot be taken or where proper care and attention cannot be had at home, he is ordered to go to hospital; premises and fomites are disinfected; and the cesspit not only of the affected premises, but all cesspits in a wide area around are specially disinfected and oiled regularly for a number of weeks, the object being to prevent the possibility of infected faeces starting up a number of cases and, also, to prevent flies breeding out and becoming vectors of the disease.

Contacts are given the opportunity of receiving anti-typhoid vaccination free of charge, if it cannot be obtained at the hands of their private doctor.

It follows, of course, that measures already detailed, which are taken to secure a pure milk and food supply, are measures also directed towards preventing contamination of milk and food in general with typhoid bacilli.

During the year 1937, contacts inoculated totalled 107, of which 61 received one T.A.B. injection and 46 two T.A.B. injections.

As regards the age and sex distribution of notifications and deaths, the figures published in the statement below show that 26 male and 21 female cases were notified, and 5 males and 2 females were reported dead, the age periods of the largest number of notifications being the 1-5 years and the 6-10 years period.

Enteric Fever, 1937—Age Distribution of Notifications and Deaths according to Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	...	...	...	...	...	...
1- 5 years	7	6	13	...	1	1
6-10 do.	11	8	19	1	...	1
11-15 do.	2	3	5	1	1	2
16-20 do.	3	...	3	2	...	2
21-25 do.	2	1	3	...	...	...
26-30 do.	1	1	2	1	...	1
31-35 do.	...	1	1	...	...	...
36-40 do.	...	...	...	...	...	...
41-45 do.	...	1	1	...	...	...
46-50 do.	...	...	...	...	...	...
51-55 do.	...	...	...	...	...	...
56-60 do.	...	...	...	...	...	...
Over 60 years	...	...	...	...	...	...
Total	26	21	47	5	2	7

PNEUMONIA.

This disease, which includes primary pneumonia (acute lobar pneumonia and acute lobular pneumonia) as well as secondary broncho pneumonia, is causing a certain amount of concern to the Public Health Department in that some condition, not yet fully determined, affecting the health of the City has been and is causing a steady increase in the number of the cases notified and in the number of deaths registered during the past ten years, as shown by the figures detailed in the table below.

Pneumonia (All Forms).
Notifications, Deaths, Death-rates and Case Mortality for the years 1922-1937.

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

From a death rate of 0.77 per 1,000 population in the year 1928, it has jumped to 1.10 per 1,000 population in 1937.

What circumstance is responsible for this increase? It seems extraordinary that with a general, all round, higher standard of sanitation, a state of general healthiness which is admitted to be on the whole eminently satisfactory, with the social and economic conditions showing the degree of amelioration expected from an improved and better educational system, that this disease should not be, in the least, influenced by this combination of factors making for better health and diminished mortality.

It is possible that some insight may be given by the statement of notifications and deaths by age and sex published hereunder.

Pnuemonia—Notifications and Deaths by Age and Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	15	8	23	9	15	24
1 to 5 years	19	29	48	5	9	14
6 to 10 do.	2	2	4	1	..	1
11 to 15 do.	3	1	4	2	1	3
16 to 20 do.	4	2	6	1	1	2
21 to 25 do.	5	3	8	..	2	2
26 to 30 do.	2	1	3	4	3	7
31 to 35 do.	5	2	7	1	1	2
36 to 40 do.	1	3	4	3	4	7
41 to 45 do.	2	..	2	..	3	3
46 to 50 do.	2	3	5	2	2	4
51 to 55 do.	1	..	1	2	..	2
56 to 60 do.	6	1	7	4	1	5
Over 60 years	1	2	3	4	5	9
Total	68	57	125	38	47	85

It is here seen that just more than one-half (71) of the notifications and just a little less than half (38) of the deaths were in the age periods under 1 year and 1-5 years, the notifications predominating in the latter and deaths in the former. These are, of course, the age periods at which secondary and primary broncho-pneumonia are particularly prevalent.

It being well known that overcrowding, dampness, exposure and sudden lowering of temperature are predisposing, contributory factors in the incidence of this disease, the conclusion is irresistible that the overcrowding of the population in the barracks or premises converted into barracks, is in a large measure responsible for this increasing prevalence of pneumonia that has been noticed during the last ten years.

Appended below is a table showing the number of cases of pneumonia reported from the different sub-districts of the City.

Sub-districts.	*No. of Cases of Pneumonia*
City Proper	36
St. Clair	....
East Dry River	40
Belmont	38
Woodbrook	11
	125

DIPHTHERIA.

Diphtheria is not a disease that causes us the same degree of anxiety as it does to health officers in more temperate climates and, from my own personal observation in private practice, I am convinced that the disease is of a relatively mild type.

The number of patients notified in 1937 as suffering from this disease was 30 and the number of deaths 4, giving a death rate of 0.05 per 1,000 population.

Notifications, deaths and death rates per 1,000 population for the years 1917-37 are tabulated in the statement below.

Diphtheria.

Notifications, Deaths and Death-rates for the years 1917-37.

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

The age period of the greatest incidence is, as would be expected, the 1-5 period, 17 of the notified cases occurring at this time ; in fact, 25 out of the 30 cases occurred under 10 years of age.

Diphtheria, 1937—Notifications and Deaths by Age and Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	1	1	2	...	1	1
1- 5 years	8	9	17	...	1	1
6-10 do.	2	4	6	...	1	1
11-15 do.	...	2	2	...	...	...
16-20 do.	1	1	2	...	1	1
21-25 do.	...	...	...	...	...	...
26-30 do.	...	...	...	...	...	...
31-35 do.	...	...	...	...	...	...
36-40 do.	...	1	1	...	...	...
Total	12	18	30	...	4	4

ACUTE ANTERIOR POLIOMYELITIS.

There was at the beginning of the year under review a small outbreak of this infectious disease which caused a certain amount of anxiety to the Local Authority. In all, 10 cases were notified and one death registered.

Starting in a small private school for better class children outside the City's limits, a number of cases cropped up in different parts of the City, rising to a total of eight (8), cases in January, one in February and one in April. Though this number appears small, it is the largest number of cases of acute anterior poliomyelitis notified during the last 11 years, as the statement below shows.

Notifications of Acute Anterior Poliomyelitis, 1927-37.

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

The age period most susceptible to this disease is the 1-5 year period, 7 cases—5 males and 2 females having been notified.

Acute Anterio Poliomyelitis—Notifications and Deaths by Age and Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	...	...	...	...	...	...
1- 5 years	5	2	7	...	...	...
11-15 do.	...	1	1	...	...	...
16-20 do.	1	...	1	...	...	...
31-35 do.	...	1	1	...	1	1
Total	6	4	10	...	1	1

The method of control adopted was the removal of all cases to hospital and their strict isolation, no visitors being allowed; thorough disinfection of premises and fomites, and strict supervision of contacts who were enjoined to douche their nose and naso-pharynx with a weak antiseptic like Condy's Fluid.

In addition, to check a possible rapid spread, the elementary schools of the City were kept closed six weeks longer than originally arranged.

There were no notifications of **Encephalitis Lethargica** and none of **Paralytic Rabies** during the year.

No case of **Small Pox,** either of variola major or alastrim (variola minor), was notified.

Since 1926 when, between January and June, 16 cases of alastrim occurred as a result of a case that cane over from Venezuela, incubating the disease, small pox in one form or the other has been conspicuous by its absence from the Colony.

CHICKEN POX.

This infectious disease, like the poor, is always with us, 84 cases having been notified during 1937. Some cases were so severe as to give rise at first sight to a suspicion of mild small pox, always dispelled, however, on closer observation.

The months with the greatest number of notifications were June, and July, and males predominated over females to the extent of three to one. No deaths were reported.

Chicken Pox in Port-of-Spain.

Notifications by Age and Sex for the year 1937.

Age Periods.	Males.	Fe-males.	Both Sexes.	Age Periods.	Males.	Fe-males.	Both Sexes.
Under 1 year ..	2	2	4	31 to 35 years ..	..	2	2
1 to 5 years ..	7	7	14	36 to 40 do. ..	1	..	1
6 to 10 do. ..	29	4	33	41 to 45 do. ..	..	..	..
11 to 15 do. ..	17	5	22	46 to 50 do. ..	..	..	..
16 to 20 do. ..	3	..	3	51 to 55 do. ..	..	..	..
21 to 25 do. ..	2	1	3	56 to 60 do. ..	1	..	1
26 to 30 do. ..	1	..	1				
				Total ..	63	21	84

Non-Notifiable Infectious Diseases.

Malaria.

Malaria not being a notifiable infectious disease within the meaning of the Public Health Ordinance, it is impossible to say, with any degree of certainty, how many cases of this disease occur in the City year by year, and the public health officer has to fall back on the deaths registered to form some idea of its prevalence.

Certain it is that for a period of at least 10 years now, the evidence points to the fact that no fatal case of malaria gets its infection within the City's limits.

Persons recently infected in districts definitely malarious are either brought into the City for treatment or old febricitants, who once lived in a malarious district now live in the City, as a result of periodic lowering of individual resistance, develop recrudescences of an infection that was never really eradicated.

Breeding places of mosquitoes of the anopheles variety—responsible for carrying the malarial parasite—are conspicuous by their absence during the dry season and, in the wettest months of the year, only occasional anopheline larvae are found on the outskirts of the City, viz.: the dumping ground at the eastern limit and round about the lower reaches of the Maraval River at the western end, and as a rule, these are quickly brought under control.

It is, however, just possible that anopheline mosquitoes (*A. tarsimalcuatus*, *A. albuarsus*, *A. maculipalpus*, *A. oswaldi*) from the neighbouring abundant breeding grounds of Success Village, Laventille, may during the rainy season, under the influence of a high, favourable wind, fly into the City and infect the inhabitants on the eastern border, and the same may possibly be the case on the western and northern borders. Control, therefore, in these areas is a matter of urgent necessity.

Every case of malaria occurring in the Colonial Hospital and every death reported, whether from the said institution, or from private dwelling houses by general practitioners, is investigated with a view to ascertaining, if possible, the source of infection with the almost inevitable result, that the patient is found to have acquired the infection in malarious areas outside the City.

The number of deaths ascribed to malaria during 1937 was 21, being two fewer than the corresponding number for the year 1936. Ten were males and 11 females.

Deaths from Malaria by Age and Sex.

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

As regards distribution in the various sub-districts of the City, nine of the deaths occurred in the City proper, nine in the East Dry River District, one in Belmont and two in Woodbrook.

The local distribution of deaths in the various sub-districts month by month is given in the table appended below.

Malaria—Local Distribution of Deaths.

Sub-districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
City Proper	....	....	1	....	....	2	....	1	4	1	....	....	9
St. Clair	....	....	....	....	....	....	....	....	....	....	....	....	....
East Dry River	....	....	1	....	....	....	2	2	1	2	1	....	9
Belmont	....	....	....	....	....	....	....	....	....	1	....	....	1
Woodbrook	....	....	....	....	1	....	....	....	....	....	1	....	2
Total	....	....	2	....	1	2	2	3	5	4	2	....	21

Syphilis.

The number of deaths certified as being due to syphilis represents only a comparatively small proportion of the mortality that this social disease is responsible for.

For instance, a very large proportion of the infant mortality—particularly that proportion attributable to ante-natal causes and manifested by such signs as hydrocephalus, retardation of growth, congenital mental idiocy, and congenital mental retardation—is directly due to syphilis; deaths from diseases of the heart and blood vessels are in large proportion the result of syphilitic infiltration of these organs; syphilis is the sole cause of aneurysm of the aorta; diseases of the nervous system—like general paralysis of the insane, locomotor ataxia, optic atrophy, apopletic stroke when due to clotting of blood, have syphilis as the underlying basic cause.

It is, therefore, obvious that to arrive at a correct estimate of the mortality that this venereal disease is responsible for, a certain proportion of the deaths, large in some cases, small in others, under practically every heading in the list of causes of deaths, will have to be added to those certified as being directly due to syphilis.

The number of deaths classified under the heading of syphilis certified during the year 1937 was **18**, representing a death rate of 0.23 per 1,000 population.

The statement tabulated below shows deaths and death rates from syphilis during the quinquennium 1932-36 and the year 1937 with percentages of decline or increase at different ages.

Deaths and Death-rates from Syphilis during the quinquennium, 1932-36, and the year 1937, with percentages of decline or increase at different Ages.

Ages.	Annual Average Deaths, 1932-36.	Deaths, 1937.	Percentage of decline of Deaths in 1937 on average for 1932-36.	Percentage increase of Deaths in 1937 on average for 1932-36.	Annual Average Death-rates per 1,000 population for 1932-1936.	Death-rates per 1,000 population for 1937.	Percentage decline of Death-rates in 1937 on average for 1932-36.	Percentage increase of Death-rates in 1937 on average for 1932-36.
Under 1 year ..	6.8	2	70.59	..	0.09	0.03	66.67	..
1- 2 years ..	0.4	2	..	400.00	0.005	0.03	..	500.00
3- 5 do. ..	0.4	..	100.00	..	0.005	..	100.00	..
6-10 do. ..	0.4	..	100.00	..	0.005	..	100.00	..
11-20 do. ..	1.2	1	16.67	..	0.02	0.01	50.00	..
21-30 do. ..	3.6	4	..	11.11	0.05	0.05	..	..
31-40 do. ..	4.0	2	50.00	..	0.05	0.03	40.00	..
41-50 do. ..	4.0	2	50.00	..	0.05	0.03	40.00	..
51-60 do. ..	1.8	2	..	11.11	0.02	0.03	..	50.00
Over 60 years ..	0.8	3	..	275.00	0.01	0.04	..	300.00
	23.4	18	23.08	..	0.32	0.23	28.13	..

There is, therefore, a decline during 1937 of 23.08 per cent. on the mortality for the last five years—a fact which throws credit on the measures adopted for the treatment and prevention of this disease and which may be briefly summed up as follows, viz; the regular, adequate and continuous treatment of cases in the earliest possible stage, until a clinical and serological cure is effected.

There still, however, remains a good deal of work to be done both in the way of educational propaganda and of instructional lectures, as well as in the actual treatment of the cases and their complications before anything like effective control can ever be attained.

Dysentery.

The mortality from dysentery has shown a progressive, steady decline during the last 20 years—a fact which, in some measure, may be taken to indicate generally the increasing standard of purity of water and food supplies and the increasing efficiency with which measures, directed to the disinfection and disposal of excreta, are attended.

Deaths from the Dysenteries for 20 years 1918-1937.

Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.
1918 ..	43	0.63	1925 ..	31	0.48	1931 ..	18	0.26
1919 ..	48	0.70	1926 ..	31	0.47	1932 ..	12	0.17
1920 ..	63	0.90	1927 ..	27	0.41	1933 ..	10	0.14
1921 ..	31	0.50	1928 ..	29	0.44	1934 ..	5	0.07
1922 ..	24	0.38	1929 ..	23	0.34	1935 ..	4	0.05
1923 ..	25	0.40	1930 ..	11	0.16	1936 ..	5	0.07
1924 ..	42	0.66						
Yearly average	39.4	0.60	Yearly average	25.3	0.38	Yearly average	9	0.13
						1937	**7**	**0.09**

The rate in 1937, 0·09 per 1,000 population, was 0·04 less than the average for the previous 6 years.

The type of disease seems to be both amoebic and bacillary, with amoebic the predominating type by a narrow margin.

The table below gives the number of deaths from the dysenteries by age and sex.

Deaths from the Dysenteries by Age and Sex, 1937.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year	1	....	1	51-35 years	....	1	1
41-45 do.	1	....	1	56-60 do.	1	....	1
46-50 do.	....	....	....	Over 60 years	2	1	3
				Total	5	2	7

The extremes of life are, from this table, more susceptible to the ravages of the disease than the intervening age periods.

Diarrhoea and Enteritis.

Diarrhoea and enteritis was responsible for 53 deaths during the year 1937, giving a death rate of 0.69 per 1,000 population as compared with 30 and a death rate of 0.40 per 1,000 in the year 1936.

The age and sex distribution is given in the table below.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year ...	21	20	41	41-45 years	1	....	1
1-5 years	1	5	6	46-50 do.	....	1	1
6-10 do.	....	....	....	51-55 do.	....	1	1
11-15 do.	....	....	....	56-60 do.	1	....	1
16-20 do.	....	....	....	Over 60 years	....	2	2
21-25 do.	....	....	....				
26-30 do.	....	....	....				
31-35 do.	....	....	....				
36-40 do.	....	....	....				
				Total	24	29	53

Forty-one out of 53 deaths occurred under one year, and 47 occurred in the age periods under one year to five years. The remaining 6 deaths occurred in the later age periods, 41-45, 56-60 to over 60 years of age. It will thus be seen that diarrhoea and enteritis takes its greatest toll at the extremes of life, the intervening age periods being comparatively immune.

As regards local distribution, the table given below demonstrates the fact that has been obvious all along these investigations, viz.: that in the unsewered portions of the City lurks the greatest danger to a pure food and water supply.

The largest number of deaths occurred in the rainy month of August.

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	1	...	1	1	1	3	1	1	1	...	2	17
St. Clair	...	...	...	...	...	...	...	...	...	...	...	...	...
East Dry River	3	...	...	2	1	1	2	6	2	...	5	1	23
Belmont	1	...	...	...	...	...	3	3	1	...	...	1	9
Woodbrook	...	1	...	...	...	...	1	1	...	...	1	...	4
Total	9	2	...	3	2	2	9	11	4	1	6	4	53

As indicating the success which has attended efforts made to secure a pure food and water supply, deaths from diarrhoea and enteritis for 20 years are tabulated in the statement given below.

Deaths from Diarrhoea and Enteritis for 20 years, 1918-37.

Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.
1918 ..	193	2.84	1925 ..	71	1.10	1931 ..	55	0.78
1919 ..	162	2.35	1926 ..	107	1.64	1932 ..	56	0.79
1920 ..	196	2.81	1927 ..	48	0.73	1933 ..	42	0.58
1921 ..	118	1.91	1928 ..	63	0.95	1934 ..	40	0.55
1922 ..	122	1.95	1929 ..	53	0.79	1935 ..	35	0.47
1923 ..	120	1.90	1930 ..	58	0.84	1936 ...	30	0.40
1924 ..	75	1.17						
Yearly average ..	140.8	2.13	Yearly average ..	66.6	1.01	Yearly average ..	43	0.60
						1937	**53**	**0.69**

DISINFECTION.

Whatever may be the views held by sanitarians as to the value of terminal disinfection, there can be no doubt that the time is not yet ripe, as far as the general public is concerned, for any radical changes in the disinfection system of the Health Department.

Premises are disinfected regularly for infectious diseases and vermin, the diseases in connection with which this measure is carried out being tuberculosis, enteric fever, pneumonia, diphtheria, chicken pox, ophthalmia neonatorum, acute anterior poliomyelitis, encephalitis lethargica.

The special coach which is reserved by the Trinidad Government Railways for transporting cases of infectious diseases is disinfected rgularly, chiefly for cases of leprosy which are conveyed from different parts of the country to Port-of-Spain in transit to the Leper Settlement at Chacachacare.

Spraying of cesspits with a mixture of crude and distillate oil goes on daily. Whenever a case of typhoid or dysentery occurs, the cesspits of the affected premises and of the adjoining houses in a wide circle around are subjected to intensive and concentrated dosing with oil and disinfectants in an effort to render the causative organisms innocuous.

Disinfection.

Premises disinfected for Infectious Diseases and Vermin.

Diseases.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total.
Tuberculosis	13	10	10	21	11	11	11	14	14	14	12	8	149
Enteric Fever	4	..	3	4	1	10	5	9	6	1	1	3	47
Pneumonia	10	9	5	10	7	8	5	9	4	8	15	7	97
Diphtheria	..	6	3	3	2	2	4	1	3	1	1	1	27
Chicken Pox	1	2	4	3	6	9	5	4	2	2	1	1	40
Ophthalmia Neonatorum	1	5	1	3	2	3	3	..	..	1	2	1	22
Acute Poliomyelitis	5	2	..	1	..	..	..	..	..	..	..	..	8
Encephalitis Lethargica	1	..	..	..	..	..	..	..	..	..	..	..	1
Total	35	34	26	45	29	43	33	37	29	27	32	21	391
Vermin	27	26	25	28	26	28	30	27	30	34	32	27	340

Railway Coaches Disinfected.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Yaws	..	..	..	..	..	..	..	..	..	..	..	..	..
Leprosy	4	3	1	4	2	4	6	2	3	3	2	1	35
Tuberculosis	..	..	..	..	..	..	..	..	..	..	..	..	..

Cesspits Sprayed with Crude and Distillate Oils (Principally for Infectious Disease.)

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Enteric Fever, &c.	3,154	3,105	3,411	3,704	3,029	3,459	3,606	3,396	3,694	3,106	3,389	3,102	40,155

Other Principal Causes of Death.

CARDIAC AND VASCULAR DISEASES.

In keeping with the trend of events in other parts of the West Indies as well as in other larger countries in more temperate climes, diseases of the heart and blood vessels are giving rise to more deaths than any other single cause, being responsible for 171 deaths with a death rate of 2.22 per 1,000 population in 1937.

This has been a constant finding during the last ten years as an examination of the comparative summary of vital statistics published on pages 46—47 shows.

Next in numerical importance to cardiac and vascular diseases (171), in the list of causes of death, come pulmonary tuberculosis (142), diseases of early infancy (122), diseases of the digestive system (117), diseases of the genito-urinary system (107), and diseases of the nervous system including cerebral haemorrhage (101).

Of the two common antecedent diseases which are known to leave their mark upon the heart, viz.: rheumatic fever and syphilis, the latter plays by far the most important part—rheumatic fever being a very rare disease in this Colony. The payment for want of proper and adequate treatment of syphilis, is the toll that is exacted by this disease on the heart and blood vessels and, needless to say, when once these delicate structures have been attacked, it is only a question of time before the fatal termination sets in.

Particulars of deaths registered from cardiac and vascular diseases by age and sex in 1937 are are detailed in the table which follows.

Deaths registered from Cardiac and Vascular Diseases by Age and Sex in 1937.

Forms.	0-5 years.		6-10 years.		11-15 years.		16-20 years.		21-25 years.		26-30 years.		31-35 years.		36-40 years.		41-45 years.		46-50 years.		51-55 years.		56-60 years.		Over 60 yrs.		Total.		Both Sexes.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Aneurism of Aorta									1				1	2		6		1		4		1	2	1	1	3	6	19	10	29
Aneurism of Thoracic Aorta ...																				1				1		1		3		3
Aneurism of Abdominal Aorta																1						1						2		2
Aneurism																1	1											1	1	2
Aortic Incompetence																		1			1	1					1	2	2	4
Aortic Regurgitation																1				1				1				1	2	3
Aortitis											1																	1		1
Mesaortitis																							1						1	1
Auricular Fibrillation																								1			1	1	1	2
Endocarditis									1							1						1		1			2	3	3	6
Mitral Regurgitation ...																					1	1			1			1	2	3
Mitral Incompetence																					1				1	3	2	3	4	7
Mitral Stenosis ...																										1		1		1
Mitral Valvular Disease ...																											1		1	1
Mitral and Aortic Incompetence														1	1			1	1					1		1	1	4	3	7
Valvular Insufficiency ...														1				1										2		2
Valvular Incompetence of Heart																			1							1	1	1	2	3
Valvular Disease of Heart																2		1	1			2	1		1	1	1	6	4	10
Cardiac Vascular Degeneration																1										1		2		2
Fatty Degeneration of Heart		1																	1	1								2	1	3
Myocardial Degeneration														1		1		1	1		1	1	1	2	3	4	6	10	12	22
Myocarditis																1	1			3	1	2	1	2	3	2	1	10	7	17
Cardiac Insufficiency ...																								1		1		2		2
Cardiac Disease									1									1								1	1	3	1	4
Complete Heart Block ...																						1						1		1
Congestive Cardiac Failure													1														1		2	2
Cardiac Syncope																			1	1		1				1		2	2	4
Congenital Heart Disease		1																										1		1
Angina Pectoris																1										2		3		3
Coronary Thrombosis														1	1	1		1						2	1	2		7	2	9
Thrombosis of Iliac Artery ...																										1		1		1
Arterio Sclerosis																								1		2	10	3	10	13
Total		2							1	2		1	2	6	2	15	3	9	5	10	7	12	6	14	11	28	35	98	73	171

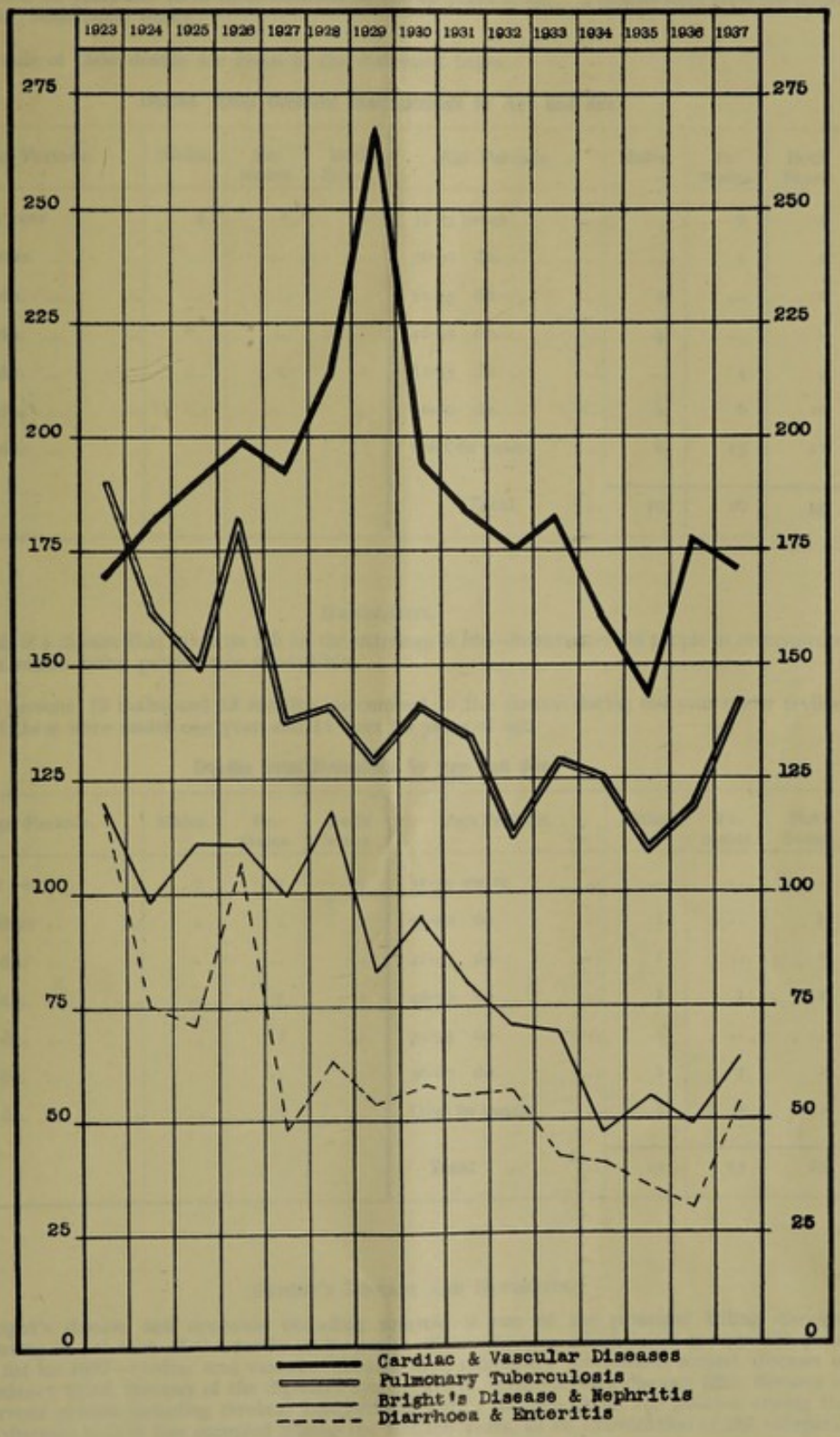
In every one of these forms syphilis can and, undoubtedly, does play an important and decisive part.

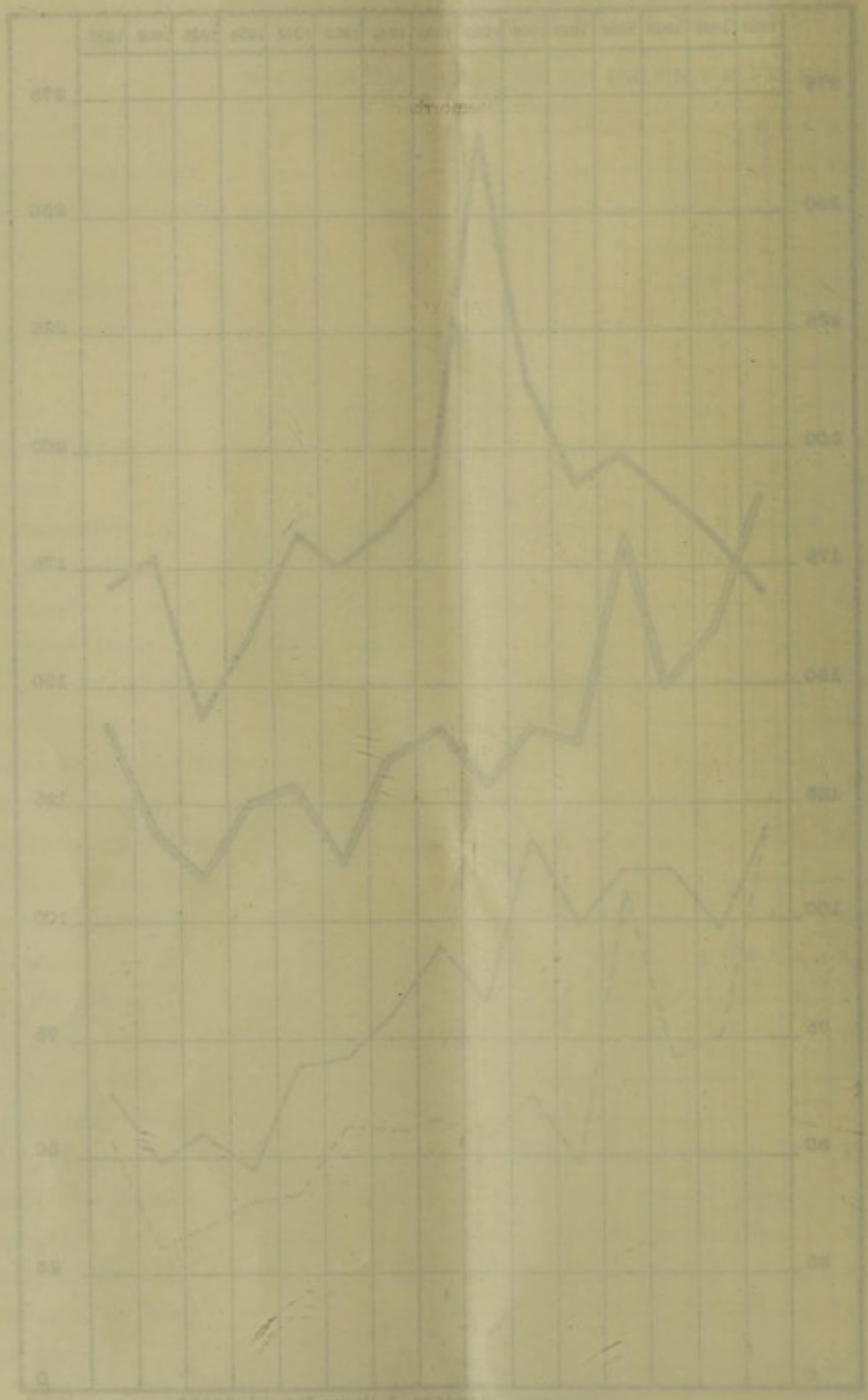
Aneurism of the aorta, which is caused solely by syphilis, was responsible for 36 of these deaths, of which 25 were males and 11 were females.

Chart 1

Port-of-Spain

Deaths from PULMONARY TUBERCULOSIS, CARDIAC & VASCULAR DISEASES, BRIGHT'S DISEASE & NEPHRITIS, and DIARRHOEA & ENTERITIS, 1923 - 1937.





Deaths from Cerebral Haemorrhage ; Apoplexy.

Apoplexy or stroke is considered by the lay public to be a very frequent cause of death. 45 deaths from this cause occurred in 1937—19 males and 26 females. Nearly one-half (21) of these were in adults over 60 years and 10 in those between 56 and 60 years of age. 2 deaths were reported under one year, both being males.

Details of these deaths are given in the statement below.

Deaths from Cerebral Haemorrhage by Age and Sex.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year	2	....	2	31-35 years	....	1	1
1-5 years	....	....	....	36-40 do.	....	1	1
6-10 do.	....	....	....	41-45 do.	1	....	1
11-15 do.	....	....	....	46-50 do.	4	....	4
16-20 do.	....	1	1	51-55 do.	....	4	4
21-25 do.	....	....	....	56-60 do.	4	6	10
26-30 do.	....	....	....	Over 60 years	8	13	21
				Total	19	26	45

Bronchitis.

This is a disease that takes its toll on the extremes of life—infants and old people in evercrowded barrack rooms being particularly susceptible.

25 persons, 12 males and 13 females, succumbed to this disease during the year under review. Four of these were under one year and 11 over 60 years of age.

Deaths from Bronchitis by Age and Sex.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year ..	2	2	4	31-35 years ..	..	..	..
1- 5 years	1	1	2	36-40 do. ..	1	..	1
6-10 do.	..	..	..	41-45 do. ..	1	..	1
11-15 do.	..	1	1	46-50 do. ..	1	1	2
16-20 do.	..	1	1	51-55 do. ..	..	..	..
21-25 do.	..	..	..	56-60 do. ..	1	1	2
26-30 do.	..	..	..	Over 60 years ..	5	6	11
				Total	12	13	25

Bright's Disease and Nephritis.

Bright's disease and nephritis including uraemia is one of the principal killing diseases, constituting 59 per cent. of the deaths under genito-urinary diseases, which latter occupy fifth place in the list for 1937—cardiac and vascular diseases first, pulmonary tuberculosis second, diseases of early infancy third, diseases of the digestive system fourth, genito-urinary diseases fifth, diseases of the nervous system including cerebral haemorrhage sixth ; and this about the position among the killing diseases that it has occupied during the last ten years, as an examination of the comparative summary of vital statistics for 1927-1937 shows.

Chronic nephritis contributes a certain number of deaths which is listed under headings "cardiac and vascular diseases" and "diseases of the nervous system including cerebral haemorrhage".

Sixty-three deaths were registered during the year, 29 males and 34 females, giving a death rate of 0.82 per 1,000 and, as is to be expected, the largest number (24) occurred over 60 years of age.

Deaths from Nephritis by Age and Sex.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year ...	...	...	...	31-35 years ...	3	3	6
1- 5 years	...	...	...	36-40 do.... ...	3	4	7
6-10 do.	...	...	...	41-45 do.... ...	1	...	1
11-15 do.	...	...	...	46-50 do.... ...	1	2	3
16-20 do.	1	...	1	51-55 do.... ...	3	...	3
21-25 do:	2	...	2	56-60 do.... ...	4	8	12
26-30 do.	1	3	4	Over 60 years ...	10	14	24
				Total	29	34	63

CANCER AND OTHER MALIGNANT DISEASES.

There is no doubt that deaths from cancer and other malignant diseases are slowly, but quite definitely, on the increase and, in spite of persistent and intensive research, the cause and with it, of necessity, the definite cure seems as far off as ever.

The only ray of hope is, of course, early resort to expert medical advice and treatment which to-day consists of surgical excision in some cases and of radium or deep X-ray therapy in others.

During the year 1937, sixty-eight cases of cancer were registered, scattered throughout the various organs of the body, as the table below shows.

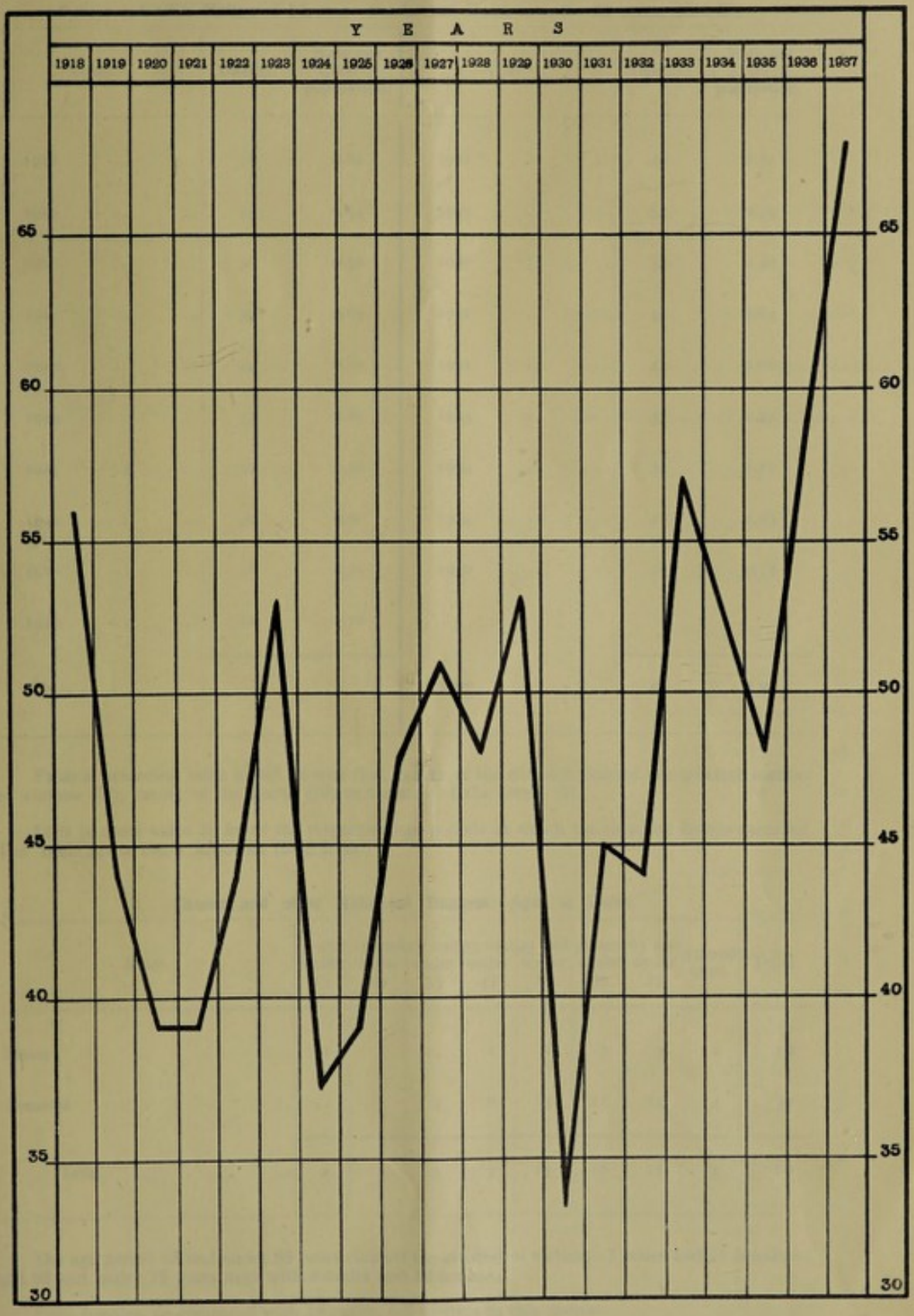
Cancer and other Malignant Diseases—Forms, Sites and Deaths.

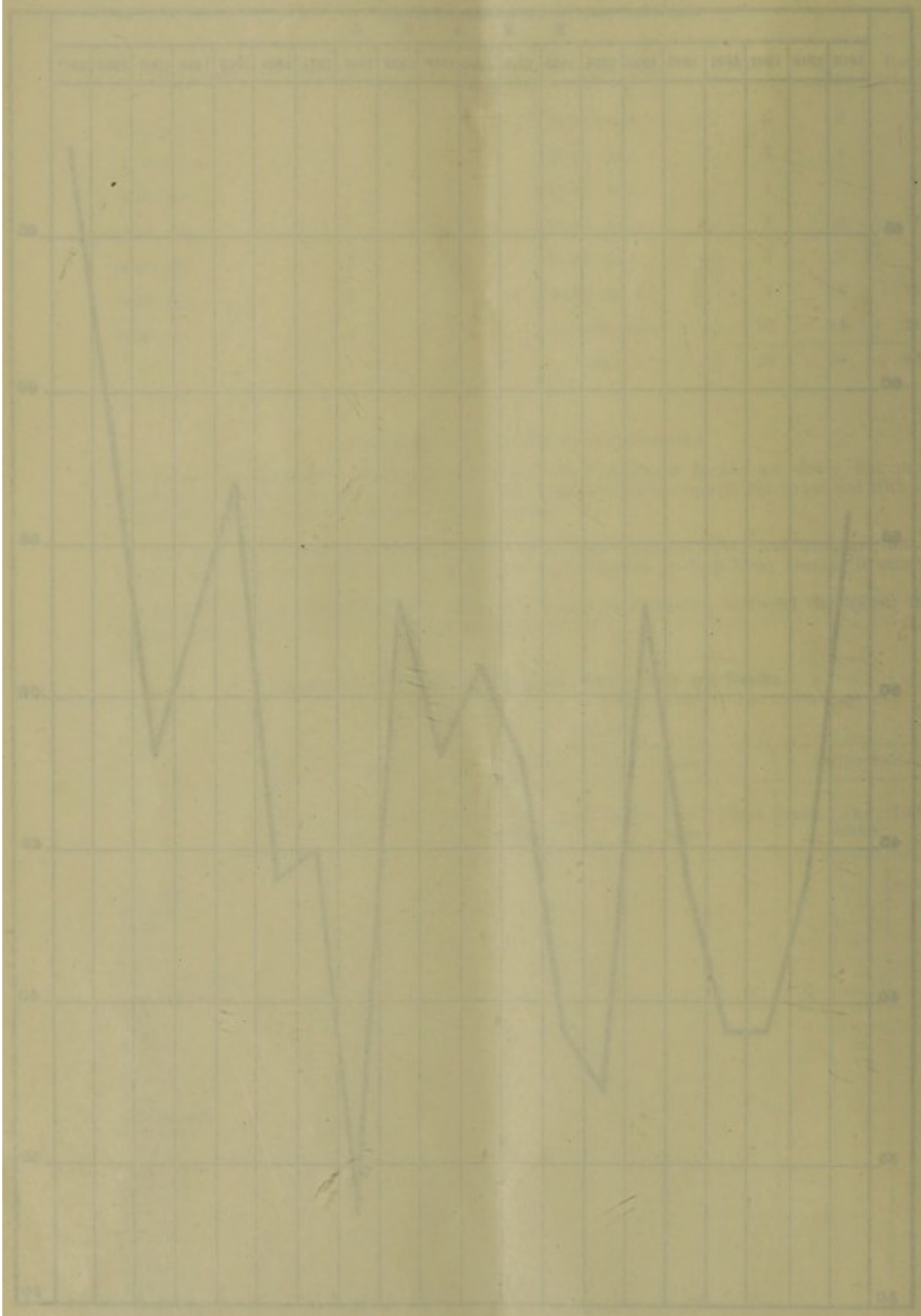
Site.	Deaths.											
	Carcinoma.			Sarcoma.			Fibroma.			Undefined.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Abdomen ...	...	1	1	...	...	...	...	...	...	...	...	...
Bile Duct ...	1	1	2	...	...	...	...	...	...	...	...	...
Brain	...	1	1	...	...	...	...	...	...	...	...	...
Breast	...	3	3	...	...	...	...	...	...	...	...	...
Cervix	...	7	7	...	...	...	...	...	...	...	...	...
Cervix, Bladder and Rectum ...	...	1	1	...	...	...	...	...	...	...	...	...
Colon	1	2	3	...	...	...	...	...	...	...	...	...
Face	...	1	1	...	...	...	...	...	...	...	...	...
Forearm... ...	...	...	...	1	...	1	...	...	...	...	...	...
Kidneys ...	2	...	2	...	...	...	...	...	...	...	...	...
Liver	1	1	2	...	...	...	...	...	...	...	...	...
Nose	...	2	2	...	...	...	...	...	...	...	...	...
Oesophagus ...	1	...	1	...	...	...		...	...	...	...	...
Ovaries	...	...	...	...	...	...	...	...	...	...	3	3
Pancreas ...	...	1	1	...	...	...	...	...	...	...	...	...
Pharynx... ...	1	...	1	...	...	...	...	...	...	...	...	...
Prostate ...	1	...	1	...	...	...	...	...	...	...	...	...
Pylorus	2	2	4	...	...	...	...	...	...	...	...	...
Rectum	...	1	1	...	...	...	...	...	...	...	...	...
Stomach... ...	6	6	12	...	...	...	...	...	...	...	...	...
Testis	...	...	...	...	...	...	...	...	...	1	...	1
Throat	...	...	...	...	...	...	...	...	...	...	1	1
Thyroid	...	1	1	...	...	...	...	...	...	...	...	...
Uterus	...	10	10	...	...	...	...	4	4	...	...	...
Undefined ...	...	1	1	...	...	...	...	...	...	...	...	...
Total ...	16	42	58	1	...	1	....	4	4	1	4	5

Chart J

Port-of-Spain

Deaths from CANCER and OTHER MALIGNANT DISEASES, 1918-1937.





The death rate per 1,000 was 0.88 which is 0.18 greater than the yearly average for the last 10 years.

Cancer and other Malignant Diseases—Deaths and Death-rates for 20 years, 1918-37.

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

From a preceding table it will be seen that cancer of the stomach claimed the greatest number of victims (12), cancer of the uterus (10) and cancer of the cervix (7).

It is of some value to know the respective age periods at which the recorded deaths occurred. The table given below furnishes these facts.

Cancer and other Malignant Diseases.—Ages at Death.

Sexes.	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and over.	Total.
Males	1	1	..	1	2	7	5	1	18
Females	..	1	3	6	13	11	12	4	50
Total	1	2	3	7	15	18	17	5	68

The age period 55 and under 65 years claimed the greatest of victims—7 males and 11 females—and 65 and under 75 years next with 5 males and 12 females.

Fifty females, as compared with 18 males, fell victims to this disease.

Comparative Summary of Vital Statistics

Port-of-Spain.	1927. Population 65,573		1928. Population 66,383		1929. Population 67,356		1930. Population 68,703		1931. Population 70,462		1932. Populati 71,06	
	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population	Number.	Rate per 1,000 population.	Number.	Ra pop
Total Births	1,753	26.73	1,868	28.14	1,895	28.13	1,935	28.16	1,956	27.76	2,021	
Total Deaths	1,433	21.85	1,476	22.23	1,503	22.31	1,308	19.04	1,223	17.36	1,125	
Marriages	594	9.06	636	9.58	670	9.95	610	8.88	622	8.83	660	
Natural increase or decrease	+320	....	+392	....	+392	....	+627	....	+733	....	+896	
Deaths of Infants under 1 year	236	*134.63	238	*127.41	250	*131.93	233	*120.41	222	*113.60	207	
Deaths from Notifiable Infectious Diseases	205	3.13	228	3.43	222	3.30	229	3.33	221	3.14	182	
Do. Enteric Fever	17	0.26	14	0.21	13	0.19	16	0.23	11	0.16	4	
Do. Pulmonary Tuberculosis	138	2.10	141	2.12	129	1.92	141	2.05	134	1.90	112	
Do. Tuberculosis (other forms)	7	0.11	19	0.29	24	0.36	14	0.20	7	0.10	10	
Do. Pneumonia (all forms)	41	0.63	51	0.77	56	0.83	55	0.80	65	0.92	55	
Do. Diphtheria	2	0.03	3	0.05	....	....	1	0.01	2	0.03	....	
Do. Encephalitis Lethargica	....	....	....	....	....	....	1	0.01	....	....	1	
Do. Acute Poliomyelitis	....	....	....	....	....	....	1	0.01	2	0.03	....	
Do. Malaria	46	0.70	57	0.86	38	0.56	40	0.58	38	0.54	36	
Do. Dysentery	27	0.41	29	0.44	23	0.34	11	0.16	18	0.26	12	
Do. Ankylostomiasis	8	0.12	11	0.17	4	0.06	1	0.01	2	0.03	1	
Do. Syphilis	50	0.76	31	0.47	36	0.53	30	0.44	18	0.26	26	
Do. Influenza	6	0.09	4	0.06	8	0.12	9	0.13	4	0.06	3	
Do. Diarrhoea and Enteritis	48	0.73	63	0.95	53	0.79	58	0.84	55	0.78	56	
Do. Bronchitis	109	1.66	71	1.07	77	1.14	67	0.98	68	0.97	51	
Do. Cancer and other Malignant Diseases	51	0.78	48	0.72	53	0.79	33	0.48	45	0.64	44	
Do. Cardiac and Vascular Diseases	193	2.94	214	3.22	267	3.96	194	2.82	183	2.60	175	
Do. Bright's Disease and Nephritis	99	1.51	120	1.81	82	1.22	94	1.37	80	1.14	71	
Do. Diseases of the Nervous System including Cerebral Haemorrhage	148	2.26	112	1.69	136	2.02	99	1.44	81	1.15	82	
Still Births	134	†7.64	158	†8.46	158	†8.34	138	†7.13	139	†7.11	160	

*Infant Mortality Rate—Per 100 Live Births.

for the years 1927 to 1937.

1933. Population 72,095		1934. Population 73,071		1935. Population 74,301		1936. Population 75,689		1937. Population 77,044		Average number for preceding 10 years. 1927-1936.	Average rate for preceding 10 years 1927-1936.
...mber.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.		
2,167	30.10	2,185	29.90	2,319	31.21	2,295	30.33	2,273	29.50	2,039.4	28.89
1,304	18.11	1,228	16.81	1,109	14.93	1,024	13.53	1,169	15.17	1,273.3	18.20
658	9.14	635	8.69	659	8.87	659	8.71	737	9.57	640.3	9.10
+863	....	+957	....	+1210	....	+1271	....	+1104	....	+766.1	....
264	*121.83	243	*111.21	181	*78.05	149	*64.92	237	*104.26	222.3	*110.63
236	3.28	264	3.61	213	2.87	231	3.05	259	3.36	223.1	3.17
10	0.14	25	0.34	19	0.26	6	0.08	7	0.09	13.5	0.19
129	1.79	125	1.71	109	1.47	119	1.57	142	1.84	127.7	1.82
21	0.29	10	0.14	7	0.09	5	0.07	20	0.26	12.4	0.18
76	1.06	99	1.35	76	1.02	97	1.28	85	1.10	67.1	0.94
....	....	5	0.07	2	0.03	4	0.05	4	0.05	1.9	0.03
....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	1	0.01	....	....
15	0.21	26	0.36	22	0.30	13	0.17	21	0.27	33.1	0.48
10	0.14	5	0.07	4	0.05	5	0.07	7	0.09	14.4	0.21
1	0.01	1	0.01	2	0.03	2	0.03	2	0.03	3.3	0.05
22	0.31	27	0.37	26	0.35	16	0.21	18	0.23	28.2	0.41
9	0.12	2	0.03	4	0.05	3	0.04	3	0.04	5.2	0.07
42	0.58	40	0.55	35	0.47	30	0.40	53	0.69	48	0 69
51	0.71	45	0.62	50	0.67	31	0.41	25	0.32	62	0.90
57	0.79	52	0.71	48	0.65	59	0.78	68	0.88	49	0.70
182	2.53	160	2.19	143	1.92	178	2.35	171	2.22	188.9	2.70
69	0.96	48	0.66	55	0.74	49	0.65	63	0.82	76.7	1.11
107	1.49	87	1.19	95	1.28	76	1.00	101	1.31	102.2	1.47
200	†9.23	163	†7.46	151	†6.51	170	†7.41	197	†8.67	157.1	†7.72

† Still-birth Rate—Per 100 Live Births.

SANITARY ADMINISTRATION.

The Staff of the Public Health Department during the year 1937 consisted of the following units :

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. (Lond.); D.O.M.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.

G. CHARLES.
F. A. HOWARD.
C. C. Assing
W. G. WILLIAMS.
F. P. BABB, Cert. R.S.I.
H. ST. CYR, Cert. R.S.I.
J. W. PARRIS.
N. E. GUPPY.
O. E. FORDE, Assoc. R. San. I.
G. F. ASHE.
T. M. MITCHELL, 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.
F. B. RIVERS.
E. BOXILL, Cert. R.S.I.
M. H. HINKSON, Cert. R.S.I.

Messenger ....T. H. CHRISTIAN.

Anti-Mosquito Gangs.

There are five anti-mosquito gangs, each composed of a driver and two men, whose duty it is to visit premises systematically and regularly in an effort to discover mosquito breeding places in eaves gutters, down-pipes; also in antiformicas, cans and other receptacles holding water, in broken crockery, in holes in the trunks of trees, in collections of water in palm leaves, &c.

Each gang is equipped with extension ladders for getting to the top of buildings and with a supply of disinfectant for current use. A supplementary unit is put on during the wet season and also on other occasions.

There are, also, five men assisting Sanitary Inspectors in doing anti-mosquito work.

Four gangs of labourers, armed with push carts carrying drums of crude oil, are specially detailed for the oiling of pools of stagnant water, insanitary drains and swampy areas which are to be found in the lower reaches of the Maraval River, in certain areas around Woodbrook and in the reclaimed lands south of Wrightson Road.

They work under the immediate supervision of a Sanitary Inspector.

Rat Gangs.

Four rat catching gangs, each consisting of three boys and a driver, and all controlled by an overseer, visit the large business places and warehouses down Town regularly, and those dwelling houses in the City where complaints of rat-nuisance are made.

Each gang is equipped with spring and cage traps of which 40 are set daily on an average, with rat poison which is laid in suitable places, and also with a Clayton fumigating machine for asphyxiating rats in their holes and in other inaccessible places.

Bounty rats are purchasee from the public at the rate of 5 cents for a full grown rat and three cents for a young one.

Disinfection Gangs.

INFECTIOUS DISEASES AND VERMIN.

Premises.—This unit consists of two men who work under the direct supervision of a Sanitary Inspector. They disinfect premises where cases of infectious diseases have been reported, and spray common lodging houses and individual premises for vermin.

Privies.—The oiling of cesspits once a week is a statutory duty imposed upon all owners in the unsewered portion of the City. Three gangs are detailed to do this work which they carry out under the supervision of the Sanitary Inspector of the district. Each gang consists of two men, and their equipment is a push cart on which is carried a mixture of crude and distillate oil in the ratio of five to one, and a spraying machine. The value of the oil is that it serves as a deodoriser, and it also prevents the breeding of mosquitoes and, incidentally, cockroaches and other vermin are destroyed.

When a cesspit is oiled at the request of the owner a small charge to cover the cost of materials and labour is made. Whenever a case of enteric fever is notified, the cesspit on the premises is sprayed and all other cesspits within a radius of 50 yards in every direction are similarly treated, free of cost, in an effort to check the spread of the disease.

Anti-Rabies Measures.

In June, 1935, the activities of the Public Health Department were increased by the establishment of a unit for the destruction of bats. It consists of ten men working under the direct supervision of a senior Sanitary Inspector specially seconded for this work. They are equipped with nets, with paste and a piston for trapping and destroying bats in their hiding places, and in pens and pastures in the course of their attack on animals.

Special Duties.

One special Sanitary Inspector devotes his entire and undivided attention to the sanitary condition of dairies, cowsheds, stables, offensive trades, bakehouses, &c., and he is provided with a bicycle for this purpose.

Another special Inspector looks after hotels, restaurants and cook-shops, fry shops, provision and meat shops, markets, cake and ice cream shops, aerated water and other factories and workshops, spirit shops and barber shops.

The scavenging and cleansing of the Eastern Market is personally supervised by the Chief Sanitary Inspector.

The Government Bacteriologist, Dr. J. L. Pawan, examines a sample of the mixed water supply taken from a tap at the Laboratory daily and, also, samples taken from the various sources and filtration plants weekly. In each case a report is sent to the Department at the earliest possible opportunity, and if any sample is, as a result of these tests, deemed unsafe for human consumption, that fact is instantly communicated to the Medical Officer of Health and the City Engineer by telephone.

The City Council has decided to make arrangements with Government to enable the Government Analyst, as soon as he is appointed, to perform regular chemical examinations of the water supply, including the detection of free chlorine; for the regular analysis of samples of milk taken in the City and, also, of other foodstuffs suspected of adulterants or of preservatives in excessive amounts. With the increasing amount of food, tinned and otherwise, which is being imported into the Colony, this latter is becoming an increasing and pressing necessity.

Sanitary Work.

The sanitary work performed during the year, in addition to what has been previously referred to in this report, is briefly summarised under the various headings detailed below.

House to House Inspection.

Sanitary Inspectors paid 145,639 visits of inspection during the year to dwelling houses, schools, common lodging houses, shops, factories, workshops, offensive trades, stables, cowsheds, vacant lots.

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

Months.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Visits to dwelling houses Shops and other premises	10,637	11,273	11,339	12,870	9,797	10,064	11,827	11,938	14,023	13,699	14,115	14,057	145,639
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	168	186	168	205	198	178	201	217	236	242	258	256	209
Provision Stores	33	33	33	33	32	9	24	31	33	34	35	36	31
Restaurants and Cookshops	21	32	19	23	20	24	30	29	31	34	32	32	27
Bakehouses	22	24	36	53	57	42	48	47	36	60	44	54	44
Bread Depots	4	4	7	20	9	6	10	10	36	14	7	7	11
Cake and Ice Cream Shops	199	194	186	184	156	140	143	182	233	228	241	232	193
Fry Shops	10	9	13	11	12	9	9	13	11	13	11	14	11
Hotels	8	9	11	10	13	14	10	15	14	15	13	16	12
Markets	5	5	5	5	5	4	3	4	5	4	4	4	4
Spirit Shops	33	38	31	35	36	29	37	42	39	38	34	34	36
Ice Cream Carts and Pails	40	31	32	51	50	43	49	65	69	99	50	62	53
Cake Trays and Baskets	79	84	78	124	74	74	107	101	100	124	113	113	98
Provision Trays and Baskets	47	55	65	65	65	18	38	71	44	63	49	40	52
Bread Carts and Baskets	45	44	48	70	60	57	65	78	49	73	65	57	59
Fresh Fish Trays	62	50	102	150	82	115	113	109	116	110	118	82	101
Oyster Vendors' Baskets	7	6	11	10	5	7	18	12	19	30	15	13	13
Plantain Carts	19	16	23	30	32	18	25	25	17	23	14	17	22
Sweet Drink Carts	17	19	33	40	13	18	24	2	32	29	16	24	22
Dairies and Cowsheds	30	32	46	52	39	....	57	50	69	55	42	35	42
Stables	27	31	33	53	38	32	41	29	49	40	38	33	37
Goat Pens	73	63	67	88	56	48	63	74	35	70	57	60	63
Aerated Water Factories	8	8	8	8	10	7	6	7	8	7	8	8	8
Soap Factories	2	2	3	3	3	....	3	4	4	5	4	3	3
Other Factories	16	17	16	15	19	14	21	17	13	23	21	21	18
Schools	24	23	23	24	24	27	31	28	30	27	29	30	27
Common Lodging Houses	10	8	7	5	13	13	7	5	8	6	7	7	8
Barber Shops	24	49	28	27	40	27	33	26	28	35	33	29	32
Dyeworks	4	4	4	4	4	5	4	4	4	4	4	4	4
Laundries	16	20	12	13	20	22	18	19	19	18	19	20	18
Garages	15	18	15	21	21	22	18	19	21	20	17	17	19
Tanneries	8	8	8	12	13	2	4	8	14	9	8	8	9
Public Urinals	8	4	10	....	9	5	5	7	8	15	4	9	7
Boats	32	38	19	12	11	1	2	2	10	19	16	14	15

Results of Notices and Verbal Directions.

Verbal directions and notices to remedy sanitary defects were complied with in 35,076 cases. Particulars of the work done are given in the table below.

Results of Notices and Verbal Directions.

Yards paved	27	Houses ventilated	43
Yard pavements repaired	105	Roofs close-boarded	30
Yards filled in	193	Leaking roofs repaired	2
Yards cleaned	12,155	Retail shops painted	68
Drains constructed	162	Parlours painted	50
Drains repaired	446	Spirit shops painted	17
Drains cleaned	3,507	Restaurants painted	15
Washing troughs cleaned	253	Bread carts painted	51
Sinks constructed	38	Ice cream carts painted	12
Sinks repaired	55	Sweet drinks carts painted	1
Sinks cleaned	634	Hotels painted	5
Gullies cleaned	615	Barracks painted	55
Lavatories cleaned	28	Barber shops painted	1
Bath-rooms repaired	22	Cake trays screened	20
Bath-rooms cleaned	10	Concrete floors of retail shops repaired	65
Washing platforms cleaned	509	Concrete floors of parlours repaired	33
Sewer basins installed	37	Concrete floors of bakehouses repaired	50
Sewer basins repaired	8	Concrete floors of cowsheds repaired	52
Sewer basins cleaned	1,138	Concrete floors of stables repaired	61
Flush tanks installed	55	Retail shops cobwebbed	453
Flush tanks repaired	51	Provision stores cobwebbed	40
New privies built	192	Parlours cobwebbed	338
Privies repaired	706	Bakehouses cobwebbed	116
Privies made fly-proof	562	Cookshops cobwebbed	52
New cesspits constructed	164	Spirit shops cobwebbed	81
Cesspits repaired	435	Barracks cobwebbed	54
Cesspits emptied	2,127	Cowsheds cobwebbed	81
Cesspits oiled (paid for)	752	Stables cobwebbed	86
Urinals cleaned	133	Aerated Water Factories scrubbed	45
Accumulations of manure removed	175	Bakehouses scrubbed	159
Sanitary dustbins provided	1,637	Retail shops scrubbed	602
Dustbins repaired	456	Cookshops scrubbed	67
Dustbins cleaned and disinfected	1,337	Restaurants scrubbed	46
Uncovered dustbins covered	737	Parlours scrubbed	655
Rat holes stopped	110	Spirit shops scrubbed	17
Trees cut down	215	Hotels scrubbed	40
Trees trimmed	440	Barber shops scrubbed	99
Premises cleared of bush	471	Cowsheds scrubbed	205
Barracks repaired	68	Stables scrubbed	152
Kitchens repaired	133	Total	35,076

Notice to limewash was complied with in 1,559 cases, as detailed in the following statement.

Limewashing.

Premises and Places limewashed.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Common Lodging Houses	..	..	5	..	..	..	..	..	..	..	..	..	5
Barracks	16	4	3	..	3	37	..	2	6	4	8	5	88
Kitchens	4	12	5	13	7	3	3	7	11	6	6	8	85
Privies	41	75	51	58	80	63	72	64	80	140	147	93	971
Bath-rooms	1	4	..	9	..	..	..	3	..	4	3	..	24
Cowsheds	1	1	2	3	4	4	5	9	..	17	12	7	65
Stables	4	2	4	..	6	8	4	7	5	7	6	7	60
Garages	..	2	..	2	..	..	..	..	..	5	1	..	10
Tanneries	..	..	..	3	..	..	1	..	..	2	1	2	9
Retail Shops	3	1	2	1	3	2	2	1	4	11	10	8	48
Refreshment Parlours ..	13	7	1	..	2	1	..	..	..	9	7	5	45
Bakehouses	4	3	6	8	7	8	6	8	11	14	7	13	95
Cookshops ..	3	1	..	..	..	..	..	..	..	4	4	3	15
Restaurants ..	1	..	..	1	..	1	2	..	..	3	..	2	10
Fry Shops	2	..	..	..	..	2	..	..	..	..	..	1	5
Aerated Water Factories	..	1	..	1	1	18	..	..	..	1	1	1	24
Total	93	113	86	99	113	147	95	101	117	227	213	155	1,559

Reports to Water and Sewerage Department.

These arise from defects in water and sewerage fittings which are noted by Sanitary Inspectors in the course of house to house inspection. They are brought to the notice of the Department concerned, as soon as possible.

Reports to Water and Sewerage Department.

Reports.	Jan.	Feb.	Mar.	Apl.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Leaks, defective taps, chokes, &c. ...	37	20	71	83	53	73	92	76	59	55	68	27	714

Anti-Rabies Measures.

Particulars of the work done by the bat-catching unit are contained in the following table :—

Trapping &c. of Bats.

No. of locations inspected for roosts of bats	24,066

Bats Caught.

Artibeus	710
Desmodus	1
Glossafaga	4
Hemiderma	23
Molossus	123
Saccopteryx	44
Total	905

Prosecutions.

Twenty-three cases in respect of breaches of the Public Health Ordinance and bye-laws made thereunder were determined by the City Magistrate, resulting in as many convictions and fines totalling $38.40.

These are set out in the appended tabular statement in greater detail.

Cases determined by the City Magistrate and penalties imposed.

Offences.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November.		December.		Totals.	
	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Cases.	Fines. $ c.	Total Cases.	Total Fines. $ c.
Failing to provide proper dustbins	2	1 20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1 20
Failing to comply with notices requiring abatement of nuisances	....	....	1 2 reprimanded	24 00	....	....	....	....	4 6 reprimanded	4 80	1	1 20		....	....	....	....	....	....	....	....	....	....	....	14	30 00
Exposing foodstuffs for sale at a height not less than two feet from the ground	....	....	....	....	....	....	2	1 20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	4 80	6	6 00
Failing to carry a licence while selling oysters	....	....	....	....	....	....	....	....	....	....	1	1 20	....	....	....	....	....	....	....	....	....	....	....	....	1	1 20
Total....	2	1 20	3	24 00	....	....	2	1 20	10	4 80	2	2 40	....	....	....	....	....	....	....	....	....	....	4	4 80	23	38 40

Report on the Observance of Health Week in the City.

12TH NOVEMBER, 1937.

1.—At a meeting held on the 17th June, 1937, 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 (Alderman Alfred Richards) Chairman.
THE DEPUTY-MAYOR (Alderman the Honourable A. A. Cipriani).
ALDERMAN M. RIGSBY.
COUNCILLOR A. P. T. AMBARD.
THE TOWN CLERK (DR. E. Prada, O.B.E.).
THE CITY ENGINEER (Mr. T. H. Scott, O.B.E.).
THE ACTING MEDICAL OFFICER OF HEALTH (Dr. T. P. Achong) 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. G. H. Masson, O.B.E.).
THE PRESIDENT OF THE DENTAL ASSOCIATION (Dr. G. A. Lyon).
THE PRESIDENT OF THE CHILD WELFARE LEAGUE (Alderman H. A. de Freitas).
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 Director of Medical Services was absent from the Colony, and Dr. H. A. Gilkes served on the Committee as Acting Director of Medical Services. On 1st October, 1937, Dr. R. G. Marcano became Medical Officer of Health for Port-of-Spain, and took the place of Dr. Achong, who continued to serve as a member of the Committee. Mr. T. H. Scott (City Engineer) went on leave in July and his place was taken by Mr. W. J. Anderson, Acting City Engineer.

2.—The Committee met on the 20th August, 1937, and decided as follows :—

(*a*) That Health Week be observed in Port-of-Spain during the week commencing 6th November, 1937.

(*b*) That the programme of the observance include the following features :—
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.
Free exhibition of Health Films.
Distribution of leaflets on health subjects.
Physical drill displays.
Opening of public institutions to inspection by the public.
A Health Exhibition at the Prince's Building.

(*c*) That the following members, with power to co-opt such other persons as they may think fit, 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 Acting Medical Officer of Health (Chairman), the Acting Director of Medical Services, the Director of Education, the Deputy-Mayor (Captain the Honourable A. A. Cipriani), the President of the Child Welfare League, Alderman M. Rigsby, the President of the Dental Association, and the Acting City Engineer, with the Mayor an *ex offfcio* member of the Committee.

(*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.

(*e*) That the following persons be invited to serve on the Organising and Exhibition Committee :—Mr. Gerald Wight, Dr. E. de Verteuil (Medical Officer of Health—North-Western Division), Dr. H. Metivier (Government Veterinary Surgeon), Dr. C. L. Boissiere (Municipal Inspector of Animals and Meat) and Dr. G. R. Marcano.

3.—The Organising and Exhibition Committee held two meetings on the 14th September, 1937, and 25th October, 1937, and made all arrangements for the carrying out of the programme decided upon, particularly with regard to the Health Week Exhibition.

The Health Exhibition.

4.—The Health Exhibition at the Prince's Building was, as in former years, the principal feature of the observance. It was formally opened by His Excellency the Governor, Sir Arthur George Murchison Fletcher, K.C.M.G., O.B.E., on Saturday the 6th November, 1937, at 4.30 p.m., in the presence of a large gathering which included representatives of all sections of the community. His Excellency was received by His Worship the Mayor, who delivered an address of welcome. The Medical Officer of Health, as Chairman of the Organising Committee, in an address to the Governor briefly described the principal features of the exhibition and of the year's Health Week campaign.

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., except on Sunday, 7th November, when it was open from 4 to 6 p.m. only. Large crowds from the City and the Country Districts visited the exhibition daily, despite the inclement weather, and it is estimated that the number of visitors to the exhibition, which in the aggregate must have been several thousands, exceeded last year's attendance by a comfortable margin. The Department of Agriculture again assisted in decorating the Hall, and the Committee is grateful to Mr. E. R. Dean, whose services were kindly lent by the Director of Agriculture, for his assistance in this way.

6.—The scope of the exhibition was limited to a few sections, so as not to unduly crowd the Hall and confuse the minds of visitors, especially children, with too many exhibits. The exhibition comprised the following nine sections :—

Sections.	*By whom arranged.*
1. Nutrition	....The Domestic Science Lecturers of the Department of Education and of the St. Joseph's Convent.
2. Selection of Foods	....The Public Health Department.
3. Child Welfare	....The Child Welfare League.
4. Pure Milk Production and Marketing	....The Government Farm (Department of Agriculture).
5. Role of insect pests, bats, &c., in communicable diseases	The Government Medical Department.
6. Vital Statistics, Charts and Diagrams	....The Public Health Department.
7. Tuberculosis Prevention	....The Tuberculosis Association.
8. Bacteriological	....The Government Bacteriological Department.
9. Sanitary Appliances	....The Public Health Department.

7.—*Nutrition.*—This was the principal section of the exhibition, and was arranged by Miss E. P. Clark, the Domestic Science Teacher at the Government Training College, and by Sister Vincent, the Domestic Science Teacher at the St. Joseph's Convent. The Nutrition Committee, through the Acting Director of Medical Services, assisted in the planning of this section, which together with the section on the Selection of Foods and a model kitchen occupied the centre of the Exhibition Hall.

By means of charts, diagrams, posters and other exhibits, both real and artificial, useful information and advice was given on proper feeding and balanced diets. The protection, preservation and storage of foodstuffs were also dealt with. Aids to digestion were suggested by a number of slogans connected with the preparation, serving and consumption of foods. The ill-effects of under-feeding and improper feeding were also demonstrated. The importance of milk as a food was stressed, and the advantages of goat's milk pointed out.

Much interest was evinced in the figure of a man made from a large assortment of foods, including fresh vegetables, ground provisions and fruit with a poster on it bearing the words " Eat more of me for Health and Strength ".

A model kitchen was constructed not only for the purpose of giving valuable instruction in the arranging and furnishing of a kitchen, but also for giving actual demonstrations in preparing and cooking certain foods, and this was done regularly every evening by students of the domestic science classes of the Government Training College and of the St. Joseph's Convent. A number of stoves which could be procured or made locally at a cost within the means of small wage-earners, were also exhibited at the kitchen.

8.—*Selection of Foods.*—This section, arranged by the Public Health Department, 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, like flour, 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.

9.—*Child Welfare.* This section, arranged by the Child Welfare League, dealt with the teaching of mothercraft, and by means of charts, diagrams, posters, models and other exhibits illustrated the growth of the Child Welfare League in Trinidad and the decline in the infant mortality in the Colony, demonstrated the proper feeding of expectant and nursing mothers and of children of various ages, and stressed the advisability and advantages of breast-feeding for babies. A model of a day nursery with a children's playground attracted particular attention.

10.—*Pure Milk Production and Marketing.*—At this section, arranged by the Government Farm under the supervision of the Government Veterinary Surgeon, Dr H. Metivier, some effort was made to popularize the use of milk as a food. Cleanliness in the production and sale of milk was particularly emphasized. 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 strain 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.

11.—*Role of insect pests, &c., in communicable diseases.*—This section was organised by the Medical Department, and was under the supervision of Dr. E. de Verteuil, the 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 country visitors as cases of ankylostomiasis are uncommon in the City.

(*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 equipment used in anti-rabies work in and around the City was exhibited, and the extent of the survey and control measures undertaken by the authorities demonstrated. Some of the exhibits at this stall were supplied and arranged by the Government Bacteriologist and his staff.

12.—*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 19 years and the encouraging results which have followed the activities of the health authorities.

13.—*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. The need in the Colony for a Sanatorium, Preventorium, a Working Colony and an After-care Committee was brought to the notice of the public. With the assistance of Dr. G. Pimm, the Government Radiologist, X-ray pictures showing normal lungs, lungs affected by Tuberculosis in the early stages, and lungs affected by Tuberculosis in an advanced stage, were on view.

14.—*Bacteriological.*—This section was arranged by the Government Bacteriologist, Dr. J. L. Pawan, and his staff. There were exhibits of specimens of round worms and tape worms, and of various human organs affected by certain diseases; exhibits showing the reaction to the medium used in the examination of water and to the Wasserman test for syphilis; and exhibits showing the various stages in the making of typhoid vaccine. Specimens of the Tuberculosis and Malaria bacilli were on view under the microscope.

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.

Leaflets and Posters.

16.—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. Much 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. Altogether about 100,000 leaflets were distributed.

Some very instructive posters were obtained from the Health and Cleanliness Council, and these were by the kind courtesy of the Editors of the *Trinidad Guardian* and the *Port-of Spain Gazette*, and also of the Trinidad Electricity Board put up on their various notice boards in the City.

References in Churches.

17.—Through the kind co-operation of the Heads of the various religious denominations in the City appropriate reference 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, 7th November. The Committee are grateful for the assistance rendered in this way year after year by the clergy.

Lectures and Addresses.

18.—Through the kind co-operation of the Education Department school children over the age of twelve from the elementary and intermediate schools of the City were grouped together at convenient centres and addressed on health subjects by medical practitioners. It is estimated that about 4,000 children were instructed in that way. The following is a list of the lectures given :—

Lecturer.	*Schools.*	*Centre.*
Dr. A. G. Francis	Nelson Street Girls' R.C., Nelson Street Boys' R.C., Eastern Government Boys' and Girls', Bethlehem R.C. and Piccadilly E.C.	Nelson Street Girls' R.C. School.
Dr. G. R. Marcano	Pembroke Street Intermediate R.C., St. Rose's Intermediate R.C., Quarry Street E.C., Calvary R.C., Rose Hill R.C. and Escallier Land E.C.	Pembroke Street Intermediate R.C. School.
Dr. M. Gosden	Tranquillity Girls' Government Intermediate, Newton Girls' R.C., St. Vincent Street E.C., Duke Street E.C. and Sacred Heart Girls' R.C.	Tranquillity Girls' Government Intermediate School.
Dr. J. Cook	Tranquillity Boys' Government Intermediate, Newtown Boys' R.C., Woodbrook E.C., Gaines Normal A.M.E., Woodbrook Intermediate R.C. and Woodbrook C.M.	Tranquillity Boys' Government Intermediate School.
Dr. C. L. Joseph	Belmont E.C., Belmont Boys' and Girls' R.C., Belmont Methodist and Belmont Intermediate R.C.	Belmont E.C. School.
Dr. P. L. Lai-Fook	Park Street Boys' R.C., Gloster Lodge Moravian, Western Boys' R.C., Moulton Hall Methodist and Richmond Street E.C.	Park Street Boys' R.C. School.

Lectures were also given to the following Associations or Institutions :—

The Trinidad Labour Party, by Dr. D. R. Huggins at Liberty Hall (Prince Street) on Wednesday, 10th November at 8.30 p.m.

The Constabulary, by Dr. A. R. McLean at Constabulary Headquarters on Friday, 12th November at 4 p.m.

The Literary Club Council, by Dr. C. L. Joseph at the Royal Victoria Institute on Friday 12th November at 8.30 p.m.

The Committee are very grateful to those medical practitioners who gave their services as lecturers. They however regret that great difficulty was experienced in obtaining the services of desired number of lecturers, and that the proposed lectures to the Salvation Army and to the Secondary schools in the City had to be abandoned for want of lecturers.

Exhibition of Health Films.

19.—As in past years the showing of health films free of charge to the public at Woodford Square was one of the principal features of the Week's observance. Four shows were given on Saturday, Tuesday, Wednesday and Friday the 6th, 9th, 10th and 12th November, and the showing was as hitherto in the capable hands of Mr. L. Tucker. The Medical Department kindly lent the films in their possession, including a "Nutrition" film which was shown for the first time to the public of Port-of-Spain. This film dealt with an investigation carried out in England into the question of nutrition, and made out a strong case against mal-nutrition and under-nourishment of the nation. A film entitled "Consequences" kindly loaned by the National Association for the Prevention of Tuberculosis of England showed that as a consequence of lack of proper sleep and rest, hurried meals, overwork, &c., resistance against Tuberculosis was lowered and that Tuberculosis in the early stages was curable with proper treatment. The "Nutrition" film and "Consequences" were shown each night and the programmes also contained other health films shown at previous observances. Newsreels, lent by Mr. Tucker, and comic and educational films, kindly lent by the Metro-Goldwyn Mayer of the West Indies Company, completed the programmes and relieved their seriousness.

Judging from the large and attentive crowds from City and its environs who attended the shows one may readily assume that much valuable information and instruction was able to reach thousands in this way. The enthusiasm of the public over these shows and their large attendances have always been a source of encouragement and gratification to the Committee.

During Health Week the Globe Theatre showed "Damaged Lives", a very fine film which dealt with Venereal Diseases, and the Committee greatly appreciate this action of the management of the Globe Theatre.

Inspection of Institutions.

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

Reservoirs and Pumping Stations	....Daily between 7 a.m. and 5 p.m.
The Tuberculosis Dispensary	....Daily between 9 a.m. and 1 p.m.
The Abattoir	....From Monday, 8th to Friday, 12th November between the hours of 9 a.m. and 4 p.m.
The Stephens Mothers' and Infants' Clinic	....On Monday, 8th and Friday, 12th November between the hours of 1 and 3 p.m.

Physical Drill.

21.—A display of physical drill, which was very much appreciated, was given by the Constabulary at the Prince's Building on Friday, 12th November at 5 p.m. The Committee are grateful to the Constabulary for their very fine display.

Child Welfare League.

22.—In addition to the section at the Health Week Exhibition the Child Welfare League invited the public to visit the Stephens Clinic and see its work on Monday, 8th and Friday, 12th November between the hours of 1 and 3 p.m. and also arranged the following lectures, &c., at the Stephens Clinic :—

Tuesday, 9th November ....Lecture to nurses, midwives and voluntary workers by Dr. D. R. Huggins at 5 p.m.
Wednesday, 10th November....Talk to mothers by Miss M. I. Ballachey at 3 p.m.
Thursday, 11th November ....Conference of delegates from branches and members of Executive Committee from 2.30 to 5 p.m. with an interval at 3.30 p.m. for refreshments.

Sanitary Inspectors Conference.

23.—The Sanitary Inspectors Association held a conference during Health Week at the Royal Victoria Institute on Wednesday, 10th November. The morning session took place at 9.30 a.m., and the afternoon session, to which the public was invited, took place at 2 p.m.

Other Matters.

24.—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 all the various Government Departments for assisting 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 gladly record their appreciation of the valuable help rendered by the Press who kindly published free of cost all notices in connection with the observance of Health Week, as well as reports, in some cases verbatim, of the lectures and addresses given during the period. These publications served to remind the public, and to keep them informed of what was taking place, and helped to focus the attention of the public on health matters during the week.

25.—The general impression was that this year's successful observance of Health Week, particularly the health exhibition, was one of the best ever carried out in Port-of-Spain, and that the attendances both at the Exhibition and at the free film shows were larger than in past years.

26.—The following was the programme carried out :—

Saturday, 6th November.

Health Exhibition at the Prince's Building, 4.30 to 6 p.m. and 8 to 10 p.m.
Exhibition of Health films at Woodford Square, 8 to 10 p.m.
Distribution of leaflets.
Opening of institutions to inspection by the public.

Sunday, 7th November.

References to Health Week in Churches and Sunday schools.
Health Exhibition at Prince's Building, 4 to 6 p.m.

Monday, 8th November.

Health Exhibition at Prince's Building, 4.30 to 6 p.m. and 8 to 10 p.m.
Lecture by Dr. R. G. Marcano at Nelson Street Girls' R.C. School at 2.30 p.m.
Distribution of leaflets.
Opening of institutions to inspection by the public.

Tuesday, 9th November.

Health Exhibition at Prince's Building, 4.30 to 6 p.m. and 8 to 10 p.m.
Exhibition of Health films at Woodford Square, 8 to 10 p.m.
Lecture by Dr. A. G. Francis at Pembroke Street Intermediate School at 2.30 p.m.
Lecture by Dr. M. Gosden at Tranquillity Girls' Intermediate School at 2.30 p.m.
Distribution of leaflets.
Lecture to nurses, midwives and voluntary workers at the Stephens Clinic by Dr. D. R. Huggins at 5 p.m.
Opening of institutions to inspection by the public.

Wednesday, 10th November.

Health Exhibition at Prince's Building, 4.30 to 6 p.m. and 8 to 10 p.m.
Exhibition of Health films at Woodford Square, 8 to 10 p.m.
Lecture by Dr. J. Cook at Tranquillity Boys' Intermediate School at 2.30 p.m.
Talk to mothers at the Stephens Clinic by Miss M. I. Ballachey at 3 p.m.
Lecture to Trinidad Labour Party at Liberty Hall (Prince Street), by Dr. D. R. Huggins at 8.30 p.m.
Sanitary Inspectors Conference at Royal Victoria Institute—Morning Session at 9.30 a.m. Evening Session at 2 p.m.
Distribution of leaflets.
Opening of institutions to inspection by the public.

Thursday, 11*th November*.
Health Exhibition at Prince's Building, 4.30 to 6 p.m. and 8 to 10 p.m.
Lecture by Dr. C. L. Joseph at Belmont E.C. School at 2.30 p.m.
Child Welfare League—Conference of delegates from branches and members of executive committee at Stephens Clinic at 2.30 p.m.
Distribution of leaflets.
Opening of institutions to inspection by the public.

Friday, 12*th November*.
Health Exhibition at Prince's Building, 4.30 to 6 p.m. and 8 to 10 p.m.
Exhibition of Health films at Woodford Square, 8 to 10 p.m.
Lecture by Dr. P. L. Lai-Fook at the Park Street Boys' R.C. School at 2.30 p.m.
Lecture by Dr. A. R. McLean at Constabulary Headquarters at 4 p.m.
Lecture by Dr. C. L. Joseph to the Trinidad Literary Club Council at the Royal Victoria Institute at 8.30 p.m.
Physical Drill display by the Constabulary at the Prince's Building at 5 p.m.
Distribution of leaflets.
Opening of institutions to inspection by the public.

27.—For the purposes of the entry of the Council into the competition for the Bostock Hill Memorial Challenge Shield 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.

Reports, 1937.

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

1. Regular.

(*a*)	Weekly.—Consular Sanitary Reports (U.S. Consulate)	52
(*b*)	Monthly.—Health of the Urban Sanitary District of Port-of-Spain and the work of the Sanitary Staff	12
(*c*)	Quarterly.—Classification of Causes of Deaths	4
(*d*)	Progress.—Health of the City for 9 months to 30th September, 1937	1

2. Special.

General Matters.

(i)	Outbreak of infantile paralysis in the City	2
(ii)	Use of footpath in front of Town Hall as dormitory	1
(iii)	Seizure of sugar cakes from home of typhoid case	1
(iv)	Abolition of " Friday Night " market at South Quay	2
(v)	Sterilization of tanks on water boats	1
(vi)	Outbreak of chicken pox at Belmont Orphanage	1
(vii)	" Walk Out " by scavenging gang of Eastern Market	1
(viii)	Improvements of Carr Place, Belmont	1
(ix)	Juvenile typhoid fever	1
(x)	Cessation of scavenging of City through labour unrest	1
(xi)	Seasonal prevalence of mosquitoes	1
(xii)	Incidence of typhoid fever in the City	2
(xiii)	Seizure of shaving brushes suspected of anthrax infection	1
(xiv)	Ventilation of cocoa stores in the City	1
(xv)	Discovery of anthrax bacillus in shaving brushes	1
(xvi)	Outbreak of food poisoning at St. Ann's Mental Hospital	1
(xvii)	Lack of accommodation and equipment in the Public Health Department	1
(xviii)	Enforcement of Sale of Foodstuffs Bye-laws	1
(xix)	Unsound foodstuffs surrendered for destruction	1
(xx)	Unusual prevalence of flies at Belmont Constabulary Station	1

Housing.

(xxi)	Premises in Block No. 1 of Slum Clearance Area	1
(xxii)	Procedure under Slum Clearance Ordinance, 1935	1
(xxiii)	Co-operation of Port-of-Spain Local Health Authority in Housing Exhibition by Royal Sanitary Institute....	1
(xxiv)	Service of nuisance notices on owners of premises in Slum Clearance Area	2
(xxv)	Housing conditions in the City	1
(xxvi)	Survey of Slum Clearance Block No. 1	1
(xxvii)	Visit to Slum Clearance Area by His Excellency the Governor	1
(xxviii)	Photographs of City Slums and Municipal Workers' Homes for Housing Exhibition of Royal Sanitary Institute	1
(xxix)	Dangerous building at 6A, Stanislaus Place	1
(xxx)	Conversion of kitchen at 6, Lovell Place into dwelling room	1
(xxxi)	Insanitary barracks and other premises....	31
(xxxii)	Proposed new buildings at 91-93, St. Vincent Street	1

3. Leases in Woodbrook.

Reports on applications for leases of building lots in Woodbrook	46

4. New Buildings.

Reports on plans for new buildings	313

5. Building Alterations and Repairs.

Reports on notices of alterations and repairs to buildings	47

6. Building Operations.

Number of premises in which building operations were in progress reportedto the City Engineer's Department	290

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 public health matters came up for discussion.

Financial.

The expenditure incurred by the Public Health Department during 1937 amounted to $42,092.96, as compared with $39,580.39 in the preceding year; and the revenue collected $393.06, as compared with $641.54 in 1936.

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

Income.	$ c.
Contribution from Government	16,080 00
Contribution from General Purposes	23,870 59
Sale of Disinfectants	53 76
Disinfecting cesspits	150 00
Cleansing eaves gutters	11 28
Sale of Milk Badges	51 60
Dairyman's Licences	30 60
Milk Vendor's Licences	42 96
Fines	38 40
Miscellaneous Receipts	10 62
Vendor's Licences—Sale of Oysters and other Shell Fish	3 84
From Woodbrook Estate and General Purposes for oiling pools and drains	1,749 31
	$42,092 96

Expenditure.	$ c.
Staff	21,965 17
Anti-Rat Measures :	
Trapping and destroying rats	3,461 36
Purchase of materials	316 00
Purchase of rats	125 00
Anti-Mosquito Measures :	
Inspecting eaves gutters	4,012 80
Oiling of Pools and drains	1,749 31
Disinfection :	
Oiling cesspits	3,392 80
Spraying premises with chemicals	931 70
Purchase of disinfectants for sale to public	95 64
Other Expenditure ;	
Purchase of milk badges	22 35
Furniture	27 20
Purchase of bicycle	60 00
Stationery, Books, &c.	185 04
Printing	631 75
Contingencies	401 50
Telephones	159 90
Notification of Infectious Diseases	142 56
Messenger's Uniform	47 00
Postage	17 15
Dissecting rats (Medical Department)	91 00
Anti-Rabies Measures	4,257 73
	$42,092 96

Changes in the Staff.

The following changes took place in the Staff of the Public Health Department during the year 1937 :—

1. *Resignations :*
   (*a*) Resignation of Dr. George H. Masson, Medical Officer of Health, as from 1st April, 1937, after 21 years' service.
   (*b*) Resignation of Mr. Henry Thorne, Sanitary Inspector, as from 1st April, 1937, after 21 years' service.

2. *Appointments ;*
   (*a*) Appointment of Dr. Tito P. Achong as acting Medical Officer of Health, as from 1st April to 30th September, 1937.
   (*b*) Appointment of Mr. Ernest Boxill as Sanitary Inspector, as from 1st April, 1937.
   (*c*) Appointment of Dr. George Roderick Marcano as Medical Officer of Health, as from 1st October, 1937.

3. *Promotions :*
   Mr. W. G. Williams, 2nd Grade Sanitary Inspector, promoted to 1st Grade, as from 1st April, 1937

Leave of Absence.

Vacation Leave :

G. Charles	....Sanitary Inspector	....4th January to 28th March.
J. A. Wood	.... do.	....11th January to 7th February.
C. C. Assing	.... do.	....15th February to 14th March.
H. Thorne	.... do.	....1st to 31st March.
W. R. Smith	....Clerk to M.O.H.	....8th March to 18th April.
M. Hinkson	....Sanitary Inspector	....30th March to 10th May.
G. F. Ashe	.... do.	....3rd May to 22nd August.
J. W. Parris	.... do.	....9th June to 31st August.
J. E. Ferreira	....Chief Sanitary Inspector	....14th June to 26th September.
I. Wilson	....Sanitary Inspector	....15th June to 9th August.
T. Christian	....Messenger	....3rd August to 27th September.
F. B. Rivers	....Sanitary Inspector	....4th to 24th October.

Sick Leave :

J. A. Wood	....Sanitary Inspector	....3rd to 12th May.
I. Wilson	.... do.	....4th to 10th May.
G. Charles	.... do.	....28th May to 6th June.
E. Boxill	.... do.	....30th September to 9th October.
W. G. Williams	.... do.	....22nd to 30th November.

Acknowledgments.

My sincere and grateful thanks are due to His Worship the Mayor, Aldermen and Councillors for the ready and willing manner in which they gave their support and encouragement in the various matters affecting the public health which, I considered it my duty to bring to their attention.

I wish to place on record and commend to the favourable notice of the Local Authority the valuable services rendered by each and every member of the sanitary and clerical staff under the expert and wise guidance of their respective heads, Mr. J. E. Ferreira, CERT.R.S.I., and Mr. W. R. Smith.

I am particularly grateful for their active and ready co-operation and for the energy they infused into their work in their efforts to make the City of Port-of-Spain a healthier and happier place to live in.