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

ADMINISTRATION REPORT

OF THE

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

FOR THE YEAR

1961

BY

Dr. RODERICK MARCANO, O.B.E. (Mil.), M.D. (Lond.), M.R.C.P. (Lond.), D.P.H. (Lond.)
MEDICAL OFFICER OF HEALTH

With the Compliments

of

The Medical Officer of Health

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

1960-1961

THE CITY COUNCIL

His Worship the Mayor, Councillor Edward C. Taylor, J.P.

Deputy Mayor:

Councillor A. Sabga-Aboud

Aldermen:

William Dolly

Dudley Cobham

Kenneth Fletcher

Fitzgerald Blackman

Mrs. Kathleen Warner

Councillors:

J. Abraham

Miss Dorothy Bentham

I. Merritt

A. Hadeed

G. Guy

J. Hamilton Holder

C. A. Roach

L. G. Rostant

D. J. Mahabir

W. E. Clarke

C. B. Tywang

Mrs. Z. Bansfield

Miss A. Harper

Administration Report of the Public Health Department of the City of Port-of-Spain, Year 1961

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PUBLIC HEALTH DEPARTMENT,
TOWN HALL,
PORT-OF-SPAIN,
TRINIDAD, W.I.
16th October, 1962.

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 Sanitary Authority, the Annual Report on the health and sanitary condition of the Urban Sanitary District of the City of Port-of-Spain, for the year ended 31st December, 1961.

Two events of outstanding importance to the Public Health Department of the City of Port-of-Spain took place in the year 1961, for which the Department desires to express its profound gratitude. I refer to the official opening of the New Town Hall which event took place on the 27th October, 1961 and the actual moving, on the 18th December 1961, into new quarters in the new Town Hall of the Public Health Department, which had eked out a semi-animated existence in the southern section of the first floor of the Port-of-Spain Corporation Electricity Board and in an outbuilding situated in the compound at the corner of Park and Frederick Streets, for a period of approximately three years.

The other half of the Public Health Department which comprises the bulk of the non-pensionable staff and is made up of operatives in the Anti-Rat Unit, the Anti-Mosquito Unit, the Anti-Rabies Unit, the Disinfection Unit, and the Public Conveniences Unit continues to be housed at 187A Tragarete Road, until such time as it is possible to construct the new quarters that are proposed in the Kew Place Area for the accommodation of the Central Division of City Engineer's Department and the above mentioned section of the Public Health Department.

The quarters in the new Town Hall into which the pensionable staff of the Public Health Department has moved are excellent quarters, properly designed and efficiently executed, and represent a long cherished dream come true. For years we had been clamouring for new quarters designed on modern lines and providing ample space for the various activities of the pensionable staff and we are fortunate to be able to state that at long last we have succeeded in getting what we desired and every officer in the Department is satisfied and contented.

The other event that has given us great satisfaction is the acceptance by Government of the Report by the Organisation and Methods Division of the Ministry of Finance of Central Government. This Division had the year before enquired, minutely into the working and organisation of the Department and had prepared a Report which with a few minor modifications had been accepted by the Council and had been submitted to the Ministry of Local Government for the approval of Government. In October of the year under report a reply was received by the Council that Central Government had accepted the Report and that we were free to go ahead with certain improvements in the staff and working of the Department that the Report had recommended. These changes were implemented on November 1st, 1961, and as I write this Annual Report the officers concerned are now being confirmed in their new posts.

The moving into new quarters in the new Town Hall and the implementation of the Organisation and Methods Report have given a new lease of life to the Public Health Department and we feel now that we can settle down and tackle the task of maintaining and improving the public health with determination and vigour and with the prospect of a more substantial degree of success.

Another event stirs us and gives us great hope and confidence that one of the major projects for the City, that we have been clamouring for every year that an annual report is being written for presentation to the Local Sanitary Authority, is about to materialise. I refer to the fact that all surveys, plans, and proposals for the sewering of the remaining unsewered portion of the City have been completed and now await implementation only, which we are most sanguinely assured will take place at the commencement of the new year 1962. And indeed as I write this report the Lock Joint (American) Company,

Trinidad is busy actively executing the sewerage project with teams which are working simultaneously in Cascade and St. Ann's; in Belmont; in Diego Martin; and in San Fernando. When this work is completed in so far as the City is concerned and the various premises connected up with the sewerage system, and the privy cesspits and septic tanks and soak-away pits eliminated, the vault of heaven will be rent with the grateful cries that will ascend to thank God for the courage and perseverance of those in authority who, in spite of opposition, were determined to see this project executed. I must record the fact that I had already made up my mind that my term of office as Medical Officer of Health would have come to an end without seeing this fond dream of my early public health days come true.

In the year under report a certain amount of extraordinary work was executed, work which was listed in the Five Year Development Programme and which is being undertaken in accordance with a fixed plan to repair and improve footways and means of access, to widen and pave streets and lanes, to drain and level off watercourses and canals, to get rid of ruts and potholes in existing roadways, to round off corners and to increase the size of lots especially in the Gonzales Place property which is owned by the Corporation.

I am happy to be able to record that the works which were being undertaken in the Carr Place—St. Barbs Road area have now been completed and drainage and accessibility have been greatly ameliorated in this particular area. This is, of course, additional to the works of upkeep and maintenance that are recurrent from year to year and which are executed as a matter of routine in the day-to-day work of the Council in the various sub-districts of the City.

There is, of course, very much more to be done to fill the various gaps and make good the many deficiencies that have occurred in the City during the years when the financial position of the Council was, to say the least, precarious, and when as a result extraordniary and a good deal of recurrent works had to be curtailed down to the barest minimum in keeping with the financial state of the Council, but the leeway is being surely, if gradually, made good by works which form part and parcel of a Five Year Development Plan, and which has been drawn up specially to ameliorate the state of health and sanitation of the Urban Sanitary District.

The health and sanitary condition of the City remained good during 1961, and except for an outbreak of chicken pox, 254 notifications of which were received in the Department, no other infectious disease attained epidemic proportions and the figures showed that there was a general decline in the number of cases notified to the Public Health Department. In fact it may be stated that during 1961 there was good reason for satisfaction: the health and sanitary condition of the Urban Sanitary District not only did not deteriorate but some improvement was apparent; the various units of the Department functioned efficiently and conscientiously and the services for which they are responsible were maintained at a satisfactory level; and plans were in full swing for replacing the unsatisfactory Maraval Water Supply by water from sources that could not so readily be impeached and the sewering of the remaining unsewered portions of the City was imminent.

The vital statistics for 1961 presented a more encouraging outlook when compared with those for 1960. The total number of live births was 2610 giving a birth rate of 2647 per 100,000 population, and the total number of deaths 952 giving a death rate of 966 per 100,000 population, as compared with 2498 births and 1040 deaths giving a birth rate and death rate of 2655 and 1105 per 100,000 population for the year 1960.

Deaths under one year totalled 116 as compared with 141 in 1960 giving an infant mortality rate of 44.44 per 1000 live births as compared with 56.44 per 1000 live births in 1960. The maternal mortality rate worked out to be 1.91 per 1000 live births, as compared with 2.80 per 1000 live births in 1960.

Deaths from the notifiable infectious diseases were practically the same as in 1960, 97 deaths as compared with 98 deaths in 1960. Deaths from Diarrhoea and Enteritis declined down to 41 as compared with 57 in 1960, the East Dry River Sub-district and the Belmont Sub-district, as can confidently be expected, furnishing the bulk of these deaths, 16 and 11, respectively.

Deaths from cardiac and vascular diseases once more again in the year under report exacted the highest toll of mortality of all diseases in the Urban Sanitary District, but there was a welcome decline in mortality in 1961, 212 as compared with 260 in 1960, and deaths from cancer and other malignant diseases showed a decline from 123 in 1960 to 107 in 1961.

These statistics cannot be considered unsatisfactory and, speaking generally, it is surely pleasing to note the air of quiet satisfaction and of heartening confidence that pervades the Department, as the light of a bright day and of steady sunshine is beginning to dawn, for the benefit of the public health of the City. There is the disposition and the determination to tackle all the major problems that bear on the health and sanitary condition of the City to which I have been referring in every annual report that I have written during the past fifteen years, seeing that the execution of many of these major projects is actively under way at the moment I write this report.

It cannot be long now before the Mucurapo lots are laid out, before the Transport Train is moved out of Woodbrook to an area south of Wrightson Road, and near the Mucurapo Pumping Station, and the lands of the Transport Train laid out into lots for dwelling houses, before the Old Leper Asylum lands are converted into a fully developed Building Area, and the Cocorite Swamp reclaimed with the provision of building space so urgently needed to relieve the congestion and overcrowding of the City Proper, which can now be fairly stated to be at its very worst.

I must again record my grateful thanks to His Worship the Mayor, who is Chairman of the Local Sanitary Authority, and to the Aldermen and Councillors for the active interest they exhibit in all matters that bear on the state of public health, as demonstrated by the number of questions asked, the enquiries made, and the lively discussions that take place at the mid-month Committee meetings of the Local Sanitary Authority. Aldermen and Councillors never fail to report to the Department complaints which they receive as to existence of nuisances and their desire to have them abated for the benefit of the burgesses. They act as liaison officers between the Department and the general public, and the co-operation that the general public exhibits in matters that affect the public health is in no small measure due to the influence and understanding of the elected representatives.

For this we of the Public Health Department are truly grateful.

Thanks are due to my colleagues in the other Departments of the Corporation: the Town Clerk, who is also Secretary of the Local Sanitary Authority, the City Engineer, the Waterworks and Sewerage Engineer, the City Treasurer, and the City Assessor, the active support and ready help of whose departments were always forthcoming and who contributed in large measure to whatsoever degree of success attended the working of the Public Health Department in the year under report.

Finally I have to commend the work of the staff of the Public Health Department as a whole, pensionable as well as non-pensionable, for the success that has attended their efforts and for a year's work well done.

I have the honour to be,

Sir,

Your obedient servant,

RODERICK MARCANO

Medical Officer of Health.

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT

There is very little that is new to record under this heading that has not been referred to in previous reports and the position remains substantially the same as has been detailed in last years's report.

The size and acreage of the City remains the same, viz. 2550 acres, but the population has risen to 98690, the estimated figure, representing about 11.32 percent of the mean population of the Territory which is now estimated to be 871050 souls. It is clear that the density of the population is rising and it now works out to be on the average 39 persons per acre.

I have already referred to the fact that pieces of extraordinary work are being executed in the various sub-districts of the City in keeping with the requirements of the Five Year Development Plan and that the landscape in the East Dry River Area particularly and in certain parts of St. James and Cocorite is surely, if slowly, undergoing a change for the better. The works that I referred to in my last annual report that were taking place in the St. Barbs-Carr Place area have now been completed, and drainage and accessibility from St. Barbs Road to Belmont Circular Road has been thereby increased, storm water finding its way easily by built-up channels to the Belmont Circular Road Area and the small narrow roads and the primitive earthen tracks that once characterised this area have been widened, levelled off, and paved with a gradual decline from St. Barbs Road to Carr Place, and then to Belmont Circular Road.

The accumulation of storm water that occurs at the extreme end of the City below the Flyover Bridge and in the vicinity of the Shirt Factory at the extreme end of South Quay whenever the La Peña Ravine floods due to the heavy flow of storm water, continued during the year under report because of the fact that the drainage system that was planned for this section of the City by the laying down of a large underground drain discharging to the East Dry River has not yet been completed, work on the project proceeding at a much slower pace than anticipated.

Very little can be reported here about Shanty Town and John John: the position has remained in statu quo due to the fact that the flats which were to be erected in the Hirondelle Street Area of Morvant to accommodate the residents of these areas whilst slum clearance was proceeding here failed to materialise, but our hopes rise high that it would not be long before this very necessary piece of work is accomplished.

Great activity is taking place in the Mango Rose Area, the former residents of this slum having been given alternative accommodation in the Malick and Morvant Area, the hovels and shacks in this area have been demolished and four storey and nine storey flats were actually in the process of being erected during the year under report, and at the time I write are almost completed.

In addition, in the old Leper Asylum area of Cocorite, to the rear of the Seventh Day Adventist Community Hospital, flats, which were planned some time ago, were beginning to raise their heads to the sky at the end of the year under report, and again at the time I write are nearly ready for occupation.

We must record the fact that whilst in the year under report works to improve the natural and social conditions of the Urban Sanitary District were not undertaken to the extent that is necessary to rid the City of the many unsanitary features that affect it, some extraordinary work has been taking place gradually and methodically, which represents an imrovement on the state of affairs that existed five to ten years ago.

SANITARY CIRCUMSTANCES

Water

The water supply to the City of Port-of-Spain is, at the moment I write, twelve and three quarter million gallons per day of which ten million are derived from Corporation sources and two and three quarter million from Central Government Sources. This is not an unsatisfactory state of affairs when one considers that the minimum daily requirement for normal usage is twelve million gallons per day.

There has been a general all round increase in yield both on the part of the river sources and on the part of the well sources that are under the control of the City, and Central Government have been able to increase the supply to the City from the El Socorro Wells via Picton Reservoir, and by the 8" bypass from the Government Wharf Wells and

the Dock Road Well. This means that more water from other sources is available to Central Government for supplying their own areas in the eastern, central, and southern parts of the Territory. To this extent, therefore, the position is satisfactory and the putting into supply of other Government sources has had a direct effect on the supply to the City in that an increased amount of water is being thereby made available.

Though, however, the Cocorite Wells and the St. Clair Well, the three Savannah Wells and the two King George V Park Wells, and the Docksite Wells handed over to the City in exchange for the Diego Martin Wells have all been functioning during the year under report, we have not yet been able to abandon the unsatisfactory river sources, the Maraval Water Supply, the St. Ann's Water Supply and the Cascade Water Supply; we had hoped that we would have been in a position to give some indication, at least, as to how long it would be before these sources could be eliminated but such was not the case and at the moment I write, though the auspices are brighter in so far as this particular aspect of the water supply is concerned, it is not possible to say with any degree of precision when the date of the abandonment of the unsatisfactory Maraval Supply will take place, though it is generally expected that this happy event will be "consummated" by the end of the rainy season in the year 1963.

So all the anxieties and headaches attendant upon the retention of these river sources persists and all the precautions and prohibitions especially in regard to new buildings must continue to exist and to be applied if the possibility of a major catastrophe is to be avoided, in spite of the existent pressure and the persistent demands of land owners and prospective builders and contractors who have holdings in or are interested in developing the areas in question. It means also that the purification system at these sources must be kept at concert pitch and be meticulously supervised in order that a safe product be supplied to consumers. Floodings of these sources have occurred in the early part of the year under report but we have been able to cut off the supply, provide an alternative supply, and clean and disinfect the reservoirs in question without visiting undue hardship on the consumers in the areas affected.

The well sources continued their supply uninterruptedly in the year under report without much diminution of their volume even at the height of the dry season. There were occasions when one or other of these well supplies, especially King George V Park Well No. 2 and Savannah Well No. 3 have had to be cut out of circulation because of various difficulties associated with the pumping machinery or the quality of the water supply, but we have always been able to resolve these difficulties and to put them into circulation again.

No attempt has yet been made to deal with the Distribution System which I need hardly state needs extensive overhauling and great expansion to meet the needs of the increasing population, seeing that the existing system is an old one laid down many years ago when the size and population of the City was almost one half of what it is today, but this is an undertaking of major proportions and we shall have to wait a little longer before this can be tackled.

Bacteriological Examination of Water Supply 1961.

Where Derived	Result of Examination				
	No. of Samples taken	Safe	Unsatisfactory (Presumptive B. Coli present)	Not safe without further treatment (Non-faecal B. Coli present)	Not Safe without further treatment Faecal type B. Coli present)
*Cocorite Wells	88	83	4	—	1
Docksite Well No. 1 (untreated)	43	37	6	—	—
Docksite Well No. 2 (untreated)	43	42	1	—	—
Wharf Well No. 3 (untreated)	47	44	3	—	—
†St. Clair Pumping Station	90	76	12	—	2
‡St. Clair Wells (treated)	30	25	4	—	1
†Maraval Reservoir	44	30	12	—	2
§Cascade Reservoir	85	75	8	—	2
Carried forward	470	412	50	—	8

Standard of Purity: B. Coli absent in 100 c.c.

*Chlorinated, not filtered.
†Filtered after chlorination.
‡Chlorinated before distribution.
§Filtered before chlorination.
‖Filtered before chloramination.

Bacteriological Examination of Water Supply, 1961.—(Cont'd.)

Where Derived	Result of Examination				
	No. of Samples taken	Safe	Unsatisfactory (Presumptive B. Coli present)	Not Safe without further treatment (Non-faecal B. Coli present)	Not Safe without further treatment Faecal type B. Coli present)
Brought forward	470	412	50	—	8
§St. Ann's Reservoir	152	142	9	—	1
Knaggs Hill Reservoir	30	29	1	—	—
Queen's Park Savannah Well No. 1 (untreated) ..	46	46	—	—	—
Queen's Park Savannah Well No. 2 (untreated) ..	39	25	13	—	1
Queen's Park Savannah Well No. 3 (untreated) ..	17	5	10	—	2
King George V. Park Well No. 1 (untreated) ..	36	31	4	—	1
King George V. Park Well No. 2 (untreated) ..	32	28	4	—	—
Laventille Reservoir	41	41	—	—	—
Picton Reservoir	41	41	—	—	—
133, Henry Street	43	40	3	—	—
143, Charlotte Street (Tap)	43	43	—	—	—
General Hospital (Tap)	42	39	3	—	—
†Saddle Road, La Seiva (Tap)	38	33	5	—	—
Masson Hospital (Tap)	42	33	5	—	2
Microbiological Institute (Tap)	44	43	1	—	—
Sanitary Laundry (Tap)	40	35	5	—	—
Furness Withy & Co. (Taps)	65	28	35	—	2
St. James (Taps)	45	36	8	—	1
Woodbrook (Taps)	45	38	5	—	2
City Proper (Taps)	59	44	12	—	3
East Dry River (Taps)	44	35	9	—	—
Belmont (Taps)	43	39	3	—	1
St. Clair (Taps)	44	34	8	—	2
Wells on Private Property—					
Electric Ice Co., 3a, Ariapita Avenue	47	45	2	—	—
Queen's Park Hotel	24	6	17	—	1
	1,612	1,373	212	—	27

Standard of Purity: B. Coli absent in 100 c.c.

§Filtered before chlorination. ‖Filtered before chloramination.
†Filtered after chlorination.

Chemical Examination of Water

Samples Examined by Government Chemist, 1961.

Where Derived	No. of Samples Examined	No. of Samples found safe
Picton Reservoir	43	43
Maraval Reservoir	14	14
Cascade Reservoir	16	16
St. Ann's Reservoir	14	14
Cocorite Pumping Station	5	5
Cocorite Pumping Station (for salinity)	260	260
Docksite Wells	30	30
King George V. Park Wells	16	16
Queen's Park Savannah Wells	23	23
St. Clair Well	11	11
Wharf Well	2	2
Queen's Park Hotel Well	8	8
Docksite Wells (for salinity)	1	1
Perseverance Well	3	3
Total	446	446

Drainage and Sewerage

Port-of-Spain is normally a well drained City because of the gradual slope of the City from north to south and from east to west and whenever heavy downpours of rain affect the City flood waters soon invade all the streets, slipper drains, and underground channels causing an accumulation of several inches on their way to the sea at the southern boundary, but this soon subsides and within an hour or two all the slipper drains, underground channels, and the streets are dry once more.

There are, however, a number of natural water courses that arise from outside the limits of the City and traverse the City and they are the cause of much nuisance whenever

they are flooded by continuous downpours of rain. There is the La Peña Ravine in the eastern limits which causes serious flooding in the Toll Gate, St. Joseph Road and adjoining South Quay Area, obstructing traffic in the lower reaches and causing nuisance to residents in the Clifton Hill, Plaisance Road Area. I had hoped that I would have been in a position to report that the bed of this ravine had been diverted, widened, and paved and the nuisance and obstruction to traffic caused by flooding eliminated, because a comprehensive drainage plan had been drawn up and approved both by the City Council and by Central Government to deal with this matter, but the work which was started at a rapid pace has slowed down considerably, if not completely abandoned, because of difficulty with a sump that was to have collected all the flood waters, from which they would be pumped to the Dry River.

The Santa Barbara Ravine project has now been completed and that has made a great difference to drainage in the Belle Eau Road–Belmont Circular Road Area, and so has the large underground drain in the Cocorite–Harding Place Area which carries storm water arising from outside the City through Harding Place across the Western Main Road to the Sea. Other smaller storm water channels coursing from the St. Barbs Area to the Carr Road Area of Belmont have been dealt with, widened and paved under the Five Year Development Plan, and other areas in the City are being tackled in similar fashion: narrow roads and primitive tracks widened and paved, earthen footways paved and dangerous corners rounded off, all part and parcel of the Five Year Development Plan.

By means of these bits of extraordinary work, small and restricted though they may be, once dangerous areas particularly in the Belmont and East Dry River Sub-districts are being rendered safe, sullage and storm water made to flow in paved channels to fixed outlets, and means of access provided to dwellings which before were engulfed in a topsy turvy insanitary slum area.

In time the whole face of the City especially in these areas, i.e. the Belmont and East Dry River Sub-districts, will have been changed and life will be rendered tolerable and even pleasant. I have stated earlier on in this report that the Sewerage Scheme has started and at the moment I write the work of laying down sewers in streets in St. Ann's and Cascade, in Diego Martin, and in so far as the City is concerned, in the sub-district of Belmont, is proceeding apace. This has meant a good deal of inconvenience to residents because of the open trenches and even, when closed, of the subsidence of the surface of these trenches, of the accumulation of mud and silt in the immediate vincinity of places where work has been executed, the cutting off of water supply to premises, and the inability of the scavenging trucks to traverse the area where work is proceeding, but anything that can reasonably be done to minimise the inconvenience is being done and the inconvenience that has to be endured at the moment is insignificant when compared with the great boon to the inhabitants of the area that will accrue when the scheme is completed. With the elimination of the privy cesspit system which permits faecal matter and often infected faecal matter to be retained in close proximity to dwellings, there will be an immediate reduction in the number of cases of infectious disease especially the bowel-filth diseases like typhoid fever, dysentery, diarrhoea and enteritis such as occured when the sub-district of Woodbrook was sewered in the year 1938. With the reduction and eventual disappearance of this type of infectious disease, with the improved water supply that sewerage entails, with the elimination of the occasional flooding of the area with faecal matter when heavy rain falls, with the disappearance of the foul pervading cesspit odour from privy cesspits cheek by jowl with dwelling houses, the general health and sanitation of these areas will undergo an immediate and marked change for the better and the residents will be able to live in comfort and happiness.

Scavenging and Refuse Disposal

Scavenging and Refuse Disposal are important services committed to the Municipality and these services are executed by the various Divisions and the Transport and Cleansing Unit of City Engineer's Department under the immediate supervision and control of the Overseers and Sub-Overseers of the Divisions and the Additional Engineer on the one hand, and the Manager of the Transport and Cleansing Unit on the other hand.

When all is working well it must be admitted that the City is kept tolerably clean and there are times when the City presents that sweet and sanitary appearance that is the objective aimed at by the Public Health Department.

But the service presents many unsatisfactory gaps which it is the business of both City Engineer's Department and the Public Health Department to eliminate and to which the very best energies of these Departments are directed. As a matter of fact a scheme

has been submitted to the Council by the Public Health Department which would have the effect of eliminating some of the worst disabilities of the existing system by substituting evening sweeping and scavenging for early morning sweeping and scavenging throughout the length and breadth of the City, such as now obtains in the down town area of the City. This scheme would eliminate the necessity of putting out full dustbins early in the morning and of running the risk of their not being emptied because the scavenging trucks have already traversed the area and are not due to return till the early hours of the next morning. Full dustbins would be put out in the evenings and would be emptied by the loaders of the scavenging trucks in the evening. If perchance householders have already retired to bed before the scavenging trucks have had the opportunity to visit the area in which they reside, the bins will be emptied into the scavenging trucks and left outside the premises, empty of their contents and consequently without the possibility of being overturned and scattered on the footway by stray dogs or cats in their search for morsels, bits and pieces, and scraps of foodstuff.

It is a fact that many dustbins are put out for emptying after the scavenging trucks have already passed and gone on their way to the Dump, and as a consequence many dustbins remain unemptied, the scavenging trucks, because of pressure of work, hardly ever returning to the District that they have already traversed.

This scheme is now being given due consideration by the Council and it is hoped that it will be adopted in the near future. In the meantime no stone is left unturned to educate and train the scavenger in the essential requirements of his job and in the qualities of tact, courtesy and understanding when it comes to dealing with the householder and the merchant.

The Sanitary Inspector of the District whose duty it is to see that all premises are provided with a proper dustbin, to explain the nature of the byelaws, and to encourage and exhort the householder and the businessman to comply with the requirements of the Byelaws, continued his efforts in the year under report with results that cannot be considered unsatisfactory.

But there is yet a long way to travel before we can claim that every householder has provided himself with a good and proper dustbin and every merchant has acquired the habit of not dumping refuse on the footway, in the slipper drains, or on the street. This highly unsanitary practice is particularly evident in the Park Street, Henry Street, George Street and South Quay quadrangle of the down-town area and we again appeal to all business people in that area to desist from this highly insanitary practice.

In the year under report a "Keep the City Clean Week" was organised in collaboration with the Junior Chamber of Commerce. This is the fourth year in which the Junior Chamber has joined forces with us and an extensive programme of health education by means of posters, leaflets, bumper strips, by motorcades in each subdistrict of the City, by open air film shows and talks at selected points in the subdistricts, by cinema slides and spot announcements and by a round table broadcast on Radio Trinidad was carried out. The week was held in October from Monday the 23rd of October to Sunday 29th October and we had as usual the active help and ready support of the Chairman of the Local Sanitary Authority and the Councillors of the respective Wards who collaborated with the Public Health Department and the Junior Chamber of Commerce in carrying out a programme which, we felt sure, was an outstanding success while it lasted but which we are convinced should be held two or three times a year, if the message we wish to convey is to sink into the crania of the hard core of chronic offenders in this particular respect.

In my report last year I made mention of the fact that it was high time that the Municipality did procure some up-to-date scavenging trucks, of greater capacity and loaded from the rear and provided with mechanical equipment for compressing the refuse, to supplement, if not entirely to replace, the existing scavenging trucks of comparatively small capacity and which are loaded from the side. I am pleased to be able to report that, at the time I write, two such trucks have been purchased and are doing duty as part and parcel of the mechanical force at the disposal of Transport and Cleansing Unit and already it is becoming clear that these trucks have made a great difference to the amount of refuse carried to the Dump at one loading and the time that is taken in doing the round of scavenging.

The Eastern Dump

The Eastern Dump is now situated in an area of land south of the Beetham Highway

and just beyond the eastern limits of the City. In my last report I referred to the fact that the Eastern Dump on the site in which it was then located was in very close proximity to the Industrial Estate of the Industrial Development Corporation, and that it was certain that it would have to be removed to a point further east. Well indeed and in fact the site of the Dump has been removed to make room for the buildings and institutions of the Industrial Estate, and a site further east has now been found for it, but not so far east as to entail a long haul from the City, and refuse is being dumped, bulldozed into shape and covered with a nine-inch layer of earth, and at the same time land is being reclaimed from the adjacent sea to add to the overall amount of reclaimed land behind the rubble wall which had been erected in this area many years ago. Just as the reclaimed land south of Wrightson Road is now being put to good use by the establishment of commercial projects all along from the Port-of-Spain Wharves area to the Mucurapo Pumping Station area, so I have no doubt that the land that is now being reclaimed by the dumping of refuse in this particular area will be put to good use as soon as it has subsided sufficiently to be used as a commercial area.

By the use of a bulldozer to compress the refuse and put it into position at the advancing seaward edge of the Dump, and by having it covered over with a nine-inch layer of earth before the day's work comes to an end, the possibility of nuisance is eliminated and work on the Dump proceeds apace without being unduly disturbed by the presence of rats and mice or by the breeding of flies and mosquitoes. Of course the inhabitants of adjacent Shanty Town continue their depredations on the Dump by digging and searching and ferreting out salvageable materials, when the day's work has been completed and the workers on the Dump have gone; and fire and smoke occasionally are a source of difficulty, but the damage done by the former is easily repaired the following day, and the latter is usually fairly quickly and successfully brought under control..

SANITARY INSPECTION OF THE DISTRICT

Premises and Occupations controlled by Bye-laws and Regulations.

Food

The Food Inspection Unit of the Public Health Department was fully organised in the year under report as a result of the acceptance by Central Government of the recommendations of the Report of the Organisation and Methods Division of the Ministry of Finance, as adopted by the City Council in June 1960. The Unit now comprises the Deputy Chief Sanitary Inspector (Food), the Senior Sanitary Inspector (Food) and three Grade A Sanitary Inspectors (Food) with the Meat and Other Foods qualification of the Royal Society for the promotion of Health. Together with the Veterinary Surgeon and the Health Education Officer they form a Unit which it is hoped will give greater and more effective stimulus to the question of food inspection and food control. Each officer in this Unit has duties assigned to him which he is to carry out every day and sometimes even at night and the overall planning for, and supervision and control of, the Unit is in the hands of the Deputy Chief Sanitary Inspector (Food) and the Senior Sanitary Inspector (Food).

Already at the time I write it is possible to see some progress in the inspection and registration of food places, in spite of the great difficulties that beset the Unit in so far as the number of old dilapidated and insanitary buildings that are used as shops, restaurants and parlours, the insufficiency and the antiquated nature of the equipment used in the storage, preparation and sale of food, and the conspicuous lack of the knowledge of food hygiene exhibited by the large majority of operatives who work in the food trade, are concerned.

It is clear that we shall not make much headway unless means are found for dealing with these problems, but though the task is a difficult uphill fight for better and more sanitary buildings, more up-to-date equipment, and greater knowledge of food hygiene on the part of the workers in this field, we cannot say that no progress has been made, and we are not completely without hope as to the ultimate outcome. Certain it is that with a system of food inspection at the Port-of-Spain Wharves, less unsound and unsatisfactory food is being discovered on arrival; that all hotels, shops, restaurants, cafés and parlours are being regularly inspected and are being made to realise and appreciate what is expected of them, and more and more itinerant vendors of food in roadside parlours, street barrows, or wayside trays are being visited and inspected and an attempt made to teach them the elementary principles of food hygiene.

I am satisfied that even if we are unable to register these food places and these

itinerant vendors because they have not attained the standard we expect, the lesson of good, clean, safe and wholesome food is gradually sinking in and every effort is being made by all, except the hard core of chronic offenders, to comply. In so far as these latter are concerned we have no other alternative than to resort to the process of the law but we hope to eliminate them altogether and they are being gradually forced out of the trade.

It is hoped in the coming year to make further use of the Health Education Officer and the Health Education Unit in this campaign and to get the Food Inspection and Food Control Unit to work as a team with the Health Education Unit in the various sub-districts of the City where food is stored, prepared and sold, and particularly in the down-town area and along the main highways of the City so that education as to the principles and practice of food hygiene could go hand in hand with the inspection and control of food places and itinerant vendors.

Whilst we pay attention to these food places and itinerant vendors scattered throughout the length and breadth of the City and whilst we feel satisfied that the larger hotels, restaurants, food depots and supermarkets are doing their level best to comply by the provision of better and more up-to-date equipment in the way of refrigerators, display cabinets, in the keeping of foodstuffs under cover and protected, by the provision of better facilities for the workers such as better sanitary accommodation, cloakrooms, overalls and aprons whilst at work, we are not unmindful of the various Institutions under the control of the Council where many of these facilities are lacking, and whilst we endeavour to maintain them in good sanitary condition and we pay regular visits of inspection to make sure that foodstuffs sold in these Institutions are safe and in sound condition, we must request the Council to make haste to make the necessary provisions to secure more adequate and more satisfactory buildings and to provide more up-to-date and sanitary equipment.

Sale of Foodstuffs Bye-laws

Registration of Shops (1961)

Provision, Meat, and Spirit Shops, Restaurants, Hotels, Refreshment Parlours, Dairies	183
Ground Provision and Fruit Shops	7
Bakehouses	4
Confectionery Shops	—
Aerated Water Factories	—
Other Factories	6
Total 1961	200
Total 1960	203

Registration of Vendors (1961)

Bread and Cakes	17
Confectionery	18
Cooked Food including Fries, Souse, &c.	56
Ice Cream and Palets	10
Sweet Drinks	6
Vegetables, Greens, Fruits	52
Miscellaneous	65
Total 1961	224
Total 1960	244

Number of Badges issued to Itinerant Vendors 1961—226 (1960—244)

Number of Oyster Vendors Licensed under Sale of Oysters Bye-Laws—1961—0 (1960—0)

Sale of Milk Bye-laws

Dairies and Milk Shops (1961)	*Cowshed Licences Issued*
City Proper	—
East Dry River (Unsewered)	—
Belmont (Unsewered)	—
Woodbrook (Sewered, but premises not all connected with the Sewerage System)	—
St. James (Unsewered)	—
Total 1961	—
Total 1960	—

Dairymen's Licences (1961)	
Dairymen's Licences issued to Cowkeepers and other purveyors of milk	—
Dairymen's Licences issued to Shops, Milk Bars and Refreshment Parlours	26
Total 1961	26
Total 1960	16

Milk Vendors' Licences and Badges (1961)

	Milk Vendors' Licences	*Cow Tuberculin Tested*	*Badges*
Port-of-Spain	26	—	—
Out-Districts	—	—	—
Total 1961	26	—	—
Total 1960	16	—	—

Foodstuffs Seized or Surrendered and Destroyed, 1961.

Biscuits	pounds	288	
Bread	pounds	12	
Butter	pounds	135	
Cheese	pounds	98	
Cereals	pounds	804	
Carrots	pounds	168	
Confectionery	pounds	1	
Cornmeal	pounds	1,100	
Fish (Canned)	pounds	1,519	
Fish (Smoked)	poends	891	
Fish (Dried)	pounds	1,698	
Flour	pounds	30,750	
Fruit (Dried)	pounds	110	
Fruit (Canned)	pounds	112	
Fruit Juices (Canned)	pounds	13	
Ham (Smoked)	pounds	1,914	
Ham (Canned)	pounds	4,258	
Meat Products	pounds	2,496	
Milk (Powdered)	pounds	50	
Milk (Canned)	pounds	101	
Macaroni	pounds	91	
Nuts	pounds	84	
Onion	pounds	9,700	
Olive Oil	pounds	10	
Peas (Dried)	pounds	760	
Pork (Pickled)	pounds	2,900	
Puddings	pounds	206	
Preserves	pounds	154	
Poultry (frozen)	pounds	29,559	
Preserves	pounds	154	
Potatoes	pounds	7,424	
Soup (Dried)	pounds	4	
Salt	pounds	47,560	
Sausage (Canned)	pounds	1,130	
Sausage (Smoked)	pounds	2,190	
Vegetables (Canned)	pounds	96	
Vegetable Juice	pounds	40	

Anti-Rat Measures

The detection and elimination of rat nuisance is one of the most important services that the Public Health Department is called upon to perform and it is to the credit of the Department that the work of this Unit has met with general satisfaction judging by the calls for the service that are made by residents inside the City and residents outside the City. In fact we have reason to believe that the work of this Unit is meeting with general success because the number of complaints of rat nuisance made by the burgesses of the City has quite definitely diminished and the Unit itself has time to undertake more preventive work, now that the curative aspect of their work is making less insistent demands

on their time and their efforts. The City is divided into 9 anti-rat districts and one foreman and usually 3 but sometimes 4 men operate in each of these districts. The morning session of their work day is taken up with the collection and disposal of baits—pre-baits, post-baits or poison baits laid the previous morning, and the laying of fresh baits to deal with rat nuisance detected in the afternoon session of the previous day's work, and the afternoon session is devoted to the verification of complaints by householders of the district, to surveys of the area to detect rat nuisance, and to the prevention of rat nuisance by indicating to the householder the measures necessary to be taken to prevent rat nuisance.

It would appear that the measures that we adopt are succeeding in keeping down the rat population to the point where it would be difficult for an epidemic of rat-borne disease, if perchance introduced, to spread rapidly throughout the length and breath of the City.

When it comes, however, to the environs of the City, east, north and west, we confess to an ever increasing anxiety that rats are likely to invade the City from these regions, seeing that no rat work of any effective kind is being done by the County in these areas adjoining the City in spite of the fact that the matter has time and again been drawn to the attention of the Central Government. The most that these areas can depend upon are the rat traps that are given them by Sanitary Inspectors operating outside the limits of the City, and it is a well understood fact that rat traps in the elimination of rat nuisance are practically obsolescent. That is the reason why the Department is compelled to deal with complaints of rat nuisance outside the City when the complaints are referred to us by the proper authorities, because we like to do our best to co-operate with our opposite members outside the City, and we save the City from being invaded by rats coming from these contiguous areas. We do sincerely hope that it will be possible for the Local Sanitary Authority of the County of St. George soon to organise an efficient anti-rat service and to work hand in glove with us in this fight to keep down the rat population to safe limits. In the meantime whatever service in this direction can be rendered by the Public Health Department of the City will continue to be most readily and willingly rendered.

The workers in the Anti-Rat Unit do a skilled job, no new man can just walk into this Unit and do the work involved, they have to be trained for a period of time before they are sent to the field on their own; they have to learn the characteristics and habits of the rat, the identification of species, the signs of rat infestation, the evidence of the damage and destruction they cause, the measures adopted for the destruction of rats, the different kinds of bait, rat poisons, rat traps, signs of disease in rats that are caught, and how to dispose safely of rats. It is clear that a good degree of basic education is necessary in those who undertake this work and that they deserve the consideration and goodwill of the householders on whose premises they happen to be operating.

No new poisons were added to our list of rodenticides during the year under report; we have been trying out various products submitted to us by interested firms like brumoline, rentokil, racumin, but so far we have not yet made up our minds to depart from the time honoured poisons we have been using for a few years now, which are warfarin, arsenious oxide, and zinc phosphide together with red squills, antu, barium and cyanogas occasionally.

Destruction of Rats and Mice, 1961.

Rats caught by trappers	32,493
Rats bought	—
Total	32,493
Mice caught and destroyed	27,023

Examination of Rats by Government Bacteriologist, 1961

Rats examined for plague	17,379
Rats found infected with plague	—
Immature rats not examined	—

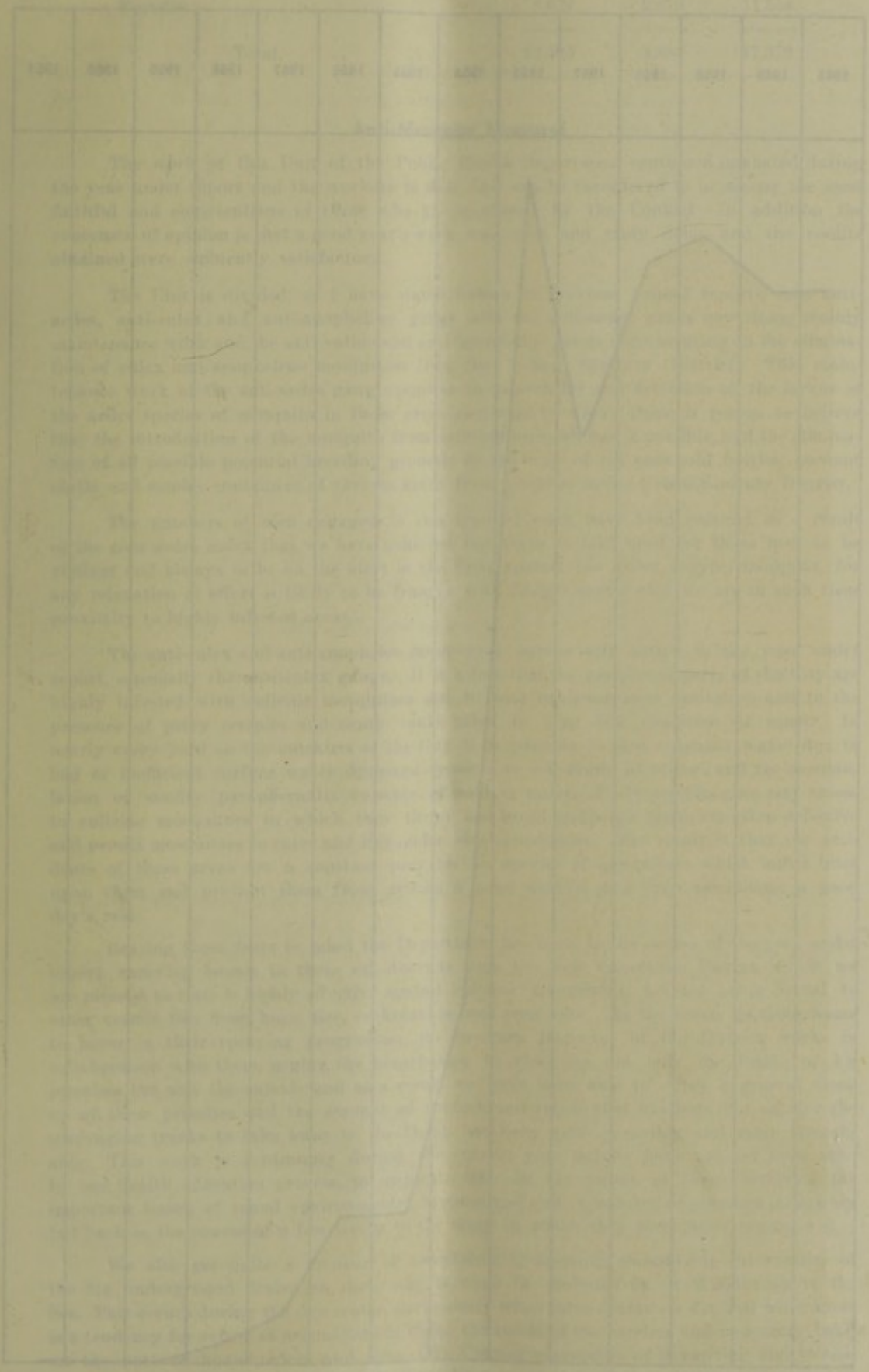
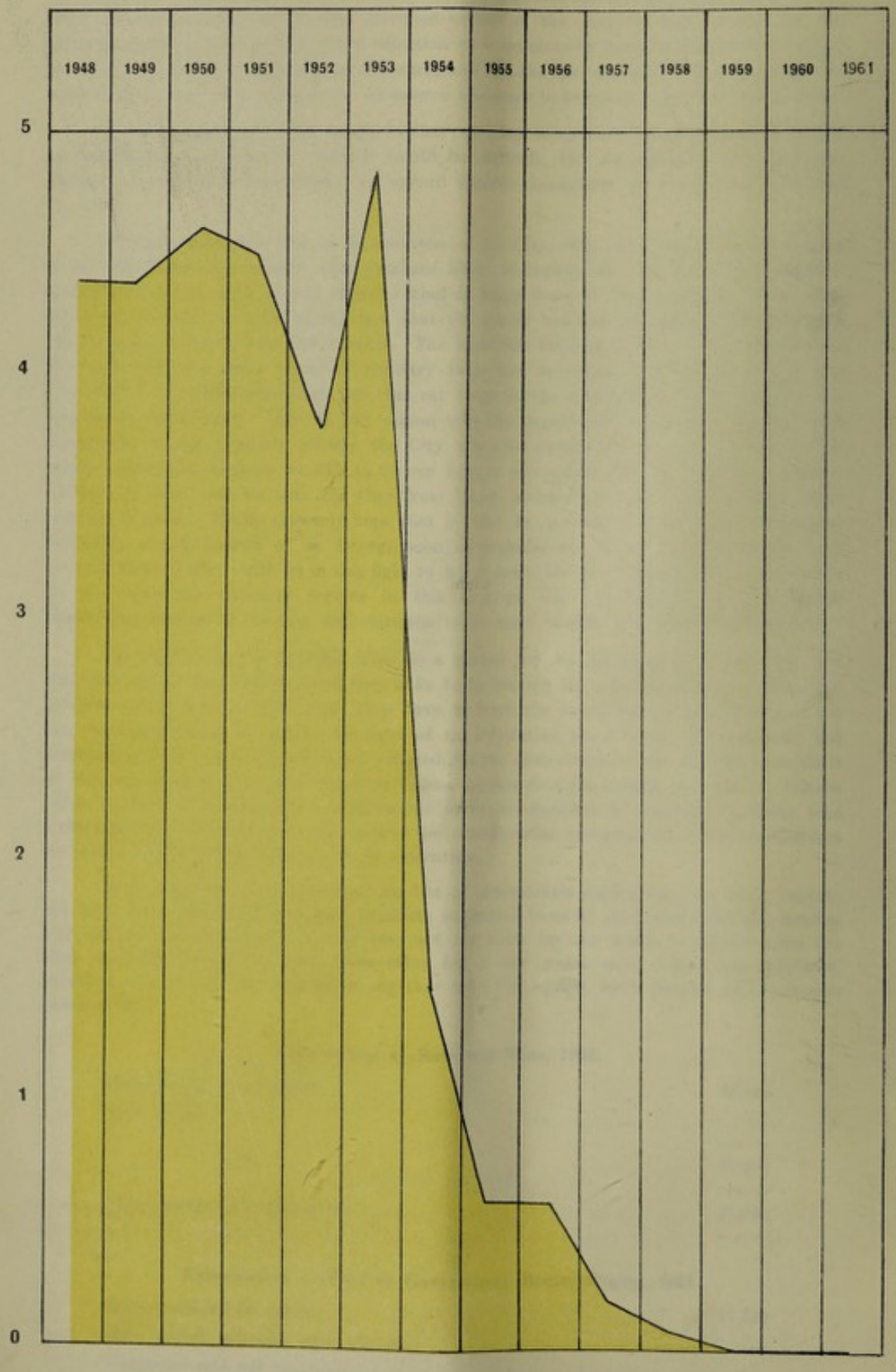


CHART A

Port-of-Spain

Aedes Larval Index 1948-1961



Species

	Decumanus	*Rattus*	*Total*
Males	4,818	1,005	5,823
Females	8,677	2,879	11,556
Total	13,495	3,884	17,379

Anti-Mosquito Measures

The work of this Unit of the Public Health Department continued unabated during the year under report and the workers in this Unit can be considered to be among the most faithful and conscientious of those who are employed by the Council. In addition the concensus of opinion is that a good year's work was well and truly done, and the results obtained were eminently satisfactory.

The Unit is divided, as I have stated before in previous annual reports, into anti-aedes, anti-culex and anti-anopheline gangs with the anti-aedes gangs now doing mainly maintenance work and the anti-culine and anti-anopheline gangs concentrating on the elimination of culex and anophelene mosquitoes from the Urban Sanitary District. The maintenance work of the anti-aedes gang comprise the search for and detection of, the larvae of the aedes species of mosquito in those areas particularly where there is reason to believe that the introduction of the mosquito from infested areas abroad is possible, and the elimination of all possible potential breeding grounds in the way of tin cans, old bottles, coconut shells, and sundry containers of various kinds from premises in the Urban Sanitary District.

The numbers of men engaged in this type of work have been reduced as a result of the zero aedes index that we have achieved but there is still need for these men to be vigilant and always to be on the alert in the fight against the aedes aegypti mosquito, for any relaxation of effort is likely to be fraught with danger seeing that we are in such close proximity to highly infested areas.

The anti-culex and anti-anopheles gangs were particularly active in the year under report, especially the anti-culex gangs. It is a fact that the peripheral parts of the City are highly infested with culicine mosquitoes due to poor environmental sanitation and to the presence of privy cesspits and septic tanks often in very bad condition of repair. In nearly every yard on the outskirts of the City it is possible to find stagnant water due to bad or inefficient surface water drainage systems, to collections of refuse, and the accumulation of sundry paraphernalia capable of holding water. Privy cesspits give easy access to culicine mosquitoes in which they thrive and breed and septic tanks are often defective and permit mosquitoes to enter and live under ideal conditions. The result is that the residents of these areas are a constant prey to this species of mosquitoes which inflict bites upon them and prevent them from getting a good night's, and even sometimes, a good day's rest.

Bearing these facts in mind the Department has been, in the course of the year under report, spraying houses in these sub-districts with the new insecticide Baytex which we are pleased to state is highly effective against culicine mosquitoes, besides being lethal to other vermin like fleas, bugs, lice, cockroaches and even ants. As the teams go from house to house in their spraying programme, the Sanitary Inspector of the District works in collaboration with them, urging the householder to clear up not only the inside of his premises but also the outside and as a result we have been able to effect a general clean up of these premises and the amount of rubbish and refuse that has been put out for the scavenging trucks to take away to the Dump has been quite revealing and most remarkable. This work is continuing during the current year but we have not yet been able, by our health education process, to inculcate fully in the minds of these residents the important lesson of sound environmental hygiene and quite a number of premises invariably fall back in the course of a few weeks to the stage in which they were first encountered.

We also get quite a number of complaints of mosquito nuisance in the vicinity of the big underground drains on their way through the Sub-district of Woodbrook to the Sea. This occurs during the dry season particularly when these drains are dry and when there is a tendency for refuse to accumulate in them, the result of the careless and insanitary habit on the part of householders and even City Council scavengers of depositing and sweeping refuse into them, and when also flushing, because of the relative shortage of water, is

very occasionally resorted to. On these occasions culex breeds quite easily in these underground drains and being under cover, except when they invade premises at night time, are relatively immune from detection and elimination. We know from experience that these underground drains are the breeding grounds, and we spray a cloud of Baytex into them through the manholes and get them flushed out by the flushing gangs of City Engineer's Department.

Larval Index (Aedes)

Premises with mosquito larvae per cent. of number visited

Yearly average	1938–1942	2.1
Year	1943	3.3
	1944	5.4
	1945	6.9
	1946	7.3
	1947	5.8
	1948	4.4
	1949	4.4
	1950	4.6
	1951	4.5
	1952	3.8
	1953	4.8
	1954	1.5
	1955	0.6
	1956	0.6
	1957	0.2
	1958	0.08
	1959	0
	1960	0
	1961	0

Inspection of Eaves, Gutters, Etc., 1961

Number of inspections of premises	178,519
Number of inspections of eaves gutters	2,284
Number of occasions found in good order	1,895
Number of occasions found defective	389
Number of occasions found containing water only	257
Number of occasions found containing water and larvae (Culex)	192
Number of occasions mosquito larvae (Culex) were found in tubs, antiformicas, tin cans, &c.	97
Yards cleared of receptacles	1

Premises used for human habitation, Houses let in lodgings, Common Lodging Houses

In my report for 1960 I confessed to a good deal of despondency in regard to the housing situation of the City. The situation quite definitely was worsening; the Statistical Department of Government had published that overcrowding of premises of the City was the highest in the Territory, 52 per cent, and the number of dilapidated and ruinous accommodation units, as they were called, was in the vicinity of 40 per cent. There was no doubt that buildings within the limits of the City, particularly in the overcrowded areas, were showing greater and greater evidence of deterioration and a few had actually collapsed leaving their occupants homeless. Whilst this was a fact, the owners of these buildings were making a bad situation worse by bluntly refusing to effect any kind of repairs and the result of the serving of Statutory Notices to that effect was invariably a resort to the process of law with all the delay, the disappointment, and the cumbrous machinery that such a process entailed. The Department could get very little done because the landlords whose premises were controlled by the Rent Restriction Ordinance wanted them vacated so that they could build new premises and it was with the greatest difficulty that they could be persuaded to spend a few dollars to stop leaks, to repair a drain, or to make a privy cesspit fly-proof. Whilst all this was happening in the lower down-town area in the City Proper, in Belmont and the East Dry River Sub-district, and in the St. James Cocorite Sub-district, John John and Shanty Town continued to thrive and the housing situation was in a hopeless mess. Slum Clearance was taking place but it was in the same declared Slum Area quadrangle of Park Street in the north, the Dry

River in the East, South Quay in the South and Frederick Street in the West, and flats that were to take the place of these slum areas were going up at such a slow pace due to the lack of funds that one had great misgivings as to the ultimate outcome of the whole process.

The year under report, however, has brought some alleviation of the tenseness of the situation, as a spurt was made to relieve the position by the acquisition of dilapidated premises in the Mango Rose District and the erection of flats in the demolished areas. The construction of two four storey flats and one nine storey flats has been undertaken in this area and at the time I write they are almost ready for occupation. Quarters have been erected in the Malick and Morvant areas to accommodate the tenants who have been displaced from this area and when these tenants have been transferred back to the Mango Rose District these quarters will be used for the accommodation of other tenants displaced from areas which have been inspected, surveyed, and declared slum clearance areas. I refer to areas round about 69 Woodford St., a small area embracing 33 and 35 Dundonald St., the La Cour Harpe area, the Jackson Place, Piccadilly, and Laventille Road area, the St. Paul Street, Rodney Street, Besson Street area, the St. Joseph Road South Quay area, and the John John area, all of which, with the exception of the St. Joseph Road—South Quay area, which has already been declared a Slum Clearance Area, have been inspected, and are now being surveyed preliminary to their being declared Slum Clearance Areas.

There is activity also at the western limits of the City; flats are being erected to the rear of the Seventh Day Adventist Community Hospital for tenants displaced from the area in which the Hospital has been erected and for those who are likely to be displaced by the widening and straightening of the Western Main Road which is due to be undertaken momently and, at the time I write, the finishing touches are being put to them and they will soon be ready now for occupation. Building by private owners and individual contractors in other parts of the City still progresses and new dwellings are appearing in the Woodbrook Area, especially in the recently laid out area west of the Mucurapo Pumping Station, and south of O'Connor and de Verteuil Streets, in the St. James and Cocorite Area, and to a certain extent in Belmont, but they serve only to scratch the core of the problem and demonstrate its magnitude, for no sooner than they are half completed they are already earmarked by prospective tenants and purchasers, and are even occupied before a Completion Certificate is requested from the City Council. In the City Proper there is a great deal of building actually taking place but they are in the main modern business places, with all the facilities and amenities that such business places now provide, and it is true to say that the face of the down-town area of the City is changing rapidly into a better and brighter Port-of-Spain.

John John and Shanty Town

I had hoped that I would have been in the position to state in this annual report that the elimination of the John John and Shanty Town Area had either begun or had been completed but, in spite of the surveys and plans and the activities of statisticians and housing experts which was such a marked feature of the year 1960 and also of the year under report, John John and Shanty Town continue to thrive on the same old site and under the same old unsatisfactory conditions that have existed from the time of their establishment. There is only one saving factor viz. that the old ruinous and dilapidated dwellings of John John and the old insanitary shacks and hovels of Shanty Town have now reached a point where they are on the verge of collapse, and indeed some have actually collapsed, and with their collapse resort will have to be had to alternative means of accommodation or to the actual reconstruction of these dwellings, which latter I feel sure will not be countenanced. It is disappointing to think that with an alternative site for the residents of these areas having been selected and with the proposal to erect flats for their accommodation having been decided upon, these proposals could not be translated into actual practice and a start actually made to the erection of flats for housing the inhabitants of these areas. It is hoped that the execution of this project would not be unduly delayed and at the moment I write some ray of hope has appeared on the horizon in that John John is about to be declared a Slum Clearance Area by the new National Housing Authority.

It is difficult to see how Shanty Town could persist on the site where it is now located and under the circumstances that exist, since things all conspire to secure its removal. It is practically on the threshold of a new Industrial Estate set up by the Industrial Develop-

ment Corporation, and right up against a proposed wholesale and retail market; the Beetham Highway bounds it on the south, the Eastern Main Road on the north and the Fly-Over Bridge bisects it and surveys it from above. Yet there are large numbers of shacks and hovels in this area, and the residents ply a trade in bottles, bits and pieces of salvageable material obtained from the Dump, and they rear pigs that run over the Dump and the Beetham Highway and even sometimes find their way into the eastern limits of the City in the region of the Abattoir, South Quay, or even St. Joseph Road. The Shanty Town dwellers make their living off the Dump and they scratch, dig up, and excavate made-up portions of the Dump in their search for pigs' food, bits and pieces of iron and other metals, and in so doing play havoc with the detailed process of controlled tipping. It is sincerely hoped that these Shanty Town dwellers will soon be removed to alternative accommodation in more amenable and congenial surroundings, their hovels and shacks demolished, the primitive water courses that traverse it eliminated and the area properly laid out, built upon, and used for industrial purposes in keeping with the rest of the adjoining area.

THE HEALTH EDUCATION OF THE DISTRICT

The most important event under this heading in the year under report was the opening of the New Town Hall and the occupation of quarters reserved for the Health Education Unit in the Public Health Department of the Council at the northern limits of the Town Hall. The Health Education Officer and the Assistant Health Education Officer have separate offices on the first floor of the building; the recorder of the Unit occupies a part of the office of the Assistant Health Education Officer, and there are photographic and processing rooms on the ground floor of the building. Coincidental with this new equipment has begun to arrive from abroad and the dark room is being provided with processing sinks and appliances. A generator has been acquired and we are building up a film library of our own, though we still have on occasions to borrow films from the United States Information Service, the United Kingdom Information Centre, the British Council and the Information Department of Government, to whom we are greatly indebted and for which we are deeply grateful.

It is therefore clear that the Health Education Unit is getting fully organised to undertake the work of the health education of the Urban Sanitary District which it is its primary duty to undertake. The Assistant Health Education Officer was officially appointed during the year under report and a chauffeur for the Health Education Van formally installed.

The Unit concerned itself with a number of health education activities during the year under report. Together with the Junior Chamber of Commerce with whom we have been collaborating since 1959, Keep Port-of-Spain Clean Week was again organised in the year under report and took place in October from Monday the 23rd October to Sunday the 29th October 1961. The week was officially launched by His Worship the Mayor taking part in a motorcade in the down-town area in the morning of Monday 23rd October and there was another motorcade, the final of the series, on Friday the 27th October in the Belmont and East Dry River areas. During the week a concentrated effort was made to bring home to every citizen of Port-of-Spain the benefits that accrue from keeping his home, his yard, the streets, parks and open spaces clean and every kind of health education medium was made to play its part during the week, the press, the radio, film shows, leaflets, posters and handbills. Small litter bins were attached to the lamp posts in the down-town area for the reception of paper wrappings, the ends of cigarettes, the skins and seeds of fruit, match sticks and empty cigarette cartons and match boxes. Public meetings with film shows were held in the City Proper at Woodford Square, in the St. James Sub-district on the open area of land bordering Ethel and Panka Streets, and in Belmont Park at the top of Norfolk Street in Belmont. Each school within the limits of the City was included in the programme and posters, leaflets, and handbills were distributed to the school children by their respective headmasters or headmistress. The Unit also participated in the programme organised by the Trinidad and Tobago Association for Mental Health and was active in the programme of that body directed to the prevention of alcoholism, taking part in the Sunday morning film shows and the panel discussion on alcoholism that took place after the film show.

One of the main activities of the Health Education Unit, however, was the organisation of the District Health Education Working Committees. It is proposed to have one of these Committees established in every sanitary district of the City comprised of interested citizens of the District together with the District Sanitary Inspector and Health Education

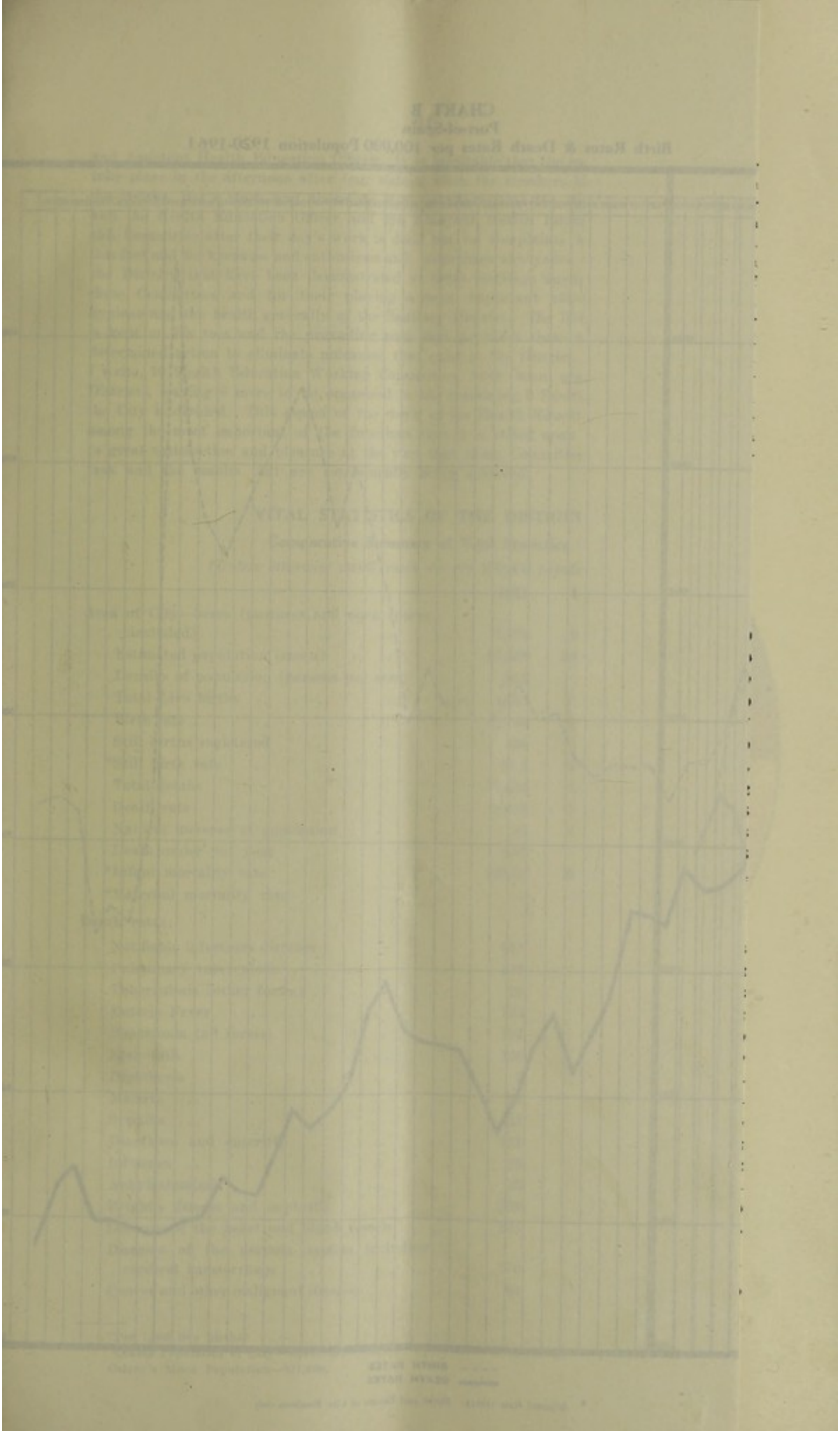


CHART B

Port-of-Spain

Birth Rates & Death Rates per 100,000 Population 1920-1961

* Adjusted Rate (1955): Births and Deaths of City Residents only

and Assistant Health Education Officer. It is inevitable that the meetings of the Committee take place in the afternoon after four o'clock when the members have returned home from the routine day's work and therefore it is inevitable that the District Sanitary Inspector and the Health Education Officer and the Assistant Health Education Officer work with this Committee after their day's work is done but no complaints have arisen so far from this fact and the keenness and enthusiasm and, sometimes annoyance at insanitary features in the District, that have been demonstrated at these meetings augur well for the future of these Committees and for their playing a most important rôle in the environmental hygiene and the health generally of the Sanitary District. The District Sanitary Inspector is kept on his toes and the prevailing note that pervades these meetings is positive and determined action to eliminate nuisances that exist in the District. So far, at the moment I write, 10 Health Education Working Committees have been organised in 10 Sanitary Districts, leaving 8 more to be organised in the remaining 8 Sanitary Districts, into which the City is divided. This aspect of the work of the Health Education Unit bids fair to be among the most important of the functions that it is called upon to fulfill, and I confess to great satisfaction and pleasure at the way that these Committees are bending to their task and the results that are consequently being achieved.

VITAL STATISTICS OF THE DISTRICT

Comparative Summary of Vital Statistics

(Unless otherwise stated, rates are per 100,000 *population)*

	1921	1959	1960	1961
Area of City—acres (pastures and open spaces included)	1,793	2,550	2,550	2,550
Estimated population (mean)	61,386	99,350	94,100	98,600
Density of population (persons per acre)	34.2	39	37	39
Total Live births	1,687	2,627	2,498	2,610
Birth rate	2,728	2,644	2,655	2,647
Still births registered	154	57	73	80
*Still birth rate	91.3	21.70	29 22	30.65
Total deaths	1,659	1,179	1,040	952
Death rate	2,683	1,187	1,105	966
Natural increase of population	28	1,448	1,458	1,658
Death under one year	287	158	141	116
*Infant mortality rate	170.12	60.53	56.44	44.44
*Maternal mortality rate	—	3.04	2.80	1.91
Death rates:				
Notifiable infectious diseases	621	82	104	98
Pulmunary tuberculosis	249	6	2	2
Tuberculosis (other forms)	26	—	—	3
Enteric Fever	125	—	1	2
Pneumonia (all forms)	197	70	99	90
Bronchitis	136	11	9	9
Diphtheria	2	2	1	—
Malaria	89	—	—	—
Syphilis	21	13	13	9
Diarrhoea and enteritis	191	69	61	42
Influenza	26	34	—	2
Ankylostomiasis	15	—	1	—
Bright's disease and nephritis	209	18	22	10
Diseases of the heart and blood vessels	265	301	276	215
Diseases of the nervous system including cerebral haemorrhage	170	158	151	167
Cancer and other malignant diseases	63	114	131	109

*Per 1,000 live births.

Census Population of City—April, 1946—93,108: April, 1960—Preliminary Count—91,340.
Colony's Mean Population—871,050.

Acreage and Population

The acreage of the City in the year under report remained the same, i.e. 2,550 acres, as it has been since the year 1949 when the 168 acres of land between Wrightson Road and the King's Wharf and Dock Site area and the Sea which the City reclaimed by controlled tipping were officially included within the limits of the City. This fact represented a major victory for the Local Sanitary Authority seeing that for a few years previously the City and the Central Government were at loggerheads as to whether these lands should form part of the City to the extent that the matter had eventually to be referred to the Colonial Office in London, which decided that the Sea was the southern boundary of the City "wherever it is now and wherever it is likely to be in the future"

In 1917 when the Local Sanitary Authority was established the area of the City inclusive of parks and open spaces was 1793 acres and in 1949 it had increased to 2550, an increase of 757 acres in 32 years. Since 1949 there has been no further inclusions within the limits of the City. The mean population i.e. the population at midnight 30th June 1961, has been estimated to be 98,600 as against 94,100 in the year 1960, an increase of 4,500 souls. This represents a substantial increase of population when one bears in mind the fact that a census was taken on 7th April 1960 in Trinidad and Tobago as well as in the other territories of the British West Indies, and the figure for the population of the City was stated to be 99,350 in 1959 and 94,100 in 1960 (preliminary count 91,340).

It is important that the estimated mean population embodies some degree of accuracy as without accurate figures the various rates which are based on the population figure would be false and misleading and could not properly be compared with similar rates for centres in other tropical and semi-tropical or temperate climates of similar size. The census population of the City was found to be as follows: in the year 1921, 61580 souls; in the year 1930, 70334 souls; in the year 1946, 93,198 souls; and in the year 1960, 94,100 souls. The estimated mean population of the Territory was 871,050 (census population 1960 was 826,900).

Births and Birth Rates

Birth returns are received regularly at the Public Health Department of the City from the District (Births and Deaths) Registrars in the various sub-districts of the City and from the Medical Superintendent of the General Hospital, Port-of-Spain. These birth returns are critically examined and sorted out into births that properly belong to the City and births that should properly be registered outside the City, depending on the residence of the parents during the six months preceding the birth of the infant. That has been rendered possible, of late, by having inserted in the birth returns the name of the parent or parents and the actual addresses of their residence during the previous six months, especially in the case of returns that come to us from the General Hospital, Port-of-Spain. The figure obtained after this sorting out is fairly accurate for City births. Two thousand six hundred and ten births were registered during the year under report which represents an increase of 112 births over the figure for 1960, 2498. This gives a birth rate of 2647 per 100,000 population as compared with 2655 per 100,000 population in the year 1960.

The death returns that reach the Public Health Department can be stated to be more accurate and more reliable than the birth returns or the notifications that are sent to us. In the first place no burial can take place or does take place unless the death has been registered and the cause of many deaths has to be investigated by the Sanitary Inspectors attached to the Department especially in the case of typhoid fever, dysentery, malaria; and very often they have to undertake the disinfection of premises where death has occurred. In the second place, from the very beginning of the system of registration it has been customary for District Registrars and the Medical Superintendent of the General Hospital to have inserted in their returns to the Department the correct address, whether within the limits of the City or outside the limits of the City, of the deceased. So that the figure for deaths during the preceding year is reasonably accurate and fairly reliable. Total deaths recorded for the year 1961 amounted to 952, a decrease of 88 as compared with the figure of 1040 for 1960. The death rate per 100,000 population worked out at 966, as compared with 1105 in the previous year.

CHART C

Port-of-Spain

Percentage Distribution of Deaths in Sub-Districts of the City 1961

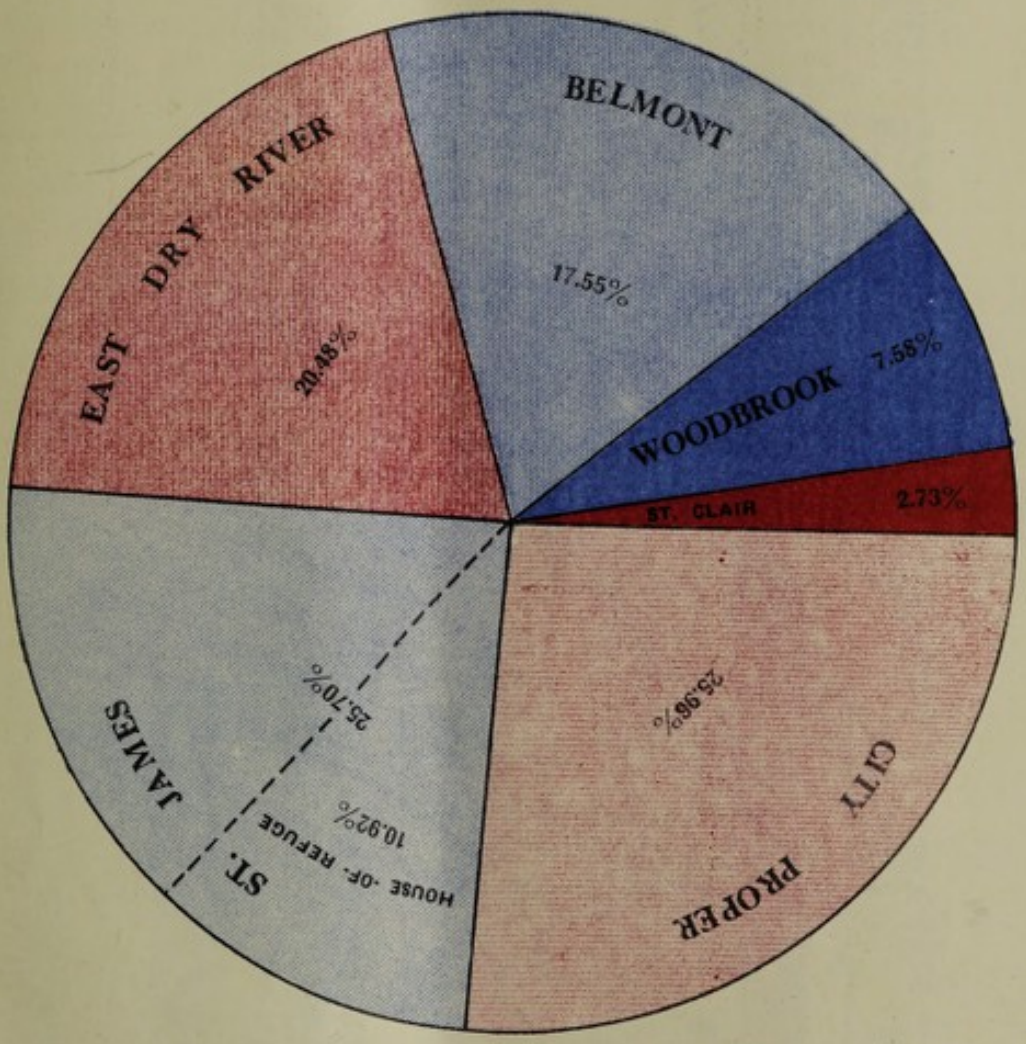
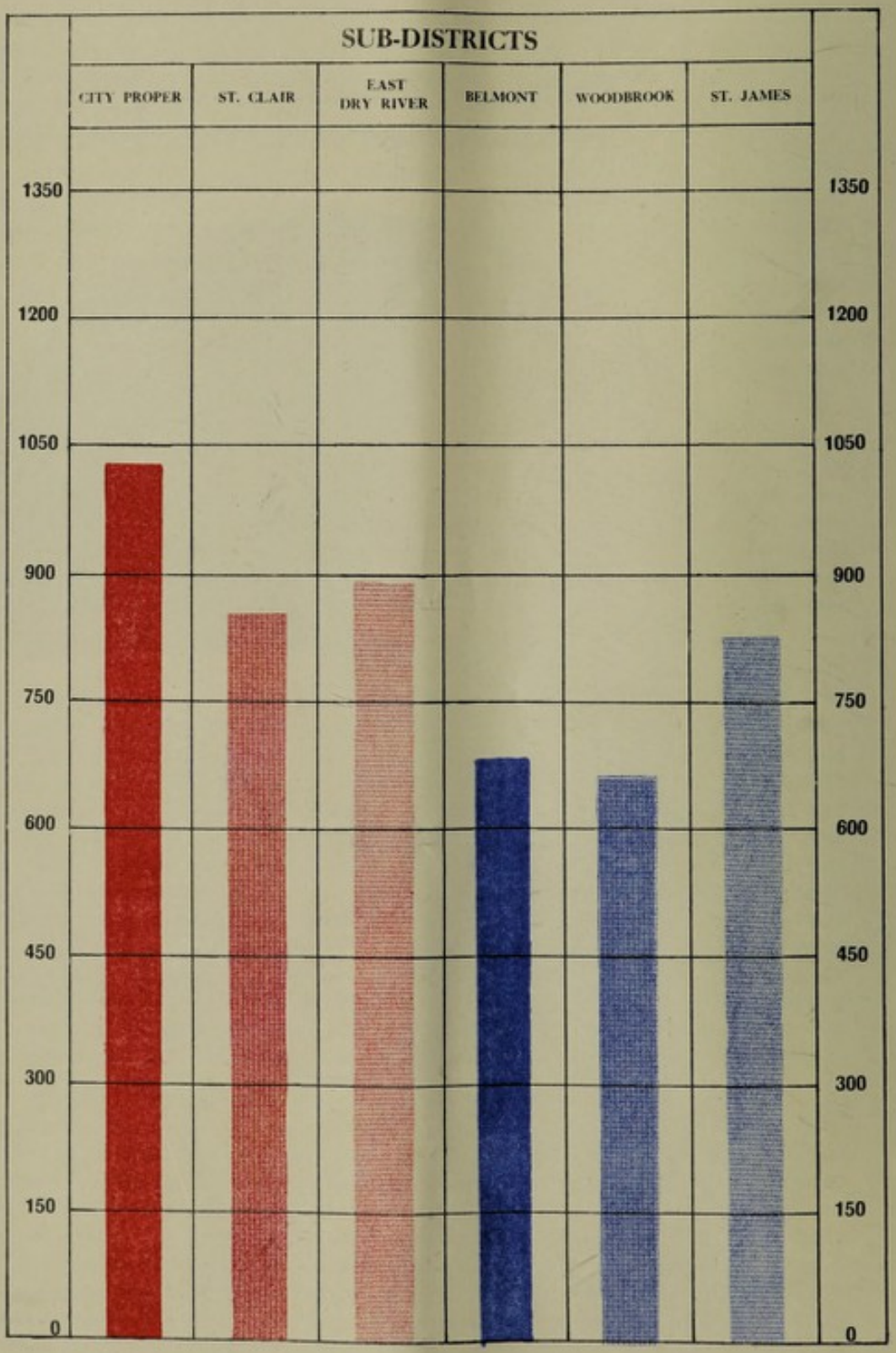


CHART D

Port-of-Spain

Sub-Districts Death Rate Per 100,000 Population of Sub-District—1961



NOTE: Deaths at Seventh Day Adventist Clinic; at St.Elizabeth Clinic; at Park Nursing Home and at the House of Refuge are excluded from Sub-Districts of City Proper, St.Clair and St.James, respectively.

Birth and Death Rate, 1961

Births, 1961				Deaths, 1961			
Males	Females	Both Sexes	Birth Rate per 100,000 population	Males	Females	Both Sexes	Death Rate per 100,000 population
1,358	1,252	2,610	2,647	478	474	952	966

Deaths in Sub-Districts of the City, 1961

Sub-District	Mean Population	Deaths				Total Deaths	Rate per 100,000 population
		Place of Occurence					
		Home &c.	General Hospital	Royal Gaol	House of Refuge	Sub-Districts	
City Proper	21,882	143	99	5	—	247	251
St. Clair	1,307	24	2	—	—	26	26
East Dry River	22,216	78	117	—	—	195	198
Belmont	24,761	83	84	—	—	167	169
Woodbrook	11,183	54	18	—	—	72	73
St. James	17,251	57	84	—	104	245	249
TOTAL	98,600	439	404	5	104	952	966

Age Distribution of Deaths, 1961

PERIOD	Males	Females	Both Sexes	Percentage of Total Mortality at All Ages
Under 1 year	61	55	116	12.18
1— 5 years	14	9	23	2.42
6—10 do.	4	2	6	0.63
11—20 do.	13	2	15	1.58
21—30 do.	14	7	21	2.21
31—40 do.	20	17	37	3.89
41—50 do.	51	33	84	8.82
51—60 do.	61	49	110	11.55
Over 60 years	240	300	540	56.72
TOTAL	478	474	952	

Comparison of Deaths at Different Age Periods, 1928-61

PERIOD	Total Deaths at All Ages	Deaths Under 1 Year		Deaths 1–5 Years		56–60 Years Deaths		Deaths Over 60 Years	
		No.	Percentage of Total Deaths	No.	Percentage of Total Deaths	No.	Percentage of Total Deaths	No.	Percentage of Total Deaths
Yearly Averages									
1928–32 ..	1,327	230	17.42	81	6.06	94	7.09	336	25.10
1933–37 ..	1,167	215	18.24	62	5.29	87	7.57	289	24.74
1938–42 ..	1,622	275	16.85	68	4.21	117	7.20	566	34.92
1943 ..	1,862	283	15.20	102	5.18	131	7.04	674	36.20
1944 ..	1,620	248	15.31	77	4.75	106	6.54	598	36.92
1945 ..	1,526	239	15.66	71	4.65	86	5.64	561	36.76
1946 ..	1,396	241	17.26	77	5.52	95	6.81	493	35.32
1947 ..	1,385	231	16.68	49	3.54	92	6.64	536	38.70
1948 ..	1,191	177	14.86	45	3.78	66	5.54	491	41.23
1949 ..	1,147	171	14.91	57	4.97	85	7.41	524	45.68
1950 ..	1,170	168	14.36	75	6.41	76	6.50	526	44.96
1951 ..	1,243	167	13.43	43	3.46	79	6.35	602	48.43
1952 ..	1,094	137	12.52	48	4.39	77	7.04	540	49.36
1953 ..	1,108	157	14.17	41	3.70	67	6.05	524	47.29
1954 ..	1,028	150	14.59	36	3.50	79	7.69	484	47.08
1955 ..	1,067	138	12.93	27	2.53	78	7.31	542	50.80
1956 ..	1,120	158	14.11	32	2.86	85	7.59	581	51.88
1957 ..	1,134	127	11.20	35	3.09	86	7.58	627	55.29
1958 ..	1,147	171	14.91	42	3.66	87	7.58	595	51.88
1959 ..	1,179	158	13.40	39	3.31	114	9.67	595	50.47
1960 ..	1,040	141	13.56	32	3.08	82	7.88	549	52.79
1961 ..	952	116	12.18	23	2.42	67	7.04	540	56.72

Causes of Death

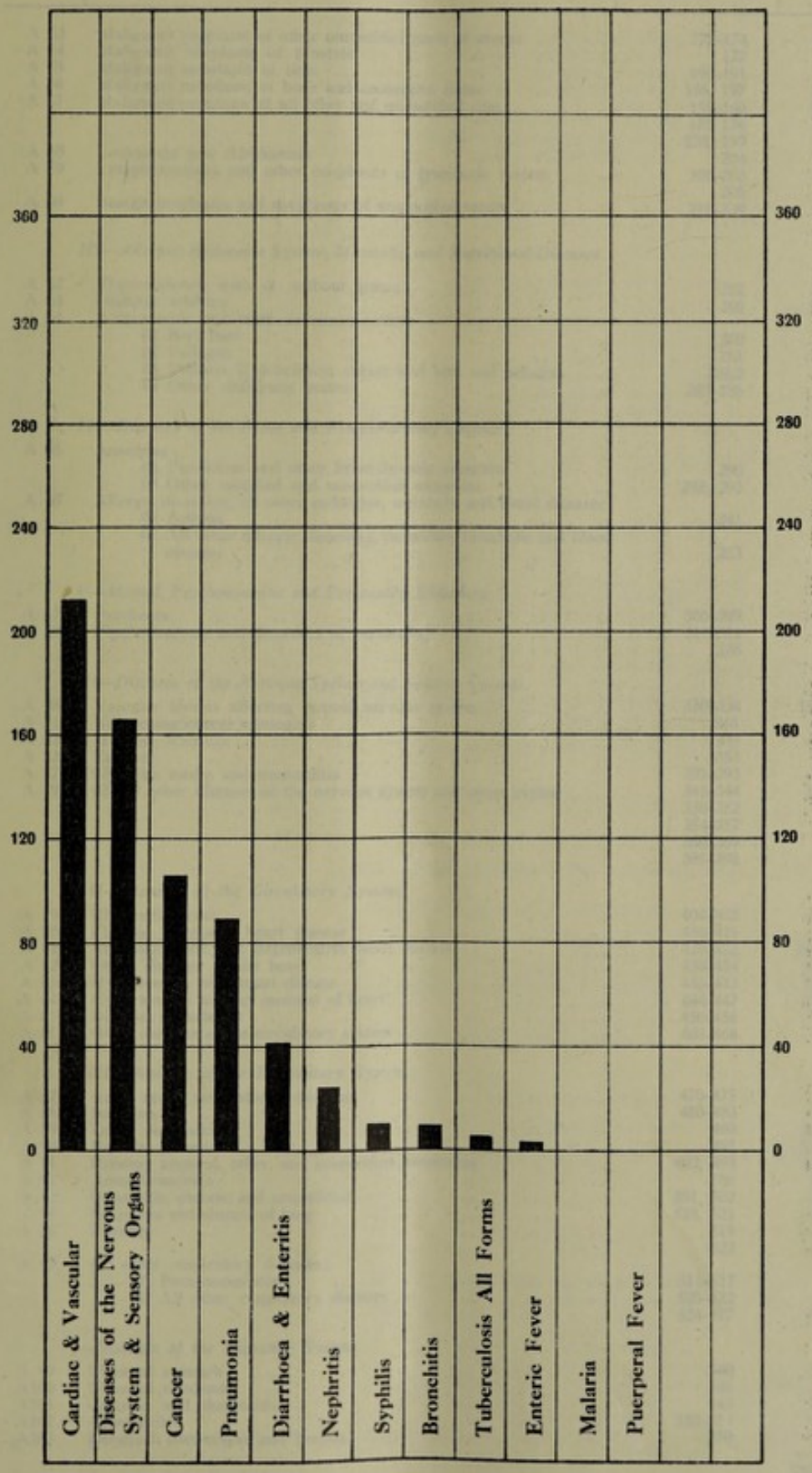
Death returns that reach the Public Health Department are now classified in accordance with the Intermediate List of 150 causes of Morbidity and Mortality of the International Statistical Classification and each cause of death is given a coded number taken from the List. This classification is important to a City like Port-of-Spain which is a busy sea port and a strategic centre of communication between North and South America, visited by numbers of people from abroad on their way to and from the Americas and by a host of sun-seeking tourists in search of a holiday. In these circumstances the knowledge of what diseases are occurring, which ones occasion the greatest mortality, and what are the chances of survival if, unfortunately, one was stricken with any one of these diseases, is valuable from the point of view of the adoption of preventive measures.

As I have stated in an earlier section of this report, 952 persons, whose permanent residence in the year 1961 was Port-of-Spain, died in the year under report, representing 88 fewer than in the previous year 1960. The greatest single cause of death was Diseases of the Circulatory System which claimed 212 victims and, though not the cause of as many deaths in 1961 as in 1960, this is the usual pattern that we have been observing year after year for the past fifteen years. Under this heading arterio-sclerosis and degenerate heart disease claimed 109 victims and hypertension with heart disease 39. Next in importance were vascular lesions affecting the central nervous system 153 deaths, and the mortality of infants under 1 year of age 116 deaths. Diseases of the Respiratory System were responsible for 110 deaths and cancer and other malignant diseases claimed 107 victims.

Causes of Deaths, 1961, International Classification)

Intermediate List No.	Cause Groups	Detailed List No.	Total
	I—Infective and Parasitic Diseases		
A 1	Tuberculosis of respiratory system	001–008	2
A 2	Tuberculosis of meninges and central nervous system	010	2
A 3	Tuberculosis of intestines, peritoneum and mesenteric glands	011	—
A 4	Tuberculosis of bones and joints	012	1
A 5	Tuberculosis, other forms:		
	02 All other forms	014, 016–019	—
A 6	Congenital Syphilis	020	—
A 8	Tabes Dorsalis	024	—
A 9	General paralysis of insane	025	—
A 10	All other syphilis	026–029	9
A 11	02 Other gonococcal infections	031–035	—
A 12	Typhoid fever	040	2
A 13	02 Other Salmonella infections	042	—
A 16	Dysentery, all forms:		
	01 Bacillary dysentery	045	—
	02 Amoebiasis	046	—
	03 Other unspecified forms of dysentery	047, 048	1
A 20	Septicaemia and pyaemia	053	6
A 21	Diphtheria	055	
A 22	Whooping cough	056	
A 23	Meningococcal infections	057	—
A 25	Leprosy	060	1
A 26	Tetanus	061	6
A 29	Acute infectious Encephalitis	082	
A 30	Late effects of Acute poliomyelitis and acute infectious encephalitis		1
A 32	Measles	085	—
A 34	Infectious hepatitis	092	
A 37	03 Falciparum malaria (malignant tertian)	112	—
A 41	Ankylostomiasis	129	
A 42	02 Ascariasis	130.0	—
A 42	02 Ascariasis	130.0	—
A 43	All other diseases classified as infective and parasitic:		
	01 Lymphogranuloma venereum	037	—
	02 Granuloma inguinale, venereal	038	1
	08 Chicken pox	087	—
	22 Herpes zoster	088	—
	23 Mumps	089	—
	25 All other diseases classified as infective and parasitic	132–134	—
	II—Neoplasms		
A 44	Malignant neoplasm of buccal cavity and pharynx	140, 148	6
A 45	Malignant neoplasm of oesophagus	150	—
A 46	Malignant neoplasm of stomach	151	21
A 47	Malignant neoplasm of intestine, except rectum	152, 153	8
A 48	Malignant neoplasm of rectum	154	1
A 49	Malignant neoplasm of larynx	161	
A 50	Malignant neoplasm of trachea and of bronchus and lung not specified as secondary	162, 163	3
A 51	Malignant neoplasm of breast	170	8
A 52	Malignant neoplasm of cervix uteri	171	8
			87

CHART E
Port-of-Spain
Principal Individual
CAUSES OF DEATHS 1961



Causes of Deaths, 1961—(International Classification)—(Cont'd.)

Intermediate List No.	Cause Groups	Detailed List No.	Total
A 53	Malignant neoplasm of other unspecified parts of uterus	172–174	9
A 54	Malignant neoplasm of prostate	177	3
A 55	Malignant neoplasm of skin	190–191	2
A 56	Malignant neoplasm of bone and connective tissue	196, 197	—
A 57	Malignant neoplasm of all other and unspecified sites	155–160 175 176 198, 199	31
A 58	Leukaemia and Aleukaemia	204	2
A 59	Lymphosarcoma and other neoplasms of lymphatic system	200–203 205	4
A 60	Benign neoplasms and neoplasms of unspecified nature	210–239	1
	III—Allergic, Endocrine System, Metabolic, and Nutritional Diseases		
A 62	Thyrotoxicosis with or without goitre	252	—
A 63	Diabetes mellitus	260	27
A 64	Avitaminosis and other deficiency states:		
	01 Beri Beri	280	1
	02 Pellagra	281	—
	04 Vitamin B deficiency, except beri beri and pellagra	286.2	—
	05 Other deficiency states	283–286	1
	IV—Diseases of the Blood and Blood-Forming Organs		
A 65	Anaemias:		
	01 Pernicious and other hyperchromic anaemias	290	—
	03 Other specified and unspecified anaemias	292, 293	5
A 66	Allergic disorders, all other endocrine, metabolic and blood diseases:		
	01 Asthma	241	4
	02 All other allergic disorders, endocrine, metabolic and blood diseases	253	4
	V—Mental, Psychoneurotic and Personality Disorders		
A 67	Psychoses	300–309	—
A 68	Psychoneuroses and disorders of personality	310–324 326	—
	VI—Diseases of the Nervous System and Sensory Organs		
A 70	Vascular lesions affecting central nervous system	330–334	153
A 71	Nonmeningococcal meningitis	340	1
A 72	Multiple sclerosis	345	—
A 73	Epilepsy	353	1
A 77	02 Otitis media and mastoiditis	391–393	—
A 78	02 All other diseases of the nervous system and sense organs	341–344 350–352 354–357 360–369 395–398	10
	VII—Diseases of the Circulatory System		
A 79	Rheumatic fever	404–402	—
A 80	Chronic rheumatic heart disease	410–416	—
A 81	Arteriosclerotic and degenerative heart disease	420–422	109
A 82	Other diseases of the heart	430–434	42
A 83	Hypertension with heart disease	440–443	39
A 84	Hypertension without mention of heart	444–447	12
A 85	Diseases of arteries	450–456	9
A 86	Other diseases of the circulatory system	460–468	1
	VIII—Diseases of the Respiratory System		
A 87	Acute upper respiratory infections	470–475	—
A 88	Influenza	480–483	2
A 89	Lobar pneumonia	490	26
A 90	Broncho pneumonia	491	51
A 91	Primray atypical, other, and unspecified pneumonia	492, 493	12
A 92	Acute bronchitis	500	7
A 93	Bronchitis, chronic and unqualified	501, 502	2
A 95	Empyema and abscess of lung	518, 521	2
A 96	Pleurisy	519 523	— —
A 97	All other respiratory diseases:		
	01 Pneumoconiosis	511–517	
	02 All other respiratory diseases	520–522 524–527	8
	I—Diseases of the Digestive System		
A 99	Ulcer of stomach	540	2
A100	Ulcer of duodenum	541	—
A101	Gastritis and duodenitis	543	3
A102	Appendicitis	550–553	4
A103	Intestinal obstruction and hernia	570	6
			596

Causes of Deaths, 1961—(International Classification)—(Cont'd.)

Intermediate List No.	Cause Groups	Detailed List No.	Total
A104	Gastro-enteritis and colitis, except diarrhoea of the newborn:		
	01 Gastro-enteritis and colitis between 4 weeks and 2 years ..	571.0	22
	02 Gastro-enteritis and colitis, ages 2 years and over ..	571.1	16
	03 Chronic enteritis and ulcerative colitis	572	1
A105	Cirrhosis of liver	581	15
A106	01 Cholelithiasis	584	1
	02 Cholecystitis without mention of calculi	585	1
A107	Other diseases of digestive system	536–539 542–544 545 573–580 582–583 586–587	9
	I—Diseases of the Genito-Urinary System		
A108	Acute Nephritis	590	—
A109	Chronic and other unspecified nephritis	591–594	10
A110	Infections of kidneys	600	14
A111	Calculi of urinary system	602–604	1
A112	Hyperplasia of prostate	610	6
A114	02 Disorders of menstruation	634	1
A114	03 All other diseases of the genito-urinary system	601–603 605–609 611, 612 614–617 622–623 635–637	4
	Deliveries and Complications of Pregnancy, Childbirth, and the Puerperium		
A116	01 Puerperal eclampsia	685	
	02 All other toxaemias of pregnancy and the puerperium ..	642, 652, 686	1
A117	Haemorrhage of pregnancy and childbirth:		
	01 Placenta praevia	643	—
	02 Haemorrhage of pregnancy	644, 670	2
A118	Abortion without mention of sepsis	650	
A119	Abortion with sepsis	651	
A120	All other complications of pregnancy and childbirth:		
	01 Ectopic pregnancy	645	2
	03 Delivery complications	673–675	—
	04 Other complications of pregnancy	646, 648 649, 676 680, 683	—
	05 Delivery without complications	660	—
	II—Diseases of the Skin and Cellular Tissues		
A121	Infections of skin and subcutaneous tissue	690–698	—
	III—Diseases of the Bones and Organs of Movement		
A122	Arthritis and spondylitis	720–725	1
A123	Rheumatism unspecified	726–727	—
A124	Osteomyelitis and Periostitis	730	1
A126	All other diseases of the skin and musculoskeletal system:		
	01 Chronic ulcer of skin	715	1
	02 All other diseases of skin	716	1
	03 All other diseases of musculoskeletal system	731–736 738, 744	
	IV—Congenital Malformations		
A127	Spina bifida and meningocele	751	
A128	Congenital malformation of Circulatory System	754	4
A129	All other congenital malformations	750–752 753, 755 759	2
	V—Certain Diseases of Early Infancy		
A130	Birth Injuries	760–761	3
A131	Post-natal asphyxia and atelectasis	762	18
A132	Infections of the newborn:		
	01 Diarrhoea of newborn (under 4 weeks)	764	3
	02 Sepsis of newborn	767, 768	—
	04 Other infections of newborn	763,–766	1
A133	Haemolytic diseases of newborn	770	—
A134	All other defined diseases of early infancy:		
	02 Haemorrhagic diseases of newborn	771	7
	03 Nutritional maladjustment	772	3
A135	Ill-defined diseases peculiar to early infancy and immaturity unqualified	73, 776	31
			182

Causes of Deaths, 1961—(International Classification)—(Cont'd.)

Intermediate List No.	Cause Groups	Detailed List No.	Total
	XVI—Symptoms, Senility and Ill-defined Conditions		
A136	Senility without mention of psychosis	794	36
A137	01 Pyrexia of unknown origin	788.8	—
	03 Certain symptoms referable to nervous system and special senses	780	—
	04 Other symptoms referable to nervous system	781	—
	05 Symptoms referable to cardio-vascular and lmyphatic system ..	782	—
	07 Symptoms referable to upper gastro-intestinal tract	784	—
	08 Symptoms referable to abdomen and lower gastro-intestinal system	785	—
	09 System referable to genito-urinary system	786	—
	12 Nervousness and Debility	790	1
	14 Uraemia unqualified	792	6
	15 Ill-defined and unknown causes of mortality	795	15
	16 Other general symptoms	788-1–788.9	—
	"E" XVII—Code Alternative Classification of Accidents, Poisonings, and Violence (External Cause)		
AE138	Motor Vehicles Accident	E810–E825	9
AE139	Other Transport Accidents		—
AE140	Accidental poisoning	E870–E985	—
AE141	Accidental falls	E900–E904	2
AE142	Accident caused by machinery	E912	—
AE146	Accidental drowning	E929	1
AE147	02 Foreign body entering other orifice	E928	
	05 All other accidental causes	E910–E911	1
	01 Foreign body entering eye and adnexia		1
AE148	Suicide and self-inflicted injury	E970–E979	—
AE148	Homicide and Judicial Execution	E980–E985	8
	"N" XVII—Code Alternative Classification of Accidents, Poisonings, and Violence (Nature of Injury)		
AN138	Fracture of skull	N800–N804	—
AN139	Fracture of spine and trunk	N805–N809	—
AN140	Fracture of limbs	N810–N829	3
AN143	Head injury (excluding fracture)	N850–N856	—
AN144	Internal injury of chest, abdomen and pelvis	N860–N869	
AN145	Laceration and open wounds	N870–N908	
AN147	Effects of foreign body entering through orifice	N930–N939	
AN148	Burns	N940–N949	3
AN149	Effects of poisons	N960–N979	
AN150	All other unspecified effects of external causes	N950–N959	
		N980–N999	1
	Grand Total		952

Infant Mortality

The infant mortality rate is one of the most important of those rates that come under the heading of vital statistics and no student of vital statistics can afford to ignore the implications of this rate. In fact, of such significance is this rate that from the very beginning of the Local Sanitary Authority when it was established in January 1917 by the Public Health Ordinance Chapter 12 No. 4, the rate has been subjected to careful analysis and special consideration in the monthly and annual reports.

Depending as it does on facts which are simple and on data that can be collected fairly easily viz. the number of infants under one year old who succumbed per 1000 live births in the particular year that is the subject of enquiry, it is clear that it is not a difficult rate to compile. The conditions that must be satisfied are two: one, the infants who have died must have been born of mothers who are normally i.e. during the previous six months at least, resident in the area in question, and two, the births that have taken place must have been born of mothers who are normally i.e. during the previous six months at least, resident in the area in question. Deaths of infants in hospital, in nursing homes or even in private homes in the City, whose parents are normally resident in the country, must be discounted in the same way that mothers who have come into the City for the purpose of confinement and who are not normally resident in the City cannot have their infants counted as City births.

The infant mortality rate is a fairly sensitive index of progress in environmental hygiene, in education and in general health A high infant mortality rate indicates lack of skilled and readily available ante-natal care, lack of adequate, prompt and skilled midwifery services and insufficient post nata and home visiting services, and even a lack

of adequate public health nursing service. It indicates that the state of general education of the community leaves much to be desired and that health education in all its aspects is lacking and particularly that there is much leeway to be made up in the health education of prospective mothers and fathers. It points to the need for education and propaganda to ensure that health and maternity services, where they do exist, are made use of by the people for whom they were intended and above all that these services can in fact be made available in the homes of the people who require them by seeking the assistance and by welcoming the attention of health visitors. A high infant mortality is usually associated with a low general standard of sanitation, a degree of poverty and malnutrition, poor housing and lack of basic essential sanitary requirements like sewerage and an adequate water supply. It is therefore with a certain measure of satisfaction that we record an infant mortality rate of 44.44 for the year under report, which is not high and which has shown a substantial decline from 232.77 per 1000 live births in the year 1917 when it was possible for the first time to compile accurate statistics. This, however, is a rate that is high compared with cities of similar size in other parts of the civilized world where infant mortality rates of 30 or so per 1000 live births are being recorded regularly. When one considers that out of a total number of 2610 births, 110 have died before they have attained the age of one year, it is clear that this is too heavy a price to pay in a City that should be and can be provided with all the modern facilities and requirements for prompt and safe confinement, and that much more effort is needed by those agencies and organisations that are concerned with maternal and child welfare. Unfortunately there is the feeling that is not sufficiently appreciated and it would appear that there is need for a complete reorientation of our attitude to this important matter and a rededication to and intensification of, our efforts directed to this particular line of public health work. The Child Welfare League and the maternity and child welfare services of Government on whose shoulders the burden of the responsibility falls have within their respective capacities been doing as much as they possibly can with the resources at their command, but the Child Welfare League which has borne the brunt of this work ever since it came into being in the year 1917 finds itself with limited funds at its disposal and a limited number of voluntary workers with which to carry on. Unless these two defects are corrected promptly, the League will be unable to expand its activities to the home of every woman and child in the City so as to be sure that no expectant mother or child fails to come under its care or supervision.

Even existing services which are in need of intensification and expansion may suffer because it is not sufficiently appreciated what an important piece of public health work this is, done as it is in the comparative obscurity of clinics and homes and so not normally hitting the headlines, but there can be no denying the benefit that has accrued to the community from the activity of the Child Welfare League.

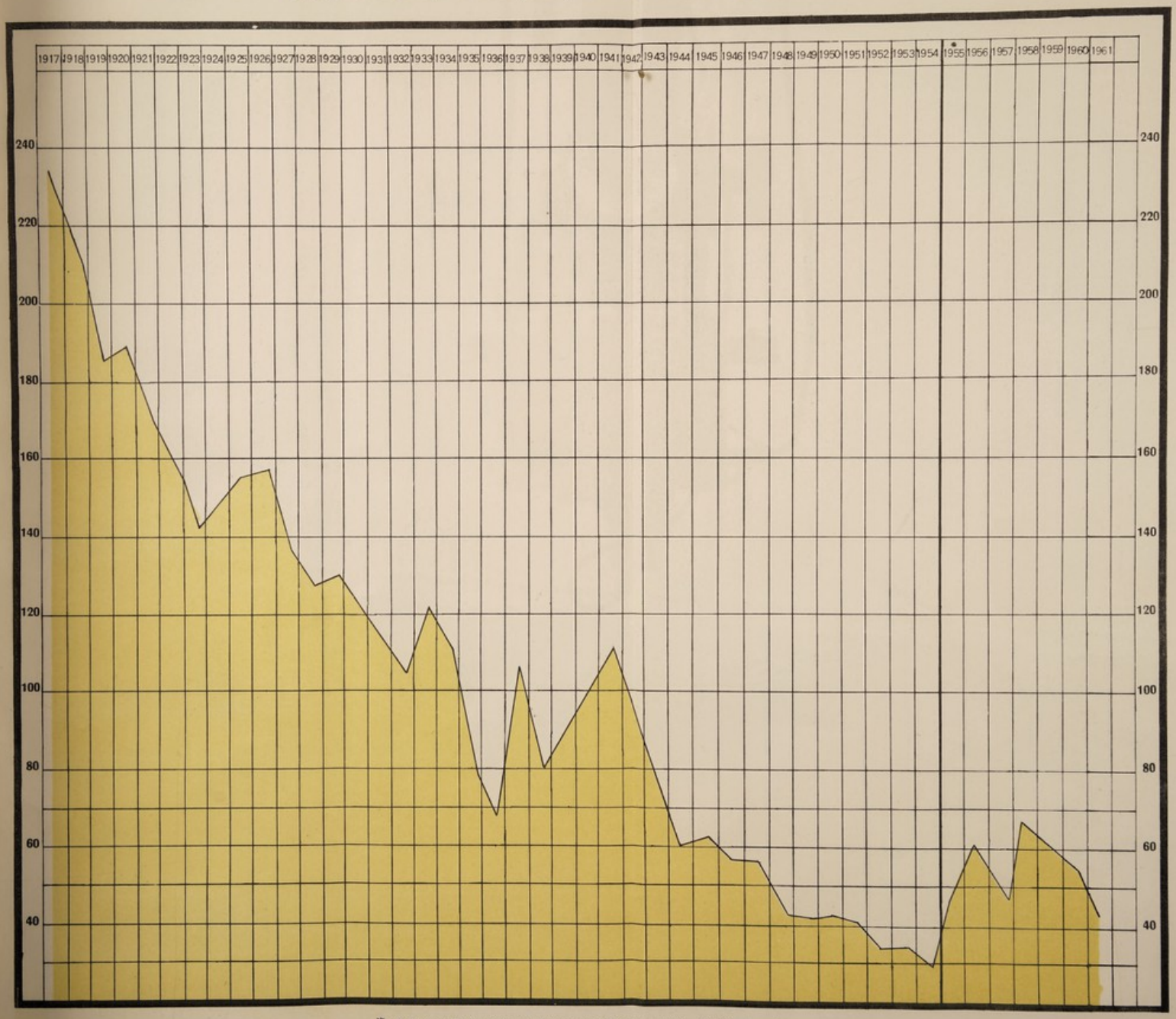
Seventy-four of the 116 deaths of infants under one year that occurred in the year under report were of infants under one month, in other words the neo-natal mortality was 63.80 of the total mortality. It is believed that the neo-natal mortality is due to causes operating mainly during the ante-natal and intra-natal period and this high rate seems to emphasize the fact that whilst the mortality in the case of those infants that survive the first month of extra uterline life is being substantially reduced, hardly any progress whatsoever has been made in so far as neo-natal mortality is concerned.

If the infant mortality is to be further reduced, the ante-natal causes of that mortality like prematurity, congenital debility, congenital abnormalities, marasmus, malnutrition, anemia and other ante-natal and intra-natal causes like haemorrhage, cerebral damage, etc. must be enquired into critically and steady research undertaken with a view to discovering the means whereby they can be prevented.

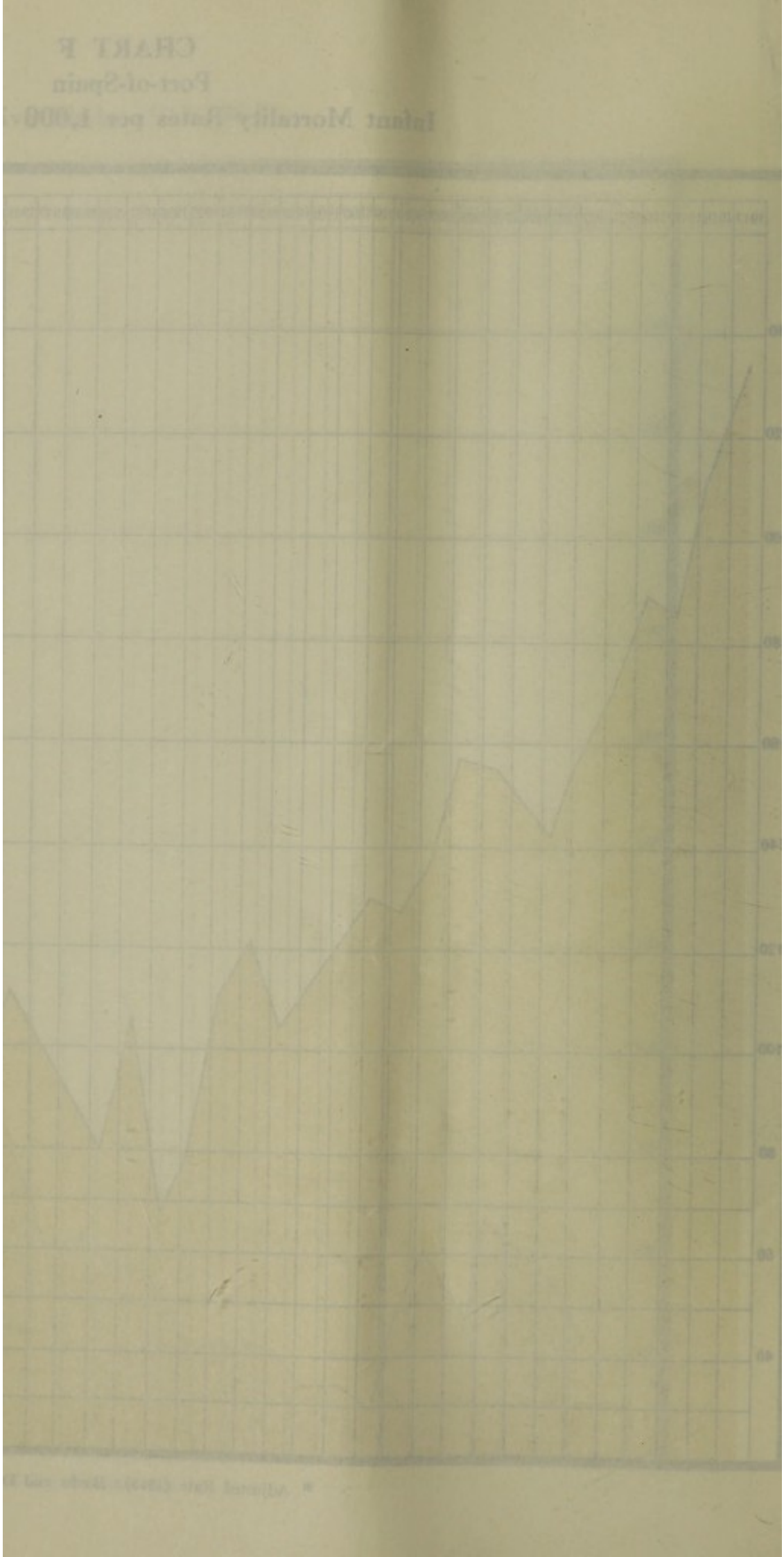
Births and Deaths of Infants under 1 year, 1917-1961

Period	No. of Births	No. of Deaths under 1 year	Infant Mortality Rate
Year 1917	1,770	412	232.77
Yearly Averages:			
1918–22	1,700	310	182.94
1923–27	1,862	274	146.96
1928–32	1,925	230	119.13
1933–37	2,248	215	96.05
1938–42	2,913	275	93.84
1943–47	4,026	248	61.94
Average 1918–47	2,446	259	116.94

CHART F
Port-of-Spain
Infant Mortality Rates per 1,000 Live Births 1917-1961



* Adjusted Rate (1955): Births and Deaths of City Residents only



Births and Deaths of Infants under 1 year, 1917-1961—(Cont'd.)

Period	No. of Births	No. of Deaths under 1 year	Infant Mortality Rate
1948	4,053	177	43.67
1949	4,037	171	42.36
1950	3,905	168	43.02
1951	3,982	167	41.94
1952	4,115	137	33.29
1953	4,499	157	34.90
1954	5,403	150	27.76
1955	3,078	138	44.83
1956	2,621	158	60.28
1957	2,735	127	46.44
1958	2,592	171	65.97
1959	2,627	158	60.15
1960	2,498	141	56.44
1961	2,610	116	44.44

Causes of Deaths, under 1 year, 1961.

CAUSES OF DEATH	Neo-Natal Deaths under 1 month	Deaths 1 month and under 1 year	Total	Percentage of Total Infant Mortality
Ante-Natal Causes:				
Ventricular Septal Defect	—	—	—	
Prematurity	26	3	29	
Marasmus	—	—	—	
Malnutrition	1	2	3	
Congenital Abnormalities	1	—	1	
Congenital Heart Disease	1	2	3	
Hydrocephalus	—	2	2	
Neonatal Sepsis	—	—	—	
Cerebral Damage	—	—	—	
Total Ante-Natal	29	9	38	32.76
Intra Natal Causes:				
Birth Injury	3	—	3	—
Total Intra-Natal	3	—	3	2.59
Post-Natal Causes:				
Asphyxia and Atelectasis	16	—	16	
Pneumonia	3	8	11	
Diarrhoea and Enteritis	4	18	22	
Bronchitis	—	3	3	
Icterus Neonatorum	1	—	1	
Pleurisy	—	—	—	
Tuberculosis	—	—	—	
Pulmonary Congestion	—	—	—	
Other Post-Natal Causes	18	4	22	
Total Post-Natal ..	42	33	75	64.65
Grand Total	74	42	116	

Duration of Life of Infants Dying Under 1 Year, 1961.

Duration of Life	No. of Infants	Percentage of Total Deaths under 1 year	Corresponding Percentage, 1960.
Under 1 day	18	15.52	14.90
1 day and under 2 weeks	48	41.38	34.75
2 weeks and under 1 month	8	6.90	7.09
Total under 1 month	74	63.80	56.74
1 month to 3 months	25	21.55	15.60
Over 3 to 5 months	6	5.17	7.09
Over 5 to 7 do.	3	2.59	7.09
Over 7 to 9 do.	7	6.03	6.39
Over 9 toll do.	1	0.86	7.09
Over 11 months and under 1 year	—	—	—
Total	116	—	—

Neo-Natal Mortality (Deaths under 1 month) 1930-1961

Period	No. of Deaths under 1 month	Percentage of Total Deaths under 1 year	Neo-Natal Mortality Rate per 1,000 Birth
Yearly Average 1930–34	90.6	38.60	44.03
Year 1935	91	50.28	39.24
1936	61	40.94	26.58
1937	110	46.41	48.39
1938	117	57.35	45.16
1939	122	50.41	44.33
Average 1935–39	100.2	49.08	40.74
Year 1940	132	45.36	44.94
1941	137	43.63	47.44
1942	134	41.62	39.42
1943	134	47.35	35.72
1944	117	47.18	28.12
1945	126	52.72	31.72
1946	136	56.43	32.91
1947	133	57.58	32.20
1948	76	42.94	18.75
1949	82	47.96	20.31
1950	82	48.82	21.00
1951	77	46.11	19.34
1952	60	43.79	14.58
1953	84	53.51	18.67
1954	84	56.00	15.55
1955	82	59.42	26.64
1956	67	42.41	25.56
1957	70	55.12	25.59
1958	88	51.46	33.95
1959	93	58.87	35.40
1960	80	56.74	32.02
1961	74	63.80	28.35

Still Births

Whilst the infant mortality rate has always attracted great attention and interest and has always been the subject of careful analysis in this country as well as in other parts of the civilized world, the problem of still births and the still birth rate has not, by comparison, been given the place and importance it deserves in spite of the fact that the study of still births is intimately bound up with that of infant deaths. It is clear that the same causes and conditions that determine the death of an infant in the post-natal period, particularly in the neo-natal period of extra-uterine life can, if they are serious enough and if the infant for one reason or another is debilitated enough, lead to its death in the mother's womb. There is a very short cry between a still birth and the death of an infant born alive but dying within the first few days of extra-uterine life, and an attitude of casual notice and quiet tolerance in the face of a menacing problem which has in its basic causes an important influence on the infant mortality rate itself is not likely to lead to the adoption of preventive measures directed to its elimination.

In addition to the disease and accidents of pregnancy and confinement which are capable of leading to the death of the infant in the mother's womb or during the early days of extra-uterine life and for which prompt and skilled medical care and attention during the ante-natal and intra-natal period are necessary, certain general diseases affecting the parents before the ante-natal period can have such a profound lethal effect on the life of the infant that it cannot possibly survive for any length of time. I refer to chronic system diseases like syphilis, diabetes, chronic nephritis, chronic alcoholism, malaria, tuberculosis and it is therefore a matter of paramount importance that a prospective parent be seized of this knowledge and that remedial means be adoped without any delay either to eliminate or diminish the effect of these diseases. Other causes are obscure and not well understood and much more research by way of post-mortem examination and by experiment is necessary if we are to possess the accurate knowledge that is needed to lower the mortality which takes such a large toll of infant life in the mother's womb.

During the year under report 80 still births were registered with the Department, the largest number during the last six years. This represents a still birth rate of 30.65 per 1000 live births. The number of still births registered during the past six years has been 67, 78, 66, 57, 73 and 80.

Still Births, 1938-1961

Year	Total Still Births	Rate per 1,000 Live Births
1961	80	30.65
1960	73	29.22
1959	57	21.70
1958	66	25.46
1957	78	28.52
1956	67	25.56
1955	89	28.92
1954	268	49.60
1953	225	50.01
1952	207	50.30
1951	193	48.47
1950	165	42.25
1949	244	60.44
1948	223	55.02
1947	220	53.49
1946	225	54.44
1945	224	56.39
1944	265	63.69
1943	230	61.32
1942	257	75.61
1941	211	73.06
1940	214	72.86
1939	190	69.04
1938	171	66.00

Maternal Mortality

The death of a mother as a result of pregnancy and or confinement is a tragedy that calls for careful investigation and critical analysis. Such deaths should be and are, for the most part, preventable and where the maternal mortality is high, there can be found inadequate and perhaps delayed attention, care, and supervision during the ante-natal, intra-natal and post-natal period. Pregnancy and confinement are physiological processes and the loss of a mother's life as a result of what is a physiological process represents a wastage of life that should be prevented on general humanitarian grounds, apart altogether from the fact that physiological process should entail no disease, injury or death. Besides a child and mother saved might very well be the means whereby greater benefit, greater welfare, and greater happiness are made to accrue to the community. The maternal mortality rate for the year under report worked out to be 1.92 per 1000 live births.

Causes of Maternal Deaths, 1961

Causes of Maternal Deaths	Under 16	16 to 25	26 to 35	36 and upwards	Total All Ages	Rate per 1,000 Births	
						1961	Average 1956–'60
Puerperal Sepsis	—	—	—	—	—	—	—
Eclampsia	—	—	—	—	—	—	0.2
Haemorrhage	—	—	1	1	2	—	1.4
Pernicious Vomiting ..	—	—	—	—	—	—	0.2
*Other Causes	—	1	1	1	3	1.15	6.2
TOTAL	—	1	2	2	5	1.92	8.0

*Other Causes include Ectopic Pregnancy 2. All other Toxaemias of Pregnancy and the Puerperium.

The Pre-School Child

Whilst much care and attention have for decades now been devoted to the infant under one year in child welfare clinics and at home, by welfare organisations, by propaganda and publicity as well as by the provision of skilled and prompt medical care and treatment, by the provision of much needed supplies to mother and infant and even in some cases by financial assistance, the pre-school child by contrast seems completely neglected. And yet this is a period of the child's life which is so important from the point of view of future manhood and fruitful citizenship, seeing that diseases occuring at this period and left untreated are likely to affect profoundly the future health and usefulness of the grown up adult and make him a life long burden on, rather than an active contributor to, the welfare of the State.

The infant at the end of 12 or 18 months seems, so to speak, to be lost to all care and welfare organisations only to be discovered again at the age of five when he enters

school and when a number of defects and diseases are detected which could quite easily in the majority of cases have been prevented if only they had been discovered at a much earlier period of time. This is the raison d'etre for nurseries and nursery schools, more of which should be established and in which the toddler between the ages of one and five can be given additional food like dried milk and glucose and if necessary left during the day whilst the mother goes out to work to earn a living so as to supplement the meagre earnings of the head of the family.

Happily these important facts are being more generally recognised and the need for this most essential service more fully appreciated. The Child Welfare Clinic and the Nursing Association whose functions include the provision of nurseries and nursery schools are actively engaged in efforts directed to the raising of funds for the specific purpose. There should be no hesitation on the part of Government and the people at large to make funds available for this very desirable and most productive service.

Causes of Death at Ages 1 to 5, 1961

Groups	Group Total	Percentage of Total Mortality at Ages 1–5
Diseases, &c., attributable to Ante-Natal Causes:		
Hydrocephalus 1; Asphyxia 1	2	8.70
Communicable Diseases:		
Pneumonia 4; Meningitis (TB) 1	5	21.73
Diseases of the Nervous System	—	—
Diseases of the Circulatory System:		
Myocardial Failure 1; Congenital Heart Disease 1	2	8.70
Diseases of the Respiratory System:		
Bronchitis 2	2	8.70
Diseases of the Digestive System:		
Gastro-Enteritis 2; Perforation of Gut 1; Peritonitis 1	4	17.39
Other Causes:		
Road Accident 1; Hymolytic Anaemia 1; Sickle Cell Anaemia 1; Acute Lymphatic Luekaemia 1; Septicaemia & Pyaemia 1; Not Known 3 ..	8	34.78
	*23	

*M—14; F—9

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES

Notifiable Infectious Diseases

It is interesting to recall the fact that the whole of the concept as to the necessity for a separate organisation and a district department to deal with preventive measures generally and to improve the environmental hygiene of the community by taking measures to abate nuisances specifically, stemmed from the havoc and destruction that infectious diseases used regularly to wreak in the sixteenth, seventeenth, and eighteenth centuries in a population which knew little or nothing of these diseases and which was poorly equipped and inadequately protected to meet their ravages. When one thinks of the epidemics of cholera, plague, typhus fever, small pox and typhoid fever that used to descend upon the residents of mediaeval cities and how in those days the population used to be decimated by their depredations, one must marvel at the progress that has been made and the efficiency of the measures that have been applied to prevent and limit the spread of infectious diseases. Not often nowadays does one hear or read of an epidemic that has caused the death of so many thousands of people, though they still do occur in less protected communities and, if nothing else, they serve to remind us that the price of safety is eternal vigilance. There can be no let up in the fight against infectious diseases and the time honoured measures of the detection and isolation of patients, the disinfection of premises and fomites, of inoculation and immunisation have stood the test of time, aided and supplemented as they are nowadays by greater knowledge as to the cause of these diseases, and the consequently more specific active immunisation that has become available.

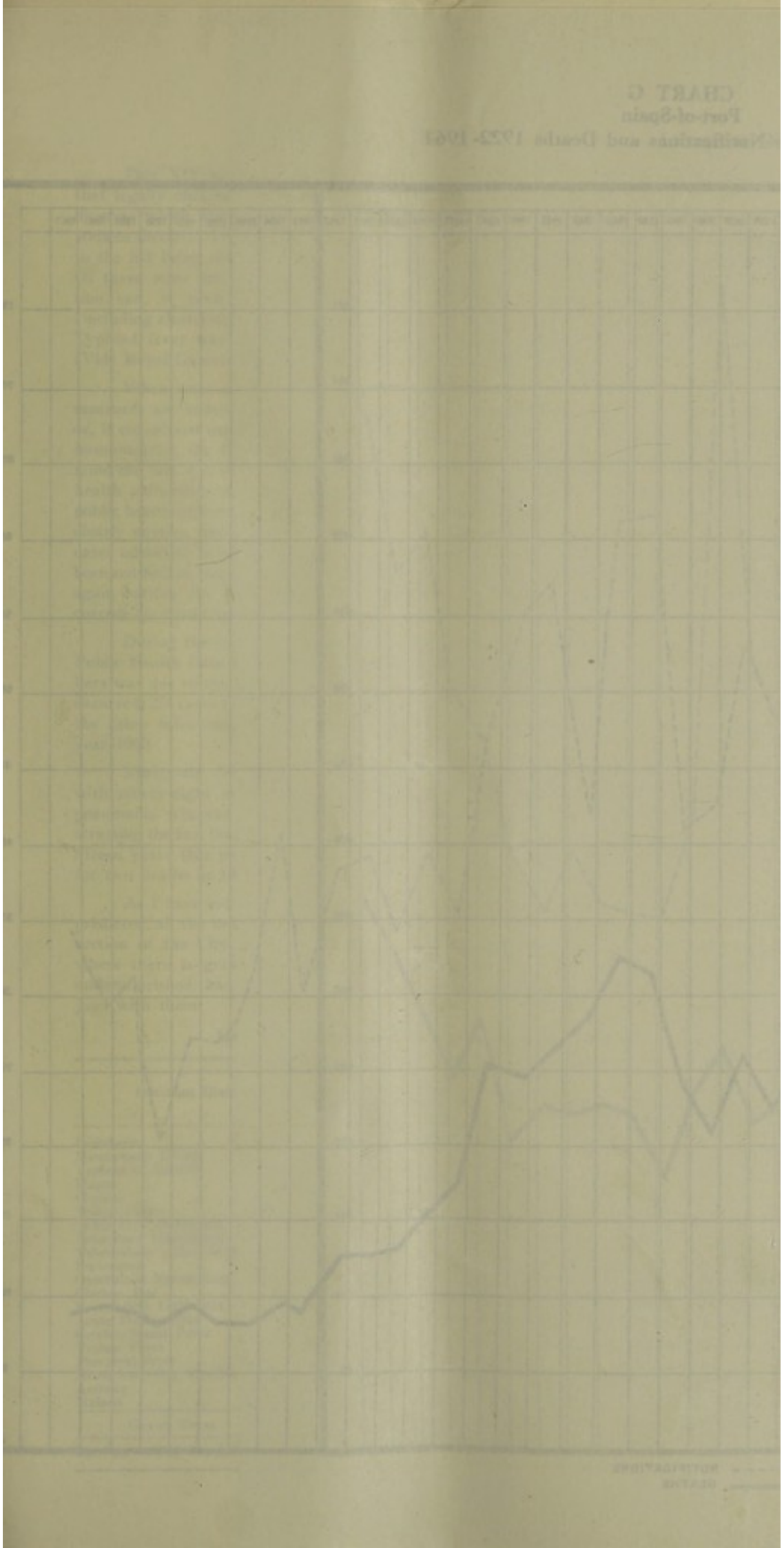
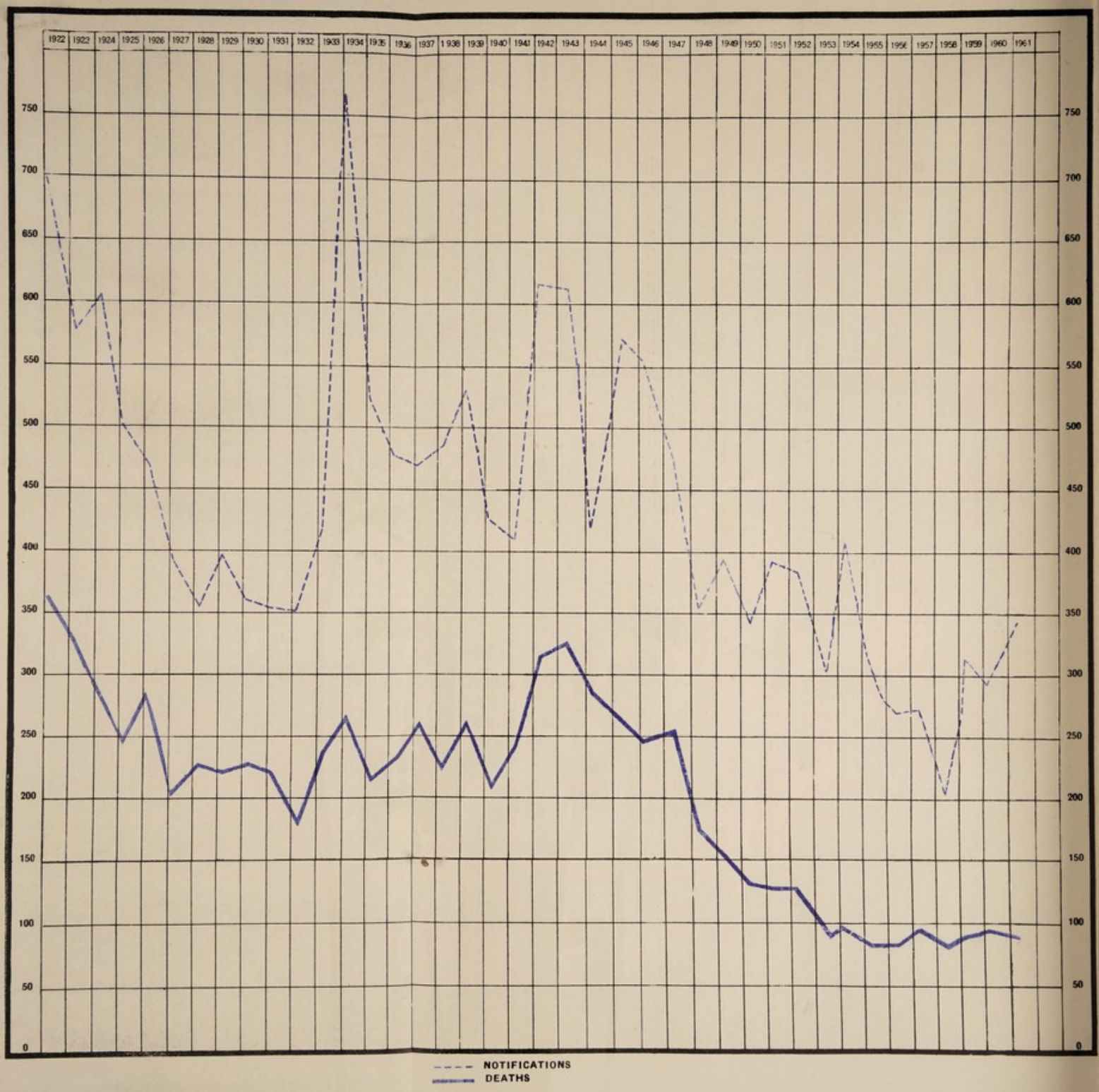


CHART G
Port-of-Spain
Infectious Diseases—Notifications and Deaths 1922-1961



Part XIV of the Public Health Ordinance Ch. 12 No. 4 prescribes the procedure that legally obtains in regard to infectious diseases and also details the list of infectious diseases which are notifiable, a list that can be added to or subtracted from as circumstances dictate. Twenty-one (21) infectious diseases are now notifiable, the latest addition to the list being malaria, which was declared a notifiable infectious disease in March 1956. Of these some are dangerous infectious diseases in regard to which the process of quarantine can, if need be, be applied. They are plague, cholera, typhus fever, small pox (including alastrim) and yellow fever to which have been added typhoid fever and anthrax. Typhoid fever was proclaimed a dangerous infectious disease in 1937 and anthrax in 1938 (Vide Royal Gazette 2nd June 1938 and 31st July 1939).

When once an infectious disease has been notified, the whole train of preventive measures are immediately set in motion, viz., the effective isolation of the patient at home or, if considered necessary, in hospital, the detection of contacts and their active or passive immunisation, the disinfection of premises and fomites etc. but it is important to bear in mind the fact it is only by notification at the earliest possible opportunity to the public health authorities that such measures can be wholly successful. It is also important for public health officers not to forget that often a case is notified on suspicion, as the law clearly enjoins, and in the circumstances it is the counsel of supreme perfection to get such cases admitted to hospital where the hospital doctor, knowing that the case has already been notified on suspicion, can afford to wait a little to be sure of the diagnosis before he again notifies the Medical Officer of Health, as he is in duty bound. By this means a correct diagnosis can be established and accurate and reliable statistics compiled.

During the year under report 342 cases of infectious diseases were notified to the Public Health Department as compared with 285 in the year before. The increase in numbers was due to the fact that in the year 1961 an epidemic, of moderate size, of chicken pox occurred, 254 cases being notified as compared with 136 in the year 1960. In the case of all the other infectious diseases the number of notifications received was less than in the year 1960.

Ninety-six (96) deaths were certified to notifiable infectious diseases as compared with ninety-eight in the year 1960. Eighty-nine (89) of this number were certified to pneumonia whereas only nine (9) cases of pneumonia were notified to the Department stressing the fact that I have mentioned before in nearly every annual report during the last fifteen years that pneumonia is a poorly notified disease. Typhoid fever was responsible for two deaths in 1961 as compared with one in 1960.

As I have indicated before in previous annual reports, and as can confidently be predicted, all the notifiable infectious diseases show a greater incidence in the unsewered section of the City and particularly in the East Dry River and Belmont Sub-districts where there is great overcrowding and congestion, where the residents are poor and undernourished, and the houses are old and dilapidated with privy cesspits often cheek by jowl with them.

Infectious Diseases—Notifications and Deaths, 1951-1961

Infectious Diseases	Cases Notified				Deaths			
	Average 1951–55	Average 1956–60	1960	1961	Average 1951–55	Average 1956–60	1960	1961
Diphtheria	25.4	19.0	19	13	1.0	1.2	1	1
Membranous Croup	0.2	—	—	—	—	—	—	—
Typhoid or Enteric	25.6	16.0	21	8	4.0	0.6	1	2
Plague	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—	—
Small Pox (Alastrim)	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	133.8	75.2	73	53	22.2	8.6	2	2
Tuberculosis (other forms)	3.8	1.8	—	—	6.4	1.2	—	3
Pneumonia	56.4	28.0	23	9	65.4	74.4	93	89
Ophthalmia Noenatorum	7.0	14.2	15	5	—	—	—	—
Chicken Pox	97.2	110.2	136	254	—	0.2	—	—
Encephalitis Lethargica	0.4	0.2	—	—	0.2	0.8	1	1
Acute Poliomyelitis	8.0	4.0	1	—	0.2	—	—	—
Cerebro-Spinal Fever	0.6	0.2	1	—	—	—	—	—
Typhus Fever	—	—	—	—	—	—	—	—
Puerperal Fever	0.2	—	—	—	—	0.8	—	—
Acute Ascending Myelitis	—	—	—	—	—	—	—	—
Anthrax	—	—	—	—	—	—	—	—
Malaria	—	0.4	—	—	—	0.2	—	—
GRAND TOTAL	358.6	269.2	289	342	99.4	88.0	98	97
Rate per 100,000 Population	320.9	242.4	307	347	88.9	79.2	104	98

Distribution of Cases and Deaths from Notifiable Infectious Diseases, 1961.

Diseases	City Proper		St. Clair		East Dry River		Belmont		Woodbrook		St. James	
	Cases notified	Deaths	Cases notified	Deaths	Cases notified	Deaths	Cases notified	Deaths	Cases notified	Deaths	Cases notified	Deaths
Diphtheria	1	—	—	—	3	—	3	—	—	—	6	—
Membranous Croup	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid or Enteric Fever	1	1	—	—	6	—	—	—	—	—	1	1
Plague	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
Small Pox (Alastrim)	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	11	1	—	—	16	—	6	1	3	—	17	—
Tuberculosis (other forms)	—	—	—	—	—	—	—	2	—	—	—	1
Pneumonia (all forms)	2	18	—	3	5	5	2	14	—	2	—	47
Ophthalmia Neonatorum	1	—	—	—	3	—	—	—	—	—	1	—
Chicken Pox	65	—	1	—	100	—	56	—	7	—	23	—
Encephalitis Lethargica	—	—	—	—	—	1	—	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever	—	—	—	—	—	—	—	—	—	—	—	—
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—
Acute Ascending Myelitis	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—
Grand Total	81	20	1	3	133	6	67	17	10	2	50	49
Rate per 100,000 Population in each Sub-District	370	46	77	230	599	27	271	69	89	18	290	284

Notifiable Infectious Diseases—Home and Hospital Deaths, 1961.

Diseases	Deaths			Hospital Deaths Percentage of Total Deaths	Corresponding Percentage for the year 1960
	At Home	At Hospital	Total		
Diphtheria	—	—	—	—	100.00
Enteric Fever	—	2	2	100.00	100.00
Pulmonary Tuberculosis	1	1	2	50.00	50.00
Tuberculosis other forms)	—	3	3	100.00	—
Pneumonia (all forms)	66	23	89	25.84	31.18
Puerperal Fever	—	—	—	—	—
Chicken Pox	—	—	—	—	—
Cerebro-Spinal Fever	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—
Encephalitis Lethargica	—	1	1	100.00	100.00
Malaria	—	—	—	—	—
Total	67	30	97	30.93	33.67

Premises, &c., Disinfected for Infectious Diseases and Vermin, 1961

DISEASES	Premises sprayed
Pneumonia	8
Tuberculosis	39
Enteric Fever	8
Diphtheria	13
Puerperal Fever	—
Ophthalmia Neonatorum	3
Chicken Pox	164
Poliomyelitis	—
Cerebro-Spinal Fever	—
Leprosy	1
Encephalitis Lethargica	—
Total	236
Vermin	1,643

6,043 Cesspits were sprayed with a mixture of crude and distillate oils (free of charge) as a routine measure of prevention against spread of the bowel-filth diseases.

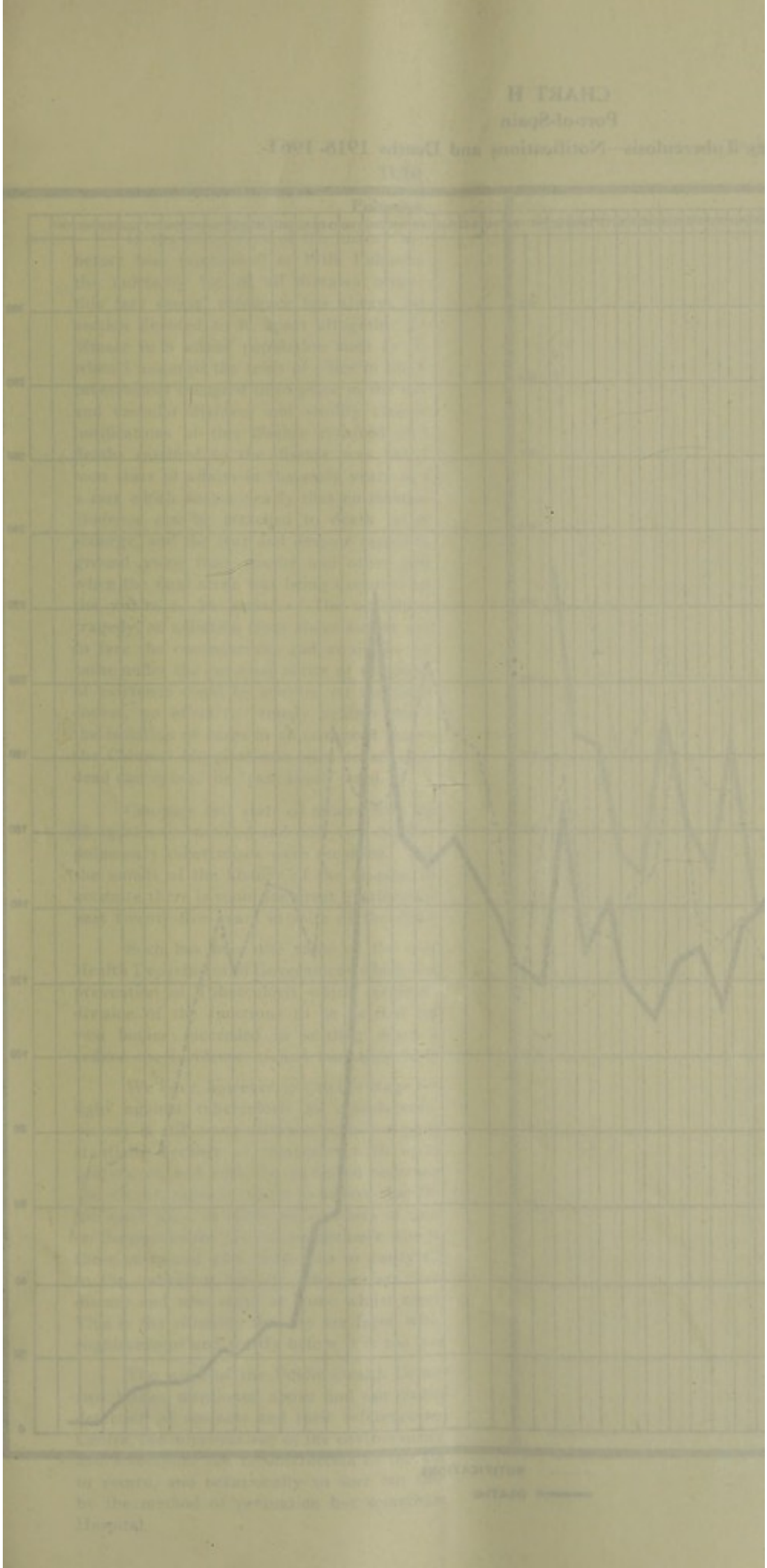


CHART H

Port-of-Spain

Pulmonary Tuberculosis—Notifications and Deaths 1918-1961

TUBERCULOSIS

Pulmonary Tuberculosis

In the early days of the history of the Local Sanitary Authority, which I have stated before was established in 1918, Pulmonary Tuberculosis occupied a very high position in the mortality list of all diseases occurring within the limits of the City and because of this fact special reference has always been made to this infectious disease and a special section devoted to it, apart altogether from the special circumstances attaching to this disease in a mixed population such as that of the City of Port-of-Spain. In the year 1937 when I assumed the reins of office in the Public Health Department of the City, pulmonary tuberculosis occupied third place in the mortality list attributable to all causes, only cardiac and vascular diseases and senility claiming more victims. In that year the number of notifications of this disease received at the Department totalled 131 and the number of deaths certified to the disease was 142, 11 more deaths than notifications, a not uncommon state of affairs in the early years of the history of the Local Sanitary Authority, and a fact which shows clearly that notifications of cases are not reliable and that much more credence can be attached to death returns. Tuberculosis then was a dread disease, a scourge, and the fear and despair associated with the disease drove the sufferers underground away from doctor and other public health workers only to be discovered again when the final scene was being executed and there was need for a death certificate to enable the victim to be buried. The unfortunate family looked upon the disease as a great tragedy, an affliction from above and as such there was no other course to be adopted than to face the consequences and await the fatal day. In those days the number of cases that came under the personal notice of the public health officer which survived a two year period of existence could be counted on the fingers of both hands. There was in those days, of course, no effective remedy against the disease, no sanatorium, no proper hospital for the isolation of cases in an advanced state of infection. It is true that the P.H. Ward of the Colonial Hospital was open to all cases but it was looked upon as a ward for the dead and dying, the "past hope" ward.

Compare this state of affairs with the position today where in the year under report 58 cases were notified and only two deaths in which the cause of death was certified to be pulmonary tuberculosis were recorded. This is the smallest number of deaths recorded in the annals of the history of the disease, and seeing that these death returns are fairly accurate there is room for great gratification that so much has been achieved during the past twenty-five years in spite of the difficulties that we have to contend with.

Such has been the value of the work done by the Tuberculosis Division of the Health Department of Government which was established in 1946 and the Association for the prevention of Tuberculosis which received a new lease of life in 1948 when a proper division of the functions to be carried out by each organisation was effected, and these two bodies succeeded in settling down to work, side by side, in a determined drive to reduce the incidence of and mortality from tuberculosis.

We have, however, got to the stage now where we have to redouble our efforts in the fight against tuberculosis as complacency has set in and we are claiming victory, when victory is still some distance from our grasp. Though the death rate has diminished substantially because of treatment with up-to-date powerful drugs, with modern surgical procedures, and with the increased resistance shown by reason of increased contact with the disease, there is reason to believe that the incidence of the disease has not declined at the same pace, as there are numbers of cases that are not notified. This is due to neglect on the part of the general practitioner who is today seeing and treating a larger number of these cases and who often fails to notify the case to the public health authorities and also to the individual himself, who prefers that it be not known that he is a victim of the disease and who stays at home whilst receiving modern treatment from his private doctor. This is the situation that we are faced with and this is the situation that we have to take cognisance of and rectify before it is too late.

The work of the Public Health Department represents a sort of liaison between the two bodies mentioned above and our Sanitary Inspectors are mainly concerned with the detection of contacts and their reference to the Chest Clinic of the Caribbean Medical Centre, the improvement of the environmental hygiene of home and surroundings, the repair and sometimes the reconstruction of the dilapidated dwellings to which the cured case has to return, and occasionally to sort out the lapsed cases and insure their return, mainly by the method of persuasion but sometimes by force, to the Chest Clinic or the Masson Hospital.

The lines along which future work must be directed are becoming clearer with each passing year: there must be continuous propaganda to dispel the feeling of over confidence that Tuberculosis has been eliminated from the community, to secure the early detection and treatment of the cases that are still occurring and their removal to hospital or sanatorium, to enlist the co-operation of the general practitioner to ensure that cases are referred to the Division dealing with this disease at the earliest possible opportunity, and particularly must efforts be made and funds provided to effect the rehabilitation of the cured cases so that they may be able once more to earn a living and to share within limits in the activity of the community. Add to this the general preventive measures directed to the elimination of bad housing conditions, to the improvement of sanitation and to the provision of clean, wholesome, and cheap food within the reach of the pockets of those in the lowest income bracket, in which the Local Sanitary Authority and the Central Government play the major part.

Pulmonary Tuberculosis—Notifications and Deaths, 1918-1961

Period	Notifications	Deaths	Death Rate per 100,000 Population
Year 1918	299	233	343
Yearly Averages:			
1919–23	207	173.2	265
1924–28	167.6	154.6	238
1929–33	133.6	12.9	185
1934–38	147.4	124.6	162
Average 1919–38	163.9	145.4	213
Year 1939	175	167	185
1940	155	118	128
1941	113	124	127
1942	157	136	137
1943	182	148	145
1944	186	158	152
1945	206	140	141
1946	173	158	157
1947	222	167	174
1948	170	108	109
1949	189	58	57
1950	127	55	53
1951	143	27	25
1952	147	28	26
1953	122	20	18
1954	137	22	19
1955	120	14	12
1956	85	13	11
1957	73	13	11
1958	75	9	7
1959	70	6	6
1960	73	2	2
1961	53	2	2

Non-Pulmonary Tuberculosis

I have in previous reports referred to this special form of tuberculosis because of the bearing it has on the public health and because of the fact that it is capable of being eliminated by the application of well known preventive measures.

Non-pulmonary tuberculosis of various organs and tissues of the human body carries with it a high mortality and in some cases, like tuberculosis of the meninges, the mortality is about 100 per cent, but seeing that it is mainly due to the bovine type of bacillus which is conveyed in the milk and flesh of bovines, effective meat inspection and the boiling or proper pasteurization of milk can have a profound effect on the incidence of the disease.

Add to this the regular tuberculin testing of bovines, the destruction of affected herds and the ante-mortem inspection of cattle previous to slaughter, and this form of tuberculosis is certain to show a diminishing incidence in proportion to the persistence and the thoroughness with which these measures are adopted.

Non-Pulmonary Tuberculosis—Forms, Notifications and Deaths, 1961

Forms	Notifications	Deaths
Miliary Tuberculosis	—	—
Tuberculosis of Meninges	—	2
Do. Spine and Bones	—	1
Do. Peritoneum	—	—
Do. Larynx	—	—
Total	—	3

Deaths from Non-Pulmonary Tuberculosis, 1924-1961

Period	Deaths	Rate per 100,000 Population
Yearly Averages:		
1924–28	15	23
1929–33	15.2	22
1934–38	10	13
Average 1924–38	13.4	19
Year 1939	15	17
1940	14	15
1941	6	6
1942	4	4
1943	9	9
1944	10	10
1945	13	12
1946	14	14
1947	11	11
1948	6	6
1949	10	10
1950	14	13
1951	7	7
1952	12	11
1953	6	5
1954	4	3
1955	3	3
1956	3	2
1957	—	—
1958	3	2
1959	—	—
1960	—	—
1961	3	3

Enteric Fever

This is an infectious disease to which public health officers devote the greatest study and attention because of the important relation that a high incidence of and death rate from, typhoid fever has to the general state of environmental hygiene obtaining in the area in question. For it is an undoubted fact that where the general state of sanitation is poor and particularly where the disposal of sewage is so inefficient that contaminated faecal matter can find its way either, through the consumption of contaminated foodstuffs or by the drinking of infected water, into the alimentary tract of the individual, there will inevitably be found a high incidence of typhoid fever and a comparatively high death rate from the bowel filth diseases.

The aim of all modern methods of sanitation and of the water borne method of sewage disposal is to lower the incidence of the bowel filth diseases of which typhoid fever is perhaps the most important and eventually to eliminate them altogether. The water borne sewerage system insures the speedy removal of faecal matter and particularly infected faecal matter from inhabited premises and their ultimate disposal in a place where they can exert no harmful effects.

It is obvious that any system of conservancy which permits faecal matter to be retained in or about premises carries with it the grave potential risk that the faecal matter, if by chance it happens to be infected, may cause the spread of typhoid fever, dysentery, and other bowel filth diseases.

In the City of Port-of-Spain where less than one half of the Urban Sanitary District is sewered there still remains the privy cesspit system of disposal with a certain number of premises served by local sewage disposal systems, like septic tanks or what is much more usual, cesspools.

It is clear, therefore, that in these unsewered areas the risk of the spread of typhoid fever is a real one, a risk that is ever present but which the Public Health Department seeks to diminish by the constant oiling and disinfecting of the cesspits in these areas, which is part of the regular routine work carried out by the operatives of the Oiling Unit of the Department but which is intensified and amplified whenever a case of typhoid fever occurs in the district. In these circumstances oiling of all privy cesspits within a radius of a mile is immediately undertaken in addition to the measures of disinfection applied to the premises themselves where the case has occurred and to the particular pit itself where it is almost certain that infected faecal matter has been deposited.

By these and other measures which include the active immunisation of contacts and others with anti-typhoid vaccine and the campaign designed to secure good, clean, wholesome and uncontaminated foodstuffs particularly those of the green variety, the incidence of typhoid fever has been lowered and fewer and fewer cases are occurring each year, but if typhoid fever is to be eliminated entirely from the City of Port-of-Spain the whole of the City will have of necessity to be sewered and a sufficiency of water supplied for the regular flushing of lavatories and the removal of all infected matter from the affected premises. Fortunately at the moment this project is being actively prosecuted and the sewering of Belmont is underway, an American Firm, Lock Joint American (Trinidad) having been given the contract to execute this work in accordance with plans drawn up by another American Firm—Metcalfe and Eddy.

It is a matter of supreme importance to determine the source of the cases of typhoid fever that are now occurring within the limits of the City. It is fairly certain that typhoid fever, as it occurs in the City, is not water borne, the incidence of these cases being entirely sporadic, and not at all bearing any resemblance to the more explosive features of a water borne epidemic; in addition the water supply is made and kept potable by the chlorination of all sources and by the maintenance of a small "residual" in the distribution system to make sure that any possible contamination of the distribution system can be dealt with immediately. The cases of typhoid fever that do occur are in the large majority of instances almost certainly due to the consumption of infected foodstuffs, particularly that type of foodstuff which is usually eaten raw like watercress, cabbage, lettuce, spinach, tomatoes etc., the vegetable gardens from which they are derived being often manured with human excrement. A few are contacts to cases which have either been neglected or missed or not diagnosed early enough to enable effective preventive measures to be undertaken, and a small number are caused by carriers who, in spite of every effort by the hospital services to prevent or eliminate the carrier state in a case of typhoid fever before discharge, still continue to excrete bacilli in their urine or faeces and so remain a potential source of danger. The problem that these latter present is a difficult one and such cases must by all means be kept far away from places and persons connected with the food trade.

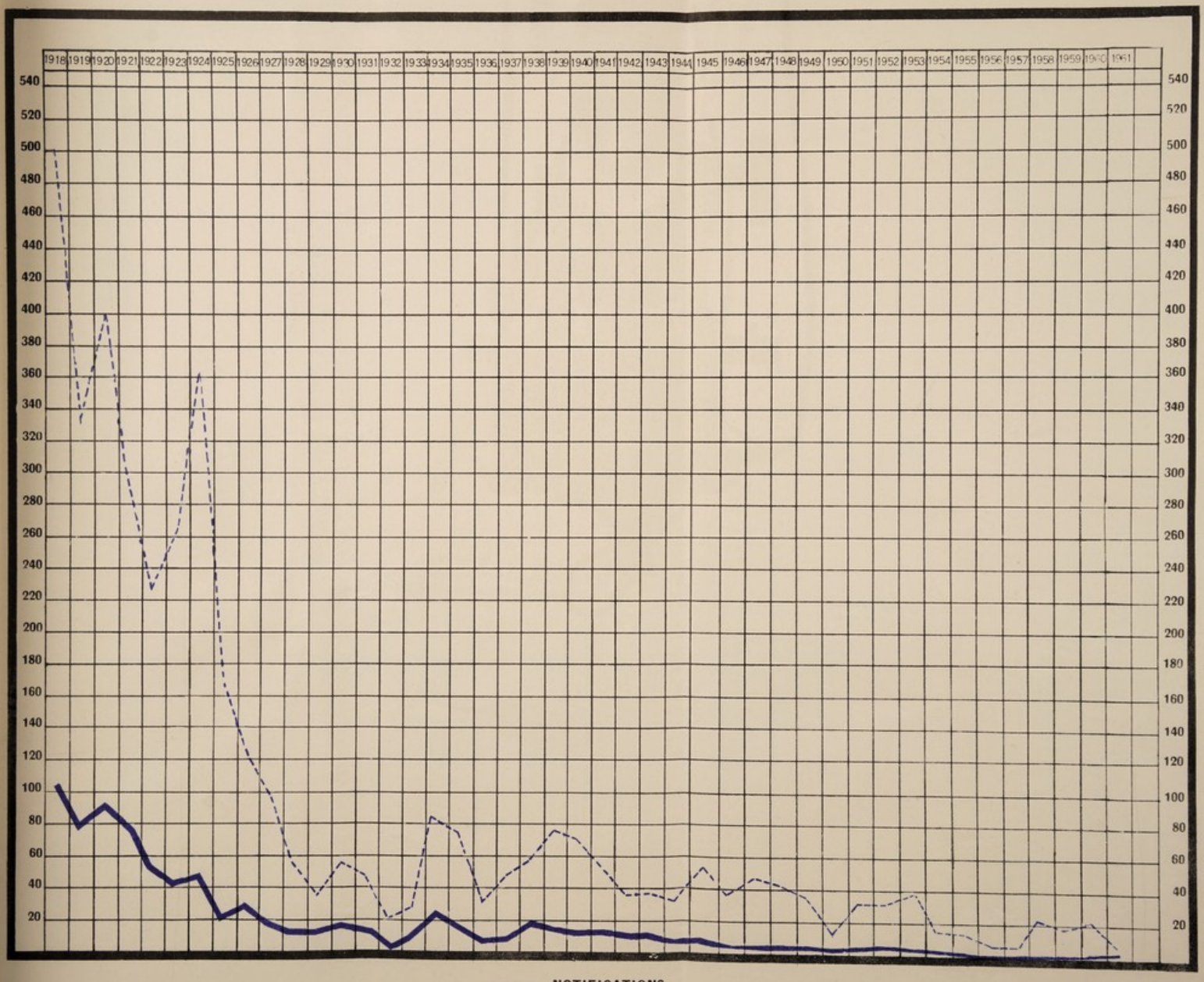
Enteric Fever

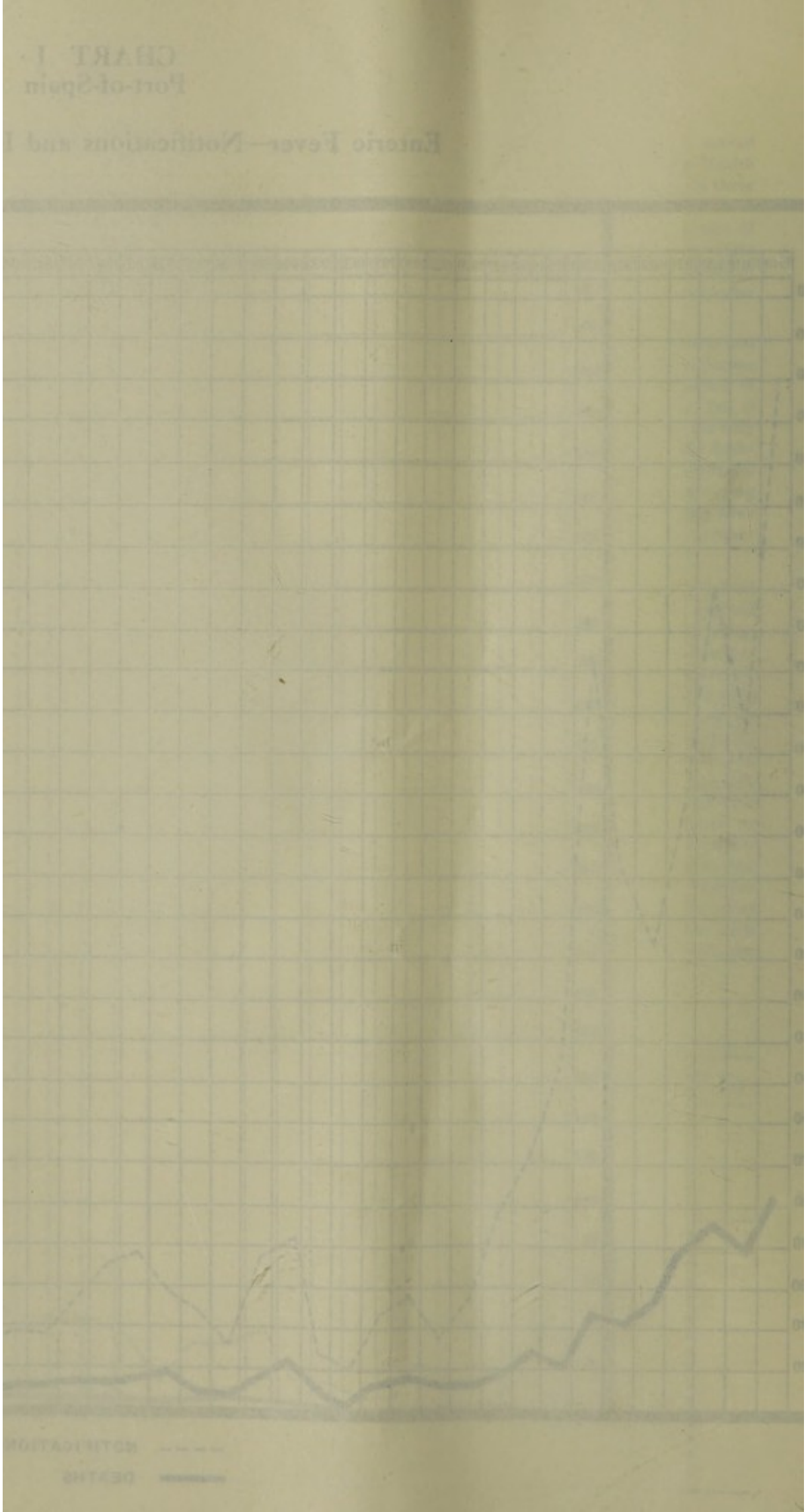
Notifications and Deaths, 1918-1961

Period	Notifications	Deaths	Death Rate per 100,000 Population
Year 1918	495	104	152
Yearly Averages:			
1919–23	301.8	67.8	103
1924–28	162.28	25.2	39
1929–33	37	10.8	16
1934–38	59.8	14.6	19
Average 1919–38	140.3	29.6	44
Year 1939	75	15	17
1940	70	11	12
1941	56	14	14
1942	37	12	12
1943	38	12	12
1944	32	9	9
1945	55	10	9
1946	37	8	8
1947	68	7	7
1948	42	5	5
1949	36	5	5
1950	14	3	3
1951	32	5	5

CHART I
Port-of-Spain

Enteric Fever—Notifications and Deaths 1918-1961





Enteric Fever

Notifications and Deaths, 1918-1961—(Cont'd.)

Period	Notifications	Deaths	Death Rate per 100,000 Population
1952	32	8	7
1953	36	3	3
1954	15	3	3
1955	13	1	1
1956	9	—	—
1957	9	—	—
1958	23	2	2
1959	18	—	—
1960	21	1	1
1961	8	2	2

Inoculation of Enteric Fever Contacts, 1961

T.A.B. Injections

Year	Number Receiving one Injection	Number Receiving two Injections	Total
1947	250	222	472
1948	85	61	146
1949	101	44	145
1950	64	32	96
1951	329	249	578
1952	66	26	92
1953	213	146	*359
1954	101	46	147
1955	50	21	71
1956	43	10	53
1957	40	27	67
1958	412	249	661
1959	153	67	220
1960	84	25	109
1961	205	226	431

*Mass inoculations were carried out during the 1953 outbreak of Enteric Fever at Arima and 8,250 City inhabitants, in addition, were inoculated.

Pneumonia

Pneumonia, in its two forms lobar and broncho pneumonia, is an infectious disease that is notifiable but it is what is termed colloquially "badly notified". Practitioners do not understand the reason why a disease which in the majority of cases nowadays is so amenable to the newer drugs like the sulpha drugs and to antibiotics like penicillin, streptomycin, aureomycin; which is usually kept at home under the care of the practitioner who has notified the case; and for which very little in the way of preventive measures is available, has perforce to be notified to public health officers who take perhaps only a casual and passing notice of the case, and so practitioners have never in the history of the Urban Sanitary District been known to notify each and every case of pneumonia encountered in the course of their practice with the care and dispatch that they are bound by statute to do, and there must be many cases of pneumonia which are left unnotified and so not known to the Department which is therefore handicapped in its efforts to check the spread of the disease.

The answer is, of course, that in the days when pneumonia was proclaimed a notifiable infectious disease it constituted a real menace to the health of the residents of the City and because of the congestion and overcrowding of the East Dry River, Belmont and St. James Sub-districts where the majority of the cases occurred, spread of the disease from person to person by direct contact was not an uncommon feature. Besides it was then often necessary, and at times still is necessary today, to remove cases from these districts to hospitals not only for the sake of the ailing patient himself but to enable proper isolation to be effected and to permit disinfection to be undertaken by the Disinfection Unit of the Department. In those areas where housing accommodation is so inadequate and where poverty and malnutrition are so prevalent, coupled with alcoholism which has such an adverse effect on the outcome of the disease, pneumonia in its various forms is a serious disease with a high mortality, often bringing in its trail such sequelae as consumption, heart disease, anaemia and debility. It is in these circumstances that preventive measures are so important and a stitch in time may be the means of preventing the occurrence of many more cases and so of obviating much subsequent suffering and distress.

In the year under report 7 cases of pneumonia (all forms) were notified and 89 deaths certified to the disease which shows clearly that many cases of pneumonia remain unnotified especially when it is remembered that the mortality from this disease has been reduced considerably since the introduction of the newer drugs and the antibiotics already referred to. Many of these cases of pneumonia are what is described as "terminal cases" i.e. the disease develops as the final complication of a general disease which has laid the patient low and compelled his lying flat in bed. These weakened and debilitated patients who are in the majority of cases on the old side and have been ailing for some time fall easy prey to "hypostatic" pneumonia and they hardly survive more than 72 or 96 hours. In these circumstances it is the death that is certified by the practitioner, the question of notification never entering his mind at all. It is the statutory duty of practitioners to notify cases of pneumonia as early as possible and so give the Public Health Department the opportunity to institute immediately preventive measures directed to limiting the spread of the disease. The Department will also be in the position to sort out contacts and to keep an eye on the premises and its surroundings in their effort to supplement and enchance the efforts of the practitioner who is in charge of the case.

Pneumonia—(All Forms)

Notifications and Deaths, 1922-61

Period	Notifications	Deaths	Death Rate per 100,000 Population
Yearly Averages:			
1922–26	111.8	78	123
1927–31	69.8	53.4	79
1932–36	155.4	80.6	110
Average 1922–36	112.3	70.7	104
Year 1937	125	85	110
1938	101	70	83
1939	107	59	65
1940	69	63	68
1941	138	88	90
Average 1937–41	108	73	83
Year 1942	332	152	153
1943	251	149	146
1944	109	97	93
1945	118	79	74
1946	87	61	61
1947	75	64	67
1948	62	51	52
1949	73	74	73
1950	64	54	52
1951	81	80	75
1952	68	72	66
1953	46	52	47
1954	48	58	51
1955	39	65	56
1956	38	67	56
1957	27	83	69
1958	22	59	49
1959	30	70	70
1960	23	93	99
1961	9	89	90

Diphtheria

Diphtheria is an infectious disease that can effectively be diminished and perhaps eliminated altogether if the public health conscience of the community is sufficiently aroused as to demand of public health authorities a campaign of active immunisation of the pre-school and school children. But because deaths are few and far between and because the cases that occur are comparatively mild, sufficient attention is not given to this disease and it is permitted to pursue its steady relentless course.

It cannot be stated with any degree of truth that cases are occurring in the Urban Sanitary District in large numbers, but certainly they show no sign of diminishing in number and every year yields the customary crop of cases.

Whenever a case is notified to the Department contacts of the case are rounded up in the course of investigation of the case and disinfection of the premises and they are directed to report to the Public Health Department for active immunisation with prophylacic toxin, two doses of APT being given to children and three doses of TAF to adults at inter-

vals of one month in each case. This practice which has been going on for years now has had some effect in stemming the tide of infection but it has only succeeded in scratching the surface of the problem and much more in the way of a properly organised campaign in schools and clinics is needed. It is a matter of great importance that the possibility of diphtheria be always borne in mind in cases of sore throat, that the throat be always inspected in cases of fever and if the least suspicion is aroused a swab taken, that cases of diphtheria be notified to the Medical Officer of Health at the earliest possible opportunity, that they be effectively isolated preferably, of course, in hospital and that treatment be begun with anti-toxic serum immediately after the swab is taken and always before the result of the examination is received from the Laboratory.

During the year under report 13 cases of diphtheria were notified but no deaths were certified to the disease. The largest number of cases notified was in the year 1939 when 61 cases were notified with 2 deaths, and the greatest number of deaths certified to the disease was in 1945 when 5 deaths were certified and 20 cases notified.

Diphtheria

Notifications and Deaths, 1917-61

Period	Notifications	Deaths	Death Rate per 100,000 Population
Yearly Averages:			
1917–21	11.8	1.4	2
1922–26	14.8	2	3
1927–31	23.8	1.6	2
1932–36	29.8	2.2	3
Average 1917–36	20	1.8	3
Year 1937	30	4	5
1938	16	3	4
1939	61	2	2
1940	37	2	2
1941	30	2	2
Averages 1937–41	34.8	2.6	3
1942	18	3	3
1943	40	4	4
1944	19	3	3
1945	20	5	5
1946	22	2	2
1947	23	2	2
1948	9	1	1
1949	11	2	2
1950	37	3	3
1951	28	1	1
1952	20	1	1
1953	33	1	1
1954	26	1	1
1955	20	1	1
1956	17	—	—
1957	19	1	1
1958	14	2	2
1959	26	2	2
1960	19	1	1
1961	13	—	—

Chicken Pox

The most important event under this heading in the year under report is the continuation of an outbreak of chicken pox which occurred in the years 1959 and 1960 when 159 and 136 cases were notified. The intensity of the outbreak showed no signs of diminishing, in fact, its extent and severity increased to the point where 254 cases were notified. No deaths were certified to the disease, but there were several cases that gave rise to anxiety and concern and the Medical Officer of Health had to be called out on quite a few occasions to make sure that a severe case of chicken pox was not really and in fact a mild case of small-pox.

But normally Chicken Pox is not an infectious disease that gives rise to much worry or concern to public health officers; cases are usually mild and straightforward and there has never been a return received in the Public Health Department where chicken pox was the principal cause of death. This of course is possible in weak and debilitated children where complications like broncho-pneumonia or encephalitis set in but ever since the establishment of the Local Sanitary Authority which enabled statistics to be carefully

collected and properly compiled chicken pox has never been responsible for a single death. The real reason why it is important to notify a case of chicken pox is because a mild case of small pox may every now and then simulate closely a case of chicken pox and be diagnosed as such with all the dire consequences of a missed case of small pox and its subsequent effects. That is why Medical Officers of Health try to see as many cases of chicken pox as possible and would like, if the necessary beds were available, to have as many cases as possible of chicken pox removed to hospital for observation and treatment especially if the dwelling is overcrowded and two or more cases have already occurred and more are likely to occur. In certain circumstances it is imperative that a case of chicken pox be removed to hospital such as occurred when a foreigner, who was once staying in the then largest hotel of the City, developed chicken pox and he refused to leave his hotel room for quarters where he could more strictly be isolated.

Chicken Pox
Notifications, 1924-61

Period	Notifications	Period	Notifications
Yearly Averages:		Year 1949	57
1924–28	19.8	1950	96
1929–33	41	1951	95
1934–38	110.4	1952	94
1939–43	42.6	1953	51
1944–48	91.8	1954	133
		1955	113
		1956	101
		1957	110
		1958	45
		1959	159
		1960	136
		1961	254

Malaria

In March 1956 Malaria was declared a notifiable infectious disease and so malaria takes its proper place among the notifiable infectious diseases; in earlier reports it used to be considered among those listed under the heading "non-notifiable infectious diseases".

In the year under report no new development in the malaria problem, in so far as it affects the City, took place and the position remains substantially the same as was detailed in my report for the year 1960. It can be stated with certainty that generally malaria is with each succeeding year becoming less and less a public health problem in this Territory and thanks to the efforts of the Malaria Division of the Health Department of Government which continues to execute a well planned anti-malaria programme with all its customary energy, drive, and efficiency, malaria bids fair to be eliminated altogether and to cease eventually to have any public health significance. The areas of Laventille and Cocorite which immediately adjoin the City at its eastern and western limits and which at one time presented such a serious threat to the City because of their highly malarious nature are now completely free of malaria, the result of the work of the Malaria Division, and though the permanent works which have been advocated in these annual reports since 1943 to get rid of the potentially dangerous Cocorite Swamp still remain undone, yet the temporary works of oiling, draining and canalising of the collections of stagnant water that abound in this area are being executed week in week out, and they have had the effect of ridding the Swamp of dangerous malaria carrying anophelene mosquitoes. The cost of these temporary measures could well have gone a good deal of the way towards paying for the cost of the permanent works advocated, and this would have had, at the same time, the added effect of reclaiming a large expanse of valuable land suitable for building purposes and so badly needed for additional housing accommodation.

At the time I write this report, however, the auspices appear favourable for the commencement of this project in the immediate future because of the decision of the Trinidad Government and the United States of America arising out of the revised Leased Bases Agreement, that a highway to Chaguaramas be constructed, commencing from the junction of the Mucurapo Road and the Western Main Road and terminating at the entrance to the Chaguaramas Base. In the process of constructing this highway, surveys for which were being undertaken in the year under report, it is inevitable that the Cocorite Swamp or at least a large part of it be reclaimed.

At certain times of the year and during the rainy season particularly, anophelene mosquitoes do make their appearance within the limits of the City at its extreme eastern and western limits and some anxiety is felt as to the possibility of an outbreak of malaria if malaria carrying mosquitoes were to gain a foothold and spread the disease among residents in these particular areas; and it must not be forgotten that cases of malaria are treated occasionally in the wards of the General Hospital, Port-of-Spain, and that old febricitants who once lived in a malarious area in the country districts but who have since taken up residence in the City do get, as a result of the lowering of their resistance, periodic recrudescences of an infection which was never really eradicated. The anophelene gangs of the Anti-Mosquito Unit have always, however, been able to detect these infestations at a fairly early stage and have succeeded in bringing them under control by the time honoured measures of oiling, draining and sometimes of filling in, of depressions where stagnant brackish water collects. It is clear that this section of the Unit has always to be on the qui vive and gangs have at all times to be deployed at the various points of the City where anophelenes from the adjoining areas to the East, North, and West are likely to establish breeding grounds.

The gratitude of the Local Sanitary Authority to the Malaria Division of the Health Department of Government is here recorded for the goodwill that they have always shown to the Public Health Department of the City and the ready assistance that they have always given in the many and varied mosquito problems that affect the City. The Territory is being surely and rapidly freed of malaria as a result of the intensive campaign now being executed by the Malaria Division and both rural and urban practitioners continue to refer to the lowered incidence of malaria that has taken place as a result; malaria will soon become a rarity because of the energy and drive with which a major public health problem has been and is being tackled.

During the year under report no return in which the cause of death was certified to be malaria was received at the Department.

Malaria—Local Distribution of Deaths, 1952-61

Sub-Districts	Deaths									
	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
City Proper ..	—	—	—	—	—	—	—	—	—	—
St. Clair ..	—	—	—	—	—	—	—	—	—	—
East Dry River	—	—	—	—	—	—	—	—	—	—
Belmont ..	—	—	—	—	—	—	—	—	—	—
Woobrook ..	—	—	—	—	1	—	—	—	—	—
St. James ..	—	—	1	—	—	—	—	—	—	—
Total ..	—	—	1	—	1	—	—	—	—	—

Acute Anterior Poliomyelitis

No notification of this acute infectious disease, which is capable of producing such crippling defects and which is responsible for such fear and alarm on the part of the family in which a case occurs and even in the general public, was received at the Public Health Department during the year under report and no deaths were certified to the disease. Since 1957 when 13 cases were notified, the incidence of the disease has been low and no return in which the cause of death was certified to be Acute Anterior Poliomeylitis has been received at the Public Health Department during the past thirteen (13) years.

In 1954 when an outbreak of the Disease occurred in the City and in the Territory, a Vaccination Programme was undertaken with the Salk Vaccine but due to short supply of vaccine at the time it was not possible to administer the full course of three doses. Since then enquiries are being constantly made at the Department as to the possibility of obtaining full courses of the vaccine free of cost, the price of which under existing conditions is outside the reach of the pockets of the low income bracket worker. With the development of oral vaccines especial enquiry is being made occasionally as to the possibility of obtaining this vaccine, and it may well be that Government will be required to stock a certain amount of oral vaccine of the type being used nowadays in the United Kingdom and the United States of America for the benefit of the poorer section of the community.

Acute Anterior Poliomyelitis

Notifications and Deaths, 1927-61

Year	No. of Cases Reported	Deaths	Year	No. of Cases Reported	Deaths
1927–29	—	—	1947	—	1
1930	5	1	1948	3	2
1931	—	2	1949	4	—
1932	3	—	1950	—	—
1933–35	—	—	1951	—	—
1936	3	—	1952	3	—
1937	* 10	1	1953	—	—
1938	2	—	1954	35	—
1939	1	—	1955	2	—
1940	—	—	1956	—	—
1941	15	4	1957	13	—
1942	* 26	3	1958	5	—
1943–44	—	—	1959	1	—
1945	—	1	1960	1	—
1946	1	—	1961	—	—

Other Notifiable Infectious Diseases

No notifications of or deaths from Encephalitis Lethargica, Cerebro-Spinal Fever, or Acute Ascending Myelitis, i.e. Paralytic Rabies, were received at the Public Health Department during 1961. No case of the dangerous infectious diseases i.e. Plague, Cholera, Typhus Fever, Yellow Fever, or Small Pox either Variola Major or Variola Minor (Alastrim) was reported to the Department during the year under report.

NON-NOTIFIABLE INFECTIOUS DISEASES

There are no definite scientific reasons why some diseases are classified as "notifiable infectious diseases" and others as "non-notifiable infectious diseases." In fact some of the diseases listed under the heading of "non notifiable" may be much more infectious than some of those classified as "notifiable" and in times of unusual prevalence may even be proclaimed "notifiable" in order to give public health authorities an opportunity of determining where and in what numbers they are occurring so that preventive measures directed to limiting their spread as well as to preventing their incidence altogether may be applied at the earliest possible opportunity, such as is the case with measles, whooping cough and influenza.

These diseases can, on occasions, present major public health problems that tax the energy and resources of public health authorities. Several pandemic waves of influenza have been known to sweep the entire world leaving numbers of deaths in their trail Then again the more chronic of the diseases usually listed under this heading are the causes of major public health problems which affect the civilized world at the present time and to solve which extensive and costly public health schemes have been prepared by various public health organisations including the World Health Organisation and are in the process of being actively executed by many of the countries of the world. I refer to syphilis, leprosy, and hookworm disease. Large amounts of money are being spent now in nearly every country on one or other of these comprehensive schemes designed to get rid of one or other or of all these diseases. Bearing these facts in mind it seems a mistake to rely on the death returns only in order to form some idea of the prevalence of these diseases, returns which indicate inadequately the existence of these diseases in the community seeing that many deaths attributable to them masquerade under other labels like aneurysm, cerebral thrombosis, hemiplegia, aortic regurgitation, which are very often due to syphilis; liver abscess which is often due to dysentery; anaemia which is the invariable result of hookworm disease; and liver disease which is sometimes the after effect of malaria.

It is not possible to state with any degree of certainty how prevalent these diseases are in the Urban Sanitary District seeing that only the death returns are available to the Department and with the increasing success that is attending treatment with the newer drugs, it is clear that the mortality from these diseases is getting lower and lower, but there can be no doubt that these diseases do occur in fair numbers within the limits of the City and are responsible for a good deal of illness and disability, facts which could be ascertained with some degree of accuracy if a proper system of notification were in vogue.

Non-Notifiable Infectious Diseases—Home and Hospital Deaths, 1961

Diseases	Deaths			Hospital Deaths Percentage of Total Deaths	Corresponding Percentage for the Year 1960
	At Home	At Hospital	Total		
Whooping Cough	—	—	—	—	—
Influenza	2	—	2	—	—
Dysentery	1	—	1	—	—
Ankylostomiasis	—	—	—	—	100.00
Syphilis	4	5	9	55.55	66.67
Leprosy	1	—	1	—	—
TOTAL	8	5	13	38.46	56.25

Syphilis

Syphilis is a disease that has a profound bearing on the state of the public health in any community and it exerts this effect by reason of the fact that it presents problems which are in part clinical, in part preventive, and in part sociological.

The clinical problems of syphilis are many and varied and it is a disease which is capable of affecting every single organ or tissue of the body. It is fortunate that the overt manifestations of syphilis are nowadays quite rare due to the concentrated drive that has been made and is being made to detect the disease at its earliest stage, and the very effective system of treatment that is being undertaken by the Venereal Disease Division of the Health Department of Government as a result of which the secondary and tertiary manifestations of the disease are being prevented from making their appearance.

This Division established in 1942 by Government with the help and advice and under the direction of Col. O. C. Wenger of the American Army and supported then by funds provided by the Development and Welfare Organisation, but now run entirely with funds allocated by Government, has succeeded in so reducing the number of cases of primary syphilis that it is a rare thing nowadays for the medical practitioner to see such a case, a postion that is quite different to what used to obtain 15 years ago. The clinical cases of syphilis, however, that are met with nowadays and which are a cause of great concern and anxiety not only to clinicians but also to public health officers are those diseases of the heart and bloodvessels and of the brain and central nervous system which are due to the impact of the syphilitic poison on these delicate and highly vulnerable tissues. These tertiary manifestations of syphilis are in the first place less amenable to treatment than the primary disease and in the second place they play an important part in the large number of diseases of the heart and blood vessels that are occurring in the City and the Territory generally and are responsible for an ever increasing toll of mortality. In fact public health officers are concerned that the mortality attributable to heart and blood vessel diseases and to cerebral haemorrhage keep increasing year after year and that the stresses and strains of life under modern conditions have such a fatal effect on damaged heart and nerve tissue. Especially is this fact disturbing seeing that so very little in the way of preventive action can be taken and there is a feeling of frustration and helplessness pervading the preventive field in the face of this high mortality. It is clear, therefore, that a campaign directed to the prevention of the disease by educating prospective victims as to the dangers of the disease and as to how it can be acquired, what means can be applied to prevent it, what facilities exist for the early and effective treatment of the disease if by chance it has been acquired and how its spread to others can be limited, is an absolute necessity and it is gratifying to be able to record that such a campaign is being actively prosecuted by the Venereal Disease Division and the Health Education Division of the Health Department of Government.

From a sociological point of view venereal disease presents the further problem that the prostitute class has to be dealt with seeing that this class of person is a potent factor under existing conditions in the spread of the disease by reason of the fact that no proper system of control of that class exists at the moment, nor does it appear that any control can be put into effect without compulsory notification of cases of the disease which would enable public health workers to locate the source whence the disease was acquired and permit adequate treatment to be undertaken to eliminate the infection. This however, is a problem of great magnitude and opinion is divided as to the value of compulsory noti-

fication. There are a number of factors involved such as the possibility of driving the disease underground, the question of economic difficulties as well as the related sociological problems that would affect doctors, nurses, and the State.

But there can be no doubt that the numbers of prostitutes who now frequent the night clubs of the City and who are under no kind of compulsory medical care and control are the main source from which venereal diseases are now acquired and through which its spread is effected, and it is a matter of great concern to social welfare workers to determine what means could be adopted to supervise and control this class of person.

Deaths from Syphilis, 1918-61

Period	Deaths	Rate per 100,000 Population
Yearly Averages:		
1918—22	16.2	24
1923—27	56.8	88
1928—32	28.2	41
1933—37	21.8	29
Average 1918—37	24.6	37
Yearly Average 1938—42	24.6	27
1943	29	27
1944	36	35
1945	22	21
1946	20	20
1947	21	22
1948	8	8
1949	7	7
1950	8	8
1951	11	10
1952	6	5
1953	7	6
1954	8	7
1955	13	10
1956	18	15
1957	13	11
1958	17	14
1959	13	13
1960	12	13
1961	9	9

Dysentery, Diarrhoea and Enteritis

Much more precise and accurate information is usually necessary, information that could be obtained by sanitary inspectors and health visitors if these diseases were made notifiable, before it is possible under existing circumstances to give the numerous cases of so called dysentery and diarrhoea and enteritis their correct label, for as they are usually certified on death certificates they constitute a "mixed bag", exhibiting the common features of looseness of the bowels with passing in some cases of blood and mucus. They are usually classified as "bowel filth" diseases and in a sense this is a useful term indicating as it does that the cause of this group of diseases is infected faecal matter which gives rise to the contamination of foodstuffs particularly those that are consumed raw or partially cooked such as green vegetables, water cress, lettuce, cabbage, various fruits as well as milk, ice cream, ices and made up dishes like mayonnaise, pastry, pies, sausages, and in so doing reaches the alimentary tract of man where the germs multiply and produce the disease. It does also happen on occasions that "canned" foodstuffs are the vehicle whereby these infections are introduced into the alimentary tract of the body particularly "canned foodstuffs" that are in the early stages of blowing due to improper and inadequate processing.

There can be no doubt that many and various diseases are often included under this heading. Some of these are cases of true dysentery, others are cases of tuberculosis or cancer of the bowels, helminthiasis or protozoal infections. Others again are cases of food poisoning and corresponding with this varied aetiology is the fact that the age incidence also varies considerably many cases occurring in infants and a fair number in the aged. Transmission from case to case by fingers and/or fomites is another possibility, if those who are attending or nursng a case of the disease are not careful about disinfecting or washing their hands thoroughly before partaking of food or are the victims of that disgusting habit of licking or sucking the fingers but this method is rare and exceptional.

In fact the diarrhoea and enteritis of infants and young children represents a special disease which is almost exclusively conveyed by contaminated milk and which is

almost certainly due to the toxins produced by the activity of organisms of either the food poisoning or dysentery variety. This disease is usually associated with dirt and squalor, with the inadequate and inefficient disposal of excreta, with overcrowding and congestion, poverty and malnutrition, and the figures detailed in the table listed below confirm the fact, as can be confidently predicted, that the East Dry River District continues to furnish, as it has always done year after year, far and away the largest number of cases of the disease in the year under report.

In view of the fact that invariably the knowledge of the existence of cases of these diseases reaches the public health official only after death has taken place, preventive measures are not always easy of application, but there can be no doubt whatsoever that intensive measures to secure good, clean and wholesome food, free from contamination by vermin or dust, dirt, flies or other vermin, milk and ice-cream that is efficiently pasteurised, as well as a persistent drive to improve the general level of environmental hygiene and to diminish congestion and overcrowding, and last but not least to eliminate the privy cesspit system and to substitute in its place the water borne system of sewage disposal, must remain the sheet anchor of all action directed to a reduction in the number of deaths attributable to this group of diseases as a whole and to diarrhoea and enteritis particularly.

At the moment I write the sewerage scheme is in the process of being executed and it will be a matter of absorbing interest to watch the effect this will have on the number of cases of diarrhoea and enteritis, especially the diarrhoea and enteritis that occurs in infancy and the early years of life.

Deaths from the Dysenteries, 1918-61

Period	Deaths	Death Rate per 100,000 Population
Year 1918	43	63
Yearly Averages:		
1919–23	38.2	58
1924–28	32	49
1929–33	14.8	21
1934–38	5.4	7
1939–43	7.4	8
1944–48	3	3
Average 1919–48	16.8	23
Year 1949	1	1
1950	2	2
1951	1	1
1952	3	3
1953	3	3
1954	2	2
1955	—	—
1956	3	2
1957	1	1
1958	2	2
1959	3	3
1960	1	1
1961	1	1

Deaths from Diarrhoea and Enteritis—1918-61

Period	Deaths	Death Rate per 100,000 Population
Year 1918	193	284
Yearly Averages:		
1919–23	143.6	218
1924–28	72.8	112
1929–33	52.8	76
1934–38	40	52
1939–43	78.4	81
1944–48	46	44
Average 1918–48	76.16	103

Deaths from Diarrhoea and Enteritis—1918-61—(Cont'd.)

Period	Deaths	Death Rates per 100,000 Population
Year 1949	30	30
1950	37	35
1951	42	39
1952	39	36
1953	58	51
1954	37	32
1955	45	38
1956	57	47
1957	35	29
1958	104	86
1959	69	69
1960	57	60
1961	41	42

Diarrhoea and Enteritis—Deaths in Sub-Districts, 1961

Sub-districts	Deaths
City Proper	5
St. Clair	1
East Dry River	16
Belmont	11
Woodbrook	—
St. James	8
TOTAL	41

OTHER PRINCIPAL CAUSES OF DEATH

Cardiac and Vascular Diseases

The toll of mortality exacted by cardiac and vascular diseases continued unabated during the year under report and the same fact must once more be recorded viz. that whilst more and more victims are being claimed by these diseases, the causes for this persistent attack on the delicate tissues of the heart and blood vessels are not sufficiently clear to enable preventive measures to be applied with the certainty that carries conviction. The position is the same in all civilized countries of the world; compilers of statistics in every part of the civilized world continue to record the fact that with each succeeding year more and more victims are being claimed by cardiac and vascular diseases and that they continue to occupy pride of place in the list of causes of death and that this is particularly the case in the big and busy centres where stresses and strains and the pace of modern life are at their greatest.

It is true that in a certain number of persons who have fallen victims to these diseases, antecedent causes like syphilis, chronic kidney disease, chronic liver disease, chronic alcoholism, rheumatic fever, certain infectious diseases etc. have been known to be at work but in the large majority of cases the causes remain obscure and the problem why these delicate tissues of the heart and blood vessels have been attacked with such disastrous results must in the present state of our knowledge remain unanswered. Certain it is that the stresses and strains of modern life, the anxiety, worry and uncertainty associated with the day's work, coupled with the pace of living which leaves so little time for rest and recreation, do play their part in aggravating existing diseases but why one set of tissues seems to be immune and another set so easily affected is a problem that still awaits solution. It would appear that the price that has to be paid for better personal and environmental hygiene, for comparative freedom from dangerous and other infectious diseases, for an improved standard of living and for increasing longevity is the increasing vulnerability of the delicate tissues of the heart and blood vessels to the stresses and strains of modern life, to the complexity and pace of every day life, and to worry and anxiety associated with the many difficult and trying situations that arise nowadays in our private and public lives.

In these circumstances the most that can be done by way of preventive measures is the extension and intensification of the health education campaign against syphilis, alcoholism and other systemic diseases, the early and thorough treatment of the chronic

diseases referred to above, coupled with the elimination and prevention of those conditions environmental and personal, that favour the propagation and spread of infectious diseases. Health education would also be able to assist victims of these diseases to a way of life that would conduce to their greater happiness and usefulness as citizens, as it is a well known fact that these diseases are most prevalent and do their greatest damage at those age periods of life when the citizen can be of the greatest use to the community by reason of his wisdom, knowledge, and experience and if nothing else, it would help to postpone, at least for some time, the fatal day.

In the year under report cardiac and vascular diseases claimed 212 victims, the largest number attributable to one single group of diseases. Examination of the table listed hereunder shows that the older age periods of 41—60 and over 60 years bore the brunt of the attack with 55 and 151 deaths respectively. The fact clearly emerges that the older the tissue, the more vulnerable it becomes to these diseases. Of the forms of cardiac and vascular diseases that are responsible for the highest mortality, it is again the same old picture that presents itself viz. arteriosclerotic and degenerative diseases are par excellence the greatest "killers."

Deaths from Cardiac and Vascular Diseases in Age Groups, 1961

Forms	0–20 years	21–40 years	41–60 years	Over 60 years	Total
Rheumatic fever	—	—	—	—	—
Chronic Rheumatic heart disease	—	—	—	—	—
Arteriosclerotic and degenerative heart disease	1	—	21	87	109
Other diseases of the heart	1	1	14	26	42
Hypertension with heart disease	—	3	13	23	39
Hypertension without mention of heart ..	—	—	6	6	12
Diseases of arteries	—	—	—	9	9
Other diseases of circulatory system	—	—	1	—	1
TOTAL.. ..	2	4	55	151	212

Cancer and other Malignant Diseases

It has been the custom for years now to devote a special section in these reports to cancer and other malignant diseases seeing that these diseases, like the deaths attributable to cardiac and vascular diseases, appear to be giving rise to a greater and greater mortality in the Urban Sanitary District. The cause of these diseases still remains obscure in spite of the large amount of research that has taken place and is taking place at the moment in all parts of the world, and as long as the cause of a disease is unknown it is difficult to determine fully what are the factors that operate in the production of the disease, just as it is almost impossible to prevent that disease from claiming the life of its victims.

Cancer and other malignant diseases are not of uncommon occurrence in the Urban Sanitary District but it cannot be stated with any degree of certainty that the incidence of the disease is showing any rapid increase judging from the mortality figures for the past ten years. Greater accuracy in diagnosis and an increasing expectation of life, and the greater consciousness of the ravages caused by the disease which leads to an earlier resort to diagnosis and treatment are very likely responsible in part for the increased number of cases that are coming to light nowadays, but that cannot be and certainly is not the complete picture though it must be admitted that the older the tissue the more vulnerable to cancer and malignant diseases it becomes.

Seeing that the specific cause of cancer still remains obscure in spite of much research and experimentation, it is not possible to apply any preventive measures that can be considered effective, but a health education campaign directed to the education of the public as to the high mortality, about 100 per cent, associated with this group of diseases and as to the urgent necessity to treat every small lump or indolent ulcer with the respect it deserves and to seek early treatment by surgery, X-Rays or radium would pay dividends and help to a greater understanding and appreciation of the toll of mortality that cancer and other malignant diseases are exacting from the community.

During the year under report 107 returns in which cancer or other malignant diseases was stated to be the cause of death were received at the Public Health Depart-

ment of the City. This was 16 fewer than those that occurred in the year 1960. The sites most commonly affected were the stomach and intestines in males and the uterus, the stomach, the breast, and the intestines in females.

Cancer and Other Malignant Diseases, 1961

	Deaths	
	Males	Females
Malignant neoplasm of buccal, cavity and pharynx	4	2
Malignant neoplasm of oesophagus	—	—
Malignant neoplasm of stomach	12	9
Malignant neoplasm of intestine, except rectum	10	7
Malignant neoplasm of rectum	—	1
Malignant neoplasm of larynx	—	—
Malignant neoplasm of trachea and of bronchus and lung not specified as secondary	2	1
Malignant neoplasm of breast	—	8
Malignant neoplasm of cervix uteri	—	8
Malignant neoplasm of other and unspecified parts of uterus	—	9
Malignant neoplasm of prostate	3	—
Malignant neoplasm of skin	2	—
Malignant neoplasm of bone and connective tissue	—	—
Malignant neoplasm of all other and unspecified sites	16	15
Leukaemia and aleukaemia	2	—
Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	3	1
Benign neoplasms and neoplasms of unspecified nature	1	—
Total	46	61

Deaths from Cancer and other Malignant Diseases, 1918-1961

Period	Deaths	Rate per 100,000 Population
Yearly Averages:		
1918–22	44.4	67
1923–27	45.6	71
1928–32	44.6	65
1933–37	56.8	76
Average 1918–37	47.9	70
Yearly Average 1938–42	75.4	82
1943	88	86
1944	84	81
1945	80	75
1946	79	78
1947	75	78
1948	87	88
1949	91	90
1950	91	89
1951	103	94
1952	89	90
1953	113	102
1954	96	84
1955	104	89
1956	104	87
1957	102	84
1958	119	98
1959	113	114
1960	123	131
1961	107	109

SANITARY ADMINISTRATION

Staff

During the year under review, the Report by the Organisation and Methods Division of the Ministry of Finance on the Public Health Department of the City was approved with a few modifications in June 1961 by the Council, and eventually approved by the Central Government in October 1961.

The result of this Report was that an increase in the number of the pensionable staff has been effected from 53 in the year 1960 to 62 in 1961, which, together with an assistant health education officer and two (2) non establishment clerks subsequently approved by the Council and sanctioned by the Central Government brings the total pensionable staff up to 65; the non-pensionable staff of 157 was diminished by two leaving a total of 155.

The fixed establishment of the Public Health Department comprised therefore 220 employees. At the end of the year 1961, however, of the permanent pensionable staff of 65 only 45 were actually permanent employees; 9 posts of sanitary inspector were vacant, 5 of these vacant posts being filled by men in a temporary capacity or on a month-to-month basis and 4 posts remaining unfilled there being no suitable and qualified persons to fill them, even in acting capacities. The three vacant posts of health visitor could not again be filled because of the unavailability of qualified staff to fill them; as a matter of fact ever since they were first established in 1951 these posts have not been filled because no suitable and qualified health visitors could be found to fill them; no sooner does a nurse qualify as a health visitor than she is immediately absorbed into the service of the Health Department of Government, who also are short of suitable and qualified staff.

Courses for health visitors and for sanitary inspectors have recently been held and at the moment I write the chances of our obtaining the health visitors and some, at least, of the sanitary inspectors we need are brighter than they have been for years.

Six student sanitary inspectors are to be appointed and, at the moment I write this report, recommendations for the filling of these posts have been forwarded to the Secretary, Local Service Commission.

Of our full complement of 35 sanitary inspectors 9 vacancies could not be filled permanently because of the lack of suitable and qualified staff, but 5 of these posts were filled in a temporary capacity by retired inspectors who have been recalled to duty and appointed on a month-to-month basis.

For the purpose of "the inspection of the district with a view to ascertain what nuisances exist calling for abatement" the City was again divided into 18 sanitary districts with a sanitary inspector in charge of each district. The number of premises in these sanitary districts varies depending on the locality, average size of premises, type of buildings etc., but they range from 1211 in District No 3 to 296 in District No. 7 for each inspector, who is required to do 25 house-to-house inspections each day and to inspect each and every premises in his district at the rate of at least once in every six weeks.

It is realised that this is a duty imposed on the district sanitary inspector which is hard to carry out and it is proposed to increase the sanitary districts to 20 as soon as it is possible to recruit newly qualified inspectors, thus making it possible for the district sanitary inspector to inspect his district thoroughly and efficiently and, of course, each and every premises, at least once in every six weeks. This we consider to be the longest time that it is possible to leave any individual premises uninspected in the Urban Sanitary District. Though the number of premises in the City of Port-of-Spain amount to 12,000, the number of accommodation (housing) units total 20,000. In his district the Sanitary Inspector is in full and complete charge of the public health services that are performed in the district viz. anti-rat, anti-mosquito, anti-rabies, disinfection etc. in addition to the basic essential work of inspecting the district and he has, as his duty, to control and supervise the various gangs that operate these services and to consult with and report to the special inspector who is in charge of the whole unit as to the efficiency of the measures being undertaken and as to the ability, conduct, discipline and efficiency of the men who are working in his district. He is, in fact, responsible to the Chief Sanitary Inspector and eventually to the Medical Officer of Health for the health and sanitary state of his district.

Eleven sanitary inspectors, who under normal circumstances, when the full complement of staff is available, have been or at the moment are Senior Grade A inspectors of some maturity and in good standing with the knowledge, experience and necessary personality and administrative ability to guide, direct, control and supervise a Special Unit, were employed in the year under report in the execution of duties of a special nature. One such Inspector is the Health Education Officer of the Department and he plans, directs, supervises and controls the work of the Health Education Unit and the personnel attached thereto as well as the other employees of the Department who may be taking part in a health education meeting in the evening. In this work he is assisted by the Assistant Health Education Officer. The Senior Sanitary Inspector (Outdoor) is in charge of the water sampling services, the Anti-Rabies Unit, and he is also the Factories Inspector. He is in

charge of water sampling and is also engaged in the inspection and control of the various catchment areas of the river and well sources of water supply; he plans, supervises, directs and controls the work of the Anti-Rabies Unit and has also to do with the registration and control of Factories in addition to his routine duties of planning, directing and supervising the work of a certain number of District Sanitary Inspectors. The Buildings Inspector is concerned with building plans of all kinds and in addition he inspects, examines, and reports on layouts, leases, assignments and other kindred matters. It is his duty to see that a building is erected in accordance with the approved plans especially the part of a building that is of special concern to the Department like doors, windows, ventilation openings, distance from boundaries, and last but not least the sanitary conveniences. Another inspector, the Anti-Rat Inspector is in charge of and plans, directs, supervises and controls the working of the Anti-Rat Unit. The Food Inspection and Food Control Unit is under the immediate charge of the Deputy Chief Sanitary Inspector (Food) who together with the Senior Sanitary Inspector (Food), plans, directs, supervises and controls the work of this Unit. Three Grade A Inspectors are assigned to this Unit, one of whom is stationed at the Kings Wharf and Customs and whose duty it is to inspect and examine food of all kinds but particularly tinned and perishable food on its arrival at the Port; another Inspector is in charge of food places in the down-town area mainly, he sees to the inspection, examination and registration of all food places and food handlers in this area; and the third Food Inspector is concerned with all food places outside the down-town area and with the registration of all itinerant food vendors throughout the length and breadth of the City. In the district the Sanitary Inspector in charge is required to take, and normally does take, an active part in this work and actively assists the Food Inspector in the demonstration and abatement of nuisances in so far as food places are concerned, preparatory to inspection for actual registration by the latter two Food Inspectors.

The two overseers and three sub-overseers of the Department are allocated to and assist in the planning and execution of the work of the non-pensionable staff in addition to supervising and controlling them. Theirs is also the duty to instruct and train newcomers to the Department in the particular work they are called upon to perform before they are actually posted to do field work. In this work the Assistant Health Education Officer plays an important rôle in educating these recruits as to what is expected of them in their particular line specifically and in health education work generally. One Overseer and one sub-overseer are allocated to the Anti-Rat Unit comprising one time keeper (for the whole of the non-pensionable staff), one checker, 9 foremen, 12 Grade A trappers and 27 Grade B trappers and the Anti-Rabies Unit of one checker, 2 Grade A trappers and one Grade B trapper. One overseer and one sub-overseer are attached to the Anti-Mosquito Unit comprising 3 checkers, 1 foreman, 12 supervisors, together with 14 Grade A mosquito inspectors and 28 Grade B mosquito inspectors. One sub-overseer is in charge of the Disinfection Unit and plans, directs, supervises and controls the operation of this Unit which comprises 2 spraymen and 4 other men engaged in disinfection work; he also plans, directs, controls and supervises the work of the Public Conveniences Unit which now comprises 15 caretakers and which was transferred from the City Engineer's Department in the year 1943.

The Unit employed by the Council for the emptying of cesspits, cesspools and septic tanks which was transferred to the Public Health Department in 1947 comprises 1 cooper, 1 caretaker, and 2 men on the deadman at the Mucurapo Pumping Station, 10 cleaners, 2 chauffeurs for driving the night soil trucks, 1 checker, 1 carpenter and mason, and 1 carpenter's mate on a part-time basis, all under the care, control, and the direction of the Supervisor of the cleaning of Cesspits.

All told, in the year under report the outdoor staff of the Department comprised 35 inspectors, 2 overseers, 3 sub-overseers, 1 supervisor of the cleaning of cesspits and 135 miscellaneous workers of the non-pensionable staff all under the care, direction, supervision and control of the Deputy Chief Sanitary Inspector (Outdoor) and the Chief Sanitary Inspector.

The work of the indoor staff, which let it be stated, is equally important and just as onerous as the work of the outdoor staff, is concerned with correspondence of all kinds, messages, complaints, verbal and written reports, the preparation and issuing of licences, certificates of registration, the distribution of food badges, the preparation of contacts of cases of infectious diseases and other applicants for inoculation and vaccination, the keeping and replenishing of equipment, supplies and records relative to vaccination and inoculation, the keeping of the various registers, books, minutes etc. of the Department, the preparation of files and the care and preservation of the filing system, the checking and

verifying of the paysheets of the non-pensionable staff, the preparation of the salary sheets of the pensionable staff, the keeping and bringing up-to-date of the various vote books of the Department, in fact all that appertains to the financial transactions and financial records of the Department. The sorting, codifying and classifying of the various returns that reach the Department, the collection and compilation of vital statistics, the calculation of the various rates that are the concern of the Urban Sanitary District, the preparation of monthly, quarterly and annual reports have, during the last quarter of the year under report, been taken away from the indoor staff and given to the Deputy Chief Sanitary Inspector (Food) and the Senior Sanitary Inspector of (Food) to prepare.

The indoor staff comprises five second class clerks, two first class clerks, one senior clerk, one scientific assistant, one messenger, all under the care, direction, supervision and control of the Principal Officer.

Inspection of Premises, &c., by Sanitary Inspectors, 1961

Average Monthly Number of Visits to Dwellings, Shops and other Premises.....7458.

Inspection of Stores, Shops, &c.

	Average Monthly No. of Visits		Average Monthly No. of Visits
Provision and Meat shops	143	Cinemas	4
Provision Stores	37	Sweet Drink Carts	5
Restaurants and Cookshops	82	Dairies and Cowsheds	13
Bakehouses	36	Stables	31
Bread Depots	14	Goat Pens	8
Cake and Ice Cream Shops	150	Aerated Water Factories	1
Fry Shops	14	Soap Factories	1
Hotels	11	Other Factories	116
Markets	12	Schools	36
Spirit Shops	37	Common Lodging Houses	8
Ice Cream Carts and Pails	45	Barber Shops	39
Cake Trays and Baskets	68	Dye Works	1
Provision Trays and Baskets	55	Laundries	22
Bread Carts and Baskets	6	Garages	31
Fresh Fish Trays	16	Tanneries	2
Oyster Vendors' Baskets	9	Public Urinals	9
Plantain Carts	—	Boats	6

Results of Notices and Verbal Directions, 1961.

	Constructed, installed or provided	Repaired	Cleansed	Painted	Eliminated	Limewashed	Oiled
Yard Pavements	96	116	—	—	—	—	—
Depressions in yards	—	—	—	—	105	—	—
Yards	—	—	5,199	—	—	—	—
Drains, sinks, gullies, washing troughs &c.,	348	559	4,036	—	—	—	—
Lavatories, sewer basins, flush tanks, urinals, bathrooms, &c.,	468	294	1,402	—	—	—	—
Privies	211	680	—	—	—	415	—
Cesspits	111	143	1,673	—	—	—	34
Manure Heaps	—	—	—	—	369	—	—
Rat Holes	—	—	—	—	175	—	—
Tree Shade, Overgrowths of bush	—	—	—	—	1,306	—	—
Dustbins	757	169	610	—	—	—	—
Dustbin Covers	351	—	—	—	—	—	—
Shops, Parlours, Restaurants, Bakehouses, Hotels, &c.,	—	137	3,234	470	—	457	—
Aerated Water Factories	—	—	24	—	—	4	—
Bread Carts	—	—	—	4	—	—	—
Barracks, Common Lodging Houses	—	15	11	2	—	8	—
Garages, Kitchens	—	68	—	—	—	74	—
Cowsheds, Stables	—	5	310	—	—	13	—
Tanneries, Soap Factories, &c.,	—	—	—	—	—	—	—
Close-boarding, Ventilation of Houses	2	—	—	—	—	1	—
Barber-Shops and other Workshops	—	—	101	27	—	7	—
Glass Cases and Covered Trays	40	28	—	63	—	—	—

Reports to Water and Sewerage Department—1961

Reports	*Total*
Leaks, defective taps, chokes, &c., ...	1,147

Anti-Rabies-Measures—1961

Trappings, Etc. of Bats

Number of locations for roosts of Bats	14,261

Bats Caught

Artibeus lituratus palmarum (Trinidad Fruit Bat)	261
Artibeus jamaicensis trinitatis (Jamaica Fruit Bat)	280
Molossus m. major (Small Free-tailed Bat)	16
Carollia p. perspicillata (Short-tailed Fruit Bat)	15
Glossophaga s. soricina (Long-tongued Bat)	5
Glossophaga longirostris major (Greater Long-tongued Bat)	73
Centurio senex (Wrinkled-face Bat)	18
Promops Centralis	1
Molossus Trinitatis (Trinidad Free-tailed Bat)	2
Phyllostomus d. discolor (Long tongued spear-nosed Bat)	5
	676

Bats Caught Outside City Limits

St. James Barracks—*Glossophaga s. soricina* (Long-tongued Bat) ..	3
Masson Hospital—*Phyllostomus d. discolor* (Long-tongued spear-nosed Bat)	6
Botanic Gardens—*Artibeus Jamaicensis trinitatis* (Jamaica-Fruit Bat) ..	4
Belmont—*Artibeus Lituratus Palmarum* (Trinidad Fruit Bat) ..	4
TOTAL	17

Building Plans, &c.—1961

Reports made by the Public Health Department were as follows:—

On Plans, &c., for reconstruction or reconditioning of buildings ..	793
On applications for leases of land in Woodbrook and Gonzales Place	91
On premises in which building operations were in progress ..	102
On application for certificates of completion of buildings ..	117

Cleaning of Privies, &c.—1961

Under the Public Health Ordinance, Ch. 12 No. 4 section 64 (1) (c), Cesspits, Cesspools and Septic Tanks were cleansed as follows:—

East Dry River	593
Belmont	665
St. James	337
Woodbrook	78
	1,673

Outstanding cesspits up to 31st December, 1961, numbered 146.

Average cost per cesspit emptied: $29.56.

Prosecutions—1961

Cases Determined by the Magistrate

Offences	*No. of Cases*	*Results Total Fines, &c.*
Failing to comply with nuisance notices	1	Fined $12.00
	10	Adjourned
	1	Dismissed
	3	Withdrawn
	15	
Breaches of Sale of Foodstuffs Bye-laws	15	Adjourned
	15	
Grand Total	30	

Summary

Cases	
1	Fined $12.00
25	Adjourned
1	Dismissed
3	Withdrawn
30	

Leave of Absence—1961

	Vacation Leave No. of days	Sick Leave No. of days	Local Leave No. of days
Assing, C. C.—Sanitary Inspector	28	14	14
Aberdeen, K.—2nd Class Clerk	21	6½	14
Andries, P.—Sanitary Inspector	—	7	1
Adams, R.—2nd Class Clerk	21	33	14
Antoine, A.—Supervisor	28	1	9
Bennett, Dr. S.—Inspector of A & M ..	15	—	7
Bocaud, R.—Sanitary Inspector	28	6	11
Boxill, E.—Dep. C.S.I. (Indoor)	28	—	10
Brathwaite, E.—Sanitary Inspector ..	28	—	12
Carpette, O.—Overseer	28	—	14
Callender, E.—Sanitary Inspector	42	—	—
Castello, G.—Sub-Overseer	21	—	10
Cameron, I.—Sanitary Inspector	21	8	—
De Four, H.—Health Education Officer ..	28	9	—
Davidson, C.—Sanitary Inspector	28	—	5
Du Bois, C.—Sanitary Inspector	21	—	5
Edwards, R.—Sanitary Inspector	—	10	8
Forde, G.—Senior Sanitary Inspector (Indoor)	28	1	6
Forde, O. E.—Sanitary Inspector	—	—	14
Goodridge, C. F.—Messenger	21	—	10
Greenidge, St. A.—Sanitary Inspector ..	21	17	11
Holdip, M.—Sanitary Inspector	28	16	9
Howard, J. R.—Sanitary Inspector ..	—	—	—
Hodge, L.—Sanitary Inspector	—	—	—
Hinkson, G.—Sanitary Inspector	28	7	7
Joseph, A.—Scientific Assistant	21	—	—
Joseph, V.—1st Class Clerk	28	1	—
Khan, V. S.—Sanitary Inspector	28	2	14
Langton, E.—2nd Class Clerk	21	9	14
Marcano, G. R.—Medical Officer of Health ..	—	7	—
Marcial, R. S.—Sanitary Inspector	21	5	2
Mitchell, K. I.—Sanitary Inspector ..	21	19	9

Leave of Absence—1961—(Cont'd.)

	Vacation Leave No. of Days	Sick Leave No. of Days	Local Leave No. of Days
Nurse, G. W.—Sanitary Inspector	28	1	8
Neranter, A. K.—Sanitary Inspector ..	21	1	9
Noel, C.—Sanitary Inspector	21	12	14
Parris, J. E.—Overseer	28	—	14
Philip, O.—Sanitary Inspector	21	14	14
Rivers, F.—Dep. C.S.I. (Outdoor)	28	—	5
Romain, A.—Chief Sanitary Inspector ..	28	—	3
Rameshwar, C. J.—Sanitary Inspector ..	21	20	4
Rowe, Desmond K.—2nd Class Clerk ..	21	10	11
St. Cyr, H.—Sanitary Inspector	28	—	4
Sampson, A.—Sanitary Inspector	—	44	1
Sansavoir, F.—Sub-Overseer	21	—	14
Samm, M.—Sub-Overseer	21	—	14
Turney, H.—Sanitary Inspector	68	4	4
Turner, K.—Sanitary Inspector	70	19	6
Trotman, F. A.—Sanitary Inspector ..	21	—	—
Wilson, A.—Senior Clerk	28	2	1

Special Leave

Turner, K.—Sanitary Inspector—12 days

FINANCIAL

Revenue and Expenditure, 1959-1961

	1959	1960	1961
REVENUE	$ ¢	$ ¢	$ ¢
Revenue collected by the Health Department ..	6,616.67	2,305.49	1,557.37
EXPENDITURE			
Salaries and Allowances	155,537.75	170,179.73	172,843.05
Superannuation Allowances	27,382.50	—	12,647.64
Contributions	879.00	91.00	91.00
4 cents per hour interim increase (Wages) ..	1,994.82	—	—
Arrears of Salary—Lee Report	9,975.75	—	—
Generator, Tape Recorder, &c.	1,787.31	—	—
Van—Health Education	3,344.90	—	—
Port-of-Spain X-ray Campaign	—	2,493.75	—
Pest Eradication Campaign—Extraordinary (1961)	—	—	25,528.01
Increased Wages—20 cents per day, 1959—A. Pajotte	—	98.65	—
Increased Wages—40 cents per day, 1959—D. Ragoobar	—	124.10	—
Increased Wages—40 cents per day, 1959 ..	—	18,885.01	—
Arrears of Pension to O. E. Forde and C.C. Assing for 1959-1960	—	2,000.00	—
Arrears of Salaries (Anomalies)—A. Romain and 4 others—1959-1960	—	4,132.00	—
Increased Wages—40 cents per day	—	15,147.21	—
Increased Wages—40 cents per day—P. Seecharan	—	5.60	—
Increased Wages—20 cents per day—A. Pajotte—1st Janauray ,1960 to 19th October, 1960 ..	—	92.60	—
Arrears of Cost of Living Allowances—1960 ..	—	830.52	—
Wages and Allowances	195,314.13	219,013.93	253,106.42
Maintenance, Materials, &c.	29,842.41	33,980.75	24,618.38
	$426,058.55	$467,074.85	$490,391.87
Disposal of Night Soil	9,017.62	10,253.48	12,252.90
Emptying Cesspits	†50,998.43	‡48,456.71	*49,458.52
	486,074.60	$525,785.04	$552,103.29

†Emptying of Cesspits—amount recoverable from house owners $15,663.75 in 1959.
‡Emptying of Cesspits—amount recoverable from house owners $14,053.00 in 1960.
*Emptying of Cesspits—amount recoverable from house owners $17,092.30 in 1961.

ACKNOWLEDGMENT

Another year 1961 has come and gone and as I come to the end of yet another annual report, which is due to take its proper place in the annals of the history of the Local Sanitary Authority, my thoughts go out, as indeed they must, to those who are around me and are part and parcel of me in this our life's work.

We cannot afford to forget that the 220 employees of the Public Health Department are all human beings, flesh and blood; each man is a distinct entity often with a family to look after, with hopes, desires and ambitions, anxious to carve a career for himself and his family and to improve his and their lot in life. The Head of a Department whilst never omitting to pay due regard to these important human considerations, must however, leave no stone unturned to secure the complete integration of the individual with the machine, so that the service, which in the case of public health is in the greatest of all that can be rendered in the field of human affairs—salus suprema lex—may be properly, thoroughly, effectively, and conscientiously performed.

That we of the Public Health Department have in a measure been able to render such service to the City of Port-of-Spain in the year under report has been due, almost entirely, to the unflagging devotion to duty, the unremitting effort, the continuous co-operation and the unfailing loyalty of the staff both indoor and outdoor, pensionable and non-pensionable, under the able and inspiring leadership of the Chief Sanitary Inspector Mr. A. Romain, Cert. R. San. I. and the Deputy Chief Sanitary Inspector (Indoor) Mr. E. Boxill, Cert. R. San. I. for the first three quarters of the year, and Mr. Anthony Wilson, Principal Officer, for the last quarter of the year.

It is inevitable, of course, that gaps in the organisation do make themselves apparent at times and that the frailty of human nature makes the call for and enforcement of discipline an ever present necessity, but no opportunity is ever missed to deal with these difficulties and I am happy to be able to record that, by the system of regular weekly meetings with the pensionable and periodic conferences with the non-pensionable staff, the machinery of the Department is on the whole kept well oiled and running smoothly most of the time. For this I am deeply grateful and I am not unconscious of the determination, the effort, the energy and the enthusiasm of one and all to attain this end, which I commend to the favourable notice of the Local Sanitary.

We lost one Grade B Sanitary Inspector during the year under report, Sanitary Inspector R. Edwards, who resigned his post to go to the United States of America to undertake further studies. We wish him all success and the best of luck.

There can still be detected on occasions a feeling of frustration among the Sanitary Inspectors of the Department that the amenities and conditions of service enjoyed by the incumbents of similar posts in the Central Government continue to elude them and I am respectfully to request the Local Sanitary Authority to make haste to give due consideration, where possible and reasonable, to adopt those amenities and conditions of service so that all officers, both central and local, who often work side by side in the sub-districts of the City, will be on a basis of parity and the regular and irksome exodus of some of our most capable and best trained men can come to an end.

YUILLE'S PRINTERIE LTD., TRINIDAD, W.I.—1962.
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