


British Guiana.

# ANNUAL REPORT

OF THE

# DIRECTOR OF MEDICAL SERVICES

FOR THE YEAR

# 1958.

GEORGETOWN, DEMERARA, BRITISH GUIANA.

1959.

## CONTENTS



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# SYNOPSIS

of the

## More Important Items in the Annual Report.

1. Assistance by WHO -

As the result of a request submitted by the Medical Department to WHO, visits by Consultants from WHO were made during the year and have resulted in the following new Schemes:-

(i) An Environmental Sanitation Scheme, whereby with the assistance of UNICEF, 12,000 pit latrines as well as hygienic school latrines will be erected in rural areas. This Scheme also covers the erection of 20 rural slaughter houses and provides WHO Fellowships for a Public Health Engineer, an Educator and junior staff.

(ii) A Rural Health Centre Scheme, which provides for the erection of 26 new rural Health Centres, including staff and equipment. It is proposed that the first of the foregoing Schemes should be implemented in 1960, and the second in 1959.

Para. 1

2. Development Plan for Health Services -

The main items in the amended Development Plan are:-

(i) The possible erection of a less costly Georgetown Hospital, than previously proposed, on a new site. The construction work to be undertaken on a deferred payment loan basis.

(ii) The erection of three new Cottage Hospitals at Mahaicony, Leguan and Leonora, respectively.

(iii) The rebuilding of the west wing of the Mental Hospital.

(iv) Erection of a large Health Centre in Georgetown and 26 rural Health Centres.

(v) The building of a new Out-Patient Department at the New Amsterdam Hospital.

Paras. 6 & 7.

SYNOPSIS: contd.

3. Shortage of Medical Staff -

Out of an approved complement of 43 general duty medical officers only 30 were appointed, and out of an approved number of 6 interns at the Georgetown Hospital, only 3 were available at any time. Ten medical officers, including two specialists, resigned from the service during the year. There is very definite discontent amongst specialist officers and medical staff attached to Institutions as regards their present emoluments. Paras. 9, 10, 11 & 12.

4. Vital Statistics -

In 1958, the Infant Mortality rate per 1,000 live births was 62.8, and the Crude Death Rate was 10.5 per 1,000 population. Para. 18.

5. Poliomyelitis -

No cases of this disease were reported, compared with 100 cases in the previous year. It is planned to introduce vaccination of the population at risk against this disease in 1959. The method proposed is the oral attenuated vaccine. Para. 21.

6. Typhoid -

The number of notifications of this disease was 422. There was a small out-break in the Christianburg-Wismar Area due to polluted water supplies. There is a possibility that with the assistance of the Colonial Medical Research Committee some research work may be undertaken in 1959 in assessing the value of typhoid inoculations in rural areas. Para. 22

7. Tuberculosis -

Due to the implementation of new proposals, the waiting list for admission to the Best Sanatorium has been reduced from a previous 500 to nil. This has been accomplished by admitting patients to hospital for a short course of intensive treatment to make them non-infectious and to educate them about their disease. These patients on discharge from hospital are treated as ambulatory cases at the out-patient clinics.

A surgeon is at present undergoing training in chest surgery for future work in the Colony. Paras. 27 & 28.

SYNOPSIS: contd.

8. The Mass Miniature X-Ray Unit -

This Unit has been transferred to the Georgetown Hospital and in due course every new case attending the out-patient department of this hospital will have a routine x-ray examination. Para. 29.

9. Malaria -

A total of 114 positive malaria slides were seen during the year as compared with 4 positives in 1957. This is a noticeable increase. All these cases came from the Interior.

Proposals for further control measures in the Interior are mentioned in some detail and the possibility of introducing the use of medicated or chloroquinated salt into the Interior is discussed. Paras. 31 - 33.

10. Filariasis -

The anti-filarial campaign continued throughout the year. A microfilarial survey was carried out on 28,219 persons in the Essequibo and 6,000 persons with positive bloods received treatment with Diethylcarbamazine. Para. 35.

11. Leprosy -

The number of patients registered in the Colony is 1,288. The first step towards implementing a new leprosy programme has been taken by sending a medical officer away for special training under a WHO Fellowship. Other proposals for the future control of leprosy in the Colony are mentioned. Paras. 38 & 40.

12. Mosquito breeding in swamps around Georgetown -

This nuisance, which is not a health problem, is mentioned, and measures for its permanent control including the use of city garbage as fill for swampy areas are discussed. Para. 43.

13. Nutrition -

(a) The School Feeding Scheme has continued to perform a very useful service. It is proposed to request UNICEF for assistance to increase the scheme to cover over 30% of school children;

SYNOPSIS: contd.

| | | |
|---|---|---|
| | and other matters dealing with mental health are discussed. | Para 70. |
| 18. | Training Schemes - | |
| | Details of various training schemes at present being implemented and those planned for the future are mentioned. | Paras. 77-81. |

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BRITISH GUIANA.

23rd March, 1959.

## I. ADMINISTRATION:

As a result of a request submitted late in 1957 by the Medical Department to WHO, visits were paid during the year to the Colony by Dr. A.G. Friend, Public Health Engineering Adviser, and Mr. Scott W. Edmonds, Public Health Educator of WHO, together with Miss I. Ripley, WHO Public Health Nursing Adviser.

Subsequent to these visits plans were drawn up for an Environmental Sanitation Scheme and also for a Rural Health Centre Scheme. The former Scheme provides for the erection of 12,000 pit latrines of an approved sanitary design, including school latrines, in rural areas. The latter Scheme covers the erection of 26 new rural health centres, including staff and equipment in country districts and also the construction of 20 rural slaughter houses. These Schemes cover the training of a Public Health Engineer, a Public Health Educator and other junior public health personnel. In due course requests for assistance for these Schemes will be submitted to WHO and UNICEF, but owing to the unavailability of funds for this purpose from these Organisations during 1959, it will not be possible to obtain final approval to implement these Schemes till 1960.

2. The WHO Nursing Adviser in her report on the nursing service recommended the appointment of:-

(i) A Public Health Nursing Supervisor.

(ii) A Public Health Sister Tutor.

(iii) An extra Sister Tutor for the Georgetown Hospital.

(iv) Integration of the present specialised Health Visitor groups into a unified body performing general public health nursing duties.

(v) The modernisation of reports and statistics in the nursing service.

Owing to financial reasons the first and second of these recommendations are not possible at present, but an extra Sister Tutor for the hospital has been approved in the 1959 Estimates. An attempt has already been made to implement the last two proposals with satisfactory results.

3. Assistance from WHO was also obtained through the visit of Mr. R.E. Curran, Adviser on Public Health Legislation. Valuable advice was by this means obtained for the proposed new Leprosy Ordinance and the proposed Food and Drugs Legislation.

I. ADMINISTRATION: contd.

4. The Dental Adviser of WHO, Dr. M.V. Chaves, visited the Colony in July, and submitted a report on the dental services. The main recommendations in this report are mentioned later (para. 56).

5. The WHO Adviser on Laboratory organisation, Miss Donna Geib, visited the Colony in the latter part of the year. The report and recommendations of this officer on her investigation into the laboratory services of the Colony have not yet been received.

6. The original Development Plan for health services which terminates in 1960, has received further consideration by Government and the Medical Administration during the year. Certain changes in the original plan have been approved.

The former proposal to rebuild completely the Georgetown Hospital, which was estimated to cost about twelve million dollars has been disapproved for financial reasons. The hospital architect is at present working on new proposals to reduce the cost of the structure to under eight million dollars. This will be done by:-

(a) moving the new hospital to a site on Thomas Lands where it can be built more economically because of the greater space available;

(b) building the whole hospital in one stage and not in stages over a period as was previously envisaged;

(c) using cheaper materials in the construction and saving on foundations by reducing on the height of the building;

(d) utilizing where possible fixtures and equipment at present available in the Georgetown Hospital; and

(e) possibly reducing the number of beds below the original number of 750, and retaining 250 - 300 beds in the old Georgetown Hospital for obstetrical and gynaecological cases and chronic medical and surgical patients.

Government is in contact with a United Kingdom firm of contractors with the possibility of having the hospital built on a deferred payment loan basis, spread over a period of eight years.

7. Briefly the other main items approved in the Development Plan are:-

(a) the erection of three cottage hospitals at Mahaicony, Leguan and Leonora, respectively;

(b) the rebuilding of the west wing of the Mental Hospital;

I. ADMINISTRATION: contd.

(c) the erection of a large health centre in Georgetown;

(d) a new kitchen and out-patient department at New Amsterdam Hospital;

(e) maternity wards for Suddie and Mabaruma Hospitals;

(f) the erection of rural mortuaries;

(g) the erection of 26 rural health centres; and

(h) a scheme for environmental sanitation for rural areas.

The last two projects have already been mentioned in this Report. It is of the utmost importance that most of these schemes should be completed before the closing date of the Plan in 1960.

8. The Director of Medical Services accompanied by the Assistant Director attended the Caribbean Medical Research Committee Meeting in Jamaica in April, and by himself, the Meeting of the Heads of Medical Services in the British Caribbean in Trinidad, in July. The Director was an alternate delegate at the Pan American Sanitary Conference and the Tenth Meeting of the Regional Committee of WHO during September, in Puerto Rico. It has been decided with the approval of the Minister of Health, that the next Meeting in April, 1959, of the Caribbean Research Committee shall be held in British Guiana.

II. PERSONNEL:

9. Details of the Colony's Medical Establishment are recorded in Appendix I.

It is still necessary, as in previous years, to record a shortage in the staff of general duty officers in the Medical Department. Out of an approved complement of 43 officers of this grade only 30 were appointed, and out of an approved number of 6 internes at the Georgetown Hospital only 3 were available at any time. Ten medical officers resigned from the Service during the year. To relieve the situation 15 temporary or part-time private practitioners were employed. Every effort however was made to permit officers, who were eligible, to proceed on vacation or study leave during the period under review.

10. During the year two specialist officers resigned, one being the Obstetrician and Gynaecologist and the other a very recently appointed Physician Specialist. The loss of this latter officer was a serious blow to the Medical Unit at the Georgetown Hospital as the qualifications and experience of this particular officer were considerably above those usually encountered.

II. PERSONNEL: contd.

11. Besides the two vacancies mentioned above in the specialist staff, the posts of Physician, Surgeon, Pathologist, Psychiatrist, Leprologist and Senior Medical Officer still remain unfilled.

12. There is very definite discontent amongst all specialist officers as regards their present emoluments and housing allowances. It is hoped that the Salaries Revision Commission, which late in the year investigated official salaries in this Colony, will remove this discontent, which has caused the Medical Administration much concern during the past few years. It might be mentioned that an officer entitled to free quarters does not appreciate receiving instead a house allowance of $480: per annum in lieu thereof, when it is not possible to rent suitable quarters for less than twice that amount.

13. As in previous years, the wastage in the nursing staff continued. During the year 94 qualified nurses resigned as against 77 in 1957, chiefly to take up appointments in the United States of America at much increased emoluments. Fortunately it was possible to obtain the services of a Male Tutor during the year - this brings the qualified teaching staff up to a total of three, which is still much too limited for the needs of the Department.

14. Following the retirement of Miss I. Premdas, the post of Matron, Georgetown Hospital, has been permanently filled by Miss C.E.A. Eaves, who was formerly Deputy Matron.

15. Mr. H.A. Moonsawmy - Senior County Public Health Inspector, who is now re-employed by Government after retiring because of age, was decorated with the M.B.E. in the Birthday Honours List for outstanding service to the Health Department over a period of many years.

16. There are at present 131 Medical Practitioners practising in the Colony as well as 27 registered practising Dental Surgeons, making a total of 158. Of this total 75 are in Government Service, 4 being dental officers.

III. FINANCE:

17. The following is the actual expenditure during 1958 for the Medical Department:-

| | Heads of Expenditure | Amount |
|---|---|---|
| 26 | - Medical (less Personal Emoluments) | - $ 245,743 |
| 26A | - Bacteriological Department (less Personal Emoluments) | - $ 39,751 |
| 26B | - X-Ray Department (less Personal Emoluments) | - $ 66,835 |
| 26C | - Hospitals | - $3,874,272 |
| 31, 32, 33 | - Miscellaneous Subventions Municipal and Non-Municipal | - $ 105,524 |
| 26, 26A, 26B | - Personal Emoluments | - $1,065,418 |

III. FINANCE: contd.

Comparative Totals of Expenditure for the years 1956 - 1958 are set out below:-

| 1956 | 1957 | 1958 |
|---|---|---|
| $4,241,618 | $5,311,462 | $5,397,543 |

The amount spent on all medical services per person (estimated total population 518,350) per annum was $10.41.

Comparative figures for the percentage expenditure on medical services to total expenditure on all services are:-

| 1956 | 1957 | 1958 |
|---|---|---|
| 10.5% | 11.7% | 11.4% |

Figures for 1958 are provisional.

IV. VITAL STATISTICS:

18. The Vital Statistical Rates for the year 1958 are the most satisfactory so far in the history of the Colony. The Infant Mortality Rate of 62.8 is the lowest on record in British Guiana and the falling Crude Death Rate of 10.5 is also a record low.

19. Comparative Vital Statistical data for the past three years are given in Table I. The 1958 statistics are provisional - they exclude Aboriginals and include migration.-

TABLE I.

| | | 1956 | #1957 | ƀ1958 |
|---|---|---|---|---|
| Population | Males | 243,070 | 250,900 | 258,910 |
| | Females | 244,240 | 251,770 | 259,440 |
| | Total | 487,310 | 502,670 | 518,350 |
| Total Births | Males | 10,461 | 11,075 | 11,366 |
| | Females | 10,272 | 10,957 | 10,970 |
| | Total | 20,733 | 23,032 | 22,336 |
| Crude Birth Rate per 1,000 mean population | Mean | 480,490 | 494,900 | 510,510 |
| | Rate | 43.2 | 44.5 | 43.8 |

# 1957 - Corrected figures.
ƀ 1958 - Provisional figures.

IV. VITAL STATISTICS: contd.

TABLE I contd.

| | | 1956 | #1957 | ϕ1958 |
|---|---|---|---|---|
| Still Births | No.<br>Rate | 702<br>33.8 | 724<br>32.9 | Not Available |
| Total Deaths | Males<br>Females<br><br>Total | 2,815<br>2,564<br><br>5,379 | 2,912<br>2,814<br><br>5,726 | 2,759<br>2,604<br><br>5,363 |
| Crude Death Rate per 1,000 mean population | Mean<br><br>Rate | 480,490<br><br>11.2 | 494,900<br><br>11.6 | 510,510<br><br>10.5 |
| Infant Mortality Rate per 1,000 live Births | Deaths<br><br>Rate | 1,418<br><br>68.4 | 1,489<br><br>67.6 | 1,403<br><br>62.8 |

# 1957 - Corrected figures
ϕ 1958 - Provisional figures.

V. COMMUNICABLE DISEASES:

20. During the period under review the health of the population of British Guiana has been satisfactory. No epidemic of quarantinable disease or other disease was encountered.

21. Poliomyelitis - No case of this disease was reported up to date as compared with 100 cases during 1957. Taking into consideration the opinion of Dr. J.L. Melnick, WHO's Regional Consultant in poliomyelitis, who visited the Colony during the outbreak of poliomyelitis in 1957, and also considering the known epidemiology of this disease, there is an expectancy that the Colony may again suffer an epidemic of poliomyelitis in late 1959 or early 1960.

The Medical Administration has therefore strongly recommended that during 1959 the population at risk, which is amongst the age group 0 - 3 consisting of about 50,000 children should be protected by poliomyelitis vaccine. Provision has accordingly been made in the Estimates for 1959 for this purpose.

22. Typhoid - The number of notifications of this disease was 422 during the year as compared with 366 in 1957.

V. COMMUNICABLE DISEASES: contd.

Of this number 257 came from Demerara (17 from Georgetown), 107 from Berbice and 58 from the Essequibo. There was a small outbreak of 71 cases of this disease in the Mackenzie-Wismar area early in the year. Immediate steps were taken by the medical staff of the Demerara Bauxite Company to control the outbreak and all active co-operation possible was given by the Health Department.

This outbreak was considered to have originated from the contaminated river water supply of the Christianburg-Wismar area and to the general poor sanitary condition of the two villages. The extension of the water supply to this area from the newly established water purification plant which is being constructed should eliminate this hazard in future.

With the assistance of the Colonial Medical Research Committee, there is a possibility that some research work may be undertaken in assessing the value of typhoid inoculations in rural areas in 1959. About 100,000 inoculations would be necessary for the study which would be on similar lines to the inconclusive experiment conducted in Yugoslavia in recent times.

The incidence of Typhoid in this Colony is closely linked up with rural water supplies and until a pure water supply is available in the more populous areas the permanent control of this disease will be difficult. The implementation however of the proposed Environmental Sanitation Scheme and the formation of a Public Health Education Unit, mentioned in paragraph 1 of this Report, should have a beneficial effect on the incidence of this disease in due course.

In all a total of 3,908 TAB inoculations were given in areas which required the most protection.

23. Food Poisoning - In July, there was a small outbreak of food poisoning affecting 15 persons at Strathcampbell, Mahaicony. The symptoms were those of acute gastro-enteritis of sudden onset. No deaths were reported. In spite of bacteriological and analytical investigations the cause of this outbreak could not be determined.

24. Diphtheria - 74 cases of this disease were reported during the year, compared with 23 in 1957.

25. Rabies - No human cases of paralytic rabies were reported during the year, but cases amongst cattle were diagnosed close to Georgetown on the West Bank Demerara. The Health Department with the co-operation of the Agricultural Department took the usual precautions to prevent the spread of this disease. A request for assistance from Colonial and Development funds to undertake a "bat survey" of the Colony has been put up by the Agricultural Department.

26. Table II compares the number of notifications recorded in respect of more prevalent infections during the past three years:-

V. COMMUNICABLE DISEASES: contd.

TABLE II.

Notified Cases of Diseases

| Disease | No. of Cases | | |
|---|---|---|---|
| | 1956 | 1957 | 1958 |
| Enteric Fever | ϕ 451 | 366 | 422 |
| Influenza | 580 | 4,281 | 1,294 |
| Chicken Pox | ϕ 146 | 197 | 64 |
| Pulmonary Tuberculosis | 190 | 192 | 202 |
| Diphtheria | ϕ 38 | 23 | 74 |
| Poliomyelitis | 4 | 100 | nil |
| ϕ Revised figures. | | | |

27. Tuberculosis - The number of new cases notified during 1958 was 202, whilst during the previous year, there were 192 notifications.

28. Following the recommendations of Professor Heaf for improving the tuberculosis service, it is now the policy of the Department to admit most active tuberculosis patients to the Best Sanatorium and discharge them after intensive treatment and education as soon as they are no longer infectious. On the average this course lasts about 3 - 4 months. A total of 157 new cases have been admitted and 207 cases discharged and 15 cases died.

Patients after discharge from hospital are enrolled as ambulatory patients or out-patients at the Chest Clinic and continue their treatment from that centre. By this means the waiting list for admission to the Best Sanatorium has been reduced from 500 to nil, and patients are now discharged after a few months treatment. Thus they are enabled to continue in their former employment, which in the past was usually impossible, and at the same time continue their treatment as ambulatory patients.

Nowadays there are usually a score or more empty beds in the Best Sanatorium, where a year ago there was seldom one empty bed. Amerindian patients however because of their poor resistance to tuberculosis, and the difficulty in providing them with ambulatory treatment in their remote homelands, are kept in hospital until they are considered cured of the disease.

V. COMMUNICABLE DISEASES: contd.

The possibility of treating the whole Amerindian population with Isoniazid as a prophylactic measure has been carefully considered. To do this effectively would entail a comparatively large staff considering the scattered distribution of the Aborigines population and the length of treatment necessary. It has therefore not been considered practicable at the present time.

It is proposed to train an Amerindian Ranger in B.C.G. technique as it has been found difficult for the B.C.G. Unit to reach these people in remote areas efficiently.

On the return of one of the Senior Surgeons from special training in chest surgery, it is planned during 1959 to organise a chest surgical unit in Georgetown.

Most of the other recommendations of Professor Heaf which were mentioned in this Report of 1957 have been implemented.

It is considered that the present policy of the Department in the control of tuberculosis is working most satisfactorily.

29. The Mass Miniature X-Ray Unit - A total of 7,931 persons were x-rayed on miniature films and 1,895 on large films. 85 abnormal chest cases (other than chest clinic cases) were diagnosed by this means, and were referred to the chest clinic for further examination.

In September, the Mass Miniature Unit was moved to the out-patient department at the Georgetown Hospital. It is proposed in due course that all new out-patients attending at this department will have a routine x-ray examination.

30. The Follow-up Programme of the B.C.G. Campaign continued its activities. From January to March, 56 schools were visited and 7,759 tuberculin tests given. After the re-opening of schools in April, the B.C.G. nurses concentrated on determining the number of children who had reverted to negative since they were given B.C.G. during the Mass Campaign and on revaccinating such children.

From April to July, the Tuberculin Test was given to 9,374 children attending 63 schools. In September, the B.C.G. Unit moved far afield - in the County of Berbice and the Pomeroon district. In all a total of 34 schools and adult centres were visited and 3,650 persons tuberculin tested.

By the end of the year, a total of 199 schools and centres in the various parts of the Colony had been visited and 29,233 persons tuberculin tested.

The British Guiana Society for the Prevention and Treatment of Tuberculosis and its After-Care Branch continued the usual good work during the year. Owing to the large number of discharges from the Best Sanatorium recently and the necessity

V. COMMUNICABLE DISEASES: contd.

of assisting these patients materially during their out-patient stage of treatment the financial resources of the Society were sorely strained. Government however realising the position came to the financial assistance of the Society.

31. Malaria - The routine activities of the Mosquito Control Service, which is limited nowadays to the entomological check surveys of the coastlands and spraying operations with D.D.T. to certain strategic areas, were carried out according to plan. In this way 15,294 houses were sprayed with a 5 per cent D.D.T. solution based on the policy of a 12-month cycle for the Interior and Riverain Settlements and on an 18-month cycle for certain areas on the Coast.

The results of the routine check surveys were as follows:-

| Hand Captures | | Flit Captures | |
|---|---|---|---|
| No. of Houses | Total Mosquitoes | No. of Houses | Total Mosquitoes |
| 8,767 | 91,844 | 4,504 | 162,748 |

As usual C. fatigans predominated to the extent of about 99.6 per cent. There was no trace of either A. darlingi or Ae aegypti.

32. A total of 114 positive malaria slides was seen during the year. This is a noticeable increase on the previous year, when only 4 or 0.52 per cent were found positive. Out of this total 44 came from the North West, 39 from the Mazaruni and 10 from the Rupununi.

The following Table compares the incidence of Malaria over a period:-

TABLE III.

| Year | No. of Cases | No. of Deaths |
|---|---|---|
| 1947 | 15,490 | 280 |
| 1951 | 1,008 | 31 |
| 1955 | 82 | 6 |
| 1956 | 42 | 3 |
| 1957 | 4 | 1 |
| 1958 | 114 | No figures available |

In any area where cases of malaria are notified, the Health Department takes immediate measures to deal with the problem. This immediate action in the control of malaria is essential and it has been noticed recently that there has been an unnecessary delay in reports of cases reaching the Mosquito Control Headquarters. Certain medical officers and Dispensers in remote areas have been slow in notifying cases or in sending blood slides to the Mosquito Control Laboratory for examination. Besides this delay, it has been discovered recently that certain results submitted by the Mosquito Control

V. COMMUNICABLE DISEASES: contd.

Laboratory have been inaccurate. This is possibly due, to some extent, to the fact that positive slides have been encountered very rarely in recent years, and the former skill in detecting positive slides in the laboratory has accordingly declined.

To tighten up on malaria control in the Interior, it has been decided to implement the following measures:-

(a) all medical officers and dispensers in remote areas shall in future submit a monthly report whether or not they encounter any cases of malaria in their district;

(b) that a blood sample of all cases of fever in remote areas shall be sent to the Laboratory; and

(c) that all blood slides examined in the Laboratory shall be kept for future reference and a fixed percentage of these will be cross checked in the Sugar Producers Laboratory, under the supervision of the Honorary Government Malariologist.

33. Complete and permanent eradication of malaria from the whole Interior is most desirable and it is hoped that this eventually will be possible. It is however useless to accomplish eradication in this country if on the otherside of our borders in Brazil no measures are instituted to tackle the problem. Early in 1959, Brazil has agreed to tackle her malaria problem on the Brazilian border - this will prevent in due course infection entering British Guiana from that source. In the North, the Republic of Venezuela has already completed her eradication campaign.

Full consideration is also being given by the Medical Administration to the possibility of introducing medicated or chloroquinated common salt for use in the Interior for a period of four years. A visit by Dr. Coatney of WHO has been arranged for February, 1959, to discuss the possibility of implementing this scheme at an early date and there is every likelihood that WHO and UNICEF will give assistance to this project to totally eradicate malaria from this Colony.

34. Yellow Fever - No clinical case of yellow fever has been reported in the Colony since 1948. The Aedes Index for Georgetown and the coastlands was 0.0 per cent. A total of 512,681 water deposits was inspected on both the coast and in the city with negative results.

A total of 11,591 yellow fever vaccinations was given at the three approved centres.

35. Filariasis - The Anti-Filarial Pilot Scheme greatly increased its scope of action during the year, even though funds and staff available for this work were limited.

(i) Micro-Filarial Blood Survey - During the

V. COMMUNICABLE DISEASES: contd.

first six months of the year, the Anti-Filarial Scheme operated on a regional basis in pursuance of the policy mentioned in last year's report to control bancroftian filariasis throughout the Colony. The County of Essequibo was chosen because of its relative isolation. A microfilarial blood survey (3 blood smears of approximately 20 cmm from a single puncture) was carried out on these population groups:-

| | |
|---|---|
| Essequibo Coast ... ... | 16,920 |
| Leguan ... ... ... | 6,387 |
| Wakenaam ... ... ... | 4,912 |
| TOTAL ... ... ... | 28,219 |

The microfilarial incidence was found to range from less than 1% to 22%. Low incidence is associated with a thinning and spreading out of the population with the houses and pit-latrines consequently far apart, for example at Dartmouth and Bounty Hall on the Essequibo Coast. The microfilarial rate mounts in areas which are more densely populated like Queenstown and Henrietta in the Essequibo, where the vector can find ready breeding places in the multiple drains and pit-latrines.

As a single blood test does not always correspond with the "microfilarial tide" of a person, blood examinations were repeated on two or more occasions at varying intervals of 24 hourly, 48 hourly periods etc., on a large number of individuals from selected areas. In this way 10,909 blood examinations were repeated. This proved a time-consuming procedure as most people had to be persuaded why further "finger pricks" were necessary. The analysis of the data so accumulated will provide useful guidelines in assessing the microfilarial incidence in random sampling of any given population group.

(ii) Treatment: Diethylcarbamazine ("Banocide" 50 mg. tablet - Burroughs Welcome) was used. Treatment was offered to every infected person and where the raised incidence warranted it, mass chemoprophylaxis was instituted. This mass treatment was done between Queenstown and Walton Hall in the Essequibo, where the population actually treated numbered nearly 6,000.

To achieve maximum results, treatment was given on a house-to-house basis on an adult dosage regime of two tablets twice daily for the first two days, followed by an interval of two days without treatment. Then 4 tablets twice daily for 3 days and if no untoward reaction, 6 tablets for a further 2 days.

V. COMMUNICABLE DISEASES: contd.

The first of the two daily doses was always taken in the presence of a member of the Filaria Team. The drug-free interval had two effects in first reducing side-effects and allergic reactions to a minimum and secondly in expelling round worms, the passage of which boosted the Campaign beyond words. The tablet-basis of treatment dispensed with the scale and thus saved time. A small post-treatment recheck proved the immediate microfilaricidal efficacy of this dosage regime. A total of 38,000 blood films was examined and 8,000 persons were treated.

(iii) Health Education: To facilitate the anti-filarial work, a proper health education approach was needed and this was done with all available facilities. Emphasis was on a personal approach through all cadres of public health personnel. But a mass campaign such as this did much to emphasise the importance of the social concept of the people. At its beginning every care had to be taken that no one was missed in the blood survey during the Hindu Festivals of "Laggan" and "Pagwah" and later, during treatment, the Mohammedan Fast and rice-planting, so important to the economic existence of the people after the failure of one or possibly two previous crops, had to be considered. The team had to be in the area from about 6 a.m. to meet the farmers who had to be assured that the drug would not interfere with their work.

(iv) Follow-up Work: A detailed account of the treatment at Queenstown and Cane Grove (on the East Coast of Demerara) was given in last year's annual report. A follow-up blood survey was done one year after on nearly everyone in these two villages, and it was gratifying to note that less than 2 per cent of the original positives still showed microfilariae on blood re-examination. Even these resistant cases had their microfilarial density so reduced as to be below the infective level for the mosquito vector. This must in time be reflected in the health improvement and greater economic production in hyperendemic areas like Queenstown where indigenous elephantiasis is so evident.

(v) Further Work: A single blood survey was done in Albouystown, a suburb of Georgetown, with a population of 10,521, and half of the "positives" were given treatment, the other half being used as an untreated control. A thorough resurvey of the whole District is contemplated.

A five-day treatment was administered to infected cases at Blygezigt, a growing suburban area, where some studies on the eosinophilic relationship to filariasis were done. Of 135 cases so examined, the highest eosinophilic count was 22%, but this was exceptional.

V. COMMUNICABLE DISEASES: contd.

With the assistance of WHO, a visit is planned early in 1959 by a Medical Expert in Filariasis and provision has been made in the 1959 Estimates to continue the Anti-Filarial Campaign on a larger scale than previously. It can truly be stated that filariasis is a leading medical problem in British Guiana and every effort must be made to eradicate this disease. The Campaign is estimated to last 4 - 5 years; so far its results have been most encouraging.

36. Social Diseases: 6,362 patients attended for diagnosis and treatment during the year. Of this number 892 were patients under active treatment at the end of the previous year. There were 5,470 new applicants. Of the new applicants 2,852 were found to be suffering from Venereal Diseases, comprising 2,095 males and 757 females; whilst 2,824 were found to be free of Venereal Diseases.

Of the total number of new cases 378 or 6.91% were found to be positive to Syphilis, whilst the number of cases of Early Syphilis was 225 as compared to 267 in 1957. The total number of new cases of Gonorrhoea was 2,269.

Field Activities: This branch carried on as usual during the year. This work is divided into two sections - (a) Follow-up Service and (b) Contact Tracing.

Under Section (a) 2,429 patients were followed up with the result that 961 returned to the Clinic.

Under Section (b) 919 contacts were named of whom 392 reported.

201 Ante-natal cases were referred for investigation and of this number 90 were found to be suffering from Venereal Disease.

TABLE IV

Comparison of Types of Venereal Disease Cases Treated.

| Type of Case | 1956 | 1957 | 1958 |
|---|---|---|---|
| Primary Syphilis | 47 | 9 | 4 |
| Secondary Syphilis | 13 | 8 | 4 |
| Early Latent Syphilis | 250 | 250 | 217 |
| Late Latent Syphilis | 89 | 1 | nil |
| Late Syphilis | 163 | 141 | 142 |
| Hereditary Syphilis | 36 | 7 | 4 |
| Acute Gonorrhoea | 2,890 | 1,600 | 1,829 |
| Chronic Gonorrhoea | 705 | 414 | 467 |
| Chancroid | 96 | 91 | 120 |
| Granuloma Venereum | 32 | 83 | 132 |
| Lymphogranuloma Inguinale | 1 | 30 | 39 |
| TOTAL NEW CASES | 5,664 | 2,634 | 5,572 |
| TOTAL ATTENDANCES | 28,969 | 24,567 | 23,810 |

V. COMMUNICABLE DISEASES: contd.

Early in 1959, a visit by the Venereal Diseases Adviser of WHO has been arranged. It is hoped after this visit it will be possible to re-organise and intensify venereal disease control in the Colony. At present very little work is done in education and propaganda in dealing with this disease.

37. Yaws - Very few cases of yaws were reported during the year.

38. Leprosy - The number of patients registered in the Colony is 1,288 giving a rate per thousand of 2.7.

During 1958, a total of 76 new cases, including 48 children, was diagnosed. Of these children 2 were lepromatous, 27 tuberculoid and 19 indeterminate.

The following Table lists the lepromatous/tuberculoid ratios over the past six years and would appear to indicate a trend towards a higher general immunity.

TABLE V

Lepromatous/Tuberculoid Ratios

| Year | T. | L. | Ratio |
|---|---|---|---|
| 1953 | 63 | 14 | 4½ : 1 |
| 1954 | 55 | 9 | 6 : 1 |
| 1955 | 61 | 15 | 4 : 1 |
| 1956 | 104 | 8 | 13 : 1 |
| 1957 | 107 | 14 | 8 : 1 |
| 1958 | 52 | 24 | 2 : 1 |

The routine school leprosy survey detected 27 children with tuberculoid leprosy.

39. The results of Leprosy Surveys among school children are shown in Table VI:-

TABLE VI

Results of Leprosy Surveys among School Children - 1954-1958.

| No. of Children examined | | | | No. of Cases found | | |
|---|---|---|---|---|---|---|
| Year | Boys | Girls | Total | Boys | Girls | Total |
| 1954 | 33,782 | 32,120 | 65,902 | 13 | 9 | 22 |
| 1955 | 35,508 | 33,266 | 67,774 | 31 | 29 | 60 |
| 1956 | 34,071 | 33,036 | 67,107 | 43 | 45 | 88 |
| 1957 | 27,501 | 27,661 | 55,162 | 52 | 43 | 95 |
| 1958 | 26,313 | 25,136 | 51,449 | 16 | 30 | 46 |
| TOTAL | 157,175 | 151,219 | 307,394 | 155 | 156 | 311 |

V. COMMUNICABLE DISEASES: contd.

40. The problem of leprosy in the Colony still has to be solved and the Medical Department is most anxious to accomplish this as soon as it is possible, and proposes the following:-

(a) The first step towards implementing a new leprosy programme has been taken by sending a specially selected medical officer away for training. This training is partly sponsored by WHO, and includes a tour of several countries in Central and South America where leprosy work is being undertaken;

(b) It is planned that this officer on his return to the Colony should devote most of his time at first to a colony-wide leprosy survey. To permit this it will be necessary for some re-organisation of the administrative arrangements at the leprosarium. A leprosy survey is a very important step to find out the true incidence of leprosy in the Colony.

(c) The addition of two or three junior staff will also be required to staff the survey team.

(d) The present out-patient leprosy diagnostic and treatment outposts in Berbice, Georgetown and Suddie are most unsatisfactory and steps will have to be taken in due course to provide better accommodation for this work.

(e) Improved laboratory facilities for leprosy diagnosis are also required. It is planned to commence the proposed leprosy survey early in 1960.

A visit was paid during the year by Dr. Souza Lima, WHO Leprosy Adviser, who gave useful advice on leprosy in the Colony.

The proposed new Leprosy Ordinance and Regulations have been submitted to Government for consideration.

The Rehabilitation Scheme at Mahaica whereby ex-patients will be provided with land and financial assistance to build their own homes on the self help principle has been approved by Government and it is hoped will be implemented in due course.

VI. PUBLIC HEALTH MEASURES:

41. 11 Meetings of the Central Board of Health were held during the year. The Select Committee which deals with routine matters met on 10 occasions.

42. During the year, a total of 747 Small Pox vaccinations was performed at clinics on the age group of 3 months to 5 years. It is the intention of the Department to

VI. PUBLIC HEALTH MEASURES: contd.

increase greatly the number of these vaccinations during 1959, and a request for free vaccine has been submitted accordingly to UNICEF in order to permit 20,000 vaccinations to be administered during the year. The necessary nursing staff has been trained to do this work.

43. Insect breeding in swamps around Georgetown - The mosquito and sandfly nuisance at certain seasons of the year in and around Georgetown was mentioned fully in last year's report. Though this nuisance was not so severe in 1958 as in the preceding year, owing to the year under review being an exceptionally dry one, it was still encountered as previously.

The eradication of the courida bush, from the foreshore the main breeding area of mosquitoes and sandflies was continued by the Health Department, though this measure is comparatively expensive and of little temporary and no permanent value. Aerial spraying of the foreshore or house spraying in the city with insecticide is of little practical value when dealing with Aedes taeniorrhyncus, the main mosquito found breeding in this area. The only permanent solution in the city to this insect nuisance, which is not a health problem as no diseases are carried by this type of mosquito, is:-

(a) the reclamation of the swampy foreshore and other swampy areas adjacent to Georgetown by using city refuse as fill;

(b) the gradual substitution of earthen drains in the city and its surroundings, e.g. in the Botancial Gardens with properly graded concrete inverted drains. The latter is comparatively expensive, but the cost could be spread over a period of years; the former is not expensive and has been approved in principle by the Public Health Engineering Consultant from WHO, who visited the Colony during the year. This reclamation of the foreshore and D'Urban Park would provide the city with valuable sites for sports grounds or other development.

44. Housing - A total of 2,455 dwelling houses was erected in the rural areas of British Guiana during the year under review. Of this total 1,493 houses were built in Demerara, 726 in Berbice and 236 in Essequibo. During the same period additions were made to 939 other dwellings throughout the Colony.

The sewage disposal system of the new houses built in greater Georgetown is the individual septic tank method; unfortunately, owing to the flat nature of the building sites and poor drainage, it has been found difficult to dispose of the effluent from these tanks satisfactorily and a nuisance in some areas has resulted. Eventually some action will have to be taken to improve this condition in the new building areas.

45. The activities of the Central Board of Health continued as in previous years, the principal categories being that shown in Table VII.

VI. PUBLIC HEALTH MEASURES: contd.

TABLE VII

| | | |
|---|---|---|
| 1. | Domiciliary Inspections .. .. | 108,005 |
| 2. | Inspection of special type premises - provision shops, bakeries, cowpens, etc. .. | 7,212 |
| 3. | Re-certification of Rice Factories .. .. .. | 192 |
| 4. | Approval of new Coconut Oil Factories .. .. .. | 11 |
| 5. | Approval of Building Applications # .. .. .. | 3,325 |
| 6. | Approval of Plans for the layout of land - | |
| | (a) For building purposes .. | 184 |
| | (b) Other than building purposes | 23 |
| 7. | Issue of certificates in relation to the completion of the prescribed works in connection with 6. .. | 152 |
| 8. | Samples of foodstuffs examined (principally from the milk industry) .. .. .. | 113 |

# Includes 196 under the Board's Relaxation Policy.

46. School Medical Service - During the early months of the year, no School Medical Officer was available, but in June it was possible to fill the vacant post. Most of the activities of the service have been concentrated on the elementary schools of Georgetown and the surrounding rural areas.

In Georgetown, 12,976 school children were screened by school nurses and of these 855 were referred to the School Medical Officer. The main diseases found were scabies, pediculosis capitis, ringworm, active ulcers and malnutrition.

In Rural Areas - 5,612 children were screened by nurses and 578 referred for medical attention. On the Corentyne Coast, nurses screened 10,703 children and referred 1,288 to the doctor. On the Essequibo, 1,810 school children were screened.

A child clinic is held daily at the Medical Department. The purpose of this clinic is to see children with their parents, who were found at screening examination to have some defect, which needs further examination than can be carried out in school.

VI. PUBLIC HEALTH MEASURES: contd.

47. Nutrition:-

(a) School Feeding Scheme - This scheme as in previous years continued to do very useful work. Over 20% of school children received a free snack meal throughout the Colony. The general nutritional standard of school children, though it may be far from perfect has improved very noticeably since this feeding scheme was introduced about five years ago. The nutritional standard of the children of this Colony compares not unfavourably with that found in other Caribbean or Central American Territories.

A request for assistance to increase the scope of this School Feeding Scheme has been put up by the Education Department to UNICEF. The new proposal is to raise the number of children benefiting to over 30%.

(b) A request for assistance from UNICEF has also been submitted by the Medical Department with the object of providing pre-school children and nursing mothers in rural areas with supplies of skimmed milk. This milk will be distributed through the new Health Centres.

(c) The Local Red Cross Feeding Scheme continued to distribute regular gift supplies of milk foods from the American Red Cross Society to the toddler age group in Georgetown and New Amsterdam. This service also proved of great value and steps are being taken during 1959 to enlarge the scheme to cover certain remote areas.

(d) The Infant Welfare Milk Scheme for the sale of subsidised milk such as Lactogen and Ostermilk to expectant and nursing mothers and for infants, was continued and has been a boon to mothers. Skimmed milk powder is also available for toddlers and mothers under this Scheme.

Milk and vitamin preparations were distributed free of charge to needy cases attending Infant Welfare Clinics.

48. Maternity and Infant Welfare - The work of the Infant Welfare and Maternity League continued satisfactorily during the year. In recent years the activities of this League have increased appreciably. There are at present 119 clinic centres in the rural areas, as compared with 103 centres in 1957. At these clinics infants, toddlers and expectant mothers receive medical care and advice. A Lady Medical Officer of Health is responsible for the administration of the service and for health education of mothers in the care of their children.

VI. PUBLIC HEALTH MEASURES: contd.

An additional Inspector of Midwives for the County of Essequibo was appointed this year so that every County now has its own Inspector.

There are 23 fully qualified Health Visitors and 50 subsidised midwives in the Service. It is regretted that owing to the shortage of midwives it was not possible to station any in remote areas, but it is hoped that when the midwives now in training have qualified, it will be possible to staff such areas as the Mahaica and Mahaicony Creeks and Islands in the Essequibo River and in the Demerara Area.

49. It is most gratifying to record that the Astor Shield was awarded to British Guiana by the National Baby Welfare Council of Great Britain in recognition of the progress made in the field of maternity and child welfare. This Shield is awarded for the 3-year period 1958 - 1960, and it is only the second occasion it has been awarded to any country or city outside the United Kingdom.

50. Statistics - The following Table gives the statistics of the number of clinics, attendances of children and mothers, and the number of live births, still births, infant and maternal deaths recorded during the past three years:-

TABLE VIII.

Maternal and Infant Welfare Statistics.

| Year | No. of Clinics | Child Attendances | Mother Attendances |
|---|---|---|---|
| 1956 | 2,002 | 61,660 | 31,048 |
| 1957 | 2,081 | 49,868 | 28,683 |
| 1958 | 2,226 | 47,930 | 31,707 |

| Year | Live Births | Still Births | Infant Deaths | Maternal Deaths |
|---|---|---|---|---|
| 1956 | 5,020 | 107 | 76 | 11 |
| 1957 | 5,098 | 111 | 54 | 1 |
| 1958 | 6,078 | 107 | 59 | 7 |

The Infant Mortality Rate within the League's Service was 9.7 per 1,000 live births, whilst the Maternal Rate was 1.1 per 1,000, as compared with 10.8 and 0.2 respectively in 1957.

51. Port Health - During the period under review 1,840 vessels were inspected for nuisances, which were abated on verbal instructions. No cases were quarantined and no travellers from infected ports were placed under surveillance.

In Government compounds and at the Port, rat destruction was carried on as in previous years. 1,956 rats and

VI. PUBLIC HEALTH MEASURES: contd.

mice were destroyed by poison of which 577 were R. norvegious; 1,164 R. rattus and 215 M. musculus.

9 ships were fumigated against rats and vermin and 25 deratisation exemption certificates were issued.

718 Aircraft arrived in the Colony leaving 8,016 passengers. It must again be recorded, as it has been in previous years in this Report, that there is no Quarantine Station in the Colony.

52. Comparative statistics for the total vessels boarded during the past three years are given in Table IX:-

TABLE IX

| | 1956 | 1957 | 1958 |
|---|---|---|---|
| Vessels of all Types | 1,188 | 1,182 | 1,840 |
| Ocean-going Steamers | 695 | 768 | 592 |

VII. CENTRAL MEDICAL AND BRANCH LABORATORIES:

53. The Medical Laboratory service carried out during the year 145,022 examinations as compared with 130,850 in the previous year. A total of 1,475 samples of water from the water supply of the city of Georgetown and elsewhere was examined. The results of the city supply have been satisfactory.

The Laboratory produced 5,150 ml. of T.A.B. Vaccine for distribution in the Colony. None was distributed to neighbouring territories.

346 Post-mortem examinations were performed.

The Central Medical Laboratory is much too small for the amount of work it is expected to perform.

The work performed by all laboratories in the Colony is shown in Table X:-

TABLE X

| | 1957 | 1958 |
|---|---|---|
| Central Medical Laboratory | 93,428 | 98,679 |
| Laboratory, Georgetown Hospital | 9,824 | 12,647 |
| Laboratory, Best Sanatorium | 6,832 | 8,807 |
| Laboratory, Berbice Hospital | 14,355 | 16,499 |
| Laboratory, Suddie Hospital | 1,183 | 1,652 |
| Laboratory, Leprosarium | 4,372 | 3,896 |
| Laboratory, Bartica Hospital | 856 | 2,842 |
| TOTAL .. .. | 130,850 | 145,022 |

VII. CENTRAL MEDICAL AND BRANCH LABORATORIES: contd.

54. Blood Transfusion Service - The number of patients who received one pint of blood was 908, whilst the number who received more than one pint was 237.

The accommodation now available for this Blood Bank Service is cramped and unsuitable. It is hoped that it will be possible during 1959 to provide better accommodation for this work.

The Local Red Cross Society also runs a blood transfusion service but recently encountered great difficulty in obtaining a sufficient supply of free blood donors.

VIII. DENTAL HEALTH:

55. During the year, the dental health of the Colony received careful consideration. Early in the year a visit was paid to the Colony by Dr. M. Chaves, WHO Dental Consultant. A report and recommendations on the dental condition of the population and on the Government Dental Services have been submitted by Dr. Chaves.

It is pleasing to record Dr. Chaves' findings that the DMF (Decayed, Missing, Filled) rate in the children of East Berbice was less than 3 as compared with other much more advanced countries where the DMF rate was much higher, e.g. over 11 in Brazil and 5 - 9 in the United States of America. Dr. Chaves states "that this is a good indication that certain areas of British Guiana are in a better than average position regarding dental caries when compared with other countries." The foregoing however does not necessarily mean, as Dr. Chaves says, that the adult population is freer of dental caries than other populations, nor does it imply that there is not a great deal of dental health work to be done throughout the Colony with our very limited personnel and finances.

An interesting point brought to light by the Consultant is that the teeth of the children of the over seven year group in Georgetown showed considerably more caries than children elsewhere in the Colony. This is due in Dr. Chaves' opinion to the fact that it is only in recent years that all drinking water in Georgetown was not rain water. Nowadays the supply to the city and to rural areas is surface water or artesian well water, which contains a suitable amount of necessary minerals.

56. In his Report the Consultant recommends that -

(a) the wa ter supplies in British Guiana do not require fluoridation;

(b) more information on the dental needs of different population groups should be accumulated by the use of uniform methods and records;

(c) no undue emphasis should be placed on the

VIII. DENTAL HEALTH: contd.

number of fillings provided by the Mobile Dental Units and that priority should be given to the extractions of unsaveable teeth for the largest possible number of children;

(d) dental health education should be introduced to a much greater degree than is possible at present;

(e) Government dental service requires more dental officers on its staff;

(f) attention should be given to the utilization of auxiliary personnel to perform certain minor dental work under the supervision of the dentist and within the framework of Government service. It is suggested that a grade of "Dental Aide" be introduced into the service. Such a person, preferably a qualified nurse, would be given a six-months training in dental extractions and on the coastlands would carry out dental extractions under the supervision of a dental surgeon.

The most valuable recommendation is the proposal to create a Dental Aide Cadre. It is proposed to implement these recommendations early in 1959.

57. Institutional Dental Service - In the Dental Department at the Georgetown Hospital, 10,966 patients were treated. Amongst this number were 14,940 extractions and 39 fractures. Official visits were paid by the Dental Surgeon to "The Palms", Prisons, Best Sanatorium and the Mahaica Hospital.

58. Mobile Dental Service - The three dental officers attached to this Unit were fully occupied during the year. The dental care of the Essequibo Coast and West Coast Demerara, has now been included in the service and next year another dental officer will be added to the service so that the North West District and the Interior can also be taken care of.

The work performed by the Mobile Service during 1958 is shown in the following Table:-

TABLE XI

| | County of Demerara | County of Berbice | County of Essequibo |
|---|---|---|---|
| Children examined | 2,833 | 6,968 | 3,068 |
| Total Extractions | 2,284 | 7,855 | 6,275 |
| Total Fillings | 316 | 718 | Nil |
| Clinic Mothers treated | 261 | 244 | 602 |
| Pauper and aged persons treated | 142 | 415 | 12 |

## IX. HOSPITALS, DISPENSARIES AND DISTRICT MEDICAL SERVICES:

59. There is a total of 2,681 beds in Government Hospitals and Institutions in the Colony. Besides this number there are 288 beds in Private Hospitals and Nursing Homes as well as 276 beds in Sugar Estate Hospitals. This is a total hospital bed-strength of 3,245 or 6 beds per 1,000 of the population.

60. Georgetown Hospital - The grim old wooden building, which was condemned in the Clark Report of 1954, is still being used as the main hospital of the Colony. Though the Georgetown Hospital has been considerably improved during the past six years with very little expenditure, it will never be possible to run such a hospital as efficiently and satisfactorily as the Medical Administration wishes. In the middle of the year, for financial reasons, it was decided by Government that the former proposal to rebuild the Georgetown Hospital, costing approximately $12,000,000 could not be approved. It was then decided to spend just over $1,000,000 in building a new operating theatre block and modernising and improving several sections of the Hospital, and plans to implement this proposal were prepared. In December, an offer was made by a United Kingdom commercial firm to build the new hospital on deferred payment terms. Government is at present considering this offer. The Hospital Architect has also been requested to redesign the plans of the proposed building and bring its cost down to $8,000,000 at the most. This is being done.

If a new hospital is eventually constructed in Georgetown, it will be a matter of 2½ - 3 years before it is ready for use. It is felt by the Medical Administration that with the ever growing needs of the population and the improved professional services now offered at the Hospital, some immediate, temporary and in-expensive construction work must be done at the Georgetown Hospital. For example, the provision of an extra temporary operating theatre is essential. At present the only theatre in the Hospital has to supply the needs of the four senior surgeons and in future will not be available for other work when time-consuming chest surgery or orthopaedic surgery is being undertaken. The provision of temporary offices for the oto-rhino-laryngologist and work rooms for the Physiotherapists are also essential and can be provided at little cost.

61. The long awaited new Central Medical Store, now renamed the "Government Pharmacy" was completed during the year and put into use immediately; so the great fire hazard under the surgical wards of this hospital has at last been removed. The new Government Pharmacy is a large modern building near the mouth of the Demerara River. It houses besides stores, a school of pharmacy and a manufacturing drugs section. It is considered the largest and most modern Government Pharmacy in the British Caribbean.

62. The present Georgetown Hospital now provides accommodation for 768 in-patients and is the largest hospital in the British Caribbean.

At the beginning of the year, there were 548 in-patients. A total of 21,721 patients were admitted for treatment. Of this number 20,485 were discharged; 5,746 cured; 14,475 were relieved and 1,155 died. The daily average stay in

IX. HOSPITALS, DISPENSARIES AND DISTRICT MEDICAL SERVICES: contd.

hospital was 11 days and the daily average number of patients in hospital was 663 as against 683 in the previous year.

There was a total of 209,406 patients attending the various sections of the Out-Patients' Department of the Georgetown Hospital. 229,338 prescriptions were dispensed in that department.

4,516 surgical operations were performed of which 2,369 were major. Enteric fever cases numbered 157 with 8 deaths or a fatality rate of 5%.

The number of patients attending the Casualty Department was 71,248 as compared with 71,637 in 1957. As was stated last year many of these cases attending the Casualty Department are not casualty cases; this causes considerable inconvenience to the staff in charge of this department.

In the X-Ray Department, 17,994 patients were examined; this department now consists of a Diagnostic and Therapeutic section. A new diagnostic x-ray machine was installed during the year and various other improvements were made to the department.

In the Physiotherapy Section - a total of 9,219 treatments were given in this most unsatisfactory building. Treatment at Mahaica Leprosarium was also undertaken by the staff of this department.

Ophthalmic Department - 13,478 out-patients and 675 in-patients were seen in this department and 1,098 operations were performed. This department is now staffed by two specialist officers.

Ear, Nose and Throat Department - 10,103 out-patients and 348 in-patients were treated and 314 operations carried out during the year.

63. New Amsterdam Hospital, Berbice (204 beds) - The total number of in-patients admitted was 6,546, with a daily average of 175 and an average stay in hospital of 10 days. The number of deaths was 294. The number of out-patients treated was 35,871.

Construction work on the new kitchen proceeded during the year. It was decided by Government not to implement the proposal for a new mortuary, but instead to repair and modernise the old building used for this purpose.

Under the Development Plan for health services, provision has been made for the erection of a new modern Out-Patients' Department. For financial reasons, it is proposed to build this department in two stages and it is hoped that construction work will commence in 1959.

64. Suddie Hospital -(96 beds). The number of in-patients treated was 3,304 with a daily average of 90 in-patients, whose average stay in hospital was 6 days. 5,003 out-patients were seen. There were 404 deliveries.

IX. HOSPITALS, DISPENSARIES AND DISTRICT MEDICAL SERVICES: contd.

As has been recorded previously, the main requirement at this hospital is for a new modern maternity department. The present stoves in the main kitchen and nurses' kitchen are most unsatisfactory.

65. Bartica Hospital (40 beds) - 767 in-patients were treated with a daily average of 23 in-patients, and an average stay of 9 days. There were 7,774 out-patients. The number of deaths was 28.

Major repairs and reconstruction work undertaken during the year to this hospital have converted it into a much improved institution. A new mortuary and delivery room have been provided. Further work on the kitchen and dispensary are planned for 1959.

66. Mabaruma Hospital (30 beds) - 956 in-patients received treatment with a daily average of 19 in-patients. There were 11,758 out-patients.

The provision at this hospital of an isolation ward for advanced cases of tuberculosis amongst Amerindians is still in the planning stage.

67. Port Mourant Hospital (42 beds) - This new pleasantly designed hospital was opened in the middle of the year. This hospital is not intended to provide the specialist services of a general hospital, for example, it has no x-ray or laboratory service, but it provides much needed hospital facilities for the thickly populated Corentyne Coast. 477 in-patients received treatment and there were 2,757 out-patients.

68. Table XII shows the number of beds, in-patients, out-patients and deaths at the six main hospitals during the year:-

TABLE XII.

| Hospital | No. of Beds | In-patients | Out-patients | Deaths |
|---|---|---|---|---|
| Georgetown | 768 | 21,721 | 209,406 | 1,155 |
| New Amsterdam | 204 | 6,546 | 35,871 | 294 |
| Suddie | 96 | 3,304 | 5,003 | 113 |
| Bartica | 40 | 767 | 7,774 | 28 |
| Mabaruma | 30 | 956 | 11,758 | 19 |
| Port Mourant | 42 | 477 | 2,757 | 35 |
| TOTAL | 1,180 | 33,771 | 272,569 | 1,644 |

69. It is proposed to erect cottage hospitals of 8 - 12 beds at Mahaicony, Leguan and Leonora during 1959.

Besides the main hospitals mentioned above, there are small cottage hospitals at Wakenaam (8 beds);

IX. HOSPITALS, DISPENSARIES AND DISTRICT MEDICAL SERVICES: contd.

Lethem (7 beds); Charity (6 beds); Ida Sabina (8 beds); Enachu (6 beds); Potaro (8 beds); Kamarang Mouth (8 beds); and at Acquero (2 beds) making a total of 53 beds in remote areas. These hospitals are each staffed with a dispenser and in most cases a midwife as well. Reference paragraph 72 later in this Report.

70. Special Hospitals - There are three special hospitals in the Colony:-

(i) Best Tuberculosis Hospital (262 beds) - Repairs and reconstruction work on this hospital continued during the year. This hospital is now in very good condition, except that new stoves are urgently needed in the kitchens.

In paragraph 27 of this Report, information is given about the work carried on in this institution.

(ii) Mahaica Leprosarium (405 beds) - The work undertaken in this institution has been recorded under Leprosy in this report.

The new kitchen and mess hall were completed during the year. It was not possible however to commence structural work on the proposed new occupational therapy workshop to accommodate tailors, cobblers and carpenters. The small printing department continued to do useful work.

(iii) Mental Hospital (834 beds) - The year began with 730 patients in hospital; 240 were admitted; 170 discharged and 47 died.

The chief forms of mental diseases admitted were Schizophrenia, Paranoid state, Manic Depressive and Toxic Psychosis. The principal methods of treatment employed were Electro-convulsion Therapy, Continued Narcosis, Sedation and Occupational Therapy.

Unfortunately it has been impossible to fill the long vacant post of Psychiatrist even though Government has approved that this post should receive increased emoluments on a contract basis. It is considered that were the services of an experienced Psychiatrist available, it would be possible to reduce the present large number of patients at the Mental Hospital considerably.

As has been stated in this Report for the past three years, this dilapidated and depressing Mental Institution should be completely rebuilt as soon as it is financially possible. The worst section of the hospital is the West Block which houses criminal mental patients. The rebuilding of this Block should be given priority. Urgent improvements are also required to the water supply, the sewerage system, the kitchens, workshops and the laundry. Baking of bread for all institutions in Berbice in the kitchens should be discontinued.

During the year, it was possible to obtain the temporary services of a Dietician to examine and report on the dietary at this hospital. On the strength of this report, the diet has been altered and made more nutritious without any extra cost. Other recommendations such as the appointment of a permanent Dietician or Caterer and more trained kitchen staff and the decentralisation of kitchens will be introduced in due course, it is hoped.

IX. HOSPITALS, DISPENSARIES AND DISTRICT MEDICAL SERVICES: contd.

71. Dispensary Service - The Mobile Dispensary River service with its nine motor launches carried on its useful work on the rivers as in previous years. The new dispensary and dispenser's quarters at Supenaam were brought into service during the year.

72. The following Table shows the work performed by the Mobile Dispensary Service and the other Dispensaries:-

TABLE XIII

| Dispensary | No. of Beds | No. of In-Patients | No. of Out-Patients | Births | Deaths |
|---|---|---|---|---|---|
| Charity | 6 | 79 | 6,705 | 50 | - |
| Enmelm | 6 | 20 | 1,560 | 1 | 1 |
| Schepmoed | - | - | 3,803 | - | - |
| Supenaam | - | - | 3,662 | - | - |
| Kamarang Mouth | 8 | 76 | 1,702 | 10 | - |
| Christianburg | - | - | 5,601 | - | - |
| Lower Demerara River | - | - | 5,581 | - | - |
| Morawhanna | - | - | 3,619 | - | - |
| Ida Sabina | 8 | 80 | 3,112 | 52 | 3 |
| Parika | - | - | 4,695 | - | - |
| Anna Regina | - | - | 5,911 | - | - |
| Potaro (Mahdia) | 8 | - | 1,384 | - | - |
| Poldér Canal No. 1 | - | - | 3,520 | - | - |
| Poldér Canal No. 2 | - | - | 4,375 | - | - |
| Lethem | 7 | 312 | 5,836 | 9 | - |
| Orealla | - | - | 392 | - | - |
| Wakenaam | 8 | 118 | 4,493 | - | 3 |
| Acquero | 2 | 50 | 4,666 | 50 | - |

Of the above Dispensaries, the first 9 are provided with dispensary launches.

73. At No. 1 Dispensary in Georgetown, 8,918 new cases were seen and there was a total attendance of 14,276. The chief complaints diagnosed at the dispensary were respiratory diseases, arthritis and debility.

As was stated last year, this Dispensary is

IX. HOSPITALS, DISPENSARIES AND DISTRICT MEDICAL SERVICES: contd.

held in a ground floor flat, rented by Government at a rental of £650 per annum. A financial saving should result and more suitable environment be provided for the dispensary work when the proposed Health Centre in Georgetown is erected. It is hoped that this scheme will be implemented in 1959.

74. Medical Service - Amerindians - From the middle of the year it was impossible to supply this service with a whole-time medical officer. The five Rangers stationed respectively at Sand Creek, Lethem, Karasabai, Kurikabaru and Kamarang carried out their duties amongst the Amerindian population as usual. These duties consist mainly of treating minor ailments, deworming the children, spraying the dwellings with DDT and sending more serious cases for medical aid at the main hospitals. There are also five nurse-midwives stationed respectively at Aishelton, Lethem, Acquero, Bacasa and Kamarang.

The general health of the Amerindians was satisfactory during the year; the diseases most commonly diagnosed being Round and Hookworm Infestations, Anaemia, Common Cold, Bacillary Dysentery, Conjunctivitis and Pulmonary Tuberculosis. More cases of fever, most probably of malarial origin, were reported in 1958 than had been encountered over the past two years.

The physical condition of the Amerindian children was mainly good during the year. These children partake of the School Feeding Programme which has proved very beneficial.

As was stated in last year's Report, the present Lethem Hospital requires enlarging and the addition of more staff, including the appointment to the Rupununi district of a whole-time resident medical officer.

During the year 312 patients were admitted to the Lethem "Sick Bay" and there were 3,677 out-patients. There were 9 deliveries.

The work performed in the four cottage hospitals in the Interior at Lethem, Kamarang, Enachu and Mahdia is shown in Table XIII, paragraph 72 of this Report.

X. PHARMACY AND POISONS BOARD:

75. There were 13 meetings during the year of the Pharmacy and Poisons Board.

Examinations for the First Professional and Final Examinations for Chemists and Druggists were held during January and August.

The new annual Register of Pharmacists was opened in November and at the end of the year 100 chemists and druggists were duly registered.

## XI. MEDICAL BOARD:

76. Two meetings of the Medical Board were held during 1958. The names of twenty five persons were added to the Medical Practitioners Register. Of these twenty one were registered in accordance with Section 25(b) of the Colonial Medical Service Ordinance; two under the Temporary Registration Ordinance and two under the Medical Practitioners Ordinance, Chapter 136.

Six persons were accorded provisional registration as Medical Practitioners. There was one addition to the Register of Dentists and one to the Register of Optometrists. There were eight additions to the Register of Sick-nurses and Dispensers.

## XII. TRAINING SCHEMES:

77. During the year, the Deputy Director of Medical Services was awarded a Fellowship course in administration held in Jamaica. A Government Medical Officer went to the United Kingdom on 2½ years study leave to take the Diploma in Psychiatric medicine. Two senior surgeons went on study leave in Britain - one to take the Fellowship in Orthopaedics, which he in due course obtained, and the other undertook a course in chest surgery. One medical officer commenced the D.P.H. course and has been awarded on completion of this course a Fellowship by WHO for special training in leprosy.

78. A Senior Departmental Sister was on study leave during the year to take a course for the Sister Tutor qualification. A senior school nurse was granted study leave to acquire the diploma in health education. A Junior Departmental Sister was granted a study course in the United Kingdom in Ophthalmic nursing. A NAPT Fellowship was awarded to a nurse for training in tuberculosis health visiting. A Senior Public Health Inspector was given a Fellowship under the Caribbean programme in health education in Puerto Rico. A senior Laboratory Technician underwent a six-months course of study in advanced haematology and blood transfusion work in the United Kingdom. Under a Government scheme one candidate completed successfully his course in Radiography, whilst two others are still in training. Two Guianese were sent to Britain to be trained for the Diploma in Dietetics and two for training in physiotherapy.

79. A request was put up for the approval of WHO for Fellowships to cover the special training of four Public Health Inspectors in Environmental Hygiene, two laboratory technicians in malaria work and two nurses in mental nursing.

80. The services of a male tutor were obtained during the year to strengthen the teaching staff of the Georgetown Hospital.

The 12 midwives destined for rural work and now on a new eighteen months training course will take their final examination early in 1959 and another similar batch will shortly be selected for training. As was stated in this Report of last year, these midwives will be of great value in rural and remote areas where their services are urgently required.

XII. TRAINING SCHEMES: contd.

A course of training for the examination of the Royal Society for the Promotion of Health started during the year. 15 candidates enrolled for the Inspectors course and 18 for the Health Visitors diploma. The course for the Health Visitors has been shortened to one year, but has been greatly intensified and modernised.

Several local girls as in previous years applied to undertake nurse training under their own aegis in British Hospitals.

81. The following Table indicates the numbers in the various categories who completed training courses in Government Institutions during the year and were successful at the relevant examinations:-

TABLE XIV

| | Georgetown Hospital | | New Amsterdam Hospital | | Total | |
|---|---|---|---|---|---|---|
| | 1957 | 1958 | 1957 | 1958 | 1957 | 1958 |
| Nurses | 37 | 50 | 8 | 27 | 45 | 77 |
| Sicknurses and Dispensers | 5 | 6 | 2 | 1 | 7 | 7 |
| Midwives | 27 | 13 | 5 | 7 | 32 | 20 |
| Chemists and Druggists | 6 | 2 | - | - | 6 | 2 |

XIII. LEGISLATION:

82. The following Ordinances dealing with medical matters were enacted -

(i) Accidents and Occupational Diseases (Notification) (Amendment) Ordinance 1958. (No. 11).

(ii) Nurses Retiring Allowances (Preservation of Rights) Ordinance 1958. (No. 27).

The Regulation passed was -

Accidents and Occupational Diseases (Notification) (Amendment) Regulation No. 10 of 1958.

XIV. SCIENTIFIC PUBLICATIONS:

83. The following articles and reports were published or submitted by officers of the Medical Department during 1958:-

XIV. SCIENTIFIC PUBLICATIONS: contd.

| | |
|---|---|
| Dr. C.C. Nicholson, Assistant Director of Medical Services | "Medical Survey of Nutrition in British Guiana." |
| Dr. B.B.G. Nehaul, Senior Government Bacteriologist and Pathologist | "Plasma Protein Level of a group of East Indians in a Hospital." |

XV. VISITORS:

84. Visits were paid to the Colony by:-

(a) Dr. R. Lewthwaite, C.M.G., O.B.E., Director of Colonial Medical Research.

(b) Professor A.C. Frazer, Professor of Pharmacology, Birmingham University.

(c) Mr. E. Davis, Consultant Hospital Architect.

(d) Dr. Q.M. Geiman, Ph. D., Professor of Preventive Medicine, Stanford University, California.

(e) Dr. C. Belfield Clarke, Member, Colonial Advisory Medical Committee.

(f) Miss Wilma Becknell, I.C.A. Health Education Adviser.

(g) Miss P. Blom, I.C.A. Health Education Trainee.

(h) Mr. J. Maes, I.C.A. Health Education Trainee.

The following visitors were sponsored by WHO and UNICEF:-

(a) Dr. P.F. de Caires, Zone Officer, WHO.

(b) Mr. A. Robinson, Chief of Area Office for Northern South America, UNICEF.

(c) Dr. A.G. Friend, Public Health Engineering Consultant, WHO.

(d) Mr. Scott Edmonds, Public Health Educator Consultant, WHO.

(e) Miss I. Ripley, Public Health Nursing Consultant, WHO.

(f) Mr. R.E. Curran, Public Health Legal Consultant, WHO.

(g) Dr. Mario Chaves, Regional Adviser in Dental Health, WHO.

(h) Dr. Souza Lima, Consultant in Leprosy Control, WHO.

(i) Miss Donna Geib, Laboratory Consultant, WHO.

L.A.P. Slinger
Director of Medical Services.

# APPENDIX I.

## (i) MEDICAL ESTABLISHMENT:

The authorised Medical Establishment is as follows:-

| | |
|---|---|
| 1 | Director of Medical Services |
| 1 | Deputy Director of Medical Services |
| 1 | Assistant Director of Medical Services |
| 1 | Senior Medical Officer |
| 4 | Surgeons |
| 3 | Physicians |
| 2 | Ophthalmologists |
| 3 | Pathologists |
| 2 | Radiologists |
| 1 | Obstetrician and Gynaecologist |
| 1 | Laryngologist |
| 1 | Venereal Diseases Officer and Dermatologist |
| 1 | Anaesthetist |
| 1 | Psychiatrist |
| 1 | Leprologist |
| 2 | Tuberculosis Officers |
| 4 | Medical Officers of Health |
| 1 | School Medical Officer |
| 39 | Medical Officers |
| 4 | Supernumerary Medical Officers |
| 3 | Registrars |
| 6 | Internes |
| 2 | Casualty Officers |
| 4 | Dental Surgeons. |

## (ii) VACANCIES:

| | |
|---|---|
| 1 | Senior Medical Officer |
| 1 | Surgeon |
| 1 | Physician |
| 1 | Psychiatrist |
| 1 | Pathologist |
| 1 | Leprologist |
| 2 | Registrars |
| 9 | Medical Officers |
| 4 | Internes. |
| 1 | Obstetrician and Gynaecologist. |

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# APPENDIX II

## Return of Diseases Notified - From all Sources 1957 - 1958

| Disease | Reported 1957 | Reported 1958 |
|---|---|---|
| Acute Poliomyelitis | 100 | Nil |
| Cerebral Spinal Fever | 1 | 1 |
| Chicken Pox | 197 | 64 |
| Diphtheria | 23 | 74 |
| Erysipelas | 2 | 1 |
| Measles | 6 | 1,641 |
| Ophthalmia Neonatorum | ∅ 43 | 26 |
| Puerperal Fever | ∅ 3 | 10 |
| Tuberculosis | 192 | 202 |
| Enteric Fever | 366 | 422 |
| Amoebic Dysentery | 294 | 229 |
| Bacillary Dysentery | 75 | - |
| Influenza | 4,281 | 1,294 |
| Pneumonia | 360 | 220 |
| Malaria | 4 | 114 |

∅ Revised Figures

## APPENDIX III

### In-patient cases treated at Government Hospitals during 1958.

| Group | Diseases | Georgetown | Berbice | Suddie | Bartica | Mabaruma | TOTAL |
|---|---|---|---|---|---|---|---|
| I. | INFECTIVE AND PARASITIC DISEASES (100 - 138) | 13,678 | 527 | 199 | 1,265 | 101 | 15,770 |
| | Tuberculosis of the respiratory system | 89 | 28 | 9 | 7 | 15 | 148 |
| | Tuberculosis (other forms) | - | 3 | - | 7 | 4 | 14 |
| | Syphilis and its sequalae | 813 | 3 | 9 | - | - | 825 |
| | Yaws | 3 | 1 | - | 1 | - | 5 |
| | Gonococcal Infections | 1,896 | 8 | - | 54 | - | 1,958 |
| | Typhoid and paratyphoid | 264 | 144 | 19 | 28 | - | 455 |
| | Dysentery all forms | 1,072 | 62 | 13 | 176 | 39 | 1,361 |
| | Streptococcal infections | - | - | - | 25 | - | 25 |
| | Diphtheria | 43 | 6 | 3 | - | 2 | 54 |
| | Whooping Cough | 655 | - | - | 25 | - | 680 |
| | Leprosy | 5 | - | - | 3 | - | 8 |
| | Tetanus | 57 | 9 | 2 | - | - | 68 |
| | Acute Poliomyelitis | 2 | - | - | - | - | 2 |
| | Small Pox | - | - | - | - | - | - |
| | Measles | 1,934 | 1 | - | 67 | 13 | 2,015 |
| | Yellow Fever | - | - | - | - | - | - |
| | Infectious hepatitis | 43 | 27 | 12 | 14 | - | 96 |
| | Rabies | - | - | - | - | - | - |
| | Typhus | - | - | - | - | - | - |

APPENDIX III contd.

| Group | Diseases | George-town | Ber-bice | Suddie | Bartica | Mab-aruma | TOTAL |
|---|---|---|---|---|---|---|---|
| I. contd. | | | | | | | |
| | Malaria | 4 | - | - | 13 | 20 | 37 |
| | Ankylostomiasis | 864 | 30 | 11 | 30 | - | 935 |
| | Filariasis | 997 | 26 | 22 | 8 | - | 1,053 |
| | Other Diseases of the Group | 4,938 | 179 | 99 | 807 | 8 | 6,031 |
| II. | NEOPLASMS (140 - 239) | 406 | 172 | 25 | 52 | - | 655 |
| | Malignant neoplasms including neoplasms of lymphatic and haematopeotic tissues | 57 | 26 | - | - | - | 83 |
| | Benign and unsuspected neoplasms | - | 142 | - | 43 | - | 185 |
| | Other Diseases of the Group | 349 | 4 | 25 | 9 | - | 387 |
| III. | ALLERGIC, ENDOCRINE SYSTEM METABOLIC & NUTRITIONAL DISEASES (240 - 289) | 13,697 | 173 | 144 | 493 | 15 | 14,522 |
| | Toxic and non-toxic goiter | 8 | 3 | - | 5 | - | 16 |
| | Diabetes mellitus | 2,773 | 62 | 74 | 22 | 15 | 2,946 |
| | Beri Beri | 916 | - | - | 35 | - | 951 |
| | Pellagra | 2,305 | - | - | - | - | 2,305 |
| | Scurvy | - | - | - | - | - | - |
| | Other Diseases of the Group | 7,695 | 108 | 70 | 431 | - | 8,304 |

APPENDIX III contd.

| Group | | George-town | Ber-bice | Suddie | Bartica | Mab-aruma | TOTAL |
|---|---|---|---|---|---|---|---|
| IV. | DISEASES OF THE BLOOD & BLOOD FORMING ORGANS (290 - 299) | 5,765 | 62 | 383 | 296 | 501 | 7,007 |
| | Pernicious and other hyperchronic anaemias | 468 | 3 | - | 6 | - | 477 |
| | Iron deficiency anaemias (Hyperchronic) | 844 | 1 | - | 52 | - | 897 |
| | Other specified and unspecified anaemias | 1,205 | 23 | 321 | 127 | 293 | 1,969 |
| | All other allergic disorders, endocrine, metabolic and blood diseases | 3,248 | 35 | 62 | 111 | 208 | 3,664 |
| V. | MENTAL PSYCHO-NEUTRITIC & PERSONALITY DISORDERS (300 - 326) | 229 | 44 | 3 | 38 | - | 314 |
| VI. | DISEASES OF THE NERVOUS SYSTEM AND SENSORY ORGANS (330 - 398) | 20,445 | 138 | 89 | 510 | 106 | 21,288 |
| | Epilepsy | 72 | 15 | 4 | 8 | 8 | 107 |
| | Diseases of the Eye | 14,161 | 7 | 23 | 167 | 81 | 14,439 |
| | Diseases of the Ear | 4,534 | 16 | 8 | 171 | - | 4,729 |
| | Other Diseases of the Group | 1,678 | 100 | 54 | 164 | 17 | 2,013 |
| VII. | DISEASES OF CIR-CULATORY SYSTEM (400 - 468) | 7,501 | 198 | 134 | 351 | 64 | 8,248 |

APPENDIX III contd.

| Group | Georgetown | Berbice | Suddie | Bartica | Mabaruma | TOTAL |
|---|---|---|---|---|---|---|
| VII. contd. | | | | | | |
| Rheumatic fever | 251 | 4 | - | 8 | 4 | 267 |
| Diseases of the heart | 3,979 | 111 | 105 | 211 | 6 | 4,412 |
| Diseases of arteries | 386 | 6 | 1 | - | - | 393 |
| Other diseases of the Group | 2,885 | 77 | 28 | 132 | 54 | 3,176 |
| VIII. DISEASES OF THE RESPIRATORY SYSTEM (470 - 527) | 7,912 | 279 | 219 | 780 | 279 | 9,469 |
| Acute upper respiratory infections | 1,165 | 2 | 8 | 175 | - | 1,350 |
| Lobar pneumonia | 69 | 11 | 5 | 4 | 1 | 90 |
| Broncho-pneumonia | 372 | 22 | 23 | 35 | - | 452 |
| Bronchitis, acute, chronic and unspecified | 2,162 | 154 | 112 | 331 | 59 | 2,818 |
| Adenoids and Tonsilitis | 1,234 | 11 | 7 | 40 | - | 1,292 |
| Other diseases of the Group | 2,910 | 79 | 64 | 195 | 219 | 3,467 |
| IX. DISEASES OF THE DIGESTIVE SYSTEM (530 - 587) | 8,181 | 605 | 221 | 977 | 1,015 | 10,999 |
| Diseases of the teeth and supporting structures | 404 | 22 | 4 | 118 | - | 548 |
| Appendicitis | 1,370 | 150 | 13 | 8 | 7 | 1,548 |
| Intestinal obstruction and hernia | 893 | 85 | 37 | 17 | - | 1,032 |
| Gastro-enteritis and colitis | 1,451 | 86 | 41 | 70 | 96 | 1,744 |

APPENDIX III contd.

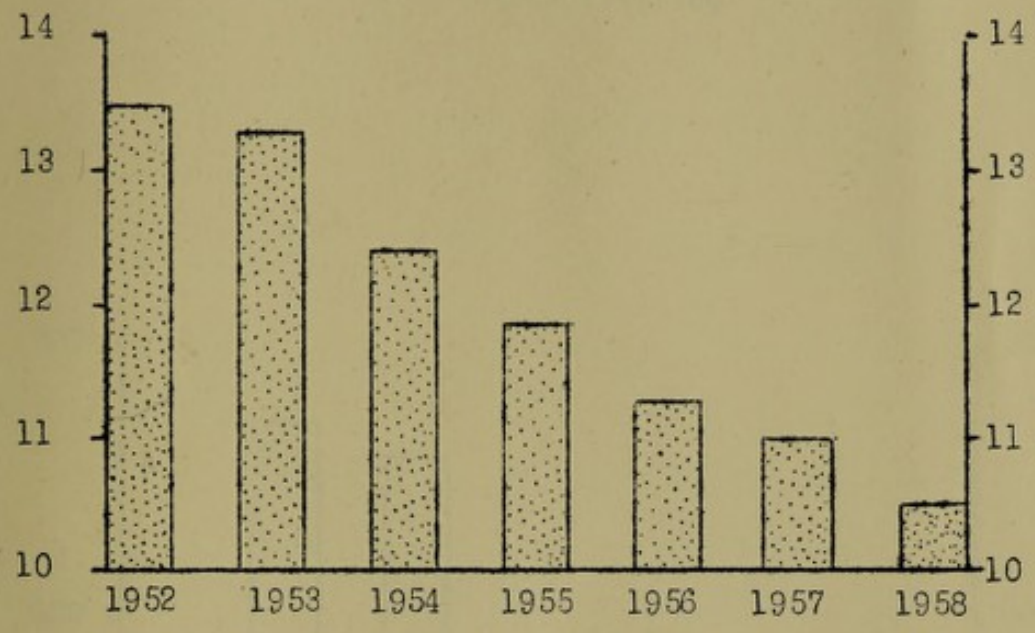
| Group | Georgetown | Berbice | Suddie | Bartica | Mabaruma | TOTAL |
|---|---|---|---|---|---|---|
| IX. contd. | | | | | | |
| Other diseases of the Group | 4,063 | 262 | 126 | 764 | 912 | 6,127 |
| X. DISEASES OF THE GENITO-URINARY SYSTEM (590-637) | 6,071 | 621 | 413 | 178 | 30 | 7,313 |
| Nephritis, acute, chronic and unspecified | 905 | 45 | 43 | 29 | 28 | 1,050 |
| Calculi of urinary system | 238 | 1 | 2 | - | - | 241 |
| Hyperplasia of prostate | 12 | 40 | - | 7 | - | 59 |
| Other diseases of the Group | 4,916 | 535 | 368 | 142 | 2 | 5,963 |
| XI. DELIVERIES, COMPLICATION OF PREGNANCY AND THE PUERPERIUM (640 - 689) | 8,093 | 1,914 | 430 | 272 | 112 | 10,821 |
| Toxaemias of pregnancy | 352 | 41 | 1 | 13 | - | 407 |
| Haemorrhage of pregnancy and childbirth | 80 | 39 | - | - | - | 119 |
| Abortion | 821 | 324 | 25 | 22 | 11 | 1,203 |
| Delivery without complications | 4,030 | 1,073 | 386 | 237 | 99 | 5,825 |
| Other diseases of the Group | 2,810 | 437 | 18 | - | 2 | 3,267 |
| XII DISEASES OF THE SKIN AND CELLULAR TISSUES (690-716) | 2,261 | 389 | 99 | 745 | 6 | 3,500 |

APPENDIX III: contd.

| Group | | Georgetown | Berbice | Suddie | Bartica | Mabaruma | TOTAL |
|---|---|---|---|---|---|---|---|
| XIII | DISEASES OF THE BONES AND ORGANS OF MOVEMENT (720-749) | 2,356 | 185 | 110 | 209 | 7 | 2,867 |
| XIV | CONGENITAL MALFORMATION (750 - 759) | 33 | 13 | - | 15 | - | 61 |
| XV | CERTAIN DISEASES OF EARLY INFANCY (760-776) | 3,346 | 106 | 35 | 61 | - | 3,548 |
| XVI | SENILITY AND ILL-DEFINED CONDITIONS (780-795) | 23,325 | 381 | 308 | 850 | 8,745 | 33,609 |
| | Senility | 1,553 | 39 | 7 | 107 | 1 | 1,707 |
| | Ill-defined conditions | 1,947 | 63 | 134 | 55 | 1,543 | 3,742 |
| | Other diseases of the Group | 19,825 | 279 | 167 | 688 | 7,201 | 28,160 |
| XVII | ACCIDENTS, POISONING AND VIOLENCE (AE/AN 800-999) | 77,037 | 1,830 | 572 | 1,326 | 542 | 81,307 |
| | Number of in-patients treated at other hospitals | - | - | - | - | - | - |
| GRAND TOTAL | | 200,336 | 7,637 | 3,384 | 8,418 | 11,523 | 231,298 |

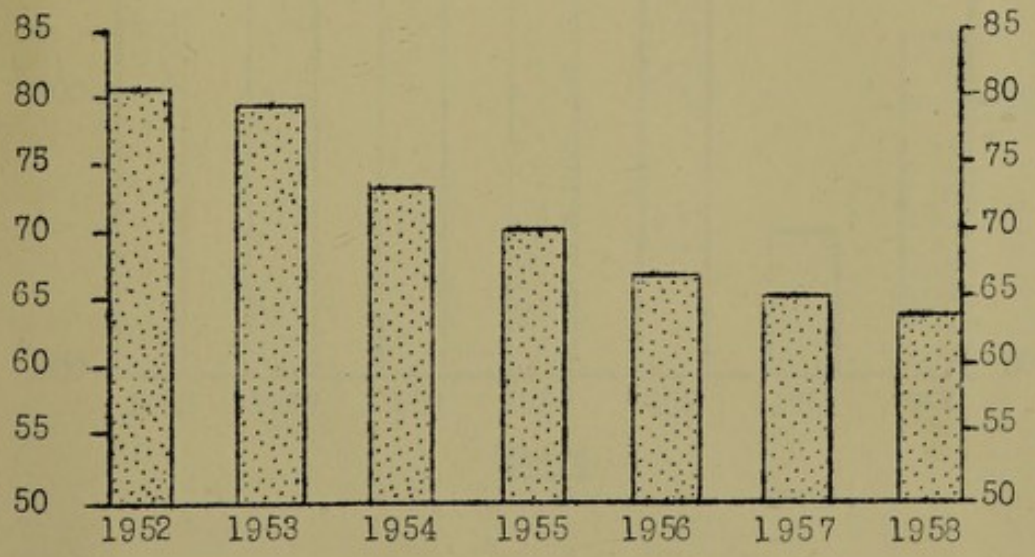
CRUDE DEATH RATES.

1952 - 1958.

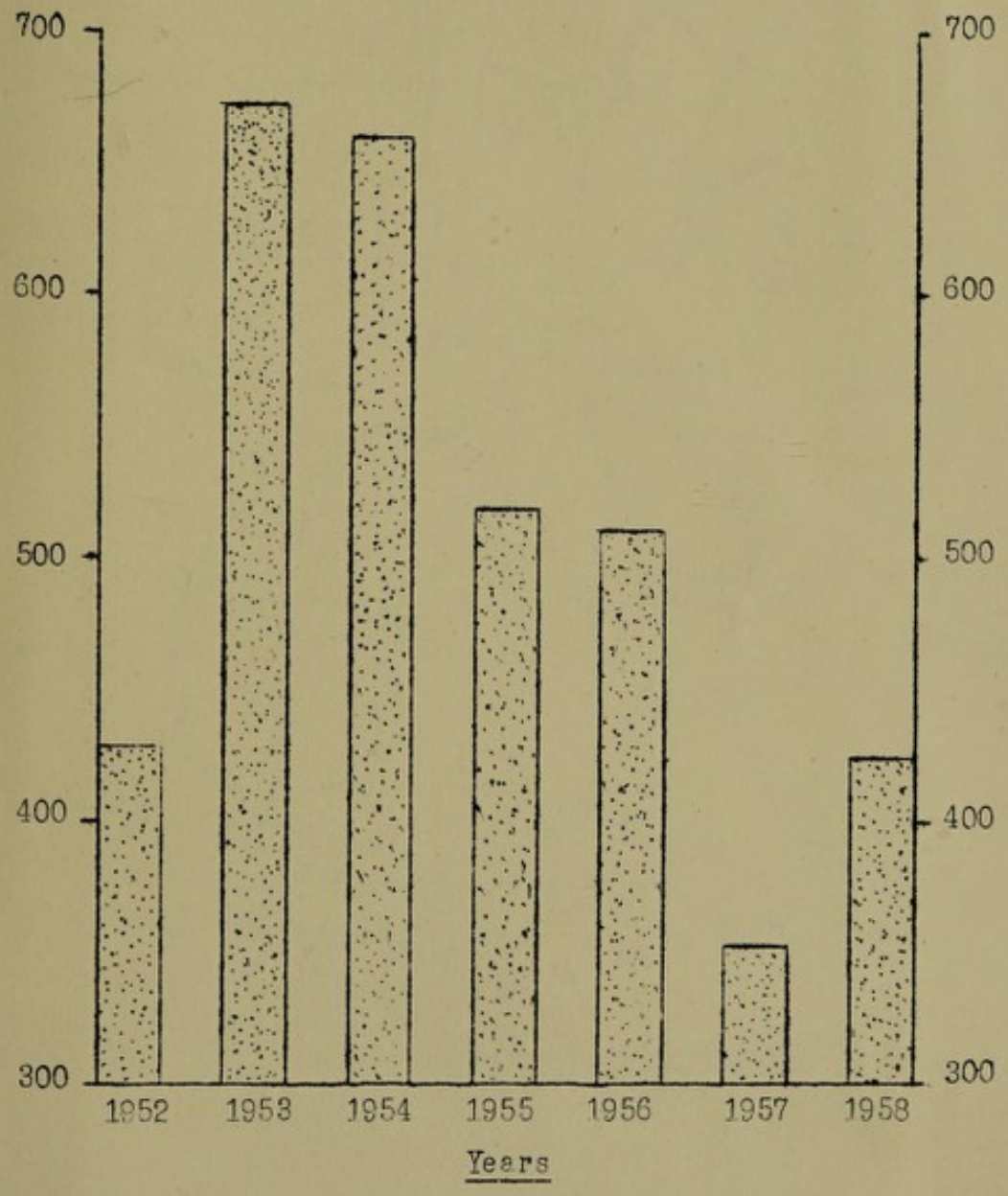



INFANT MORTALITY RATES.

1952 - 1958.



ENTERIC FEVER
1952 - 1958
Cases Notified



# BRITISH GUIANA