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EGISLATIVE COUNCIL OF FIJI

COUNCIL PAPER NO. 24 OF 1959

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Colony of Fiji

## ANNUAL REPORT

OF THE

# MEDICAL DEPARTMENT

FOR THE YEAR

1958

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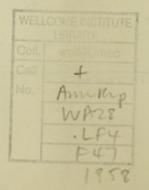
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LEGISLATIVE COUNCIL OF FIJI



COUNCIL PAPER NO. 24 OF 1959

## MEDICAL DEPARTMENT

(ANNUAL REPORT FOR 1958)

#### I-GENERAL REVIEW

BROADLY the functions of a Government Medical Service are twofold; the organization and maintenance of curative services, in the form of hospitals, dispensaries and a variety of clinics where those who have fallen sick may receive treatment and the provision of public health services designed to prevent, where possible, the entry and/or spread of disease. The concept of these latter services has, however, changed to some extent over the years from that of mere prevention and has taken on a more positive attitude to health. Thus in addition to the improvement of sanitary services such as sewerage and refuse disposal, purification of water supplies, vermin and insect control, etc., the trend in public education in this respect is to teach how a healthy mind and body may be developed which can not only withstand disease, but derive the greatest benefits from what life has to offer.

2. Man is an individual with his own personal aspirations, habits and way of life, but he is also a member of society and must, within certain limits, conform to the customs and requirements of the social group within which he lives. It is, therefore, apparent that if a more positive approach to health is to be achieved and avoidance of preventable disease is to become a reality, the doctor, nurse and health worker cannot expect lasting or even effective temporary results if their efforts are confined within the walls of their professional and technical knowledge. It is essential that the assistance of the school teacher, priest, administrator, anthropologist and, in fact, all those engaged in work connected with the humanities and society, be sought, and used in the public welfare.

3. Any plan of health education must be long-term and the teaching, while being as simple and interesting as possible, should nevertheless be repetitive. It is from parents and later at school, that the child learns the habits of hygiene which will influence him throughout life and once acquired any faults will be difficult to eradicate. Thus adult as well as child education is necessary, and every known medium brought into use; press, radio, cinema, lectures, posters, and use must be made of the faimly circle, church, school room, women's committee, dispensary, child welfare clinic, and of any occasion when a group of people are gathered together in discursive mood.

4. It is, of course, essential that the curative and preventive medical services be closely integrated and wherever possible the same individual should be responsible for the treatment of the sick and for leadership in public health measures and health education, at least in so far as village communities are concerned. It is through their skill to treat and nurse the sick that doctors and nurses gain respect and confidence and thus make the community receptive to advice given on how sickness can be prevented. It is even possible that they may be able to give the lead by example and teaching and demonstrate that harmony of bodily and mental function which gives rise to positive health and not merely absence of disease.

5. During the year some progress has been made in developing public health services and health education. This has not, however, been as rapid as had been hoped owing to the unavoidable diversion of key staff to other work of an urgent nature and the delays which seem inevitable in the first stages of any policy changes. Nevertheless a definite start has been made in the reorientation of the training of A.M.Os and ancillary staff. The building of the Nuffield Department of Preventive and Social Medicine as a part of the Central Medical School, was started at the end of the year and this Department should be functioning fully before the middle of 1959. There was a definite increase in health propaganda in the form of radio talks, press articles, lectures and group discussions, and a number of posters and booklets have been produced for distribution. Liaison has been maintained with the Education Department and particularly with the staff of the Teachers' Training College, where hygiene and sanitation courses are included in the curriculum. There can be little doubt that many sections of the public are eager to learn and results can be achieved if knowledge is disseminated in a simple form and means can be found to implement the advice given cheaply and in a practical manner.

6. The notable feature of the year, affecting the public health, was the poliomyelitis epidemic which struck the Colony in mid-July and continued until early November. It must be admitted that this epidemic was unforeseen as it had been assumed, not without considerable supporting evidence, that there was a reasonably high degree of immunity to the disease amongst the population. The fact that poliomyelitis has occurred in Fiji in sporadic form for a great number of years is beyond dispute and, under the conditions of sanitation existing in rural and not a few urban areas, it was concluded that the immunity to the disease, acquired in infancy, must be considerable. While this hypothesis was correct enough and has since received support from laboratory tests, it appears that the unaccountable had happened and for some reason unknown, one of the three identifiable viruses which cause the disease had died out some 7–8 years ago, thus leaving the young of this age group vulnerable. This virus (Type I) was then re-introduced, presumably by some visitor, and the result was explosive. Of the paralytic cases that occurred, 75 per cent were 7 years of age or

younger, and if the number of cases of non-paralytic form is included the percentage is even higher. The number of cases in the 8-21 years age group was relatively low and it must be concluded that those over 20 years who were affected (11.5%) had either lived in conditions where they had never encountered the disease or had acquired immunity in infancy and childhood but had lost it over the passage of time. Fuller details of the epidemic are given later in this report, but the opportunity is taken here to express very sincere appreciation for the assistance and donations given by the New Zealand Red Cross, the Fiji Branch of the British Red Cross Society and a large number of individuals, also to the Royal New Zealand Air Force for the loan of apparatus and to the New Zealand Department of Health for the loan of apparatus and recruitment and release of physiotherapists.

7. Of the other notifiable diseases, 11,626 cases of influenza were reported, but it is probable that this figure includes a number of other conditions such as non-paralytic poliomyelitis and a variety of other virus infections including the common cold. There was certainly no clear cut epidemic such as occurred in the previous year with the Asian variant of the A virus. The number of cases of whooping cough notified showed a sharp increase, 1,000 as against 261 in 1957, but the disease seems to have been relatively mild. There was a small increase in the number of cases of diphtheria and a marked increase in the incidence of tetanus, and parents are again urged to see that their children are immunized against these three lethal but preventable diseases. The inoculations are combined in one as "triple antigen" and are freely available. The increase in the number of cases of infective hepatitis (infective jaundice) noted last year was maintained and it is now clear that the greater number of cases notified has a statistical significance and the disease is more prevalent than previously. There was a mild outbreak of mumps and some increase in chicken-pox, but the incidence of measles was negligible.

8. Although more detailed information on tuberculosis, leprosy, yaws and veneteal disease is given later in this report, the importance of these diseases is such that they should be mentioned in this review. The B.C.G. vaccination programme commenced, as planned in June but in August, it had to be stopped *force majeure* owing to the poliomyelitis epidemic. Despite this, however, 12,000 persons were tested and those susceptible vaccinated; the programme was re-commenced before the end of the year. The plans for extensions to the Tamavua Tuberculosis Hospital have been prepared and tenders called for; building will commence early in the new year. In addition, a considerable amount of information on tuberculosis control was disseminated by radio, press and pamphlet and there was a marked increase of in-service training of staff.

9. The leprosy situation has not changed materially during the year except that the population of Makogai has been further depleted by the return of a number of patients to their parent territories; a policy which will continue during the forthcoming year. The smaller the number of cases on Makogai, the easier it will be to trace back on contacts and the greater the chance of eventual elimination of the disease.

10. The yaws control campaign, although successful in reducing the disease to minimal proportions, will not be complete until the disease is eradicated. No complacency can be allowed and it is essential that every case found be notified and appropriate treatment given not only to the patient but the contacts. In so far as notification of cases is concerned, the situation in regard to venereal disease does not appear to have altered materially since last year and there was in fact, a decline in the number of cases of both gonorrhoea and syphilis recorded. Full reliance cannot, however, be placed on these figures as, owing to the stigma attached to these diseases, notification may be avoided in certain cases and others may receive treatment from unqualified practitioners. A careful watch must be kept on the situation as with the diminution in yaws, which disease gave immunity to syphilis, the next generation of Fijians will be vulnerable to the latter disease and further, it has been found in many parts of the world that the causative organism of gonorrhoea has now developed resistance to penicillin.

11. Although hygiene and sanitation, both in urban and rural areas, remain, in general, unsatisfactory, the authorities, particularly in urban areas, are conscious of the defects and are taking steps, where possible, to rectify matters. Surveys are being carried out in the Suva and Lautoka areas as a step towards improved sewerage disposal and storm water drainage and the establishment of a Housing Authority to plan and stimulate low cost housing schemes is a marked step forward. Standards of village hygiene in many areas are appallingly low which when coupled with a lack of awareness on the part of the population that this is so, gives a further clear indication of the need for health education. If hygiene is to improve, it must be through the co-operation of the people; food handling standards can only be raised if the public demands and insists upon improvement and the disgusting habit of spitting, which is a widespread cause of disease, will only cease when public opinion condemns it.

12. The Colonial War Memorial Hospital, Suva, continued to fulfill its triple role as specialist centre of the Colony, training hospital for A.M.Os and Nurses and divisional hospital for the central division. The Medical Superintendent, who is also Physician Specialist, with the close co-operation of all members of his staff continued to effect many improvements to the hospital, both in respect of amenities and overall organization. The hospital now enjoys a high reputation not only within the Colony but also further afield. During the year, the Royal College of Surgeons of England agreed to recognize the hospital in respect of house appointments required of candidates taking the Fellowship examination. In June, the staff with co-operation of certain leading citizens organized a Hospital Week in Suva, during which over £4,000 were collected to provide amenties. This is likely to become an annual event. Dr. D. J. Oldmeadow, who had given sterling service as honorary consulting Obstetrician to the hospital for a number of years, left the Colony in November and will be sadly missed. It has been necessary to create the post of Obstetrician/Gynaecologist on a wholetime basis to replace him and an appointment is expected shortly. 13. Work at the Lautoka, Labasa and Levuka divisional hospitals continued at full pressure and the staff of these, in particular, had to bear the additional burden of the poliomyelitis epidemic which was felt most severely in the Suva and Lautoka areas. The Lautoka hospital, as has been stated before, is of out-dated design, is in poor repair and lacks many facilities; it is, therefore, all the more to the credit of the staff that they met the emergency admirably. The staff of this hospital was strengthened at the end of the year by the appointment of a Surgeon.

14. The fourteen rural hospitals continued to fulfill the useful function of providing bed accommodation for the sick in outlying areas and relieving pressure on the divisional hospitals. The number of dispensaries remained at 44. All these rural hospitals and dispensaries, with the exception of that at Waiyevo, where a Medical Officer is stationed, are in the charge of an A.M.O. These men and women are responsible for the day to day care of the sick in their area and are assisted by locally trained Nurses. There is, however, a growing awareness on their part that more preventive medicine is required and this change of outlook is being developed and encouraged.

15. Separate sections of this report are devoted to the work carried out at the special hospitals—Tamavua Tuberculosis Hospital, Makogai Leprosy Hospital and settlement and the Mental Hospital, Suva, and thus no further reference will be made to them in this review other than to congratulate and thank the staff for the work achieved during the year.

16. The Dental Division of the Department extended its sphere of activities to some extent during 1958 by the acquisition of a mobile dental unit purchased from funds made available as an annual grant by the Colonial Sugar Refining Company. This unit will tour schools in Viti Levu. The work of the division in general, is directed at child dentistry and marked emphasis is laid on dental health education. A full set of excellent posters designed by the Senior Dental Officer was prepared during the year with the kind co-operation of the South Pacific Commission. The scheme to provide low cost toothbrushes to school children also continued with success.

17. Training activities, both pre- and in-service, were maintained and apart from training of A.M.Os, A.D.Os and Nurses, courses continued for Assistant Health Inspectors, Assistant Radiographers, Assistant Pharmacists, Laboratory Technicians and Assistant Dietitian/Housekeepers. At the Central Medical School building commenced on the new Department of Preventive and Social Medicine, funds for which have been provided by the Nuffield Foundation. The Foundation has given a grant of £20,000 to establish and maintain this Department for a period of three years after which it will become a Government responsibility. A Medical Officer was seconded to the School as whole-time lecturer in Public Health at the end of the year.

18. In August, the Council of the Assistant Medical Officers' Association organized a most successful seminar in Suva at which tuberculosis control was selected as the subject for discussion. Twenty-four A.M.Os attended the meetings which were held over a period of four days and during which Professor Heaf, Advisor in Tuberculosis to the Secretary of State, addressed the delegates.

19. Family planning clinics were established at the Colonial War Memorial Hospital, Suva, and the Government hospitals at Lautoka and Labasa, and it is proposed to extend this service to other centres of population in the Colony in the near future. The attendance at these clinics gave a clear indication that there is a public need for advice on family spacing, sub-fertility and general marriage guidance. Notices as to the day, time and place at which advice can be obtained were displayed in out-patients departments, dispensaries and child welfare clinics. Wider publicity will be given as time goes on, but the less direct approach has been effective.

20. The year has not been an easy one. The poliomyelitis epidemic added greatly to the strain placed on doctors and nurses, already over-worked. In addition, the financial difficulties of the Colony during the closing months of the year gave rise inevitably to feelings of frustration, particularly as it was made clear that the social services would be the first to feel the pinch in future economies. It is, therefore, with even greater than usual appreciation that I would like to express my gratitude to all members of the staff of the department for the high standard of service which they have given and maintained and for their continued loyalty.

#### II-ADMINISTRATION

## ESTABLISHMENT AND STAFF

21. The Departmental establishment is shown as Appendix I to this report.

22. Medical Directorate—Dr. W. H. McDonald, M.B.E. (Mil.), Deputy Director of Medical Services, returned from vacation and study leave in August. He had been successful in obtaining his D.P.H.

Dr. W. L. I. Verrier, Senior Medical Officer, acted as Deputy Director of Medical Services during Dr. McDonald's absence.

Mr. J. H. Gale was appointed Departmental Secretary in July.

Mr. L. W. Wendt was appointed Departmental Accountant in September.

23. Senior Staff Changes, Appointments, Transfers, etc.-Mi. J. M. Foreman, F.R.C.S. was appointed Surgeon in December and posted to Lautoka.

Dr. W. G. MacIntosh proceeded on study/vacation leave in September to take a course leading to the Diploma in Clinical Pathology.

Dr. J. L. M. de Beaux proceeded on study/vacation leave in December to take a course leading to the Fellowship of the Royal College of Surgeons of England.

Dr. P. W. E. Downes proceeded on study/vacation leave in March to take a course leading to the Diploma in Ophthalmology.

Dr. E. T. Cusick resigned from the Service in April.

Drs. M. A. R. Eslick, H. R. Simons, H. N. Williams, A. E. Crossley and C. Parker were appointed as Medical Officers during the year.

#### LEGISLATION

24. Legislation of medical interest was as follows:---

1958-Legal Notice No. 13, amends the Prison Regulations.

1958—Legal Notice No. 25, approves various drugs for the purposes of free entry under Customs Ordinance.

1958-Legal Notice No. 48, amends the charges for Quarantine and Port Health Services.

1958—Legal Notice No. 61—Air Navigation Regulations—includes a section on the medical requirements for the persons concerned.

1958—Legal Notice No. 76, amends the Public Hospitals and Dispensaries Regulations-1955.

1958-Legal Notice No. 87, restricted the entry of persons to Rotuma,

1958—Legal Notice No. 105, approves various drugs for the purposes of free entry under Customs Ordinances.

1958-Legal Notice No. 109, amends the Nurses and Midwives Rules.

- 1958—Legal Notice No. 113, amends the Fiji Military Forces Regulations in respect of the Fiji Army Medical Corps.
- 1958—Legal Notice No. 114, amends the Third Schedule of the Pharmacy and Poisons Ordinance.
- 1958-Legal Notice No. 115, amends the Poisons Regulations.

1958—Legal Notice No. 124, approves various drugs for the purposes of free entry under Customs Ordinance.

1958-Legal Notice No. 125, defines the Rural Sanitary Districts.

1958-Legal Notice No. 130, revokes Legal Notice 87.

1958—Legal Notice No. 147, amends the Public Hospitals and Dispensaries Regulations, 1955.

#### FINANCE

25.	Expenditure for the year 1958-General	l Disti	rict and	Special	Hospitals :
	Salaries of Medical Officers				£29,591
	Salaries of Assistant Medical Officers				. 20,185
	Salaries of Laboratory Staff				0 590
	Salaries of Nursing Staff				C2 055
	Salaries of X-Ray Staff				0.000
	Salaries of Clerical Staff	•••			10 001
	Salarias of Dantal Staff	•••			
	We man of Carbon Marche Ch. W	••			. 9,286
		••			. 62,751
				•• •	. 85,343
	Power, Heat Light, Water and Refriger	ration			. 3,988
	X-Ray services	••			. 1,555
					. 2,540
	Occupational Therapy				. 31
	Workshop				. 33
	Hospital Paupers' Burials				. 16
	General Maintenance, Stores and Incide	entals			. 5,798
					. 43,236
					. 14,791
	Decks and Decis disch				. 161
			Tota	1.	. £364,342
26.	Expenditure for the year 1958-Rural 1	Hospit	als and	Dispen	saries :
	Salaries of Medical Officers				. £1,542
	Salaries of Assistant Medical Officers				. 41,638
	Salaries of Nursing Staff				45 050
	Salaries of Clerical Staff				010
	Wages of Subandinata Ctaff		••		11,000
	Pations	•••			
	General Upkeep, Stores and Maintenand	•••			. 13,143
	Hoenital Paupars' Puriels			•• •	. 3,745
	Hospital Paupers' Burials.	••	••		. 11
	Drugs, Instruments and Appliances	••			. 11,346
	Bedding, Clothing and Equipment				. 1,859

Total .. £133,348

27. Medical Stores and Equipment-Value of issues to nearest £:--

		Drugs and Instruments	Clothing and Bedding	Total
		£	£	£
Cash Sales		 10		10
Private Accounts		 151		151
Special Hospitals		 6,371	4,493	10,864
General Hospitals		 36,865	10,298	-47,163
Rural Hospitals		 5,812	1,735	7,547
Dispensaries		 5,534	124	5,658
Health Sisters		 2,326	348	2,674
Child Welfare Nurses	s	 2,420	312	2,732
Missions		 38		38
Other Medical		 146	180	326
Other Departments		 1,357	99	1,456
	Total	 £61,030	£17,589	£78,619

28. Revenue and Expenditure of the Department :---

		1956	1957	1958
		£	£	£
Gross Expenditure		804,295	852,119	901,754
The second se		84,860	83,961	78,169
		719,455	768,158	823,585
Percentage of Colony's	Expendi-			
		11 per cent	11.62 per cent	
Expenditure per head of p	opulation	40s. 2d.	42s. 7d.	44s. 0d.

These figures include revenue and expenditure of the South Pacific Health Service.

			Total	Expenditure
Year			Population	per head
1949	 	 	 284,955	25s. 0d.
1950	 	 	 293,764	27s. 2d.
1951	 	 	 301,959	32s. 10d.
1952	 	 	 312,678	36s. 7d.
1953	 	 	 320,801	38s. 8d.
1954	 	 	 333,389	36s. 9d.
1955	 	 	 345,164	36s. 3d.
1956	 	 	 357,881	40s. 2d.
1957	 	 	 361,038	42s. 7d.
1958	 	 	 374,284	44s. 0d.

29. The above table shows the expenditure on Medical and Health Services per head of the population over the past 10 years.

#### COLONIAL DEVELOPMENT AND WELFARE PROJECTS

30. Filariasis Research—Mr. G. F. Burnett, Entomologist of Her Majesty's Overseas Research Service continued his investigations into filariasis and mosquito control. The main lines of research are now connected with the use of insecticides in mosquito control and the use of hetrazan in the control of filariasis. Mr. C. B. Symes' report on the Natural History of Human Filariasis in Fiji is now in print and will be available for distribution shortly.

#### INTERNATIONAL AGENCIES

31. World Health Organization—Two students, Jimione Samisoni and Joji Guivalu, who were awarded W.H.O. fellowships to study physiology and biology respectively at Otago University, made satisfactory progress. It is hoped that they will take up posts as lecturers at the Central Medical School on completion of their courses. A fellowship was also made available to Salim Baksh to study Medical Librarianship for six months in Sydney. The training he received has been most valuable.

32. China Medical Board—The China Medical Board, a body affiliated to the Rockefeller Foundation, made two fellowships available; one to A.M.O. Ram Singh Tulsi to study anatomy for one year at Otago University, and the other to Manek Lal Vithal to continue his study of physics at the same University. A.M.O. Ram Singh Tulsi returned to his post as Assistant Lecturer in Anatomy at the Central Medical School at the end of the year, having benefited greatly from his course. Both fellowships were administered by the W.H.O. on behalf of the China Medical Board.

33. Central Medical School—The World Health Organization continued to make available two lecturers at the Central Medical School, the one in biology and the other in physiology. It is hoped that this most welcome assistance will continue until local men undergoing University training return to Fiji to take over their work. Some valuable laboratory equipment was also provided by the Organization. 34. Conferences and Seminars—The Medical Superintendent of the Leprosy Settlement on Makogai, Dr. D. W. Beckett, attended, in November, the W.H.O. Inter-regional Leprosy Conference in Tokyo, this was preceded by the 7th International Congress on Leprology. Much useful information was obtained. Two Assistant Health Inspectors attended a seminar at Port Moresby on environmental sanitation, also organized by the W.H.O. The Director of Medical Services, Dr. P. W. Dill-Russell, led the United Kingdom delegation at the 9th Session of the Western Pacific Regional Committee in Manila in September.

35. Yaws Campaign—The international team re-visited Fiji during the first quarter of the year and carried out a survey in the Nadroga and Navosa Province. The full-scale campaign is now complete, but follow-up of any cases found continues and a yaws survey forms part of the assignment of the B.C.G. vaccination teams.

36. South Pacific Commission—Close liaison with the South Pacific Commission was maintained and Dr. Massal, the Executive Officer for Health, visited Fiji for discussions during the year. The Commission organized a Conference in Pago Pago on Tuberculosis in November at which a number of high ranking specialists met to consider the problems of control confronting workers in the Pacific and much useful information was obtained. Dr. G. D. Murphy, Medical Supe.intendent of the Tuberculosis Hospital, Tamavua, represented Fiji.

#### III-PUBLIC HEALTH

#### ORGANIZATION

37. The public health activities of the Government Medical Services are organized and directed by the Director of Medical Services as head of the Medical Department. He is assisted at his headquarters by a Deputy Director of Medical Services, Administrative Secretary, Accountant, Nursing Superintendent, Senior Medical Officer in charge of records and statistics, Chief Health Inspector and clerical staff. For administrative purposes, the Colony is divided into four medical divisions, corresponding with the general administrative divisions, and each is in the charge of a Divisional Medical Officer who is responsible for the organization of the curative and preventive services in his area. He controls the work of junior Medical Officers, Assistant Medical Officers, Health Inspectors, Assistant Health Inspectors, Health Sisters, Nurses and other medical auxillaries in his division. A conference of Divisional Medical Officers, under the chairmanship of the Director of Medical Services, is arranged once or twice a year to decide upon policy and to co-ordinate activities.

#### COMMUNICABLE DISEASES

38. The trends in certain notifiable diseases in the last six years is shown in the following table:---

	1953	1954	1955	1956	1957	1958	
Dengue	 60	72	36	38	12	8	
Dysentery (all forms)	 243	244	143	231	233	163	
Enteric Group	 35	13	26	14	25	29	
Infantile Diarrhoea	 2,197	1,527	1,542	2,369	2,117	1,991	
Pertussis	 245	422	627	471	261	1,000	
Influenza	 3,197	8,492	5,437	5,710	12,190	11,626	
Measles	 3,179	7	9	12	7,066	15	
Poliomyelitis	 		14		6	328	
Infective Hepatitis	 29	45	53	63	123	279	
*Tuberculosis	 498	489	745	610	654	721	
*Leprosy	 40	26	36	40	44	39	
Gonorrhoea	 220	211	322	299	375	335	
Syphilis	 23	12	48	15	26	10	
Yaws	 			519	159	135	
Tetanus	 33	45	37	38	38	56	

\*These figures are obtained from the Central Registry and not from notification records as those from the Registry are considered to be more accurate. A full table of notifiable diseases is given at Appendix XII. Certain of these notifiable diseases deserve special mention:----

39. Poliomyelitis—The epidemic started in July and spread rapidly throughout the Suva/ Nausori area, in August it had extended to the Lautoka/Nadi/Ba area and in September/October a relatively small number of cases occurred in Labasa. Although concentrated in epidemic form in these areas, the disease was widespread over the Colony and cases were notified from many islands in the Lau group, even from the most southerly, Ono-i-Lau. Cases were reported also from Savusavu, Nabouwalu (Bua), Taveuni and Kadavu. No cases occurred on Rotuma or Makogai. It is, of course, impossible to give accurate figures of the total number of persons who suffered from the disease owing to the mildness of symptoms and difficulties of diagnosis in certain nonparalytic cases. Furthermore, with large area involved and slow communications from certain districts, the returns issued through the Epidemiological Service and to the press included only those cases which had been notified as occurring during the period reviewed. If notifications were received from remote areas of cases which had occurred some time before these were not included in the running total as this would have given a false picture of the course of the epidemic, but they were added to the final tally. It seems probable, however, following check and re-check, that the figure of 328 persons who suffered some degree of paralysis either transient or persisting is reasonably accurate. The racial distribution was:--

Fijians				32%
Indians				54%
Europeans and part	Europe	ans	•••	12.54%
Others The age distribution	was:-		•••	1.45%
	0	6 yea	rs	75% 13·5%
		nd over	r	11.3%

40. Through the kind co-operation of the Commonwealth Serum Laboratories, Melbourne, examination was made of 32 specimens of stools and Type I virus was recovered from 19. In addition blood samples were taken from adults in an area to which the epidemic had not spread and on examination immune bodies were found to be present to all three types of virus in all these. It would seem probable, therefore, that the Type I virus had died out in the Colony for some reason unknown for 7–8 years and was then re-introduced. Those below seven years of age would have no natural immunity and a small percentage of those over that age had either lost immunity or had for some reason never been exposed to risk.

41. Nine deaths occurred, there being a relatively high proportion of cases of encephalitic type. Fortunately, a number of respirators were available in the Colony and this number was augmented by the kind co-operation of the R.N.Z.A.F. and the Health Department, New Zealand, who provided additional equipment with characteristic generosity and promptness.

42. Centres have been established at Suva and Lautoka for the continued treatment of paralytic cases and here again the Health Department, New Zealand, gave ready assistance by recruiting and agreeing to the secondment of physiotherapists to the Fiji Medical Service. The Kisan Sangh also assisted generously in providing the Union's building in Lautoka as a treatment centre free of rent.

43. Although anti-poliomyelitis vaccination was offered to certain groups which were considered to be vulnerable before the epidemic occurred, the response was poor. Following the outbreak, however, the demand increased and a fairly large number of children up to the age of 14 years have since received the vaccine on payment. It is proposed to extend the vaccination campaign at reduced charges or free to other groups in areas of greatest risk shortly and also to offer vaccination to all age groups.

44. Influenza—Although the number of cases notified was almost as great as that recorded in 1957, when the outbreak of Asian influenza occurred, there was no full-scale epidemic during the year and it is probable that the notifications combined a number of conditions with symptoms similar to influenza, including the early stages of poliomyelitis.

45. Intestinal Diseases—Although the number of cases of dysentery (all forms), salmonella infections and infantile diarrhoea (from whatever cause) was lower than in the previous year, this was largely fortuitous and does not reflect a marked improvement in hygiene and sanitation. Village sanitation, in particular, is far below standard in many areas and a considerable improvement is necessary before a satisfactory and lasting decrease in these lethal diseases can be expected.

46. Tetanus, Diphtheria, Whooping Cough—Although not directly related, these diseases are mentioned together as a three in one inoculation, triple antigen, is freely available through infant and welfare clinics. If parents would bring their children for vaccination, the incidence of all three diseases could be markedly reduced. Fifty-six cases of tetanus, 13 of diphtheria and 1,000 of whooping cough, were notified. Tetanus carries with it a high mortality in any age group and the number of cases occurring is alarming. The incidence of diphtheria, although not high, shows that it could rise to epidemic proportions if precautions are not taken, and whooping cough, which was in mild epidemic form during the year, can be lethal to infants and has been responsible for a significant increase in the infant mortality in the past.

47. Measles—The cycle of epidemic measles seems to be a four year one in Fiji and after the epidemic of last year, the incidence in 1958 was small, only 15 cases being notified. The disease is not as formidable in the Pacific as it used to be, but complications are still by no means uncommon.

48. Infective Hepatitis—There can now be no doubt that the incidence of this disease is on the increase. In 1956, 63 cases, in 1957, 163 and in 1958, 279 were recorded. It can be extremely severe in some individuals, but the epidemiology is still obscure and considerable research is still required before control measures can be taken.

49. Tuberculosis—Notification figures are known to be inaccurate as owing to the chronicity of the disease the same case may be notified from various sources and equally for a variety of reasons, some cases may escape notification by practitioners in the field. However, as all cases diagnosed do, at some time, attend Government hospitals for diagnosis and treatment, an accurate assessment of prevalence can be obtained from the Central Tuberculosis Registry. It has been decided, therefore, to adopt these figures in future and it is these that are now quoted in the table above. Although it would appear that a marked rise in incidence still continues, most workers connected with the control of the disease in the Colony now agree that the increase shown is largely due to improved case finding. If this is so, a fall in incidence should occur shortly as with early case finding and thus treatment, the infectious period in each case is reduced. 50. Details of control measures have been given elsewhere in this report, but briefly these

- (a) improvement in case finding through clinical examination, tuberculin testing and where possible, bacteriological examination and X-ray;
- (b) immunization of the susceptible with B.C.G. vaccine;
- (c) segregation of the infectious cases in hospital for which increased hospital accommodation is being provided;
- (d) follow-up and review of cases discharged from hospital;
- (e) increased surgical treatment of cases that do not respond readily to medication;
- (f) use of I.N.H. in young children who are positive tuberculin reactors and for those chronic cases who are unsuitable for surgery;
- (g) improvement in general standards of living, and
- (h) health education.

are-

51. The trustees of the War Memorial Anti-Tuberculosis Fund have made considerable sums of money available during the year in financing the control programme.

52. Leprosy—In assessing the incidence of this disease also a new statistical approach has been used and figures showing admissions to Makogai as obtained from the Central Leprosy Register have been used instead of the notification records. It will be noted that admissions over the last five years remain fairly steady at between 36 and 40. This must mean that although the incidence is not over high, there still remains an undiscovered reservoir of the disease in the community. As soon as staff can be spared from other duties it is proposed to increase the search for these hidden sources of infection.

53. Details of the work on the island of Makogai are given in Appendix VI to this report.

54. Yaws—The incidence of the disease as shown by the notification figures does not give a true picture of the situation as a large number of cases notified are non-infectious, and thus of no danger to the community. A re-survey has been included in the work of teams carrying out the B.C.G. vaccination. In addition, A.M.Os and Nurses working in the field are constantly on the look-out for the disease and are reminded to be so by circular and verbal instruction at intervals.

55. Venereal Diseases—The number of cases of gonorrhoea (335 as against 375 in 1957) and syphilis (10 as against 26 in 1957) showed a decrease, but there are no grounds for complacency and a close watch must be kept on the situation, particularly with the tendency for young people to drift to the towns where venereal diseases are more prevalent.

#### VITAL STATISTICS

56. The Registrar-General's estimates of the population of the Colony at the end of 1958 are shown at Appendix XIII.

57. A census of the Colony's population was held on 26th/27th September, 1956, and the full Report has now been published as Council Paper No. 1 of 1958.

58. The average annual increase of the population for 1936/45 was 6,126, and for 1946/55 was 9,472. The marked upward trend is shown by the estimated increase of 13,246 for 1958. The average annual increases for the two major races for the past decade have been:—

Fijian	 	 	 3,367
Indians	 	 	 5,425

59. The rates of natural increase for the whole population for the past five years have been (corrected to the nearest whole number):—

30
32
34
34

60. The following comparative crude birth rates may be noted :---

		1954	1955	1956	1957	1958
Fijians	 	 37	34	36	39	36
		 43	42	44	45	46
Whole Population	 	 40	38	39	41	41

61. The infant mortality rates for the past three years have been :---

		1956	1957	1958
Fijians	 	48	42	38
Indians	 	45	36	42
Whole Population	 	46	39	39

#### **IV—HYGIENE AND SANITATION**

62. During the year it was found necessary to re-define the boundaries of all Rural Local Authorities. Advantage was taken to alter boundaries to suit local needs so that centres of population could be placed under those authorities of the natural market towns.

63. There are now 18 local rural authorities. This number is increased to 26 by the addition of those authorities responsible for administration in the City of Suva, the Town of Lautoka, the International Airport at Nadi and the Townships of Nausori, Ba, Nadi, Levuka and Labasa.

64. The minutes of meetings of all local authorities are received by the Central Board of Health and advice is offered on any of the matters raised. All requests for legal aid are passed through the Board to the Crown Law Officers.

65. During the year a great deal of work has been carried out on all public health legislation with a view to bringing it up to date. It is hoped that this will be finalized during 1959.

66. The health staff of all but one local authority is employed by this Department and seconded to the various authorities as is found necessary for carrying out the duties laid down by public health legislation. The return of work carried out by all local health authorities for the last five years includes the following figures:—

	1954	1955	1956	1957	1958
General Sanitary Inspections	42,716	78,036	71,569	92,788	89,925
Sanitary defects remedied	23,090	53,018	21,395	28,243	32,763
Written Notices issued	4,609	7,827	6,323	7,999	6,587
Closing Orders issued	57	110	92	182	50
Demolition Orders	212	40	20	53	17
Buildings demolished	35	64	42	31	26
Food Premises inspected	1,882	5,049	4,112	5,611	12,634
Improvements effected	461	1,047	1,350	2,082	2,203
Foodstuffs condemned in lb.	27,696	57,445	101,712	97,209	58,684
Food samples taken	426	292	723	399	35

67. Supervision of new Buildings-Owing to various economic factors, fewer buildings were erected during the period under review than in previous years.

	1954	1955	1956	1957	1958
Applications received	1,151	2,024	2,115	1,614	3,841
Declared Value	£1,797,455	£2,263,460	£2,497,058	£1.581.078	£1.519,521

68. Legal Proceedings were as follows :---

(a)	For offences under the	Pul	olic He	alth	1954	1955	1956	1957	1958	
X-1	Ordinance-				005	105	050	000	0.50	
	Cases taken to Court				225	165	250	333	252	
	Convictions obtained				203	163	243	314	251	
	Penalties imposed				£370	£373	£882	£997	£677	
(b)	For offences under the I nance—	Pure	Food	Ordi-						
	Cases taken to Court				42	30	40	7	28	
	Convictions obtained				41	25	35	7	27	
	Penalties imposed				£366	£154	£245	£33	£154	

69. Sewage Disposal—The owners of new homes continue to prefer septic tanks to the dry conservation system.

		1954	1955	1956	1957	1958	
Septic tank proposals passed	 	51	67	1,010	425	267	
Latrine Slabs sold	 	452	716	601	487	885	

70. Garbage Disposal-Local Authority garbage disposal systems continued to operate satisfactorily during the year.

71. Rat Destruction-

			1954	1955	1956	1957	1958	
Number of Poison Baits se	et		 	915	1,930	400	997	
Number of traps set			 12,640	9,977	9,528	4,905	8,498	
Number of rats caught			 1,875	1,720	1,203	1,944	1,619	
Rats sent to Laboratory			 78	63	58	88	74	
No rats were found to be infected	with	plague.						

72. Water Supplies-Regular inspections and examinations of Government water supplies were continued in close co-operation with the Public Works Department.

Number of samples taken-

			1954	1955	1956	1957	1958
Bacteriological test		 		129			
Chemical test		 					
Sea Water (Public Baths)	• •	 	13	20	18	22	45

#### V-SEAPORT AND AIRPORT HEALTH AND QUARANTINE

73. The ports and airports of entry remain unchanged, Suva and Lautoka being ports of entry for shipping for all overseas vessels and Levuka being restricted to ships from those overseas ports other than recognized malarial areas.

74. The International Airport at Nadi is open to all land 'planes and Laucala Bay to all seaplanes. Landings at Nausori Airport are generally restricted to aircraft from disease-free areas, but by special arrangements aircraft from other areas can be accepted.

75. The following figures show the number of ships and aircraft dealt with at all ports:---

	1958
Ships given pratique	 . 317
Landing passengers	 . 3,461
Aircraft given pratique	 . 1,873
Landing Passengers	 . 16,861
Overseas vessels fumigated (cyanide)	 . 1
Local vessels fumigated (cyanide)	 . 74
Overseas vessels fumigated with Aerosols	 . 70
Aircraft treated with Aerosols	 . 646
International Deratization Certificate	 . 1
International Deratization Exemption Certificates .	 . 5

Cvanide fumigations are restricted to the Port of Suva.

76. A matter worthy of mention is the introduction of a new species of mosquito, Aedes Vigilax. This species is a serious pest in parts of Australia and in New Caledonia where it breeds in enormous numbers in salt marshes. It is also reported from the coastal areas of New Guinea and Esperitu Santo.

77. Apart from its importance as a pest, Aedes Vigilax from the first two named countries is known to be a highly efficient laboratory vector of the New Caledonian strain of non-periodic Wuchereria Bancrofti. As there are many suitable areas in the coastal mangrove swamps, it was considered urgent to investigate the potentialities of this species, with a view to possible extermination before it had time to spread from its initial breeding areas around Suva harbour. However, Mosquito Inspectors from widely separated areas were soon reporting the presence of this new specimen and it is now firmly established in the delta of the Colony's largest river, the Rewa. The delta covers some 80 square miles and it is obvious that it would require a major operation to carry out complete extermination. The mosquito has fortunately proved to be a poor carrier of W. Bancrofti locally.

78. It is not possible to be definite as to where A. Vigilax entered the Colony, partly at least because the control and inspection system is designed to exclude anophelines and no great importance is attached to culicines. It is, however, most likely that it came by air and evaded the usual precautions taken to exclude importation of mosquitoes. A later report incriminates the International Airport at Nadi, though the conditions at the seaplane base at Laucala Bay afford more suitable breeding areas for their reception.

#### VI-HOSPITALS AND DISPENSARIES

79. The centres available for the treatment of the sick are : 44 dispensaries, in the charge of an Assistant Medical Officer, located at centres of population both rural and urban throughout the Colony. Fourteen rural hospitals, the majority of which are administered by A.M.Os, are sited at points convenient for the collection of cases who require hospital treatment from their immediate environs or from outlying dispensaries. Divisional hospitals, four in number, are situated at the divisional centres and draw their patients either from the immediate surrounding population or from the rural hospitals if greater facilities for diagnosis and treatment are required than are available at the latter. The actual location of these dispensaries and hospitals is shown at Appendix II (a).

80. The size of the rural hospitals varies from 52 to 9 beds and they fulfil a useful function in providing accommodation for those cases where a satisfactory clinical diagnosis can be made and treatment is short-term; for treatment of those persons who normally would receive domiciliary treatment but where home conditions are unsatisfactory and for convalescent cases from the major divisional units. They do much to relieve pressure on the divisional hospitals.

81. The Colonial War Memorial Hospital, Suva (298 beds) continued to fulfil its triple role of specialist centre for the Colony, teaching hospital for medical and nursing students from the Central Medical School and Central Nursing School, and divisional hospital for the central division. In general, nursing staff was maintained at reasonable strength at this hospital during the year, but the poliomyelitis epidemic added greatly to the burden of work which had to be undertaken. Many improvements have been achieved by the Medical Superintendent and his senior staff and the hospital can now be considered to be of high standard although much needed expansion and improvements are still delayed through lack of funds. Further details are given in Appendix IV.

82. Excellent work was carried out at the Lautoka Hospital during the year despite the unsatisfactory nature of the hospital buildings, the overcrowding due to lack of accommodation and the frequent changes of senior nursing staff. A very severe strain was placed on the medical

and nursing staff by the poliomyelitis epidemic and all members are to be congratulated on the way in which they gave of their best during this trying time. Although the bed strength is shown at 168, far more patients have frequently had to be accommodated. Additional beds have been put up in any space available and patients have often to be accommodated on mattresses on the floor. The daily average bed occupancy during the year stood at 175.6.

83. The Labasa and Levuka hospitals functioned satisfactorily during the year. These hospitals are also of antiquated design, but the pressure on accommodation is not quite as great as in Lautoka and Suva, although it is considerable. There are frequent difficulties of retaining staff owing to the less satisfactory accommodation which can be offered and lack of modern conveniences.

83A. Specialized institutions are: The Tuberculosis Hospital at Tamavua, the Leprosy Hospital and Settlement at Makogai, the transit station at St. Elizabeth Home, Suva, the Mental Hospital, Suva. Details are given in Appendices III, VI, VII and V, and only brief mention of these institutions need be made here.

84. Some enlargement of the Tamavua Hospital is taking place from funds made available by the Trustees of the War Memorial Anti-Tuberculosis Fund and an additional 65–70 beds will shortly be available. At Makogai the extension to the physiotherapy department was completed during the year and opened by Sir Hugh Ragg. Funds for this building were provided by the New Zealand Lepers' Trust Board. The Mental Hospital, although by no means meeting up to modern requirements, provided accommodation, care and treatment for about 190 patients and the staff gave excellent service.

#### VII-DENTAL DIVISION

85. The Dental Division of the department fulfils four main functions-

- (a) the establishment and maintenance of permanent dental clinics.
- (b) the provision of a school dental service.
- (c) the production of a dental health education programme, and
- (d) the training of Assistant Dental Officers, Dental Hygienists and Dental Mechanics. Details of the work are given at Appendix VIII.

86. The policy of concentrating on conservative dental treatment of children was continued both in the dental centre and in the school dental work. The mobile dental clinic, provided during the year from funds made available from an annual grant to the Medical Department by the Colonial Sugar Refining Company, will aid much in the expansion of the school dental work. Dental health education, under the guidance of the Senior Dental Officer made excellent progress. Posters designed by the Senior Dental Officer and produced by the kindness of the South Pacific Commission were distributed during the year and the provision of low cost toothbrushes to schools increased in popularity.

#### VIII-LABORATORY DIVISION

87. The Central Laboratory, Suva, although within the precincts of the Colonial War Memorial Hospital, is an independent section of the department. Specimens are sent for examination from all parts of the Colony and from time to time investigations are undertaken for other island territories. In addition to clinical pathology, bacteriology etc., required by both hospitals and private practitioners, the Pathologist in charge undertakes a great amount of medico-legal work and examination of food samples. Furthermore the training of A.M.Os and laboratory technicians is carried out in this Laboratory. The demand for blood for transfusion purposes continued to increase and a blood bank was established which again has added greatly to the work of the staff.

88. A small subsidiary laboratory for routine clinical tests has been established at Lautoka. It had been hoped to set up small laboratories at Labasa and Levuka, but the number of students in training as technicians has been reduced as an economy measure and thus this much needed expansion will be delayed for some years.

#### IX-NUTRITION

89. The staff of the department concerned with rationing of hospitals and feeding of patients and staff consists of a Supervising Dietitian and five housekeepers. The Supervising Dietitian directed the work of the housekeepers at the major hospitals and also advised officers in charge of the smaller hospitals on matters connected with catering. The Supervising Dietitian left the Colony on completion of her contract in July and has not yet been replaced, but it is hoped to fill the vacancy shortly as her services have proved invaluable and marked economies resulted from her standardization of diets and overall direction.

90. The general nutrition research and education work of the Colony is carried out by the Nutritionists of the South Pacific Health Service, which has its headquarters in Suva. Lectures on nutrition were given to A.M.Os and Nurses by the staff of this Service who also organized the training of Assistant Dictitian/Housekeepers. Various booklets, posters and teaching aids were produced during the year and two numbers of Tropical Food and Nutrition were published.

#### X-TRAINING

91. Training of Assistant Medical Officers and Assistant Dental Officers continued at the Central Medical School. Details regarding the number of students under training and their countries of origin, are given in an appendix to this report, together with other information connected with the School. As was reported last year, a grant training £20,000 has been made by the Nuffield Foundation to establish a department of Preventive and Social Medicine at the School. Building had started by the end of the year and the premises should be available shortly. A Medical Officer has been appointed as whole-time lecturer in Public Health and this aspect of the training has been given further emphasis. To stress still further to the student the need for the preventive approach in medicine, a new feature has been introduced into the curriculum with the organization of a medical and social survey, by the final year students and some of the teaching staff, of the population of one of the smaller islands. The island of Gau (population 2,000) was chosen this year and much useful information was obtained as well as providing invaluable training for the students.

92. At the Central Nursing School, Tamavua, the Principal, assisted by her tutorial staff, was responsibile for 181 students of which 158 were taking the local course and 23 the New Zealand standard course. During the year the first group of students to enter the New Zealand course, took their final examinations and out of seven students five were successful and the remaining two failed in only one subject each.

93. At the Lautoka School 82 students were in training, all on the local course. Training of a small number of girls is undertaken at Labasa, but it is proposed to close this school as being too small and thus uneconomic. The students will be absorbed into the Tamavua and Lautoka schools. Training is also undertaken at the Methodist Mission Hospital, Ba.

94. Some difficulty was again experienced in obtaining training staff and it is thus all the more to the credit of the Principal of the Central Nursing School and other members of staff at Tamavua and Lautoka that excellent results were achieved despite the long hours of duty which became necessary.

95. Other courses of training undertaken in the department were for Assistant Health Inspectors, Assistant Pharmacists, Assistant Radiographers, as well as those mentioned previously for Laboratory Technicians, Dental Hygienists, Dental Mechanics and Dietitians.

#### XI-DEPARTMENTAL VESSELS

96. A number of vessels are maintained and controlled by the Medical Department, amongst which are the following:---

The 42-ton A.K. Vuniwai used chiefly for carriage of staff on inspection and transfer, the transport of patients, particularly those suffering from tuberculosis and leprosy, and for the distribution of medical supplies. The vessel was also used in times of emergency to carry foodstuffs and, on occasions, for the transport of special teams on survey or other research work.

The A.K. *Makogai*, as her name indicates, is the vessel used as transport for the Leprosy Settlement on the island of Makogai and was used to convey stores, staff, visitors and discharged patients between Makogai and Viti Levu and Levuka.

The launch *Eileen*, also based on Makogai, was used mainly for the collection of copra from various points on the island, in fishing expeditions for patients and staff and provides communication between Makogai and Levuka.

The launch *Vuniwai-ni-toba* was used for purposes of giving pratique to vessels arriving in Suva harbour, for fumigation and deratization duties and for short journeys to neighbouring islands including weekly visits to the quarantine islands of Makuluva and Nukulau.

The Adi Makareta, which was based formerly at Wainibokasi, was transferred to Labasa for relatively short journeys within the reef. The Rewa river in which she formerly navigated has now become so silted that she was unable to fulfil her proper function.

97. Various motorized punts are either in use or on order for river and close coastal work. The annual grant given to the Department by the Colonial Sugar Refining Company for child welfare work is being used, with the Company's permission, for the purchase of more of these vessels for transport of Health Sisters and A.M.Os.

#### XII—PHILANTHROPIC ORGANIZATIONS

98. New Zealand and Fiji Lepers' Trust Boards—The Fiji Board, under the Chairmanship of Sir Hugh Ragg, continued to disburse funds allocated to Fiji by the parent body—the New Zealand Lepers' Trust Board. Again a splendid allocation of £NZ.11,000 was made. The tireless efforts of Mr. P. J. Twomey, M.B.E., J.P., the Secretary of the New Zealand Board, and the generosity of all those people of New Zealand who gave of their time and money are very deeply appreciated.

99. The money is used to provide grants to ex-leprosy patients who for one reason or another require financial assistance and for various works of a capital nature at Makogai and St. Elizabeth Home. 100. War Memorial Anti-Tuberculosis Fund—This Fund amassed from voluntary contributions is administered by a Board of Trustees of which the Chairman is Sir Hugh Ragg and Secretary, Mr. W. E. Donovan, I.S.O., K.S.G. The money has been made available for a variety of buildings and pieces of equipment during the past years. During the year the trustees financed the building of a new recreation room, at Tamavua Hospital, which will release a ward, at present used for recreation purposes and thus making available an additional 65–70 beds, and erection of a records room. Funds were also provided for the B.C.G. vaccination campaign.

101. British Red Cross Society—The Fiji Branch, under the Presidency of Lady Maddocks and the Directorship of Mr. E. B. Povey, was most active during the year and gave great assistance to the Department in providing diversional therapy, mobile libraries, children's clothing and toys and special equipment for hospitals including an electrocardiograph and oxygen tent (from the Lautoka division). A group for handicapped children was also organized on a weekly basis in Suva.

102. St. John Ambulance Brigade and Association—First-aid and Home Nursing classes were continued and the enthusiasm of members maintained throughout the year. Members of the Brigade continued to give invaluable assistance by manning ambulances at the Colonial War Memorial Hospital during the night hours. This service is entirely voluntary and its value has been proved on numerous occasions. The value of the first-aid training has also been frequently demonstrated.

103. Home of Compassion—The Home of Compassion staffed by Marist Sisters accepts aged ladies who, for some reason or another, require some degree of nursing care. The institution is excellently run and fulfils a very real need.

104. The Cottage Home—This home for aged people is supported by public subscription and also is well organized and of great importance to the welfare of the elderly.

105. Mercy Flights—Once again tribute should be paid to the officers and men of the Royal New Zealand Air Force, who, from their flying-boat base at Laucala Bay, have given invaluable assistance in times of emergency. On a number of occasions during the year calls for their services to pick up patients or drop supplies for persons seriously ill or injured have been met with immediate response. The service given without hesitation and with characteristic efficiency, has undoubtedly raised morale amongst those living on far away islands and has assisted in saving a number of lives.

#### XIII-METEOROLOGY

106. Summaries of the meteorological observations for 1958 are given at Appendix XVII. For these, I am indebted to the Meteorological Officer at Laucala Bay, Suva.

> P. W. DILL-RUSSELL, Director of Medical Services.

## APPENDIX I

## DEPARTMENTAL ESTABLISHMENT

								1958
1.	MEDICAL AND ADMINISTR	ATIVE	SECTIO	N-				
	Director of Medical Serv	vices						1
	Deputy Director of Med	lical Se	rvices					1
	Secretary							1
	Senior Medical Officers							5
	Physician Specialist							1
	Surgeon Specialist							1
	Surgeon							1
								15
	Ophthalmologist							1
	Radiologist							1
	Pathologist							1
	Anaesthetist							1
	Dental Surgeons							2
	Assistant Medical Office	TS			1.			125
	Assistant Dental Officer	8						12
	Physiotherapist							1
2.	NURSING SECTION-							
	Nursing Superintendent				••	••	• •	1
	Matrons and Assistant I			• •	••	••	• •	6
	Sisters in Charge			**	••		• •	3
				1.1		• •	• •	54
		· ·		11				13
	Principal (1) Tutors (6)	Nursu	ig Scho	>01	* *	1.1		7
	Nurses							375
3.	TECHNICAL SECTION-							
	Laboratory Superintend	lent		1111				1
	Chief Laboratory Assist							i
	Laboratory Assistants							13
	Chief Health Inspector							1
	Health Inspectors (11) .		nt Iner		199	11		34
						••		
	Government Pharmacis							7
	Radiographers (3) X-Ra	ty Assi	stants	(+)	••		••	7
	Supervising Dietitian	11	Dente	i'm	11.000			1
	Dental Hygienist (1) As			u Hygi	enists	(4)		5
	Dental Mechanics	• •		* *		••		3
4.	CLERICAL SECTION-							
	Clerical Staff							57
-	Commences Commence							
э.	SUPERVISORY SECTION-			-11- (O	-			-
	Mental Hospital Attend						••	22
	Caretaker, Quarantine I							1
	Overseers (2) Storekeep	ers (3)						5
	Occupational Instructor	-			14			1
	Housekeepers (7) Laund	iresses	(2) Sea	amstres	is (1)			10
	Subordinate Staff							592
G	CENTRAL MEDICAL SCHOOL	NT-						
0,								
	Principal		••					1 2
				•••				1
	Anatomy and Surgery I	Lecture	-		• •			1
	Science Lecturer.				••			
		••					••	1
	Dental Officers							-
	Assistant Medical Office						• •	$\frac{1}{22}$
	Housekeeper (1) Clerical						1.1	
	Laboratory Attendants				• •			3
7.	FIJI LEPROSY HOSPITAL-							
-	Senior Medical Officer					1		1
	Clerical Staff							2
	Overseer (1) School tead	thers (	2) Cons	tables				8
	Bakers (4) Labourers ar							41
	Nursing Sisters	in our	. anto fe	.,	12			23
	Nursing Sisters Assistant Nursing Sister	18	1.					Ĩ
8.	MALARIA PREVENTION AN	D FIL	ARIASIS	CONTR	ROL-			
	Surveyor in Charge							1
	Inspectors and Assistan							67
0	CENTRAL MEDICAL RESE/	PCH I	IRRADA					
0.	Librarian							1
	27.7 X X 27.7 AV				• •			
	Clerical Staff	1.1						

## 15

## APPENDIX II (a)

## HOSPITALS AND DISPENSARIES

MAIN AND SPECIALIST HOS	PITALS	_					Beds
Colonial War Memoria			Suva				298
Tamavua Tuberculosis							362
Mental Hospital, Suva							156
Fiji Leprosy Hospital,							600
Deserves Herrison							
DISTRICT HOSPITALS-							
Lautoka							168
Labasa Levuka		••	••		• •		104
Levuka	••	••	••		••	••	40
SUBSIDIZED HOSPITALS-							
Methodist Mission Hos	pital. 1	Ba					41
Private Hospital, Colo	nial Su	gar F	Refining	Compa	any, Ba		12
		~	0				
RURAL HOSPITALS-							
Nailaga, Ba							20
Wainibokasi		•••	• •				52
Waiyevo, Taveuni	••	••	••	• •	• •		52
Koromumu, Sigatoka	••	•••	• •		•••		20
Vaileka, Rakiraki, Ra	•••	•••			•••	• •	28
Nadi					•••	•••	18 37
Savusavu							32
Vunisea, Kadavu							24
Lomaloma, Lau							16
Rotuma							16
Lakeba, Lau							11
Matuku		•••	• •				9
Nabouwalu, Bua		••			••	••	30
See Appendix II (b) for det	ails of	out-p	patients.				
See Appendix II (b) for det	ails of	in-pa	tients				
DISPOSITION OF U	PPAN	AND I	PUPAT I	HEDRY	CADIPO		
and the second se	and and a	and I	AURAL I	JISPEN	SARIES		
In Suva— Suva Gaol							
Samabula							
Tamavua Out-patients	(Gene	ral) I	Dispensa	rv			
Nabua	( Joene		rispensa	.,			
C I I D' I I D'			1. 1.00				
Central Division (under Div	visiona	i Mei	ucal Off	1			
Beqa Island					usori (	linic	
Korovou, Tailevu Nor Lodoni	tn				ivua ivavu		
Lonanikoro					provisile		
Mokani					ria		
Namosi							
Eastern Division-				T.	1100		
Gau				Ko	oro		
Kabara Ono-i-lau					ro, Ka	davu	
	-						
Western Division (under Di	visiona	l Mea	lical Offi	cer, Lo	utoka)-	-	
Korolevuiwai					tuatua		
Nadarivatu		1000			viti, Y	asawa	
Nadi Airport (administ	tered fr	rom S	ouva)		utabu		
Namarai Nanukuloa				Ta	u vua		
Nanukuioa Nasau					tukoul	a	
Northern Division (under D	ivision	al Mo	edical Of				
Dreketi					soqo		
Lekutu				W	ainunu		

Dreketi Visoqo Lekutu Wainunu Naduri Rabe Island Community Kioa Island Saqani Natewa Korotasere Tukavesi

Total Rural Dispensaries-44

See Appendix II (b) for details of out-patients.

## APPENDIX II (b)

The following tables show the analyses of in-patients and out-patients for the year 1958:

Race	C.W.M. Hospital	Tamavua	Lautoka	Labasa	Levuka	Totals
Fijians Indians Europeans and Part-Europeans Chinese and Others	010	428 93 13 34	1,165 4,243 205 211	399 1,561 44 19	519 82 69 29	4,769 9,533 1,147 794
Totals	7,129	568	5,824	2,023	699	16,243

1. CENTRAL AND DISTRICT HOSPITALS ADMISSIONS-RACIAL DISTRIBUTION

#### 2. OUT-PATIENTS THROUGHOUT THE COLONY

Race	-		C.W.M. Hospital	3 District Hospitals	14 Rural Hospitals	Rural Dispensaries	Totals
Fijians Indians . Europeans and Part-Europeans Chinese and Others		 1 1 1	40,602 63,156 5,060 7,531	25,949 74,448 2,975 4,228 }	67,338 61,383 12,578	152,413 50,375 22,009	286,302 249,362 54,381
	Totals	 1.1	116,349*	107,600	141,299	224,797	590,045

\* Includes 14,735 dental cases

#### 3. GENERAL AND RURAL HOSPITALS-ADMISSIONS

Hospitals	No. of Beds	Daily average In-patients	Admissions
Colonial War Memorial Hospital Tamavua Tuberculosis Hospital Three District Hospitals Fourteen Rural Hospitals	298 362 314 365	260 362 291 235	7,129 568 8,546 8,566
Totals	1,339	1,148	24,809

The mean annual turnover in all hospitals is 8.5 persons per bed, being an average stay of 43 days per patient: On an average day there were 1,148 persons in hospital beds, being at the rate of 3.3 persons per mille total inhabitants. The hospital beds available, 1,339 were at the rate of 3.9 beds provided per mille of the total inhabitants.

#### APPENDIX III

#### TUBERCULOSIS DIVISION-1958

The year 1958 saw the completion of Tamavua Hospital's twelfth year as the Colony's main tuberculosis hospital. Throughout the year, the daily average bed state was 362.

2. Recent comparative figures are set out below :---

	1947	1951	1952	1953	1954	1955	1956	1957	1958
In-patients at 31st Dec.	 153	220	241	270	304	403	320	325	350
Admissions	 269	220	257	360	487	513	482	705	568
Discharges	 183	118	137	248	373	465	392	412	464
Deaths	 64	86	46	53	42	27	29	26	13
Out-patients	 	832	1,285	1,756	2,048	2,227	2,790	3,620	3,302

 Of the 568 admissions, 428 were Fijians, 93 Indians. There were 86 children under 15 years admitted during the year. Of the 150 readmissions included in the figure of 568, only 63 were relapses.

4. Of the 13 deaths in 1958, 12 were due to tuberculosis, of whom 9 were Fijian, 2 Indian and 1 Rotuman.

 At the close of the year, there were 78 patients awaiting admission to Tamavua Hospital: many of these were already under treatment elsewhere.

6. The out-patient department consists of a casualty department for those people living near the hospital and a clinic for cases of tuberculosis. There were 3,275 attendances in the casualty section: 1,300 attended for chest X-ray only while 3,302 required full assessment including clinical examinations, chest X-ray, sputum test and blood sedimentation rate. There were 1,274 minor collapse refills and about 100 patients attended for streptomycin injections regularly.

7. 3,331 films from outside centres were received at Tamavua and reported on during the year. Of these, the Radiologist examined 2,040, the remainder being dealt with by the staff as routine reviews. 201 films were referred by the Radiologist to the Medical Officer in Charge.

8. 8,401 Tamavua Hospital reports were sent out in the course of 1958.

9. All tuberculosis reports and other documents pass through a Tuberculosis Registry at Departmental Headquarters, which collates all records and distributes them to those in medical charge of patients, and assumes the duty of securing due follow-up and review examinations. The records of any patient, wherever he may be seen, are collated.

10. 24 patients were transferred to the Colonial War Memorial Hospital for major chest surgery. The procedures were pneumonectomy, lobectomy, apicolysis with polythene-ball plombage, thoracoplasty. Phrenic crush and other minor procedures were done at Tamavua. 14 patients were transferred to the Maternity Annexe, Colonial War Memorial Hospital.

11. The Dental Clinic, which had been equipped by the War Memorial Anti-Tuberculosis Trust Fund, is operated by the Dental Division of the Department and during 1958 performed 894 procedures, including fillings, extractions and miscellaneous treatments.

12. An Occupational Therapy Department has been fully equipped by the Trust Fund and has a full-time staff of two men. It is used by male and female patients.

13. Many entertainments of a special kind as well as the weekly film shows were given to the patients during the year.

14. The farm and plantation was further improved by the construction of a dam with a capacity of approximately 160,000 gallons. 1958 was a very dry year, but crops to the value of almost  $\pounds 2,000$  were harvested. The piggery proved successful after a modest start and produced pork to the value of  $\pounds 500$ . The egg production was less than in 1957 as virus pneumonia infected a large number of the "day-old" chickens imported during the year.

#### APPENDIX IV

#### COLONIAL WAR MEMORIAL HOSPITAL, SUVA

Every effort has been made to improve the facilities and amenities at the Colonial War Memorial Hospital. The kitchens have been remodelled, storage facilities re-organized and the inadequate kitchen at the non-paying Maternity Annexe closed.

2. As well as being the specialist hospital, the Colonial War Memorial Hospital is the teaching hospital for medical students from the Central Medical School and student nurses from the Central Nursing School: it also provides post-graduate facilities for A.M.Os.

3. Out-patients Departments—The overall number of out-patients has risen. While this may be partly due to the increase in population, it is more likely because of the development of services. Two new clinics were started during the year—diabetic and physiotherapy clinics.

4. The total number of out-patients seen during 1958 is analysed in the following table :---

				European	Fijian	Indian	Others	Total	
Specialist Clinics-									
General Medical				364	547	2,220	330	3,461	
Diabetic				27	40	501	29	597	
General Surgical				258	702	937	189	2,086	
Fracture				176	698	1,011	108	1,993	
Physiotherapy				30	66	112	39	247	
Ophthalmic .				142	1,815	3,466	700	6,123	
Obstetric-									
Colonial War Men	orial	Hospit	al		4,959	11,174	824	16,957	
					1,648	956		2,604	
Sub-Fertility & F	amily	Planni	ing .	4	31	407	8	450	
General Out-patients-									
Paying				591	2,985	2,760	320	6,656	
Non-Paying .				498	22,734	33,092	4,116	60,440	
				2,090	36,225	56,636	6,663	101,614	

5. A total of 60,440 was seen in the Non-Paying Out-patients Department. This was an increase of over 20,000 on the 1957 figures and testified to the improved services.

 Staff consisted of one Medical Officer, three Assistant Medical Officers, a Nursing Sister and nursing staff.

7. The department remains open 24 hours a day and deals with all admissions, casualty cases and non-paying out-patients.

8. As an adjunct, family planning and sub-fertility clinics were held by the Medical Officer and attendance increased greatly during the year.

9. Tuberculosis comes only incidentally into the work of the Colonial War Memorial Hospital, but as can be seen from the out-patients figures, it was thought necessary to provide special outpatient facilities for the follow-up of acute rheumatism and diabetes.

10. Diabetics are admitted to the ward for tuition and indoctrination and then attend the clinics. These clinics have been surprisingly successful with a very small failure rate.

11. The acute rheumatism clinic was split off from the cardiac clinic late in the year to enable the staff to have more time for these young people and to develop a more highly organized service. The clinic uses monthly injections of Benzathine penicillin for prophylaxis and with gratifying results, we have had few relapses in early non-defaulting cases in the three years this method has been used.

12. Wainibokasi Ante-Natal Clinic—It was found necessary to open an ante-natal clinic at Wainibokasi Hospital to relieve the pressure of work at Suva. This was commenced in June 1957 and a weekly Saturday visit by two of the Assistant Medical Officers was arranged. As the number of attendances were increasing, it was found necessary to increase these visits twice weekly from early 1958.

13. The number of ante-natal attendances at the Wainibokasi Clinic during the last two years was as follows:---

				Fijians	Indians
1957	1.	 	 	1,359	500
1958		 	 	1,648	956

14. In-Patients—The admissions to hospital have reached saturation point and the main reason for the increase in 1958 was the poliomyelitis outbreak which caused further over-crowding of the hospital. A house, formerly used as a Medical Officer's residence, was taken over as a ward.

15. A noticeable trend during 1958 was the increase in cases of protein malnutrition. It is disappointing to recall the subsequent course of these children was not favourable after their discharge from hospital.

16. Infective Hepatitis was also common with one death again in 1958. Efforts to incriminate leptospira have been so far unsuccessful.

17. Acute nephritis was not so rife in 1958 as is usual. The high incidence of this and acute rheumatism indicates the prevalence of haemolytic streptococci in a population not renowned for sore throats.

18. The number of admission							
Admission to Main Block			668	1,499	Indians 2,085	Others 204	Total 4,456
Admissions to Non-Paying nity Annexe				730	1,322	138	2,190
Admissions to Paying Mate	rnity		148	29	147	159	483
Totals			816	2,258	3,554	501	7,129
19. The surgical work done	was as i	follo	ws:—				
Operating Theatre—							
Total number of pat		tten	ded				2,919
		• •					1,210
Ophthalmic Surgery Plaster Room		• •	••	•••		••	194
Minor Operating Th							1,275 240
Total number of Op							1,454
Grand Total of Proc	edures	Carı	ried Out				2,969
Anaesthesia—							
Total Number of Ar	aesthet	ice .	riven				1.814
Types—Relaxant		ics į					1,814 300
Inhalation							637
Local							270
Spinal/Extra	a-dural						96
						• •	83
Plaster Roo Minor Opera						••	200
Millor Open	ting its	oom	cases				228
Surgery Details—							
Gastro-Intestinal Surg	ery				Tot	al	183
Appendicectomy							77
Cholescystectomy		••	• •			••	15
Gastrectomy		•••	•••	• •	••	•••	10 12
Gastro-enterostomy						••	13
Plastic to Common 1		ct					2
Imperforate Anus							2
Hemicolectomy							4
Oversewing Rupture		t					5
Haemorrhoidectomy		• •		•••		• •	10 2
Bowel Resection Gastro-cholecystosto				••		••	2
Ramstedt's Operatio				11			ĩ
Hellers Operation							1
Other-Major							12
Minor		• •	• •				15
Thoracic Surgery						. Total	54
Apicolysis or Plomba							14
Lobectomy							11
Pneumonectomy		•••					2
Thorocoplasty	••	••					5
Lung Decortication							$\frac{2}{3}$
Pericardectomy							1
Vagotomy							1
Segmental Resection	IS						2
Other Major Chest S							4 8
				•••			8
Abscess Drainage	•••	•••					
						. Total	15
Potts' operation for		gy o	f Fallot				1
Splenectomy			• •			••	3 4
Mitral Valvalotomy		••		•••		••	1
Arterial Suture Varicose Vein Surger	 rv						6
varicose veni surge	.,						

Gynaecological Surgery						Total	302
Dilatation and Currettage						. oran	173
Ligation of Fallopian Tube							13
			•••		•••		
Lower Segment Caesarian							23
Classical Caesarian Section							9
Total Hysterectomy							16
Sub-Total Hysterectomy							3
Vaginal Hysterectomy							4
Rupture Ectopic Gestation							6
Colpo-perineorrhaphy							5
Colporrhaphy							2
Ovarian Cystectomy							12
Mandan and and and							6
			••		• •		
Myomectomy		• •					4
Oophorectomy							4
Salpingectomy							2_
Others							20
Orthopaedic Surgery						Total	93
Amputations (any member						Total	20
		••		• •			1000
Manipulations		••	* *				2
Sequestectomy	See. 1			11			15
Bone Removals for Osteom	yelitis (	includ	ing sau	iceriza	tion e	tc.)	10
Plating Fractures							3
Pinning Fractures							2
Fracture Zygoma Elevation	n.						5
Menisectomy							2
Patellectomy							4
Others-Major		-					22
Minor				• •			8
Minor	••	••	• •				0
Ear, Nose and Throat Surger	v					Total	98
Tonsillectomy and Adenoid		7					45
Nasal Polypectomy		-					8
Laryngoscopy							8
Antra proof puncture	••		••		••		6
				• •			7
Diathermy to Turbinates				• •			
Mastoidectomy							3
Mastoidectomy							3
Mastoidectomy Others						Total	3 21
Mastoidectomy Others Genito-Urinary Surgery				 		Total	3 21 184
Mastoidectomy Others Genito-Urinary Surgery Cystoscopy	••	  				Total	3 21 184 66
Mastoidectomy Others Genito-Urinary Surgery Cystoscopy Hydrocoele cure				 		Total	3 21 184 66 22
Mastoidectomy Others Genito-Urinary Surgery Cystoscopy Hydrocoele cure Nephrolithotomy	••	  		 		Total	3 21 184 66 22 11
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Thyroid Surgery						Total	15
Sub-Total Thyroided							8
Adenoma							6
Cyst-Thyroglossal							1
N							
Neurosurgery	••	• •	• •			Total	11
Pituitary Tumour	• •			• •	• •		1
Extra-dural Haemat	tomo	• •		• •			1
Meningocoele				•••	• •	••	1
Nerve Repair		•••	• •	• •	•••		1
Neuro Fibroma							3
Skull Traction	1.1	1.					1
Others							2
Breast Surgery						Total	7
Simple Mastectomy							4
Radical Mastectomy	7						1
Biopsy	• •				• •		2
Application of Radium	a	15				Total	20
Wound Toilet		•••	• •	• •	• •	Total	14
Minor Operations in T	heatre					Total	156
						Tak	010
Minor Operation Theat	tre Lis	ts	• •	8.4	• •	Total	240
00 m	14						
20. The number of eye opera	tions p	perform	ned in t	the Ma	in Thea		der:—
Ophthalmic Surgery						Total	197
Cataract Extraction		• •			• •		97
Iridectomy			• •	• •			15
Enucleation		* *					14
Sclerotomy (Anterio		•••		•••			12 8
Entropion		••		••	• •		15
The second se							8
The second							3
C SC							4
Carbolisation of Corr	neal U	lcer					1
Plastic repairs of Or	bit						4
Probing of Lacryma	l duct						2
Excision of wart on	lid		• •				3
							2
Exploration in Orbit		···	••	•••			1
Excision of Conjunc Irrigation of Anterio				•••			4
Excision of Lenticul							1
Suturing of perforat	ing wo	und o	f eve-ba				2
outuring or periorat			55.56				
21. The number of minor ope	eration	s perf	ormed in	n the E	Eye Out	t-patient Cli	nic is as under:
Minor Eye Operations						Total	302
Pterygium							86
Entropion							10
Extropion							3
Chalazion							42
Corneal Foreign Bod	iy			• •			111
Incision of Hordeolu	ım			* *	• •		6
Incision of Lid Absc		••		••	• •	••	6 1
Incision of Punctum					• •		5
Incision of Acute Da Excision of conjunct	tival m	rowth					6
Excision of epibulba	r dern	noid					1
Excision of wart (lid							i
Excision and diather	rmy of	conju	inctival				2
Removal of conjunct	tival fo	oreign	body				2
Removal of subtarsa	al forei	gn bo	dy				1
Diathermy to lids						••	2
Others	••			• •	••		17
	10.0			T		and the solute	of the Amintent
22. The number of eye operation	ations	perfor	rmed at	Labas	sa duri	ng the visit	of the Assistant
Medical Officer (Ophthalmology) wa	LS :						36
Cataract		• •		• •	••		36 3
Entropion							

 Cataract
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23.	Maternity Paying Annexe-	-The	figures	for the	paying	Maternity	Annexe were :
	Admissions						483
	Discharges						476
	Normal Labours						305
	Abnormal Labours						124
	Still-births						3
	Neo-natal Deaths						9
	Caesarian Sections						12
	Ante-partum Haemo						7
	Post-partum Haemo						16
	Secondary post-part	um H	aemorrl	hages			1
	Retained Placenta						7
	Placenta praevia						4
	Anaemia						2
	Toxaemia						13
	Hyperemesis				**		1
	Instrumental deliver				esthetic		4
	Instrumental deliver			ene			62
	Persistent occipito-p		or				8
	Breech presentations	;	••				13
	Face presentations	• •	••	••		•• ••	3
	Prolapsed Cords	• •					1
	Number of babies						440
	Number of females	• •				•• ••	212
	Number of males						228

24. During the year at the non-paying Maternity Annexe, there were 1956 confinements, an increase of 56 over the 1957 figures. This represents an average stay of 4 days per patient with all beds filled every day of the year: it does mean that the average stay in hospital for an uncomplicated labour is 2 days.

		Fijians	Indians	Others	Total
Admissions	10	730	1,322	138	2,190
Discharges		719	1,323	135	2,177
Deaths		1	2		3
Admitted not in labour		32	205	15	252
Normal labour		568	989	104	1,661
Abnormal labour		131	140	24	295
Total Confinements		699	1,129	128	1,956
Live births		680	1,088	125	1,893
Premature births		28	46	2	76
Multiple births		10	11	6	27
Still-births		19	41	3	63
Total viable infants born alive	or				
dead		699	1,129	128	1,956
Neo-natal infant deaths		18	57	4	49
Maternal Morbidity-Anaemia		1	51		52
Pre-eclamptic toxaemia		8	43	1	52
Eclampsia	ι.		4		4
Puerperal pyrexia		24	63		87

25. Radiological Department—In the Radiological Department the total number of cases increased by more than 30 per cent as compared with 1957.

In-patients Out-patients .		Indians 2,022 3,104	Fijians 1,716 2,924	Europeans 477 1,301	Others 336 675
Total		5,126	4,640	1,778	1,011
	Grand	d Totals	: 1958-12,555	1957-9,631	

26. Special investigations were further increased in 1958-

-			1958	1957
Intravenous Pyelography			196	152
Barium Meals			346	229
Barium Enemas			61	53
Heart Screenings and Barium	Swallov	v	236	157
Retrograde Pyelography			17	26
Cholecystography			113	104
Silogram			2	6
Bronchography			62	33
Cholecystography I. V			3	
Myelogram			4	3
Peri-renal Pneumography			5	4

27. Laundry—A total of 1,538,208 articles was laundered in 1958, an increase of 92,746 over 1957, without a corresponding increase in staff. The equipment is getting old and there is an absence of modern drying apparatus which causes considerable difficulty and dislocation in persistently wet weather.

#### APPENDIX V

#### MENTAL HOSPITAL

The number of patients in the Hospital increased during the year.

2. Occupational therapy continued during the year and finger-painting was added to the patients' activities. The sum of  $\pounds 126$  15s. 0d. was raised from the sale of articles made by the patients and it is hoped that enough money will be raised to buy a cine-projector.

3. Details of staff are as follows :----

Medical Superintendent (part-time) Head Attendant Assistant Attendant 8 Female Fijian Orderlies 4 Female Samoan Orderlies 9 Male Fijian Orderlies 5 Male Samoan Orderlies 1 Male Fijian Cook

- 2 Male Indian Cooks
- 1 Male Fijian Kitchen Hand.

4. The following table shows admissions and discharges :----

Remaining in the Hospital at the end	of 195	7	160	
Admitted during 1958			91	251
Discharged during 1958			8	
Absent on trial during 1958			51	
Died in Institution during 1958			1	
Remaining in Hospital at end of 1958		•••	191	051

5. The following table shows the length of residence of patients remaining in the Hospital the end of 1958-

No. of Years		Males	Females	Total
0 to 1 year	 	 29	21	50
1 to 2 years	 	 8	14	22
2 to 3 years	 	 14	16	30
3 years and over	 	 56	33	89

Total ..

191

6. The patients were classified as follows :----

Classification					Number
Manic depressive	psycho	osis	 	 	81
Schizophrenia			 	 	98
Mental defective			 	 	13
Delusions			 	 	1
Epilepsy			 	 	13
Senility			 	 	20
Spastic diplegia			 	 	2
General Paralysis	of the	Insane	 	 	2
Alcoholism			 	 	4
Involutional Mela			 	 	2
Psychosis with A	rteriosc	lerosis	 	 	4
Idiocy			 	 	6
Not yet diagnosed	d		 	 	5

7. The racial distribution and sex of patients was as follows:---

		Males	Females	Total
Europeans	 	 10	10	20
Fijians	 	 29	25	54
Indians	 	 87	70	157
Others	 	 13	7	20

8. One death occurred in the Hospital. It was due to pulmonary embolism in a case of pre-senile dementia.

		Europ	eans	Fiji	ans	Ind	ians	Oth	ers	To	tal	Total	
		M	F	M	F	M	F	М	F	M	F	M&F	
Remaining at end of 1957		8	8	16	10	54 33	48	11	5	89	71	160	
Admitted during 1958		2	2	14	14	33	22	2	2	51	40	91	
													2
Absent on Trial 1958		1	2	6	10	16	15	1		24	27	51	
Discharged during 1958		2		2		4				8		8	
Died during 1958						1				1		1	
Remaining at end of 1958		7	8	22	14	66	55	12	7	1 107	84	191	
													2
The number absent on tr	ial												
including those absent	on												
trial during 1958		9	8	32	29	56	73	8		105	110	215	

10. Forty-two patients received electro-convulsive therapy.

11. Quarterly visits were paid by the Board of Visitors.

12. Gifts to the Institution were made as follows :----

(a) Mr. and Mrs. Sakuthen, Indian pudding to all patients.

(b) St. Andrews Presbyterian Xmas Cheer Fund, fruit, biscuits, cigarettes for the patients.

(c) Dudley Girls' School, Toorak, a present to each female patient-soap, toothbrush.

(d) Rotary Club per Mrs. A. Bernard-a parcel to each patient.

(e) Mr. Tommy Dalip Ram (Fiji Construction Works) 17 dozen aerated waters.

(f) Mr. and Mrs. Pujana, Tamavua Hospital, a mid-day Sunday meal for all patients.

#### APPENDIX VI

## CENTRAL LEPROSY HOSPITAL, MAKOGAI, FIJI

The island of Makogai has been devoted since 1911 to the treatment of persons of all races suffering from leprosy. The northern half of the island is kept for the hospital and patients' villages; the arable land in this area is also given over to them for cultivation. The southern half of the island is reserved for the houses of members of the staff and for a small farm; it also provides the grazing for a herd of about 50 head of milk cattle. The island is volcanic in origin and measures approximately three miles from north to south by two miles from east to west. It rises steeply to 870 feet and there are two other peaks of over 700 feet.

2. The able-bodied male patients live in villages outside the central hospital, each race having its own village. Here they are encouraged to live as normal a village life as possible so as to reduce the likelihood of their becoming "institutionalized" and incapable of looking after themselves when they are discharged. Apart from sleeping and eating, they are at liberty to mix freely with patients of other races and racial harmony on the island is excellent. It is of interest to note that, over the years, a sort of Makogai "lingua franca" has developed consisting mainly of Fijian but with words and constructions from almost every other South Pacific language grafted on to it.

3. Within the hospital live all the female patients and those males who are too sick, too young or too old to look after themselves in the villages. Men and women are allowed to meet for a chat for an hour each morning and evening but, apart from this, it has been found that to keep the sexes strictly segregated is much the most satisfactory arrangement. When married couples are admitted as patients, they are allowed to live together but their children are removed at birth and brought up by the Sisters until they are old enough to be sent to relatives outside. Two such births occurred during 1958. No marriages are permitted between patients and no healthy relatives of patients are allowed to live on the island.

4. Since the founding of the Fiji Leprosy Hospital in 1911, 3,771 patients have been treated. There have been 1,658 cases of arrest of the disease, 476 repatriations, and 1,187 deaths. At the end of 1958 the number of patients was 450 of whom 338 were from within the Colony. During the year there were 38 admissions, 121 discharges and 11 deaths. Fifteen Gilbertese patients were repatriated. To the best of the writer's knowledge, 121 is the largest number of patients ever discharged from Makogai in one year. These figures do not include two patients who were admitted for investigation but discharged again when it was determined that they were not suffering from leprosy and one old patient who was re-admitted for surgical treatment of a trophic ulcer.

5. The patients actually in Makogai on 31st December, 1958, were divided racially as follows:-

Fijians					 120
Indians					 172
Europeans	and	part-Eu	ropean	s	 18
Chinese an	d oth	ers			 140

6. Establishment-The staff of the hospital consists of the following:-

Senior Medical Officer (Medical Superintendent) Local Superior of the Missionary Sisters of the Society of Mary 17 Sisters Executive Officer Class III Clerk Supervisor (Mechanical) Overseer (Stock, Farm and Labour) Sergeant, Corporal and 3 Police Constables Master of A.K. Makogai and 4 Members of Crew 41 Labourers.

7. The Medical Superintendent also acts as Sub-Accountant, Postmaster and Magistrate. He maintains a daily surgery for members of the staff and their families. During 1958 2,546 patients were seen.

8. The Medical Superintendent was absent from his post from 5th to 29th November during which time he travelled to Tokyo to represent Fiji at the VIIth International Congress of Leprology and the World Health Organization Inter-Regional Conference on Leprosy which was held immediately afterwards.

9. The following staff changes took place among the Sisters :---

Departures-

Sister Mary Judith, transferred to Australia, 17/2/58

Sister Mary Capistran, transferred to U.S.A., 3/3/58

Sister Mary Angelica, on leave to U.S.A., 10/5/58

Sister Mary Valentine, transferred to Suva, 7/10/58

- Sister Mary Monica, on leave to N.Z., 4/12/58 Sister Mary Dorothea, on leave to N.Z., 9/12/58

Arrivals-

Sister Mary Marguerita, transferred from Suva, 4/10/58

Sister Mary Alcime, transferred from Suva, 4/10/58

Both these Sisters were returning to Makogai after a temporary transfer to Suva.

10. Teaching—No Assistant Medical Officers underwent refresher courses in leprology during the year. Thirteen final-year students from the Central Medical School spent a fortnight in Makogai.

11. Statistics—The classification used in Makogai is a simplification of the Madrid classification. It is easy to use, simple to learn and adequate for statistical purposes. Cases are divided up as follows:—

Tuberculoid 1	•••	Cases with a few leprides and minor disturbances of sensation only
Tuberculoid 2	•••	Cases with thickened and painful nerves and/or more and larger leprides
Tuberculoid 3		Cases with deformities
Lepromatous 1		Cases with a few lepromata or with no skin lesions but with positive smears
Lepromatous 2	•••	Gases with numerous lepromata or several large ones, or with nodules
Lepromatous 3		Numerous and extensive lepromatous skin lesions with or with- out lesions of the mucous membranes
Indeterminate T/L		Indeterminate cases indicative of tuberculoid rather than lepromatous leprosy
Indeterminate L/T		Indeterminate cases indicative of lepromatous rather than tuberculoid leprosy.

		1958	1957	1956	1955
Total number of admissi	ons	38	49	60	45
Adults		29	42	43	39
Children (under 14)		9	7	17	6
Tuberculoid 1		6]	16	13]	9]
2		8 >16	11 >29	14 > 28	5 -17
3		2)	2	1)	3
Lepromatous 1		5]	4]	16	7]
. 2		9 >17	10 >14	11 > 32	19 27
3		3	0)	5	1
Indeterminate L/T		2	3		1
Indeterminate T/L		3	3		

12. It is appreciated that these figures extend over too short a period to be really significant, but it would seem from them that the number of cases being discovered annually in Fiji has not materially reduced. Moreover, the number of children admitted remains high in proportion to the total admissions which would seem to indicate a population without a high degree of resistance to the disease. The figures for 1956 are swollen by the admission in one batch of 11 patients from Tonga in that year. However, the proportion of tuberculoid cases admitted does seem to be rising which leads one to believe that some degree of immunity is beginning to develop.

13. The progress of the various patients divided by classification is shown in the next table :---

		TI	T2	T3	L1	L2	L3	T/L	L/T
Improved	 	42	47	62	79	102	16	9	1
Improved Stationary				4				2	2
Worse	 	3			13	13			

14. This table includes all those cases discharged during the year who are shown as having improved and also those admitted during the year, all except the earliest of whom are shown as stationary. The number of lepromatous cases is of interest in that it is more than twice the number of tuberculoid cases. This is extremely high.

15. The number of patients remaining stationary has risen and will continue to rise as our total numbers decrease until a stage is reached when the discharges equal the admissions. This is an inevitable concomitant of dwindling numbers.

16. The racial division of discharges and deaths is as follows :----

Discharges-(All patients notified as suffering from leprosy)

1.	Fijians			 	 34
	Indians			 	 40
3.	Europeans and Part-	-Euro	peans	 	 1
	Chinese and others			 	 46
				Total	121

## 17. Deaths-

1. Fijians

- (a) Bilateral lobar pneumonia
- (b) Acute gastro-enteritis
- (c) Chronic nephritis & anaemia
- (d) Chronic nephritis & anaemia
- (e) Lobar pneumonia & anaemia

2. Indians

- (a) Senility
- 3. Europeans and Part-Europeans-Nil.
- 4. Chinese and others
  - (a) Congestive cardiac failure and Bronchiectasis
  - (b) Right-sided cardiac failure and Bronchiectasis
  - (c) Cerebral thrombosis
  - (d) Chronic nephritis and anaemia
  - (e) Pulmonary embolism and anaemia

A CONTRACTOR OF A CONTRACTOR		otal	Num	ber of	Deat	hs:
------------------------------	--	------	-----	--------	------	-----

Fijians Indians	•••	••	 • •	5
Europeans and Part-	Europe	ans	 	
Chinese and Others		•••	 	5
				11

18. It is thought that much of the anemia and chronic nephritis seen in Makogai is due to amyloid disease but further study is required.

19. Treatment—No new departure was made in the standard treatment used which remained in almost every case Diamino-Diphenyl-Sulphone by mouth or by injection. A small trial was made of a proprietary preparation of Diamino-Diphenyl-Sulphone in Chaulmoogra oil given by twice weekly injections of 2 c.c. containing 400 mgm. Diamino-Diphenyl-Sulphone. It seemed to have no advantage over Diamino-Diphenyl-Sulphone alone when given in this dosage.

20. The long-term results of the surgical treatment of trophic ulcers recorded in the Annual Report for 1957 proved disappointing and over 50 per cent of these ulcers eventually broke down again. The treatment is, however, being persisted with but more detailed training in the after-care of their feet is being given to the patients involved.

21. Research—A trial was commenced in 1957 of the efficacy in leprosy of various drugs which are commonly used in the treatment of tuberculosis. Sixty patients took part in the trial. All were clinically inactive but bacteriologically positive at the commencement of the trial. They were divided by random selection into four groups of 15.

22. The first group was given Streptomycin 1 G. twice weekly, the second INAH 100 mg. twice daily, the third PAS 4 G. three times a day and the fourth was a control group. All four groups were also given Diamino-Diphenyl-Sulphone 400 mg. twice a week. The trial was continued for a year and then the results assessed by the Medical Superintendent and a Sister. Neither of them knew at the time to which group a particular patient belonged. Of Group I, thirteen patients had improved, that is, they were still inactive and their smears had become negative or much less positive. Of Group II, fourteen had improved; of Group III, twelve had improved and of Group IV, thirteen had improved. It was concluded that, although the trial was small in numbers and of short duration, there was little point in persisting with it as the control group was doing just as well as the others. Streptomycin, INAH and PAS given in the doses used seem to have no effect in enhancing the value of Diamino-Diphenyl-Sulphone.

23. Tuberculosis—All patients undergo routine chest X-ray on admission and again at intervals of three years. During 1958, two new cases of pulmonary tuberculosis were discovered and two old cases were found to have become active again. One patient was discharged from the Tuberculosis Ward. At the end of the year, eight cases were undergoing treatment; there were 44 patients who, at one time or another, had been notified as having tuberculosis and there were 54 cases who had chest X-rays sufficiently suspicious to warrant their being checked at more frequent intervals—usually every six months.

24. X-Ray and Physiotherapy Departments—These two departments remained active throughout the year in spite of space being very cramped. In December, a fine new Physiotherapy Department was opened which has eased the situation considerably.

25. During the year, 540 X-rays were taken. That this is a lesser number than usual is due to the declining number of patients and partly to the fact that the routine chest X-rays were completed in 1957 and it was not until the latter half of 1958 that the first patients to be done became due again for examination.

26. In the Physiotherapy Department, 2,876 sessions of exercises were held and 5,616 patients underwent electro-therapy of various types, many of the latter also having massage.

27. Surgery—All surgery is carried out single-handed by the Medical Superintendent. Local or spinal anaesthesia is used as much as possible. When general anaesthesia is unavoidable, the simplest type of open ether inhalation is administered by a Sister under the supervision of the Surgeon. 102 operations were performed during 1958 and they fell into the following groups—

Incision of abscess				 	 10
Excision and scrapin,	g of tro	ophic u	lcers	 	 28
Y		-		 	 3
Excision of sebaceous	s cysts			 	 15
Supra-pubic cystoton	nv			 	 1
Excision of ischio-rec		ula		 	 1
Enucleation of toe-na				 	 3
Manipulation of shou	lder ur	nder G.	A.	 	 1
Reduction of dislocat				 	 1
Removal of ganglion	from v	vrist		 	 1
Amputation of digits				 	 8
Plastic operation to o				 	 4
Plastic operation to o				 	 2
Removal of lipoma fi				 	 1
Decapsulation of ner				 	 5
Circumcision				 	 8
Appendicectomy				 	 1
Exploratory laparoto					 2
Gastro-enterostomy				 	 1
Herniorrhaphy				 	 2
Radical cure of hydr				 	 4
				Total	 102

28. Dentistry—The Sister who normally carries out routine dentistry departed on leave during the year and her job was gallantly taken over by another Sister. In spite of having had no previous training, she soon became adept.

29. A Dental Officer visited Makogai for about a fortnight and prepared and fitted 8 total and 18 partial dentures.

30. The following routine dental treatment was carried out-

Treatment of	mouth	and	gums	 	 	315
Filling of cav	ities			 	 	55
Extractions				 	 	324
Scaling				 	 	13
Dentures (con	mplete	and	partial)	 	 	26

31. Laboratory—The laboratory was staffed throughout most of the year by one Sister but pressure of work necessitated the posting of a second Sister from time to time. The normal heavy traffic in urine examinations, blood counts and sputum examinations was carried out. In addition, every patient had his or her haemoglobin estimated every two months. No fewer than 5,594 skin smears were examined for mycobacterium leprae.

32. Occupational Therapy—Practically every patient who is fit for it is now employed in some fashion. The Ernest Wolfgramm Technical Institute and the Alice Austin Arts and Crafts Centre are always busy. All teachers in these and the Makogai School are patients and the pupils show great enthusiasm. The standard of work turned out seems to achieve new heights every year. The new Physiotherapy building was built entirely by patients and extensive reconstructive work was carried out in the villages.

33. The Sisters' quarters were renovated and repainted for the first time in 23 years and this work was also performed by patients. In spite of prolonged drought, the gardens and plantations are flourishing.

34. The Boy Scouts built themselves two new boats—a fast motor launch and a dinghy, and the patients also built a work-boat for collecting copra, and a new dinghy for the launch, *Eileen*.

35. The Boy Scouts and the Girl Guides are enthusiastically active and all sporting events— Soccer, Cricket and Basketball as well as our annual Sports Day—were vigorously contested.

36. Lepers' Trust Board—The Lepers' Trust Board continued to exhibit its customary generosity. The Physiotherapy building referred to above was built with funds contributed by the Board and it was fitting that it should be opened in December by Sir Hugh Ragg who is Chairman of the Fiji branch of the Board. The usual stream of gift boxes, all crammed with good things, continued to arrive throughout the year. Indeed, so many boxes arrived that we ran short of storage space for them and had to ask the Board to build us a new store for this purpose which they promptly gave us the money to do. At the end of the year it was almost completed.

37. The Fiji branch of the Lepers' Trust Board visited Makogai in December and held a meeting here.

38. Visitors—The highlight of the year was a visit from Her Majesty, Queen Salote of Tonga which took place in March. Her Majesty spent a night in Makogai and endeared herself to all by her great charm and friendliness.

39. In all, 78 persons signed our Visitors' Book in 1958, although this is not the total number of people who visited us during the year. The following list gives an idea of the variety of people we meet during a year's work:—

Superintendent of Police, Levuka Rev. C. A. Hatcher, Methodist Mission, Levuka Senior Magistrate, Suva District Medical Officer, Eastern Her Majesty Queen Salote of Tonga Ship's complement of H.M.N.Z.S. *Pukaki* Rev. John Dodd, Church of England Mission, Levuka Dental Officer, Suva Chief Medical Officer, Gilbert and Ellice Islands Colony Members of Sergeants' Mess, R.N.Z.A.F. Station, Laucala Bay, Suva Meteorological Officer, Suva Director of Medical Services Deputy Director of Medical Services Members of the Lepers' Trust Board (Fiji) Inc. Most Reverend Bishop Foley.

40. Special mention must be made of the visit of the members of the Sergeants' Mess of the R.N.Z.A.F. Station, Laucala Bay, Suva. This visit which is made by Sunderland Flying Boat has now become an annual pre-Christmas event. Each year these gentlemen make a most generous donation of gifts to the patients and a contribution to the Comforts Fund. This year they presented a cheque to the value of  $\pounds$ 116 0s. 0d. all of which sum they collected among themselves.

41. General—The year saw two new staff quarters completed in Nasau. These were badly needed.

42. A new spring was discovered by one of the patients at the northern end of the island, tapped and fed into a well. This well was then connected with the water mains and contributes an estimated 10,000 gallons a day to the hospital area.

43. Makogai suffered from its second successive year of drought so this additional water was most welcome. As well as drought, we had "near misses" from two hurricanes, one in February and the other in December. Minor structural damage occurred but crops and coconut trees suffered considerably.

44. In conclusion, it gives great pleasure to place on record a debt of gratitude to the Sisters and lay staff of the hospital for their unfailing help and cheerfulness.

### APPENDIX VII

## ST. ELIZABETH HOME-KOROVOU, SUVA

Discharged cases from Makogai housed until transport was arranged for their various destinations in and outside the Colony-

			Male	Female	Total
Fijians		 	 15	17	32
Indians		 	 27	14	41
Cook Islanders		 	 3	1	4
Gilbertese		 	 3	6	9
Solomon Island	ers	 	 5	4	9
Tongans		 	 6	2	8
Euronesians		 	 1		1
Rotumans		 	 1	3	4
Chinese		 	 1		1
Samoans		 ••	 3	5	8
			65	52	117

2. Patients housed pending removal to Makogai:---

			Male	Female	Total
Fijians		 	 12	5	17
Indians		 	 17	4	21
Solomon Island	iers	 	 1		1
Euronesians		 	 1	1	2
Rotumans		 	 1		1
				-	
			32	10	42

3. Patients on survey, or other matters, housed during the year:---

			Male	Female	Total
Fijians .		 	 24	12	36
Indiana		 	 17	6	23
Solomon I	slanders	 	 3	6	9
Rotumans		 	 1		1
			-		
			45	24	69

4. Total number of discharged patients from Suva, Rural and Urban, during 1958:-

Suva Urban	 	 	Male 8	Female 1	Total 9
Suva Rural	 	 	11	12	23
			-		
			19	13	32

#### APPENDIX VIII

## DENTAL DIVISION-MEDICAL DEPARTMENT

The dental health programme in Fiji has developed around three main parts which are closely interwoven-

(1) Training of Dental Personnel (see Central Medical School-Appendix X)

- (2) Provision of Dental Treatment
- (3) Dental Health Education and Preventive Dentistry.

#### (2) PROVISION OF DENTAL TREATMENT

(a) Suva Dental Clinic 2. This clinic has 9 chairs in the main surgery and a theatre for surgical operations together with three offices, a laboratory, a waiting room, a dark room, a lecture room and toilets. It serves as administrative headquarters for the dental division and also as dental school.

Staff-

D. M. Ellerton, B.	D.S.		 Senior Dental Officer
I. L. Vosailagi, B.I	D.S.		 Dental Officer
Mrs. N. H. Palmer			 Dental Hygienist
I. Nadakuitavuki			 Assistant Dental Officer
No. 1911 1			 Assistant Dental Officer
A /A			 Assistant Dental Officer
L. Narayan			 Assistant Dental Officer
J. Savou			 Assistant Dental Officer
K. Vatanimato		1	 Assistant Dental Officer
Sister M. Usher			 Nursing Sister
M. Vidovi			 Senior Nurse
Madan Pal			 Assistant Dental Mechanic
· · · · · · · · · · · · · · · · · · ·			 Assistant Dental Mechanic
Susan Pene			 Assistant Dental Hygienist
			 rise in the second my gremst

Dental Officer A. H. Thomson of the Central Medical School staff is in charge of Conservative Dentistry and conducts an Orthodontic clinic for school children.

Dental Officer J. L. Godfrey of the Central Medical School staff is in charge of Prosthetic Dentistry.

Final year students in the course of their clinical training contributed largely to the treatments carried out.

4. Treatments provided-

caiments proviaca	<i>i</i> —						
Operative-							
Fillings							3,806
Temporary							2,182
P 15							554
Surgery-							
Extraction	s-per	mane	nt				4,718
		iduou					2,815
Surgical oper							73
General A							135
Fractured	Mandil	ble fix	ations				37
Radiography-							
Films take	n						815
Dentures-							
Complete o	lenture	0					51
Full upper				•••			12
Partial der		wei					56
Repairs an							66
Attendances-A							461
Europeans Dort Europ		•••					372
Part-Europ		•••				•••	2,820
Fijians Indians		••	••	••	•••		2,738
Others	•••	•••	••				408
Others	••				•••	•••	
					Total		6,799
Attendances-C	hildren	_					
Europeans							944
Part-Europ							1,193
and the second s							1,557
Indians							3,782
Others							460
					Total		7,936
Total	Adult :	and C	hild Att	endar	nces		14,735
Revenue							£1,673 9s. 6d.

#### (b) Lautoka Dental Clinic

5. This clinic was moved in May from the Lautoka Hospital to the Health Office. It consists of a surgery equipped with a hydraulic dental chair and electric dental unit and a waiting room. The clinic was operated during the year by Assistant Dental Officer Pillai and Assistant Dental Hygienist Eunice Prasad. Dental tours were made to schools in Nadi, Lautoka, Ba, Raki Raki, Yasawas, Vatulele and Malolo.

					1,637
					538
					3,851
s					11
	ations				11
					156
i					1,532
					5,454
					53
					£417 5s. 0d.
	le fix:	s s le fixations	s s le fixations  s	s s le fixations  s	s s le fixations  s

6. T

8

10. Treatm

### (c) Labasa Dental Clinic

7. This clinic, in a small building adjacent to the hospital, is equipped with a hydraulic chair and a newly installed modern electric dental unit. It was operated during the year by Assistant Dental Officer Ligani while he was not away on dental tours to schools in other parts of Vanua Levu and Taveuni.

Treatments provided—			
Permanent fillings		 	 1,104
Extractions	 	 	 3,550
Scalings	 	 	 57
Adult attendances		 	 895
Child attendances	 	 	 3,172
Schools visited	 	 	 26
Revenue	 	 	 £231 15s. 0d.

#### (d) Levuka Dental Clinic

9. This clinic, in the medical office, is equipped with a hydraulic chair and a newly installed modern electric dental unit. It was operated until May by Assistant Dental Officer Masi and since then by Assistant Dental Officer Savou. Assistant Dental Hygienist C. Miller was recalled to Suva at the year's end. The size of the clinic was enlarged during the year. Dental tours were made to schools in Gau, Batiki, Nairai, Koro, Moturiki, Lakeba and Kadavu.

nents provided—					
Permanent fillings					994
Temporary fillings					226
Extractions					1,201
Scalings					96
Total attendances		 			1,606
Schools visited					17
Revenue				÷ .	£151 8s. 0d.

#### (e) Mobile Dental Clinic

11. This two-chair vehicle with generator trailer was manufactured in England and purchased with the aid of a grant from the Colonial Sugar Refining Company Limited. Both vehicle and generator are diesel powered. The clinic commenced a circuit of Viti Levu via Queens Road in August carrying a staff of two Assistant Dental Officers and a driver.

2. 7	reatments provided—			
	Fillings	 	 	 998
	Extractions	 	 	 5,548
	Schools visited	 	 	 66

#### (f) Travelling Dental Teams

13. Throughout the year a team consisting of two Assistant Dental Officers and an Assistant Dental Hygienist and using portable dental equipment visited schools in the Suva district to provide dental treatment for the pupils. With only two dentists available and so many children to be treated, each school can be visited only once a year and the treatment provided in the time available for each school must be restricted to extractions only—extractions of teeth which would have been filled on the previous visit if more staff had been available.

14. Field trips were made to Kadavu and Makogai.

### (g) Tamavua Dental Clinic

15. An Assistant Dental Officer was in attendance on Saturday mornings throughout the

year.

#### 16. Treatments provided-

Fillings	 	 	111
Temporary fillings	 	 	97
Extractions	 	 	621
Scalings	 	 	25
Miscellaneous treatments		 	40

#### (h) Rural Dispensaries

17. Each dispensary is provided with a basic set of forceps to enable the Assistant Medical Officers to extract diseased teeth.

#### (3) DENTAL HEALTH EDUCATION AND PREVENTIVE DENTISTRY

18. Again this year the policy has been to concentrate our health education programme on children in their schools. The dental treatment visit at each school is always concluded with a talk on the teeth, dental disease, diet and oral hygiene. These talks were given in over 150 schools in the year. The scheme to provide toothbrushes in schools at a cost of 3d. each continued. In schools with enthusiastic headmasters who see that each child cleans his teeth once a day, the improvement in oral hygiene is remarkable.

19. In December the first of the specially designed and constructed toothbrush cabinets was installed in a Suva school. These ventilated cabinets provide a hygienic and tidy storage for brushes. Three sizes are available.

20. During the year, 200 copies of each of the four dental posters designed by the Dental Hygienist were reproduced by the Literature Bureau of the South Pacific Commission, and distribution to schools commenced.

#### APPENDIX IX

#### PATHOLOGICAL DIVISION

Staff—The Pathologist was on duty throughout the year. The Laboratory Superintendent, the Chief Laboratory Assistant and one Senior Laboratory Assistant were all on vacation leave in turn during the year.

 The rest of the staff were on duty throughout the year. One Assistant was granted a Scholarship to study Biochemistry in Melbourne.

3. Eleven students were training during 1958. Seven of these were local, and one each from Papau/New Guinea, American Samoa and Niue. Of these, one local student in his later years resigned, and one local student in his early training was found unsuitable. These two vacancies are at present unfilled in accordance with general policy. This will delay expansion of the Laboratory service and realization of our aim to supply trained Assistants to other hospitals.

 Three students, one local, one from Niue and one from New Guinea have almost completed their course and should qualify as Assistants in 1959.

5. The appointment of a suitable Assistant Medical Officer for training as an Assistant to the Pathologist was again deferred. Several Assistant Medical Officers were attached to the Laboratory for short periods and proved how useful a suitable one could be in helping the Pathologist in work which needs medical training.

 Teaching—The Pathologist continued the teaching of general pathology, bacteriology and clinical pathology and forensic medicine in the Medical School and, with senior trained members of the Laboratory staff, gave lectures to the Laboratory students to supplement their bench training.

7. Blood Transfusion Service—A blood bank was started in the early part of the year, with a domestic type of refrigerator, to hold a small supply of blood for emergencies. The use of blood in the Colonial War Memorial Hospital increased again during the year. 1,011 pints of blood were crossed matched with patients. If this need increases, the provision of extra staff for this service will have to be considered. A specially designed refrigerator and a separate room have been approved for 1959. The biood bank has worked fairly well. It has been hampered by rather poor attendance of donors. Many who had entered their names and been tested did not attend when called. The emergency list of donors with telephones was enlarged and these donors attended when called with their usual willingness.

8. Routine Examinations—These, as previously, comprised the main work of the division and were of a very varied nature as shown in detail in Table I, with the principle positive findings in Table II. The total number of examinations was 46,644 which is slightly less than last year, but more than any other previous years.

9. The Laboratory with its present staff is working to full capacity and no Assistants are at present available to staff sub-Laboratories at other hospitals.

10. A feature of the year's work was a very considerable increase, 1,304 as compared with 987 in 1958, in specimens for histology, and in specimens for forensic purposes, 257 as compared with 127 in 1958. These examinations have to be dealt with by the Pathologist, and are ones in which a trained Assistant Medical Officer could help. The number of specimens examined over the years was:—

1939		 	7,060	1940	 	7,930
1941		 	19,971	1942	 	17,123
1943		 	25,784	1944	 	29,500
1945		 	33,041	1946	 	27,149
1947		 	26,291	1948	 	27,557
1949	/	 	27,570	1950	 	29,742
1952	.1	 	26,348	1953	 	24,527
1954		 	33,469	1955	 	42,487
1956		 	44,470	1957	 	49,552
1958		 	46,644			

11. Sources of Specimens—The principle senders of specimens are shown in Table VI—67 per cent of the specimens were received from the Colonial War Memorial Hospital, or 76 per cent including the Maternity Annexe. There has been an increase in specimens from the surgical wards and Out-patients Departments as compared with last year. 969 specimens were received from private practitioners and 21, mainly histology, from other territories.

Accidents-						
Injuries from falls						4
Collapse of building	1.1					1
Traffic						7
Drowning						5
Poisons-						
Barbiturate						1
Kerosene				21		1
Strychnine						î
Fish						î
						-
Suicide-						
Hanging						13
00						10
Homicide-						
Sharp instruments						4
Blunt instruments				1001	100	2
						-
Natural Causes—Adults—						
Acute infections	2.					17
Rheumatic infections						3
Tuberculosis						4
Vascular degenerations,						11
Cirrhosis of liver				1996		4
Malignant tumours						7
er en						
Children—						
Cirrhosis of liver						7
Congenital abnormali	ties					2
Acute infections						6
Tuberculosis						2
Rheumatic fever						1
Neo-natal Deaths—						
Still births						3
Congenital abnormalitie	s					5
Acute infections						12
Tentorial tears						2
Pre-maturity						1
Obstruction by meconiu	m in a	ir passa	ages			1
			1990 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (			
Infants-not Neo-natal—						
Acute infections						11

13. Blood Grouping—The groups of blood found according to race are shown in Table V. There was a high percentage of group "B" in Indians and of Group "AB" among Fijians.

14. Khan Reactions—Khan reactions showed the same preponderance as formerly of Fijians and other island peoples with positive reactions in spite of a recent campaign of treatment for yaws.

15. 25 per cent of Fijians examined showed a positive reaction, with 14 per cent strongly positive, and 15 per cent of "others" who are mainly other island people. The incidence among Indians was 8 per cent and Europeans 1 per cent.

16. A number of healthy volunteer blood donors were found to give positive reactions and it was thought advisable not to place these on the donor list.

17. Details of these reactions by race are shown in Table III.

18. Branch Laboratory—Lautoka—A total of 20,423 examinations was carried out in this Laboratory, which was staffed for most of the year by one Assistant and a cleaner.

19. Increase in the number of the staff in this branch is urgently needed, but they are not at present available. Details of the examinations are shown in Table VI.

# TABLE I

# CENTRAL LABORATARY, SUVA

# Details of specimens etc. examined in Central Laboratory, 1958

Material from biopsies et	c		1,053		7. Vaccines Prepared— T.A.B. 50 c.c. bottles 1,090	
autopsics.			249		Autogenous vaccines	
Animal tissues			2			1,090
				1,304	8. Biochemistry-	
2. Haematology-					Estimations in blood and serum-	
Blood counts-			0.000		Urea and non-protein nitrogen 676	
White cell counts .		••	3,396		Sugar	
Differential counts .		••	3,514		00	
Eosinophile counts .			1,069		10	
Red cell counts Haematocrit readings			868		12	
Haemoglobin estimati			3.748		Calcium	
Reticulocyte counts .			1,315		Acid phosphatase 34	
Blood sedimentation rat			2,098		Van den Bergh reactions	
			2,907		Bilirubin estimation 239	
Rh grouping			109		Thymol turbidity test 169	
Donors bled for transfus	ion		784		Alkaline phosphatase 169	
			1,011		Icterus index 5	0.10
			5			2,197
		••	75		Electolytes-	
			81 48		Sodium 81 Potassium	
			48			
		••	2			
		••	107			
Marrow smears	· ··	••	107	21,319	Co <sub>2</sub> combining power 3	23
3. Seminal Fluid-				artore	Urine	
178 - Fall			11		Routine and microscopical examina-	
Fertility tests				11	tions	
. Parasitology-					Excretion of ascorbic acid 157	
Faeces-					Bile 5	
A PERSONAL AND A PERSON AND A P			4,715		Estimation of Urea 2	
						5,59
Blood-					Cerebro-spinal fluids	4
Films for malaria			32		Cytology 437	
A #1			464		Pandy tests 437	
Mucosal scraping for a			8		Protein 437	
			-	5,219	Sugar 437	
5. Bacteriology-				and the second second	Chlorides 437	1000
Microscopic examination	is for G.C.	etc				2,18
Vaginal and cervical	mears .		505		Faeces-	
Urethral smears (Mal			254		Occult blood 165	
Sputum			604		Fat estimation 3	
Skin lesions for M. lej			85		Trypsin 2	
Nasal smears for M. I			191			17
Skin lesions for fungu			29		Functional test meals. 59	
Gastric washings			132		17	
Dark background for	treponema		10	1 910		
0.1				1,810	Grategoe toretante totto	
Cultures-						
For M. tuberculosis-			82			
Urine			42		in the second seco	
Cerebro-spinal fluid		••	126		Water concentration tests I	18
			22		9. Animal Inoculations-	
Line and Aviadate	•• ••		29		Toads for pregnancy tests 121	
					Guinea pigs for leptospira 2	
Gastric washings						
			8	309	Contra pige ter reprospere ter ter	12
Gastric washings Others			-	309		12
Gastric washings Others General Cultures—			419	309		12
Gastric washings Others General Cultures				309		
Gastric washings Others General Cultures— Urine			419	309	10. Rats for Plague	
Gastric washings Others General Cultures Urine Blood	:		419 147	309	10. Rats for Plague	
Gastric washings Others General Cultures Urine Blood Faeces Pus and fluids			419 147 223 219 521	309	10. Rats for Plague	
Gastric washings Others General Cultures Urine Blood Faeces Pus and fluids		  	419 147 223 219 521 437	309	10. Rats for Plague	
Gastric washings Others General Cultures Urine Blood Faeces Pus and fluids Throat swabs			419 147 223 219 521 437 168	309	10. Rats for Plague	
Gastric washings Others General Cultures Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui	ds		419 147 223 219 521 437		10. Rats for Plague	
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab	ls ral dischar		419 147 223 219 521 437 168 8	309 2,142	10. Rats for Plague	
Gastric washings Others General Cultures	is is in the second sec		419 147 223 219 521 437 168 8		10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)—         Examinations for blood stains—         Weapons       39         Clothing, etc.       111         Scrapings, etc.       14         Money       1         Examinations for seminal stains,	
Gastric washings Others General Cultures	is is in the second sec		419 147 223 219 521 437 168 8 353		10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)—         Examinations for blood stains—         Weapons       39         Clothing, etc.       111         Scrapings, etc.       14         Money       1         Examinations for seminal stains,       10	
Gastric washings Others General Cultures Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths	is is in the second sec		419 147 223 219 521 437 168 8 353 31		10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)—         Examinations for blood stains—         Weapons       39         Clothing, etc.       39         Clothing, etc.       111         Scrapings, etc.       111         Examinations for seminal stains, clothing, etc.       10         Blood grouping suspects, etc.       5	
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths Food	la ral dischar tion of wat	     ter etc	419 147 223 219 521 437 168 8 353 31 14		10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)—         Examinations for blood stains—         Weapons       39         Clothing, etc.       111         Scrapings, etc.       14         Money       1         Examinations for seminal stains,       10	
Gastric washings Others General Cultures Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths	la ral dischar tion of wat	    	419 147 223 219 521 437 168 8 - 353 31 144 1		10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)— Examinations for blood stains— Weapons	
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths Food	ds	    ter etc	419 147 223 219 521 437 168 8 353 31 14	2,142	10. Rats for Plague	
Gastric washings Others General Cultures	tion of wat	         	419 147 223 219 521 437 168 8 - 353 31 144 1		10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)—         Examinations for blood stains—         Weapons       39         Clothing, etc.       39         Clothing, etc.       111         Scrapings, etc.       111         Kraminations for seminal stains,       10         Blood grouping suspects, etc.       5         Vaginal swabs for spermatozoa       15         12. Post Mortem Examinations—       20         Colonial War Memorial Hospital       80	
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths Food Milk Ice Cream 6. Serology—	tion of wat	         	419 147 223 219 521 437 168 8 - 353 31 144 1	2,142	10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)— Examinations for blood stains— Weapons	
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths Food Milk Ice Cream 6. Serology— Agglutination tests—	tion of wat	         	419 147 223 219 521 437 168 8 	2,142	10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)— Examinations for blood stains— Weapons	
Gastric washings Others General Cultures	tion of wat	         	419 147 223 219 521 437 168 8 - 353 31 14 14 1 8 - 353 31 14 103	2,142	10. Rats for Plague	
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths Food Milk Ice Cream 6. Serology— Agglutination tests— For typhoid and par Brucellosis group	tion of wat	rge  ter etc  	419 147 223 219 521 437 168 8 - 353 31 14 14 1 8 - - - - - - - - - - - - - - - - - -	2,142	10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)— Examinations for blood stains— Weapons	
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths Food Milk Ice Cream 6. Serology— Agglutination tests— For typhoid and par Brucellosis group Weil-Felix	tion of wat	rge ter etc 2	419 147 223 219 521 437 168 8 - 353 31 14 1 8 - 103 32 5	2,142	10. Rats for Plague	4
Gastric washings Others General Cultures	tion of wat	rge	419 147 223 219 521 437 168 8 	2,142	10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)— Examinations for blood stains— Weapons	12 4 25 16
Gastric washings Others General Cultures— Urine Blood Faeces Pus and fluids Throat swabs Cerebro-spinal flui Vaginal and Ureth Conjunctival swab Bacteriological examina Drinking water supp Sea water baths Food Milk Ice Cream 6. Serology— Agglutination tests— For typhoid and par Brucellosis group Weil-Felix	tion of wat	rge ter etc 2	419 147 223 219 521 437 168 8 - 353 31 14 1 8 - 103 32 5	2,142	10. Rats for Plague       49         11. Forensic Specimens (Other than autopsies)— Examinations for blood stains— Weapons	4

# TABLE II

# CENTRAL LABORATORY, SUVA

# Principle Positive Findings, 1958

6.

						apre 1 of
1.	Histology-					
						74
	Acute inflammations					74
	Chronic non-specific infla				••	33
	Tuberculosis			••	• •	33
	Leprosy					8
	Rheumatic tissues				**	3
	Hyperplasia-					
	Endometrium				42	
	Prostate				10	
					2	
	Breast				4	54
	and the second second					
	Products of conception					82
	Tumours-					
	and the second se				82	
					84	
	Malignant				04	166
	Isolated myocarditis					2
0	Harmateler					
2.						
	(14.6%  gms = 100%)					1 501
	Hb. values-90% and or	ver			• •	1,521
	80-89% 70-79%	* *		**		2,030
	70-79%					1,988
	60-69%					1,476
	50-59%					831
	40-49%					546
	Less than 40%		199			391
	Red cells, alteration in	morph	hology	-		1000
	Anisocytosis					393
	Poikilocytosis					268
	Polychromasia					87
	Nucleated Red cells					88
	Punctate Basophilia					2
	Polycythaemia					2
						-
	White Cells-	-				1111
	Neutrophile Leucocyte	0515				440
	Lymphocytosis					46
	Eosinophilia				· · ·	513
	Leucopenia					5
	Agranulocytosis					2
	Infective mononucleos	is				5
	Leukaemia			229		11
						10
	Prolonged bleeding time		**	••		7
	Long clotting time	**	**			25
	Low platelet count				1.1	25
	Marrow smears-					
	Normoblastic erythop	oesis		See		57
	Primitive normoblasti		hopoes	is		18
	Megaloblastic erythop				-	17
	Aplastic marrow			100		12
	A REAL PROPERTY OF THE REAL					
	Blood Groups-					
	(See separate table V)					869
		В				594
	A	AB				165
		0				1,054
	Blood Sedimentation rat					and the second second
			1.			431
	mms per hour 10-20 21-30					448
	31-40					367
	41-50	••	1.0		**	299
	51 and	over				214
	Under 10		**	**		204
2	Fertility Test-					
-	Aspermia			1000	100	2
	subcomp					-
4.	Parasitology-					
	Faeces microscopic-					
	Ova-Ankylostomes		175.32	1000	12700	1,171
	Ascaris lumbrico	videa	1.1			314
			••		••	129
	Trichuris trichu					26
	Interobius verm		15			
	Cysts-Ent. histolytic					2
	Ent. coli					66
	Giardia lambli					10
	Iodamobae but	tschlii				3
	Protozoa-Ent. histoly	vtica a	vegetat	ive		10
	Urine trichomonas vag					10
	Blood microfilariae	cinans.				45
	interonationalities					40

5.	Bacteriology				
	Films-				
	Vaginal and cervical smears, N Urethral smears (male) N. gon				11 88
	Children-Vulva vaginitis, N.				2
	Sputum-				
	M. Tuberculosis				15
	Hansen's bacillus		**	••	3
	Dark background examination- Tr. pallidum	-			1
	Cultures-				
	M. tuberculosis grown in-				
	sputum				4
			••		4
					2
	General cultures-				
	Urine-B. coli				52
	Staphylococcus pyoger Streptococci	108	• •		30 8
	Other coliform organis	ms	1		4
	Bllod-Staphylococcus pyogen				1
	Diplococcus pneumoni: S. Paratyphi A				1
	Salmonella paratyphi I		11		î
	B. Coli				1
	Faeces-Shigella flexneri V Shigella flexneri W		•••		9 1
	Shigella ambigua (Scl	hnitz's	baci	Hus)	3
	Staphylococcus pyoge				2
	Salmonella paratypho	sum /	1		4
	Pus and fluids etc				190
	Staphylococcus pyogenes . (penicillin sensitive 46)		**		139
	(untested 16)				
	Haemolytic streptococci .	•	••		8 10
	B. proteus		11		10
	Other coliform organisms .				5
	Throat Swabs-				
	Corynebacterium diphtheriae .		• •	••	9 127
	P	2	11		150
	191 B				17
			· ·		1
	Vaginal and urethral cultures- (Male) N. gonorrhoea				20
	All and a second s	1			19
	177 C 1 1 1 1 1				4
		•	• •		35
	Haemolytic streptococcus . Conjunctival Swabs	•			3
	N. gonorrhoea				6
	Staphylococcus pyogenes .				3
	Cerebro-spinal fluids-				
	H. influenzae Diplococcus pneumoniae	•	••		12 14
	Staphylococcus pyogenes	:			1
					1
P	and any				
	ierology—				
D	hagnostic titres for	2		4	
	, paratyphi A .			11	
	" paratyphi B .	•	••	5	20
	Kahan Reactions-				-
	(See separate table 111)			~.	
	Strong positive			54 60	
	Weak positive			188	
					302
	Anti-streptolysin 0 titres-			3	
	50	2		7	
				11	
	166			13	
	250			13 13	
	230			4	
	625 and over			13	
					77

Biochemistry-			
Blood and Serum— High urea and non-prote High single blood sugar—	in nitrogen -Fasting Random	 52 73	117
			125
High cholesterol		 	13
" uric acid		 	14
" calcium		 	2
" acid phosphatase		 	2
Van den Bergh Reaction-			
Direct positive	1.1	96	
Indirect positive		 2	
maneer positive		 	98
Bilirubin high		 	95
Thymol turbidity high			60
Icterus index high		 	1
Urine-			
			474
Protein present		 	86
Sugar present		 	23
Acetone present		 	
Bile present		 	27
Blood present		 	261
Pus present		 	135
Casts present		 	220
No excretion of ascorbic	acid	 	11

7.

Cerebro-spinal flu	id					
Pandy test pos			14	1		138
Protein high			11			144
Sugar low						19
Chlorides low						5
Cells increased-	-Neu	trophil	les		39	
	Lyn	nphocy	tes		89	
					-	128
Faeces-						
Occult blood p	resent				**	114
Eunctional tests	1000					
		ers-di	aberic	14.00	100	19
	Lymphocytes 89 					
		-				0
Hyperchlohydr	na.					2 13
Histamine free	achlo	shydria				15
Animal inoculatio	ms-					
		st-por	sitive	1000		11
<ul> <li>Forensic Medicine Human blood sta</li> </ul>						
					10	
					50	
Clothing etc.					4	
Scrapings					10	64
Human seminal	tains	100				
Clothing		12.52		199	10	10
	•••					1
Human hairs						9

TABLE III KAHN REACTIONS, 1958

	Negativ	e Weak Positive	Positive	Strong Positive	Total %	Positive	Strong Positive
Fijians	··· 885 ··· 217 ··· 168 ··· 76	89 3	23 27 2 8	27 22  5	1,015 355 174 105	8% 25% 1% 15%	5% 14% 1% 12%
Total	1,345	188	60	54	1,649	49%	32%

			SE	NDERS	OF S	PECIM	ENS IS	958				-		
	C.W.M	LH.	Ĩ.	2					ac-	5	U	1		.4
	Medical wards	Surg. wards	Out- Patient Dept.	Annexe	A.N.C.	Other Hospi- tals	Other Govt. Depts	Health Office	P. Prac- titioners	Services	Police	Sava C.C.	Lab.	Other Terris.
Haematolgy and Ser- ology Bacteriology Biochemistry Grouping Stools Food and Water etc. Forensic specimens Post Mortem Exami- nations	4,859 2,937 1,462 467 1,206 6 	2,277 1,020 433 1,444 521 798 	2,968 1,954 256  1,120 39  	2,174 505 160 486 55 5   23	768 14   	621 407 229  249 173  5	323 149 4  304 2  8	118 380 1  368  386  1	495 175 40 11 246 2  	549 172 25 104 629 3 15 	  249 55		445 24 4 138  249  	··· ··· 21 ···
	11,017	6,493	6,337	3,408	782	1,684	790	1,254	969	1,497	304	87	860	21

TABLE IV

TABLE V BLOOD GROUPS BY RACE

		Group	% of Total	A	% of Total	В	% of Total	AB	% of Total	Total
Indians Fijians Europeans Others	 	474 372 144 64	37% 40% 41% 53%	390 307 140 32	30% 32% 40% 27%	384 152 47 15	30% 17% 14% 13%	38 102 17 8	3% 11% 5% 7%	1,286 933 348 119

### TABLE VI

### BRANCH LABORATORY, LAUTOKA

Haematology-			4. Serology-	
Blood counts-			Agglutination tests-	
White cell counts	730		For typhoid, etc 53	
Differential counts	697			5
Red cell counts	254			
Haemoglobin estimations	7,330		5. Biochemistry-	
Blood sedimentation rates	2,395		Estimations in blood-	
Blood grouping	1,212			
	419		and the state of the state	
	10		Urea 157	24
Platelet counts	108			24
Haematocrit readings			Estimations in serum-	
Bleeding times	8		Van den Bergh 37	
Clotting times	8		Protein 9	
Fragility test	1			14
		13,172	Urine-	
			Routine 1,560	
			10	
Parasitology-				
Faeces-				1,6
Microscopical examinations	1,164			1,0
Steroscopical cantinations		1,164		
		.,	Gastric analysis 58	1
Blood-				
Films for malaria and microfilariae .	10		Cerebro-spinal fluid	
		10	Protein 134	
			Chlorides 134	
			Sugar 134	
Bacteriology-				4
Microscopic examinations-				1
Urethral and cervical smears	324		Faeces-	
Sputum	2,318		Occult blood etc 104	
	2,010			1
	150		Functional tests-	
Cerebro-spinal fluid			Liver function 8	
Skin and nasal smear for leprosy	165		Glucose tolerance tests 12	
Miscellaneous exudates, pus etc	185	0.150		1.1
		3,153		
			6. Animal inoculations-	
Cultures-			Toads for pregnancy tests 58	
Stools	76			1
	83			
			Total	20,42
Swabs	104	2996		-
Blood Swabs	83 182	296	Total	2

dans annelente solt les parters field donntaction au de la Louisitaire di field de los articulations de la los articulations de la

#### APPENDIX X

#### CENTRAL MEDICAL SCHOOL

The following table shows the number of students enrolled for each course during the past nine years:---

	Co	urse			1950	1951	1952	1953	1954	1955	1956	1957	1958
Medical					76 2	124 23	129 30	123 23	100 31	88 28	86 16	92 14	96 9
Pharmacy					5	5	9	6	6	6	4	2	4
Sanitation				**	14	10	20	13	12	7	14	11	16
Laboratory	1.				5	6	12	8	8	10	6	4	7
Filariasis a	nd Mo	squito (	ontro	1	16	14	21	9	8	24	++++		
K-Ray		1			****	1	1	3	.5	5	1	1	
Dietetics					****						2	3	2
		Total	1.		118	183	222	185	170	168	129	127	134

The number of students from each territory at the close of the academic year is shown in the table below:—

		fedical					MED	ICAL					DES	TAL	Te	tal
Administration	High School Course 1957 1958		1st 1957	Year 1958	2nd 1957	Year 1958	3rd 1957	Year 1958	4th 1957	Year 1958	5th 1957	Year 1958	All 1 1957	l'ears 1958	1957	1958
ilbert and Ellice Islands Colony . British Solomon Islands		3	3		1	3		1							4	7
Protectorate	1	2	2	3							22	1			53	6
ook Islands		2							1			ï	ï	ï	2	4
okelau Islands American Samoa	2	2 1	2	2		2	11				ï				5	25
Papua/New Guinea	9	8	8	7	4	2	ï	4	2	ï	ï	2	3	3	26 3	26 2
onga lew Hebrides			··- 2	$\frac{1}{2}$	'i	.:		ï					2	1	24	235
J.S.T.T	5			3			ii	- 5	28	10		2 10		2	7 45	5 43
Total	19	18	24	28	11	14	12	11	13	11	13	16	14	8	106	106

3. Of the 16 students in the final year, 11 qualified at the end of the year and one qualified in May. One student was rusticated after three months, two more were referred for further study in 1959 and one was discharged without qualification. Of those who qualified, 8 were from Fiji, one from the British Solomon Islands Protectorate, 2 from Papua/New Guinea and one from the Cook Islands.

 The only student in the final year of Dentistry was one from Fiji who had been referred from 1957, and he qualified in May, 1958.

 Two medical students who were required to continue their studies in 1958 were both from Fiji. One was referred for six months and one for three.

 An analysis of the students who left and did not continue the course is as follows:— Preliminary Class 1958—

3 were sent home as unsatisfactory

3 were transferred to other courses

1 was repatriated due to severe illness and

1 was repatriated during the course of the year at his own request.

In the *First Year of the Medical Course* by the time the examinations were finished, one was retired with severe illness, one was transferred to an ancillary course, 8 were discharged as unsuitable.

In the Second Year Medical one was expelled for disciplinary reasons.

Third Year had no losses.

In the Fourth Year one was rusticated for six months, but resigned eventually.

In the Fifth Year one was rusticated, as mentioned above, to return in 1959.

In the *Dental Course* in First Year, two were repatriated as unsuitable, the remainder stayed.

7. At the end of 1958 it continued to be apparent that many of the students entering the Pre-clinical Course were unable to prepare themselves adequately for first year proper in one year. In December, 1958, following the examinations, apart from those quoted above who were discharged or transferred to other courses, four were retained to continue preliminary education.  1958 was a relatively quiet year for formal post-graduate instruction, as only two students from outside territories attended, both of these for a period of six months.

9. A number of distinguished visitors visited the School-

Sir Geoffrey Gibbs of the Nuffield Foundation

The Minister for Island Territories, New Zealand

The Governor of American Samoa, and at the end of the year

His Excellency the Governor of Fiji paid an official visit to the School.

As usual, we also had a number of distinguished scientific visitors, too numerous to mention in this appendix. We are most appreciative of the visits by administrators and scientists, all of whom help us in our work.

10. A.M.O. Ram Singh left early in the year to attend a twelve months fellowship in Anatomy at the Otago University, the fellowship being provided by World Health Organization. Dr. C. Petitipierre, World Health Organization lecturer in Physiology, resigned at the end of 1958. In November, Dr. Oldmeadow left the Colony after giving many years of honorary service in the teaching of obstetrics. It had been decided that a specialist in Obstetrics and Gynaecology should be added to the Medical Department's staff and he will, on arrival, take care of teaching of these subjects.

11. In the Dental Course, the intake in 1958 into the First Year of the course was three. One from the Preliminary Year, one transferred from A.M.O. I and the third admitted provisionally upon his passing the Senior Cambridge Examination. He had failed and his provisional admission was therefore cancelled. The other two failed at the end of the year and were repatriated. The Second Year of Dentistry had two students, one from Nauru and one from Papua/New Guinea. The third had four, one of whom was repatriated after four months and three completed the year. one from Fiji, one from Tonga and one from the Cook Islands. There were no fourth year dental students. It was decided towards the end of 1958 that once again the course would be reduced to three years, two years almost entirely confined to the basic sciences, Physiology and Anatomy and the third year to dental subjects. It was further decided that those students in the third year of dentistry should have their course completed if possible, in June, 1959.

12. Training of Dental Ancillaries : (1) Assistant Dental Hygienist-Two girls completed the two year course of training and joined the staff. A further two girls are in training.

(2) Assistant Dental Mechanics—One young man completed his course of training lasting 21 years and joined the staff. No more students will be accepted until the need arises.

13. General—Once again we must express our gratitude to the large number of people who undertook the direction of the clinical teaching and other courses beyond pre-clinical years. These are all members of the various sections of the Medical Department in Suva and elsewhere. The beginnings of Social and Preventive Medicine occurred in December, 1958. Dr. T. G. Hawley was appointed as lecturer in that subject. It is hoped that the building of the Nuffield Clinic, which will be the headquarters of this department, will be completed early in 1959.

#### APPENDIX XI

#### NURSING DIVISION

Staffing of hospitals showed an improvement during the year, except for the latter part of the year when they were again below establishment.

2. Recruitment of Sisters was continued through New Zealand and Australia with a few local appointments of overseas trained personnel.

3. Five locally trained Nurses were appointed as Staff Nurses, having successfully passed the New Zealand Registered Nurses Examination.

 Staffing of hospitals and districts by Colony trained Nurses also showed some improvement. It was necessary, however, to bring Nurses from the districts to hospitals to help during the poliomyelitis epidemic.

 Much is still required to be done with regard to accommodation for Nurses in the districts, hospitals and Nursing Schools.

6. No new Nurses' Stations were opened during the year.

7. Health Sisters' Conference—The annual Health Sisters' Conference took place in the office of the Director of Medical Services in October.

8. Nurses' and Midwives' Board-The Nurses' and Midwives' Board met during October.

9. Nursing Establishment-

in the second	Posts	Filled	Vacan
Nursing Superintendent	1	1	
Matrons	4	3	1
Assistant Matrons	2	1	1
Sisters-in-Charge	3	3	
Health Sisters	13	9	4
Sisters, Ward or Departmental .	54	43	11
Principal, Nursing School	1	1	
Tutor Sisters	6	5	1
Staff Nurses	7	5	2
Senior Nurses	62	49 (3 male	e) 10
Nurses	285	263	22
Male Nurses	21	18 (3 seni	or)
Appointment of New Zealand Sisters	i		10
2 year contract		9	
Appointment of Australian Sisters-			
2 year contract		11	
Appointment of Local Sisters-			
permanent		7	
Appointment of Local Sisters-			
temporary		12	
Appointment of Local Staff Nurses		5	
Total number accepted on 2 year con		20	
Total number accepted on temporary			
ment		12	
Total number accepted on permanent	t appoint-		
ment		7	
Number completing contract		12	
Number of resignations (including			
porary)		13	
Number extending contract (3 month		13	
0	4		

10. Fiji Qualified Nurses-Total number of Nurses including female tuberculosis trained employed as at 31st December, 1958 was 312.

Employed in Hospitals	1				196	
Fijian and others			189			
Indians			7			
Employed in Districts					116	
Fijian and others			110			
Indians			6			
			312		312	
Total number of Nurse	s qua	lified d	uring th	e ye	ar	 53
						 53
Re-appointments					· · ·	 20
Resumed duties followi	ing le	ave of a	absence			 13
On leave of absence for						 12
Resigned						 55
Absconded						 10
Duties terminated						 4
Deceased						 1
Admitted to Tamavua	Ches	t Hospi	tal			 1
Promoted to senior gra						 4

### NURSING SCHOOLS

Trained	Establishm	ent		Pos	sts	Filled		Vacan
Principal				1		1		
ALC: 1				4		3		1
Nurses .				2		2		
Number of	f students i	n train	ing as a	+ 31et	Dec	mbor 1	91	
Colony	y Curriculu	m	ing as a			1 m m	01	
	year at Lal					8		
New 2	Zealand Cu	rricului	m			23		
						181		
Colony Curri	culum—					-		
and the second	raduated M	lav 19	58 (inc	luding	2 fr.	m New		
Zealand	induced 5	ay, 10	oo fine	ading				35
Number pa	artial passe	s May.	1958					5
Number fa	uled May.	1958						3
Number er	ntered the	School,	Februa	ry, 19	58			67
Number le	ft the Scho	ool						41
Number tr	ansferred f	rom No	ew Zeal	and Cu	urricu	ılum		2
School Roll in	ucludes—							
Fijians .						141		
Part-Europ						1		
Rotumans						9		
Part-Chine						1		
Papua/Nev				••	• •	4		
Banabans		••		••	• •	2		158
Number le	aving the S	School			100			41
					1 20	1	a line	1.000
New Zealand	Course-							
Number in		s at 31	st Dece	mber			in a h	23
Entered th								12
Graduated								5
Left during	g the year							3
Transferred	d to Colony	r trainin	ng					2
New Zealand	Course Ro	ll Inclu	des-					
Fijians .						15		
Indians .						6		
Part-Europ						2		
Daniel with 10						-		
						23		
New Zealand	Profession	al Exam	nination	-Ium	e 19	58-		
	-							2
Pass .				••				4
	State Final	Exam	ination	Inne	195	8-		
Nam Loaland		1 44 4 14 19 10	100000000000	1 10100	1 100			
New Zealand				-				5
New Zealand Pass . Partial pa								$\frac{5}{2}$

12. Graduation—On May 6th the Graduation Ceremony took place. Addresses were given by the Director of Medical Services and the Nursing Superintendent. Special prizes were presented by Lady Garvey.

13. On September 15th a small function was held to present the New Zealand medals to the 5 successful nurses from the New Zealand course. The Deputy Director of Medical Services spoke to the graduates and medals were presented by the Nursing Superintendent.

14. Social-The nurses have organized their evening social activities during the year, ending with a Christmas party.

15. Sports—Nurses continued to take an active interest in sport. Basketball was played in the Suva Senior Competition. Inter-Class Play continued each week through the season for the "Porter Cup" which was won by the New Zealand class. In athletics the nurses have formed their own Club instead of being associated with the Central Medical School.

Trained Es	tablishm	ent		Pos	ts	Filled		Vacant
Tutors				2		1		1
Nurse				1		1		
Number of st	udents i	in traini	ing as	at 31st	Decer	nber, 19	958 .	82
Number of n								18
Number of p	artial pa	sses, M	ay, 19	58				5
Number faile	d, May,	1958						4
Number ente	red the	School,	Febru	ary, 19	58			35
Number leav	ing the S	School						18
School Roll inclu	udes-							
Fijians								72
Indians								9
Part-Europea								1
								82

17. Graduation—Graduation Ceremony took place on May 8th, 1958. Medals were presented by the Nursing Superintendent and the special prizes were presented by Mrs. J. A. C. Hill, wife of the District Commissioner.

18. Social Activities—Picnics were held at Saweni Beach during Easter and Christmas periods. The usual Graduation and Christmas parties were held.

19. Sports-Nurses continued to take an active part in basketball and athletics, which are the favourite recreational activities.

20. Grand total (not including New Zealand curriculum)-

Total number of nurse	s in tr	aining	as at	31st De	ecembe	er, 1958	 240
Fijians						213	
Indians						9	
Part-Europ	eans					2	
Rotumans						9	
Papuans						4	
Part-Chine	se					1	
Banabans						2	
						240	
Total num	ber ac	cepted	to the	School	s		 112
Total num	ber gra	aduated	d, May	, 1958			 53
Total num	ber lea	wing th	he Sch	ools			 59
Admitted t	o Tan	navua l	Hospit	al			 3
Transferred	1 from	New 2	Zealan	d Class	à		 2

### HEALTH STAFF

13 138

. .

. Establishment	-IV ursing			
Health	n Sisters	 	 	
Nurse	5	 	 	

21

22. The 1958 programme of work was similar to that performed by the Health Sisters and Nurses in 1957.

23. Health Sisters' Name	Headqu				Area
Miss Ramsamuj		and the second se			Suva City, Suva Rural to Kalokolevu via Queens Road, Colo-i-Suva via Princes Road to Laqari, Kalabo
Miss J. Sinclair		Suva Health	Office		and Naliva village to Kings Road, Wailoku Hospital. Suva City, Suva Rural Schools to Davuilevu via Kings Road to Sawani via Princes Road.
Miss V. McKenzie (Health Sister)		Nausori			Rewa, Tailevu, Naitasiri, Kadavu
Vacant (Health Sister)		Nadroga			Nadroga, Navosa, Namosi
Miss B. Johnson		Lautoka Hea			Lautoka, Yasawas, Nadi
Mrs. J. Cleary		Lautoka			Lautoka to beyond Korolevu on
(Mobile Clinic)	/	Lautoka			Queens Road and beyond Raki Raki via Kings Road
Vacant (Health Sister)		Ba			Ba Province
Vacant (Health Sister)		Nanukuloa	1.2		Ra Province
Mrs. A. Elsner (Health Sister)		Vatukoula			Vatukoula Obstetric Annexe Tavua, Nadarivatu, Vatukoula
Miss L. Hunter-Smith (Health Sister)		Labasa			Macuata, Bua
Vacant (Health Sister)		Savusavu			Cakaudrove
Not yet established		Levuka		••	Lomaiviti, Lau, Kadavu
(Health Sister)	•••	Levuka			Lomaiviti, Lau, Kadavu

### SUVA HEALTH OFFICE

# 24. Health Sisters two (one Child Welfare, one School Health Sister).

# A-CHILD WELFARE DEPARTMENT

Clinic Attendances-(including Mobile Clinic)-

	1			
Europe	ans	 	 	1,440
	uropeans	 	 	1,209
Fijians		 	 	14,000
Indian		 	 	10,964
Chinese		 	 	614
Others		 	 	1,376
		Total	 	29,603

Children under 2 years seen at He Children between 2 years and 5 year Children under 2 years seen on Mo Children between 2 years and 5 year	bile Cl	at H	ealth O		7,614 4,194 8,855 6,179
Stools sent to Laboratory					121
Children treated for worms					214
Smallpox vaccinations					1,076
Vaccination inspections					251
Anti-tetanus inoculations given					1
Triple antigen inoculations given-				1.	971
T.A.B. inoculations given			1		411
Cholera inoculations given					92
Inoculations against poliomyelitis					585
Approximate number of families fir	st visit		ealth O		3,731
Manufactor of home of the l	at viate	51011	canno		
					1,173
Number of children seen in homes			1.1		2,057

### B-SCHOOLS HEALTH DIVISION

25. Number of children inspected and inoculated and treated at schools and in Health Clinic during 1958:—

Number of children medically inspected at schools	13,061
Number of children given T.A.B. inoculations at schools	5,857
Number of children treated for minor ailments at schools	422
Number of children given T.A.B. inoculations at Health	
Office	37
Office Number of children given A.T.S. injections at Health	
Office	78
Office Number of children given penicillin injections at Health	
Clinic	97
Number of children treated for minor ailments at Health	
Clinic	6,107
Number of children treated for positive worms at Health	
Clinic	73
Number of children treated for secondary yaws at Health	
Clinic	5
Number of children treated for loss of weight	44
Number of children given triple antigen at Health clinic	66
Number of children given Polivirin at Health Clinic	951
Number of children found with chickenpox at Health Clinic	12
Number of children found with mumps at Health Clinic	2
Number of children sent to Out-patients Department,	
Colonial War Memorial Hospital	214
Number of children sent to Dental Clinic	143
Number of children sent to X-Ray Department	7
Number of children sent to Eye Clinic	140
Number of children sent to Mobile X-Ray	13
Approximate number of children with families first visits	2,323

# C-DISPENSARIES

Number of patients seen at	Nabua	Dispensary,	Wailoku	1
Hospital, Waiqanake				. 12,194

### ACTIVITIES OF HEALTH SISTERS AND RURAL HEALTH NURSES BASED ON CENTRES OUTSIDE SUVA

	Lautoka	Labasa	Nadroga	Tavua	Ra	Rewa	Total
Attendances at Health Clinic .	22,300	10,165	625	8,338			41,428
Schools visited	54	57	53	11	36	37	248
Children examined in schools Children seen in Clinics	9,445 15 996	4,301 7,542	6,227 3.589	} 16,258	{ 2,099 1,565	9,208 67,849	144,079
Smallpox vaccinations	681		18	82			781
Ante-natal examinations	3,432	*1,356	855	3,331	1,926	3.881	14,781
Homes visited	63			192	89	74	418
Typhoid inoculations	6,504	3,656	883	5,252	2,289 289	7,197	25,781
and Tetanus injection	1,838	1,693	448	1,941		3,800	10,009
Family Planning Clinic		176					

\* Ante-natal clinic held at the Hospital last six months of year

#### APPENDIX XII

### NOTIFICATION OF INFECTIOUS DISEASES BY RACE FOR THE YEAR 1958

Disease		Europeans	Part-Europ.	Fijians	Indians	Others	Totals
I. Ankylostomiasis		1	6	94	81	5	187
2. Anthrax							
3. Beriberi							
4. Cerebro-Spinal Mening	itis			1			1
5. Chicken Pox (Varicella	a)	33	13	286	68	72	472
6. Dengue Fever		1		3	4		8
7. Diphtheria			1	8	3	1	13
8. Dysentery-							
(a) Amoebic		1		2	9		12
(b) Bacillary .		1	2	30	40		73
(c) Unclassified			2	30	46		78
9. Encephalitis Lethargie							
0. Erysipelas					1		1
1. Infantile Diarrhoea			27	1,116	766	78	1,991
2. Infective Hepatitis		4	5	55	140	75	279
3. Influenza			169	6,984	3,450	966	11,626
4. Leprosy			4	12	17	1	34
5. Leptospirosis		100000					
6. Malaria				2		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3
7. Measles (German)							1
8. Measles (Morbilli) .		0		6	1		15
9. Mumps		10	11	59	88	17	187
0. Poliomyelitis		20	9	96	183	8	328
1. Puerperal Fever			i	31	74		106
2. Scarlet Fever		1			2		2
3. Tetanus				33	21	2	56
4. Trachoma		10000	20	149	31	15	215
5. Tuberculosis-Pulmon		10	6	469	117	31	633
Tuberculosis-Other f		1	i	65	19	4	90
6. Typhoid Fever-	orms			00	10		
(a) Enteric				8	2		10
(b) Paratyphoid ]				18			19
		And the second second second		10			
8. Venereal Diseases-							
(a) Climatic Bub		the second	1000	A REAL PROPERTY	i sure i	and and a second	
11 12 1			25	176	110	15	335
(c) Gon. Ophthal	min includ-			170	110		000
ing Neonatorur			Contraction of the	4	and the p	and reading a	5
(d) Soft Chancre		10000			1		1
					9		10
(e) Syphilis				1	9		10
(f) Venereal Gra		1					
(g) Others							1.000
9. Whooping Cough (Per		1	21	493	445	40	1,000
0. Yaws			2	82	31	20	135

### APPENDIX XIII VITAL STATISTICS (1) ESTIMATED POPULATION AT 31st DECEMBER, 1958

Race	Male /	Female	Total	(1957)	Difference	Per cent increase	Population per sq. mile
Fijians Indians Europeans Part-Europeans Other Islanders Rotumans Chinese Others	 80,110 95,575 4,946 4,238 3,043 2,375 2,780 16	$77,698\\88,515\\4,041\\4,035\\2,754\\2,333\\1,765\\60$	$157,808 \\ 184,090 \\ 8,987 \\ 8,273 \\ 5,797 \\ 4,708 \\ 4,545 \\ 76$	$153,356 \\ 177,247 \\ 7,998 \\ 8,038 \\ 5,401 \\ 4,586 \\ 4,348 \\ 64$	4,452 6,843 989 235 396 122 197 12	$\left.\begin{array}{c} + & 2.9 \\ + & 3.9 \\ + & 12.4 \\ + & 2.9 \\ + & 7.3 \\ + & 2.7 \\ + & 4.5 \\ + & 19 \end{array}\right\}$	22 26 1 density of less than 1 person per sq. mile.
Totals	 193,083	181,201	374,284	361,038	13,246	+ 3.7	53

		-		
4	L		ſ.	
	н			

# (2) BIRTHS RECORDED DURING YEARS 1955-1958

Race		1955	1956	1957	1958	1957 Population (Census)	Crude Birth- rate 1958 per mille of 1957 population
Indians Europeans Part-Europeans Rotumans Other Islanders Chinese		5,017 7,127 148 241 166 194 153 21	5,378 7,679 155 272 213 190 134 35	5,933 7,928 181 240 171 225 164 3	5,587 8,196 193 278 159 217 171 4	$153,356 \\177,247 \\7,998 \\8,038 \\4,586 \\5,401 \\4,348 \\64$	36 46 24 35 35 40 39
Totals	••	13,067	14,056	14,845	14,805	361,038	41

### (3) DEATHS RECORDED DURING YEARS 1955-1958

-	Rac	•	1955	1956	1957	1958	1957 Population (Census)	Crude death-rate per mille of 1957 population
Fijians Indians Europeans Part-Europ Rotumans Other Isla Chinese Others	peans		 1,411 1,193 30 34 53 51 15 1 15	1,136 1,241 43 38 65 48 21 3	1,309 1,114 45 39 46 69 27 2	1,193 1,204 44 43 37 45 18	$158,356 \\177,247 \\7,998 \\8,038 \\4,586 \\5,401 \\4,348 \\64$	8765 888 84
		Totals	 2,788	2,595	2,651	2,584	361,038	7

# (4) MARRIAGES, BIRTHS, DEATHS AND NATURAL INCREASE-1958

Race	Marriages	Births	Deaths	Net Increase	1957 Population (Estimate)	Increase per mille
Fijians Indians Europeans Part-Europeans Other Islanders Others	1,144 1,489 53 58 20 51 23 1	5,587 8,196 193 278 159 217 171 4	1,193 1,204 44 43 37 45 18	4,394 6,992 149 235 122 172 153	153,356 177,247 7,998 8,038 5,401 4,586 4,348 64	29 39 19 29 23 38 35
Totals	2,839	14,805	2,584	12,217	361,038	34

#### (5) INFANT AND CHILD MORTALITY

			Births		DE	THS UND	er 5 Ye/	ARS		Infant Mortality
		-		Under 1	1-2	2-3	3-4	4-5	Total	Rate per mille
1956—Fijians Indians			5,378 7,679	259 342	85 29	31 21	11 8	15 7	401 407	48 45
1957—Fijians Indians			5,933 7,928	251 282	134 35	40 13	23 16	28 7	476 353	42 36
1958—Fijians Indians	::		5,587 8,196	211 345	82 19	34 14	19 6	17 9	363 393	38 42

Note: Registrar-General has stigmatised Fijian 1958 figures as unreliable

# APPENDIX XIV

Return of Diseases and Deaths for the year 1958, at the Colonial War Memorial Hospital, Tamavua, Lautoka, Labasa and Levuka Hospitals.

NOTE.-This classification is based on the International Classification of Diseases, WHO 1955.

termediate it Number	Detailed List Numbers	Cause Groups				Euro.	Fijian	Indian	Others	To tals	Deat
		I-INFECTIVE AND PARASITIC	DISEA	SES							
	001.000							101	40	905	4
1 2	001-008 010	Tuberculosis of respiratory system Tuberculosis of meninges and central ner-			**	24	557	184	40	805 16	1
3	011	Tuberculosis of intestines, peritoneum and			inds		6	2	1	9	
4	012,013	Tuberculosis of bones and joints		••	••		29 31	10		39 41	
56	014-019 020	Tuberculosis, all other forms				1000	2	4		6	
7	021	Early syphilis				and the second se	1			1	
8 9	024 025	Tabes dorsalis								••	
10	022,023	General paralysis of insane						- 4			1
	026-029						1				
11 12	030-035 040	Gonococcal infections			•••		75	22		97	
13	041,042	Paratyphoid fever and other Salmonella i	nfection	s		1	1			2	
14	043	Cholera									
15 16 (a)	044 045	Brucellosis (undulant fever)					7		**	26	
(6)	046	Amoebiasis				2	13	24	3	42	
17 (6)	047,048 050	Other unspecified forms of dysentery		•••		4	6	7	1	18	
18	051	Scarlet fever						3		3	
19	052	Erysipelas									
20 21	053 055	Septicaemia and pyaemia				1				1 9	
22	056	Diphtheria				1	1	82	1	5	
23	057	Meningococcal infections				2	6	3		11	1 3
24 25	058 060	Plague Leprosy				••	••	6		6	
26	061	Tetanus			1		13	28	2	43	1
27	062	Anthrax									
28 29	080 082	Acute poliomyelitis				24 3	55	157	2	238 7	1
30	081,083	Late effects of acute poliomyclitis and		infect	ious						
31	084	encephalitis						1	1	2	
32	085	Smallpox			1		11	11	**		
33	091	Yellow fever						10			
34 35	092 094	Rabies					8	30	3	52	
36 (a)	100	Louse-borne epidemic typnus	1.0.0.1					12	1		
	101 104	Flea-borne endemic typhus (murine) Tick-borne epidemic typhus		**	••						
(d)	104				1			2		1	
(e)	102, 103	Other and unspecified typhus								2.	
37 (a)	106-108 110	Vivax malaria (benian tertian)				1	1	1	1.00	3	
(b)	111	Vivax malaria (benign, tertian)		1.	1		1			1	
(c)	112 115	Falciparum malaria (malignant tertian)	4.4			1				Î	
(G) (e)	113, 114	Blackwater fever . Other and unspecified forms of malaria			1						
	116,117										
38 (a) (b)	123-0 123-1	Schistosomiasis vesical (S. haematobium) Schistosomiasis intestinal (S. Mansoni)			1					14	
(c)	123-2	Schistosomiasis intestinai (S. japonicum)									
39 <sup>(d)</sup>	123-3	Other and unspecified schistosomiasis .			••						
40 (a)	125 127	Hydatid disease									
(b)		Loiasis				11					
	AND NEEDERS .	Filariasis (bancrofti)			• •		25	5	2	30	
41	129	Ankylostamiasis					13	17	1	32	
42 (a)	126	Tapeworm (infestation) and other cestode				i				1	
(b) (c)	130-0 130-3	Ascariasis					2	6	1	9	
(d)	124, 128	Other diseases due to helminths					1	1		2	
43 (a)	130-1, 130-2 037	Lumpheerenulema									
43 (a) (b)	038	Lymphogranuloma venereum Granuloma inguinale, venereal				1	3	3		6	
(0)	039	Other and unspecified venereal diseases									
2.2	11.453	Road postoning infastion and intervication				2	5	2		9	
(d) (e)	049 071	Food poisoning infection and intoxication Relapsing fever									

	termediate st Number		Cause Groups	Euro.	Fijian	Indian	Others	Totals	Deaths
	EEE BEEEEEE	$\begin{array}{c} 072\\073\\087\\090\\095\\096-7\\120\\121\ (a)\\(c)\\131\\135\\036,054,059,\\063,064,070,\\074,086,088,\\089,093,\\0961-096\ 6,096-9,\\122,132-134,\\136-138\end{array}$	Leptospirosis icterohaemorrhagica (Weil's disease) Yaws	           		2             	"1 ". ". "1	 4 2 4    15 20	
AAAAAAA AAAAAAA AA A	44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	$\begin{array}{r} 140-148\\ 150\\ 151\\ 152, 153\\ 154\\ 161\\ 162, 163\\ 170\\ 171\\ 172-174\\ 177\\ 190, 191\\ 196, 197\\ 155, 160, 164, 165, 175, 176, 178-181, 192-195, 198, 199\\ 204\\ 200-203, 205\\ 210-239\end{array}$	II—NEOPLASMS Malignant neoplasm of buccal cavity and pharynx	$ \begin{array}{c} 1 \\ \vdots \\ 5 \\ \vdots \\ 1 \\ 1 \\ \cdot \\ 8 \\ \vdots \\ 13 \\ \cdot \\ 14 \end{array} $	1 4 6 2 3 5 7 3 2 2 5 21 3 5 38	$21 \\ 10 \\ 52 \\ \\ 21 \\ 12 \\ 23 \\ 14 \\ 3 \\ 466$	1  1 3  3  2  1  4	5 5 17 13 5 9 7 21 6 3 12 8 49 6 10 122	$ \begin{array}{c} 1 \\ 1 \\ 4 \\ \\ 5 \\ \\ 5 \\ 1 \\ 2 \\ \\ 23 \\ 3 \\ 2 \\ 8 \\ \end{array} $
A A A A A A	61 62 63 64 (b) (c) (d) (c) (d) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	250, 251 252 260 280 281 282 283-286 290 291 292, 293 241 240, 242-245, 253, 254, 270- 277, 287-289, 294-299	III-ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES and IV-DISEASES OF THE BLOOD AND BLOOD- FORMING ORGANS Nontoxic goitre	12993 1233 5	1 3 27  18 5 9 4 12 17	13 9 170 2 1 1 21 26 103 21 62 48	··· 1 6 ··· ··· ·· 1 2 1 ··· 2	15 15 212 2 1 42 33 116 29 77 72	··· 10 ··· 5 1 3 3 2 ···
A A A	67 68 69	300-309 310-324, 326 325	Psychoneuroses and disorders of personality	10 5	24 17 5	46 23 10	5 	85 45 15	

rmediate Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Death
		VI-DISEASES OF THE NERVOUS SYSTEM						
70	330-334	AND SENSE ORGANS Vascular lesions affecting central nervous system		12	41	1	54	23
71	340	Nonmeningococcal meningitis		24	12	i	40	1
72 73	345 353	Multiple sclerosis	-	35	115	1	4 24	
74	370-379	Inflammatory diseases of eye	2	62	53	6 5	123 135	
75 76	385 387	Cataract		21	106 12	5	20	
77 (a)	390 391–393	Otitis externa		13	2 9		9 22	••
(b) (c)	394	Otitis media and mastoiditis		2	1	11	3	
78 (a) (b)	380-384, 386, 388, 389 341, 344	All other diseases and conditions of eye	4	25	36	4	69	
(0)	350–352, 360–369 395–398	All other diseases of the nervous system and sense organs	7	21	24	2	54	
					10			
70	400 400	VII-DISEASES OF THE CIRCULATORY SYSTEM		10	124		100	
79 80	400-402 410-416	Rheumatic fever	6	16 28	134 90	8	162 130	1
81 82	420-422 430-434	Arteriosclerotic and degenerative heart disease	17	18 17	98 72	24	135 101	3.54
83	440-443	Hypertension with heart disease	8	9	66	4	87	1
84 85	444-447 450-456	Hypertension without mention of heart		7	51 24		71 32	
86	460-468	Other diseases of circulatory system		31	31	1	77	
		VIII—DISEASES OF THE RESPIRATORY SYSTEM				1100		
87	470-475	Acute upper respiratory infections		29	63	3	119	1
88 89	480-483 490	Influenza		35	52	2 10	94 255	i
90 91	491 492, 493	Bronchopneumonia	13	138	164	13	328	4
92	500	Acute bronchitis	3	10 43	44	17	32 97	
93 94	501,502 510	Bronchitis, chronic and unqualified	7 29	57	14 51	22	28 89	
95	518, 521	Empyema and abscess of lung	2	4	4		10	
96 97 (a)	519 523	Pleurisy		8	14		22	1
(b)	511-517, 520-522,	All all and an and a		49	44	10	117	
	524-527	All other respiratory diseases	19	49		10		
		IX—DISEASES OF THE DIGESTIVE SYSTEM						
98 (a)	530	Dental Caries	1 12	2	2		4	
99 (6)	531-535 540	All other diseases of teeth and supporting structures	13	5 12	6 42		13 72	••
100 101	541 543	Gastritis and duodenitis.	100	20 23	47 67	4	78 102	
102 103	550-553	Appendicitis	44	41	117	8	210	
104 (a)	560, 561, 570 571-0	Intestinal øbstruction and hernia	4	48 26	85 50	22	151 82	1
(b) (c)	571-1 572	Gastro-enteritis and colitis, ages 2 years and over	9	37	44	6	96 8	
105	581	Cirrhosis of liver	2	13	10		25	ï
106 107	584, 585 536-539	Cholelithiasis and cholecystitis	4	9	57		70	••
	542, 544, 545, 573-580, 582,	Other diseases of digestive system	30	64	111	8	213	1

ist Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deatl
108 109 110	590 591–594 600	X-DISEASES OF THE GENITO-URINARY SYSTEM Acute nephritis Chronic, other and unspecified nephritis		17 19 37	21 28 131	2 5	42 49 187	3 11 2
111 112 113 114 (a) (b) (c)	602,604 610 620,621 613 634 601,603 605-609	Calculi of urinary system	18 7 2 7	5 4 5 34 26	72 23 7 17 65	3 1 2 1	98 35 15 60 108	  
	611,612 614-617 622-633 635-637	All other diseases of the genito-urinary system	42	80	179	12	313	3
		XI-DELIVERIES AND COMPLICATIONS OF PREG- NANCY, CHILDBIRTH AND THE PUERPERIUM						
115	640-641,681, 682,684	Sepsis of pregnancy, childbirth and the puerperium	1	7	16	2	26	3
116	642, 652, 685, 686	Toxaemias of pregnancy and the puerperium	1	17	94	1	113	
117	643, 644 670-672	Haemorrhage of pregnancy and childbirth		16	64	3	89	
118 119	650 651	Abortion without mention of sepsis or toxacmia		52 12	187 26	12 3	268 43	
120 (a)	645-649 673-680 683, 687-689	Other complications of pregnancy, childbirth and the puerperium	17	59	115	6	197	
(b)	660	Delivery without complications	158	845	2,123	254	3,380	
		XII—DISEASES OF THE SKIN AND CELLULAR TISSUE						
		and						
100		XIII—DISEASES OF THE BONES AND ORGANS OF MOVEMENT						
121 122 123 124 125 126 (a)	690-698 720-725 726, 727 730 737, 745-749 715	Infections of skin and subcutaneous tissue	9 6 7 1	$230 \\ 31 \\ 5 \\ 55 \\ 1 \\ 4$	203 53 28 44 15 12	18 2 1 1  1	487 95 40 107 17 23	
(b) (c)	700–714, 716 731–736, 738–744	All other diseases of skin	13 9	13 43	16 26	3	45 80	
(10(2)(81)	CO. A STATE OF	XIV-CONGENITAL MALFORMATIONS	1		1.000			
127 128	751 754	Spina bifida and meningocele	::	1 2	3 7		4 9	
129	750, 752, 753, 755–759	All other congenital malformations	3	13	41		57	
atthe		XV-CERTAIN DISEASES OF EARLY INFANCY						
130 131	760, 761 762	Birth injuries Postnatal asphyxia and atclectasis		2	3 2 5		5 2 7	
132 (a)	764 765	Diarrhoea of newborn (under 4 weeks)		$2 \\ 1 \\ 2$			1	
100 (6)	763, 766–768 770	Other infections of newborn Haemolytic disease of newborn All other defined diseases of early infancy		1 10		1	2 2 20	•••
133 134	769, 771, 772							

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Deaths
A 136 A 137 (a) (b) (c)	794 788-8 793 780-787 788-1-788-7 788-9,789-792, 795	XVI—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS         Senility without mention of psychosis.         Pyrexia of unknown origin         Observation, without need for further medical care         All other ill-defined causes of morbidity	0	 22 170 27	8 36 401 34	 1 14 4	8 65 638 80	1 2  

### " E " CODE-ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE)

ntermediate ist Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Death
E 138	E810-E835	Motor vehicle accidents	ш	26	48	5	90	6
E 139	E800-E802 E840-E866	Other transport accidents	4	14	22	5	45	1
E 140	E870-E895	Accidental poisoning	4	7	37	1	49	
E 141	E900-E904	Accidental poisoning		112	185	14	339	5
E 142	E912	4	1000	10	135	14	33	
E 143	E916	Accident caused by machinery Accident caused by fire and explosion of combustible materia	1 1	16	22	5	44	6
E 144	E917, E918	Accident caused by hot substance, corrosive liquid, steam		10		0		0
	2011,2010	and radiation		6	21	2	30	3
E 145	E919	Accident caused by firearm		1	5			
E 146	E929	Accidental drowning and submersion			2	1	72	
E 147 (a)	E920	Foreign body entering eye and adnexa		83	2 89	3	195	
(b)	E923	Foreign body entering other orifice	_	1	5		6	
(c)	E927	Accidents caused by bites and stings of venomous animals						
		and insects		4	4	2	10	
(d)	E928	Other accidents caused by animals		3	17		20	
(e)	E910, E911 E913-E915							
	E921-E922	All other accidental causes	13	69	54	5	141	3
	E924-E926 E930-E965		1.1					
E 148	E970-E979	Suicide and self-inflicted injury	1	2	16	1	20	1
E 149	E980-E985	Homicide and injury purposely inflicted by other persons		-				
		(not in war)		38	63	8	116	3
E 150	E990-E999	Injury resulting from operations of war		1			1	1
							3	- 2° - 2

# " N " CODE-ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (NATURE OF INJURY)

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Death
AN 138	N800-N804	Fracture of skull	11	37	34	5	88	9
AN 139	N805-N809	Fracture of spine and trunk	0	18	18	ĩ	46	2
AN 140	N810-N829	Fracture of limbs	23	114	211	13	361	4
AN 141	N830-N839	Dislocation without fracture		3	20	5	31	
AN 142	N840-N848	Sprains and strains of joints and adjacent muscle	2	7	15	2	26	
AN 143	N850-N856	Head injury (excluding fracture)		41	51	4	104	2
AN 144	N860-N869	Internal injury of chest, abdomen and pelvis		8	14	1	27	4
AN 145	N870-N908	Laceration and open wounds	14	71	104	7	196	2
AN 146	N910-N929	Superficial injury, contusion and crushing with intact skin			1.0389			
	11000 11000	surface	9	17	27	1	54	
AN 147	N930-N936	Effects of foreign body entering through orifice		8	17	1	26	
AN 148	N940-N949	Burns	5	29	45	6	85	8
AN 149	N960-N979	Effects of poisons	3	5	30	2	40	1
AN 150	N950-N959 N980-N999	All other and unspecified effects of external causes	2	35	22	2	61	1
	14990-14999	,				-		
					1		1	100

### APPENDIX XV

# URBAN/TOWNSHIP/RURAL SANITARY DISTRICTS OF FIJI—REPORT OF HEALTH INSPECTORS FOR THE YEAR 1958

1-SUMMARY OF INSPECTIONS

Type of Premises, etc.InspectionsHouse-to-house Inspection of District $\dots$ $40,345$ $16,522$ Investigation of Complaints, Nuisances, etc. $936$ $392$ New Buildings Sites—before approval $\dots$ $1,245$ $299$ New Buildings Works in Progress $\dots$ $3,086$ $996$ Investigation of Infectious Disease and Disinfection $2,086$ $28$ Shipping $\dots$ $\dots$ $292$ $\dots$ Houses-let-as-Lodgings and Lodging Houses $1,108$ $436$ Aircraft $\dots$ $\dots$ $649$ $2$ Factories and Workshops $\dots$ $98$ $38$ Schools $\dots$ $\dots$ $530$ $191$ Checking Sanitary Services (A/cs. etc.) $709$ $65$ Laundries $\dots$ $1,171$ $321$ Hairdressers, Chiropodist, etc. $\dots$ $1,037$ $664$ Foodshops, Foodstores, Markets, etc. $\dots$ $3,801$ $1,996$	Total
Investigation of Complaints, Nuisances, etc.936392New Buildings Sites—before approval1,245299New Buildings Works in Progress3,086996Investigation of Infectious Disease and Disinfection2,08628Shipping292Houses-let-as-Lodgings and Lodging Houses1,108436Aircraft6492Factories and Workshops9838Schools530191Checking Sanitary Services (A/cs. etc.)70965Laundries1,1037664	
Investigation of Complaints, Nuisances, etc.936392New Buildings Sites—before approval1,245299New Buildings Works in Progress3,086996Investigation of Infectious Disease and Disinfection2,08628Shipping292Houses-let-as-Lodgings and Lodging Houses1,108436Aircraft6492Factories and Workshops9838Schools530191Checking Sanitary Services (A/cs. etc.)70965Laundries1,1037664	56,867
New Buildings Sites—before approval1,245299New Buildings Works in Progress3,086996Investigation of Infectious Disease and Disinfection2,08628Shipping292292Houses-let-as-Lodgings and Lodging Houses1,108436Aircraft6492Factories and Workshops695352Cemeteries9838Schools530191Checking Sanitary Services (A/cs. etc.)70965Laundries1,171321Hairdressers, Chiropodist, etc.1,037664	1,328
New Buildings Works in Progress3,086996Investigation of Infectious Disease and Disinfection2,08628Shipping292292Houses-let-as-Lodgings and Lodging Houses1,108436Aircraft6492Factories and Workshops695352Cemeteries9838Schools530191Checking Sanitary Services (A/cs. etc.)70965Laundries1,171321Hairdressers, Chiropodist, etc.1,037664	1,544
Investigation of Infectious Disease and Disinfection       2,086       28         Shipping        292          Houses-let-as-Lodgings and Lodging Houses       1,108       436         Aircraft        649       2         Factories and Workshops        695       352         Cemeteries        98       38         Schools        530       191         Checking Sanitary Services (A/cs. etc.)        709       65         Laundries        1,171       321         Hairdressers, Chiropodist, etc.        1,037       664	4,082
Shipping         292          Houses-let-as-Lodgings and Lodging Houses        1,108       436         Aircraft         649       2         Factories and Workshops         695       352         Cemeteries          98       38         Schools          530       191         Checking Sanitary Services (A/cs. etc.)        709       65         Laundries         1,171       321         Hairdressers, Chiropodist, etc.         1,037       664	2,114
Houses-let-as-Lodgings and Lodging Houses       1,108       436         Aircraft         649       2         Factories and Workshops         695       352         Cemeteries          98       38         Schools          530       191         Checking Sanitary Services (A/cs. etc.)        709       65         Laundries         1,171       321         Hairdressers, Chiropodist, etc.         1,037       664	292
Aircraft          649       2         Factories and Workshops         695       352         Cemeteries          98       38         Schools          530       191         Checking Sanitary Services (A/cs. etc.)        709       65         Laundries         1,171       321         Hairdressers, Chiropodist, etc.         1,037       664	1,544
Factories and Workshops	651
Cemeteries <th.< td=""><td></td></th.<>	
Schools         530         191           Checking Sanitary Services (A/cs. etc.)          709         65           Laundries          1,171         321           Hairdressers, Chiropodist, etc.          1,037         664	1,047 136
Checking Sanitary Services (A/cs. etc.)70965Laundries1,171321Hairdressers, Chiropodist, etc1,037664	721
Laundries	774
Hairdressers, Chiropodist, etc 1,037 664	
Foodshops, Foodstores, Markets, etc 3.801 1.996	1,492
* Obtaitopa, * Obtaitoroa, attracta, etc 0.001 [.358)	1,701
	5,797
Aerated Water and Lee Easteries 179 00	3,636
Kava Saloone 022 101	261
	363
	1,018
Slaughterhouses	92
Butchers' Shops	630
Food vehicles 535 302	837
Cinema	83
Quarantine Islands 30 8	38
Septic Tanks	107
Sanitary Inspections of Local Vessels	121
Public Lavatories	- 1
Miscellaneous 2,415 233	2,648
Total 65,005 24,920	

### 2-WRITTEN NOTICES, ETC., ISSUED

Intimation Notices served			6,587
Statutory Notices served			196
Buildings Surveyed for Closure or De	molitie	on	41
C1 - 0 1 - C - 1			50
Demolition Orders Served			17
Notices of Closing Orders			40
Buildings Demolished after service of	Order		
By owners			26
Notices of Intention to Demolish			20
			6 977

### 3-BUILDING APPLICATIONS DEALT WITH

Applications in respect of New Buildings Applications in respect of Alterations and	Number 3,270	Value £1,371,321	9	0
Repairs Applications in respect of Septic Tanks	304 267	55,635 92,566		
Total	3,841	£1,519,522	9	0

Buildings Completed and Pass	ed dur	ing the	year	1,303
Applications Outstanding in F completed)-	legister	r (work	not	
New Buildings				3,619
Alterations and Repairs				687
Septic Tanks			Carlos and	120

4-SUMMARY OF SANITARY IMPROVEMENTS, ETC. (ALI	L TYPES OF PI	REMISES)
Items	Ordered	Completed
Repairing of Buildings	572	223
Improvements to Lighting and Ventilation of	572	223
Buildings	228	125
Removal of Unauthorized Erections	405	
Abatement of Overcrowding	171	207
New Privies (all types)	2,744	74
New Privies (all types) Repairing, Cleansing or Flyproofing of Privies	3,143	1,470
Filling in of Insanifary Privies	1,460	2,468
New Bathrooms or Washing Places	306	967
Repairing or Cleansing of Bathrooms or Washing	300	182
Places	597	101
New Kitchens		401
Repairing or Cleansing of Kitchens	169	31
Provision of New Drains	420 643	361
Kepairing or Cleansing of existing Drains		505
New Wells	2,554	1,947
Kenstring or Improvement of Walls	112 642	68
New Water Tanks		380
Renairing Screening or Cleanging of Wester T 1	44	54
Removal of Accumulations of Refuse ato	1,026	413
Clearing of Overgrowth or Long Grass	14,435	12,299
Provision of Garbage Tins	5,823	3,647
Abatement of Nuisances from Animals or Poultry	1,843	999
Abatement of Mosquito Breeding	2,380	1,045
Cleansing of Food Promises	2,890	2,181
Structural Improvements to Food Premiser	1,704	1,362
Cleansing of Food Vehicles	720	558
Improvements to Food Vehicles	286	228
Cleansing or Improvement of Hairdressers' Premises	79	55
Cleansing or Improvement of Laundries	335	239
Cleansing or Improvement of Schools	135	83
Cleansing or Improvement of Shipping	81	45
Impounding of Straving Cattle		
Miscellaneous	4	4
Auscenaneous	288	102

### 5-MOSQUITO CONTROL

Premises Inspectee Premises at which	d for M larvae	osquite was fo	Larva	e	 62,583 2,870
Larval Index	••		••		 4.633 per cent

46,239

32,723

# 6-DISINFECTION, DISINFESTATION AND FUMIGATION

	e of Pres						Method	1			Number
Overseas	s vessels	-anti	-mala	rial		Aerosol Bon	mbe				
					•••		mos				70
Overseas						Cyanide					1
Local ve	ssels					Cyanide					-
					• •						74
Aircraft						Aerosol Bor	mbs				646
Premises						Dieldrin, D.	D.T. &	Pyagra	and D	D.T.	010
						& Kerose	ne				305
Clothing	(Second	hand	Y			Cvanide			• •		
Marth	foccourd	mana	1								152
Miscellar	leous					Cyanide					20
	Interna	tional	Derat	tization	Carti	ficates Issued					20
	T	roman	Dura	incation	Certi	incares issued	• •			1	
	Interna	tional	Derat	tization	Exen	nption Certifica	ates Iss	sued		5	

# 7-ANTI-RAT MEASURES

Traps Set	rin)	::				·· 997 ·· 8,498
Rats destroyed by poise Rats destroyed by trap	oning			Rattus Rattus 587 467	Rattus Norvegics 293 233	us 880 700
Rats destroyed by fumi Overseas shipping					200	
Local shipping				13	26	39
Rats submitted for Labo	oratory	examin	na-			
Rats Found Infected						74

### 8-SUPERVISION OF LABOUR GANGS, ETC.

Number of men employed, clearing and draining work done, loads of refuse removed etc .--

Number of men employed		 	 84
Clearing and draining work done in	acres	 	 21,563
Number of loads of refuse removed		 	 1,490

### 9-FOOD INSPECTION AND SAMPLING

Unsound foodstuff condemned and destroyed in lb.-58,684 lb.

Food and Water Sam	ples t	aken-						
Fresh Water : Number of sampl	es tak	en for	bacteri	ological	l exami	nations		318
Number of satisfa								223
Number of chemi	ical sa	mples t	aken					3
Number of chemi	cal sa	mples s	atisfact	tory				3
Sea Water : Number of sea w	ater a	nd bath	ns samr	oles .				45
	arer a	na bau	is sump	100 .	••	••	•••	40
Milk : Number of milk s								
Genuine								7
Non-genuine								11
Ice-Gream : Number of ice-cr	eam s	amples	taken-	_				
Genuine								10
Non-genuine								7
Meat Inspection :								
Carcases inspecte								132
Condemned								4

#### 10-LEGAL PROCEEDINGS

Defendants, Offences and Results of Action-

Public Health Ordinance			Pure Food Ordinance				
Cases Convictions Penalties	••	 £677	252 251 8s. 6d.	Cases Convictions Penalties		 £154 11s	28 27 . 6d.

# 11-REMARKS AND DETAILS OF ANY OTHER SPECIAL WORKS CARRIED OUT DURING THE YEAR UNDER REVIEW

Sanitation Campaign-

		Number	Va	lue	
Squatting slabs sold	 	798	£399	0	0
Latrine plugs sold	 	374	37	8	0
Pedestal sets sold	 	87	174	0	0
Pedestal seats sold	 	1	1	2	6
		1,260	£611	10	6

12. Sea Port and Airport Health Quarantine—The following are comparative figures in respect of shipping dealt with over the last five years:—

	1954	1955	1956	1957	1958
Ships given Pratique	206	222	240	281	317
Landing Passengers	2,385	2,902	6,972	6,081	3,461
Aircraft given Pratique	1,066	1,219	1,376	1,763	1,873
Landing Passengers	10,615	12,597	13,660	13,844	16,861
Local vessels fumigated	92	72	80	85	74
Overseas vessels fumigated	15	19	3	2	71
Aircraft treated with Aerosols	373	384	576	539	646
International Deratization Cer-					
tificates		1	4	2	1
International Deratization Ex-					
emption Certificates				2	5

### APPENDIX XVI

### SUVA GAOL

During the year 1958, Dr. T. A. U. Clunie was visiting Medical Officer to Suva Gaol.

2. Regular weekly visits were made by the Medical Officer when he saw cases referred by the Assistant Medical Officer and patients admitted to the Infirmary ward.

3. Prison buildings, bakery and warders' compound were inspected regularly.

4. All new admissions to the Gaol were medically examined. The resident Assistant Medical Officer gave the routine daily medical attention to those attending the sick parade and a total of 1,850 persons were seen during the year.

5. Infectious Diseases—During the year 2 cases of influenza and 2 of poliomyelitis were notified. In the Warders' Compound there were 3 old cases of pulmonary tuberculosis, 1 admitted to Tamavua Hospital and 2 received treatment at the Gaol Dispensary. No active lesion was found among the contacts.

6. The following cases were referred to the Colonial War Memorial Hospital:-

1 Anaemia

1 Intoxication from drinking methylated spirits and shellac.

1 Renal calculus

1 for observation and investigation

1 Acute nephritis

1 Bruised lumbar region

Two patients were referred to Tamavua Tuberculosis Hospital for admission and there were 3 psychoses.

7. There were 2 judicial hangings and 1 corporal punishment during the year.

#### APPENDIX XVII

#### METEOROLOGICAL REPORTS

The following Meteorological Reports for the year 1958 have been supplied by the Meteoro-

ogical Office:			
Laucala Bay		Suva	
Rainfall—		Rainfall	
Total	115.90"	Total	124.97"
Normal for 14 years	117.83"	Normal for 69 years	124.25"
Departure from normal		Departure from normal	+0.72''
Wet days (0.01" or more)		Wet days (0.01" or more) .	181
Wettest day on April 17th	9.25"	Wettest day on April 17th	10.68"
Temperatures		Temperatures	
Mean Maximum	83-1°F.	Mean Maximum	82.6°F.
	00117.	Highest Recorded on Feb-	02.0 1.
Highest Recorded on Feb-	94-1°F.	rugnest Recorded on reb-	94.7°F.
ruary 14th		ruary 24th	
Mean Minimum	71·2°F.	Mean Minimum	71.4°F.
Lowest Minimum on July		Lowest Minimum on July	
8th	58.5°F.	10th	54.8°F.
Mean temperature 1/2 (Max.	Construction of the	Mean Temperature ½ (Max.	
+ Min.)	77·2°F.	+ Min.)	77.0°F.
Departure from normal		Departure from normal	-0.2°F.
Mean Temperature at 9 a.m.	78.5°F.	Mean Temperature at 9 a.m.	78.5°F.
Humidity		Humidity	
Mean humidity at 9 a.m	79%	Mean humidity at 9 a.m.	77%
Dright Sunching			

	Bright	Sunsnine	
Total	Hours		 2,129.0 hrs.
Mean	Daily		 5.83 hrs.

#### NOTES

 General—Although rainfall and temperature were close to the average there were some remarkable variations in individual months, particularly in regard to rainfall.

3. Temperature—The mean temperature was 0.2°F. below average at Suva and extremes ranged from 94.7°F. on February 24th to 54.8°F. on July 10th. On the average March was the hottest month and July the coolest. November 2nd with a minimum of 59°F. was the coolest November day on record at Laucala Bay and the coolest at Suva since 1922 when the minimum was 55°F.

4. Rainfall—Eight months of the year had rainfall below average while April and November had considerable excesses resulting in near average rainfall for the year. April was the wettest month with 41.88", the second wettest April on record, and June the driest with 0.60". From mid-May to November 5th semi-drought conditions prevailed and the five month period June to October proved to be the driest on record. 13.69" were recorded at Suva and 11.82" at Laucala Bay for the period. The respective departures for the five consecutive months were minus 24.33" and minus 21.97". The previous driest periods (June to October) were 15.27" at Suva in 1905 and 17.66" at Laucala Bay in 1943.

5. Winds—The prevailing wind direction was S.E. with 42 per cent frequency and together with Easterlies accounted for 78 per cent of all directions. The mean speed was 8.5 knots and the maximum gust 84 knots on December 2nd.

6. Hurricanes—Three tropical storms affected the Group during the year. The first occurred between January 6th and 8th when a hurricane passed through the Lau Group causing widespread damage. The second occurred on April 9th–11th but filled up gradually between Viti Levu and Vanua Levu and did not reach hurricane intensity. Finally a moderate hurricane, which originated near Rotuma, at the end of November, passed over Suva on December 2nd causing slight damage to buildings and considerable damage to crops in the Eastern half of Viti Levu.





