Annual report on the medical services / Sierra Leone.

SIERRA LEONE

ANNUAL REPORT of the Medical and Health Services for the Year 1952

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FREETOWN

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1953

CORRIGENDA

Under " A 35, 094 Rabies " the " 1 " should be deleted and the figuures of 2 (under " A 34, 092 Infectious Hepatitis ") amended to 3.

2. Page 24 should follow immediately after " Medical Officer Health " (under " Post Mortem ") on Page 22.

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1—GENERAL REVIEW

During the past year there has been an increasing demand for all services and although the curative is the more popular, the importance of preventive measures is slowly being realised. As practical examples of the latter there is no reluctance amongst the population (except in a very few areas) to receive the prophylactic pentamidine injection against sleeping sickness, and there is a slowly increasing demand for town planning and a greater demand for improved water supplies.

2. It appears to be necessary to inform the public of the limiting factors which prevent the expansion of these services. Both curative and health measures ultimately bring their rewards by reducing the incidence of ill-health, increasing the birthrate and by the prolongation of the span of life and eventually can assist in increasing the wealth of the country. But the immediate problem, which presents itself prior to the consideration of any extension, is finance. Both curative and preventive measures cost money. Curative treatment requires the building of hospitals and clinics. It is necessary to recruit and train staff for these buildings. Equipment has to be purchased to furnish the buildings. After this initial outlay, a recurrent expense is incurred in the yearly replenishment of drugs, the salaries of the staff, the feeding of the in-patients and the replacement of wornout equipment. Whenever increased facilities are being considered, the yearly recurrent expense should not be forgotten.

3. Although in the United Kingdom over £8 per head of population is available to meet the cost of the National Health Service the demand for beds exceeds the supply. In this territory in 1952 the allocation for the Medical and Health Services was approximately £342,000, excluding expenditure under the Colonial Development and Welfare Scheme, for a population of 2,000,000. This allows a little over 3*s*. per head of the population. The increase in the estimates for this department has risen from £90,000 in 1939 to £342,000 in 1952. Even without any further expansion of the service, costs will continue to rise. This is due to the discovery of new drugs, drugs which are curative and specific for diseases which previously proved fatal or incurable. From the figures given it is obviously impossible to provide hospital accommodation for all the inhabitants of this country. Nor is this essential when many of the diseases for which patients seek in-patient treatment can be prevented, and treatment of these and other conditions can often only be regarded as palliative.

4. In order to obtain an improvement in the general health of the community expansion of the curative service should not alone be considered. It is more economical and of more lasting benefit to adopt preventive measures. Better housing in approved lay-outs of towns and the health education of the public and in particular of the school children are within the economic resources of every country. Health education should consist of hygiene, housing, preparation of foods and the production of foods. Ignorance of simple facts associated with poverty also results in diseases which can be prevented.

5. Smallpox and Sleeping sickness were formerly widespread and prevalent in this country. The latter is now well controlled in most areas but supervision will still have to be exercised for many years. The incidence of smallpox has been greatly reduced by the mass vaccination campaign which took place some years ago, but re-vaccination is essential if the incidence is not to rise and epidemics occur. Improved sanitation would result in a very great reduction in the all too prevalent intestinal diseases. Treatment of the latter can only be palliative when patients return to their old environment from which they received their infections, and Community diseases, which are prevalent and costly to treat, could be reduced and eventually prevented by education.

6. To improve the economy of the country health must be regarded as a highly important factor. Widespread infectious diseases must be reduced to a minimum and eventually eradicated, not necessarily by individual treatment, but by mass treatment by travelling teams which will also employ preventative means. Other widespread diseases due to ignorance of elementary hygiene will require a different treatment. Education of the population will first have to be undertaken, accompanied by measures to remedy the existing sanitary defects. Hospitals are not necessary to treat patients suffering from many of these preventable diseases and preventative measures should be instituted as early as the economy of the country will allow.

2—ADMINISTRATION

7. Dr. E. A. Renner, O.B.E., was promoted to Director and Dr. A. J. Johnson, Dr. T. P. Eddy and Dr. H. M. S. Boardman were promoted to Deputy Director, Assistant Director and Senior Medical Officer respectively. No member of the Senior Service was transferred and only one Medical Officer resigned.

8. ESTABLISHMENT

Administration

1 Director	1 Chief Clerk
1 Deputy Director	2 First Grade Clerks
1 Assistant Director	40 Second and Third Grade Clerks
1 Administrative Secretary	

General

1 Senior Specialist	1 Senior Medical Officer
1 Specialist	28 Medical Officers (including Lady Medical Officer and Medical Officer of Health)
2 Senior Medical Officers (Health)	3 Medical Officers—Endemic Diseases Control Unit

Nursing

3 Senior Nursing Sisters	1 Superintendent of Midwifery
1 Sister Tutor	19 Midwives
13 Nursing Sisters	10 Student Midwives
2 Staff Nurses Grade I	1 Linen Store Supervisor
8 Staff Nurses Grade II	1 Laundry Supervisor
110 Nurses	1 Health Visitor, Grade I
100 Student Nurses	2 Health Visitors, Grade II
1 Matron's Assistant	8 Health Visitors, Grade III
1 Senior Surgical Assistant	3 Midwife Health Visitors
1 Surgical Assistant	

Laboratory

1 Senior Pathologist	
1 Pathologist	1 Laboratory Assistant, Grade I
1 Laboratory Superintendent	1 Laboratory Assistant, Grade II
	6 Laboratory Assistants, Grade III
	2 Laboratory Assistants-in-training

Pharmaceutical

1 Chief Dispenser	6 Dispensers, Grade I
2 Senior Dispensers	18 Dispensers, Grade II
	26 Dispensers, Grade III

Radiological

5 Radiographers	3 Attendants-in-training

Dental

3 Dental Officers	1 Dental Mechanic

Mental

1 Keeper	1 Senior Attendant
1 Matron	45 Attendants

Health

2 Chief Sanitary Superintendents	6 Sanitary Inspectors, Grade I
1 Malaria Superintendent	8 Sanitary Inspectors, Grade II
1 Entomologist	39 Sanitary Inspectors, Grade III
11 Sanitary Superintendents	18 Sanitary Inspectors-in-training
2 Entomologist Assistants	6 Malaria Inspectors

Medical Stores

1 Medical Storekeeper and Inspecting Pharmacist	1 Store Assistant, Grade I
	5 Store Assistants, Grade II
1 Assistant Medical Storekeeper and Inspecting Pharmacist	13 Store Issuers

Endemic Diseases Control Unit

1 Senior Attendant, Class I	12 Attendants, Class I
12 Senior Attendants, Class II	35 Attendants, Class II and Learners

Transport

1 Foreman Driver	3 Senior Drivers
1 Motor Mechanic	24 Drivers

Miscellaneous

Stokers, Cooks, Porters, Ward Attendants, Messengers, Packers, Telephone Operators, Sewing Maids, Mosquito Spotters, Court Messengers, etc.

9. Early in the year two Medical Officers joined the Service and with the assistance of temporary Medical Officers, the establishment, for the first time for many years, was complete except for a Pathologist. It was thus possible to re-open Kabala as a Medical Officer station and all the hospitals have been staffed with Medical Officers this year. Three Medical Officers were attached to the Endemic Diseases Control Unit until the last quarter of the year when it was necessary to transfer one to take charge of a hospital. In spite of the apparently very satisfactory position, a note of caution is necessary. The advent of the antibiotics is affording greater scope in treatment and the attendances of patients are increasing, the staff, though larger, had to meet greater demands. Many of the Medical Officers arrived within a few months of each other and therefore are due to go on leave at approximately the same time. Three Non-expatriate Medical Officers are attending post-graduate courses in order to obtain higher diplomas. Thus there are difficulties ahead in the coming year if all the hospitals are to be staffed with Medical Officers and there are already difficulties in staffing the two largest hospitals adequately. No Pathologist has been recruited and on the departure on leave of the Senior Pathologist the most senior of the Laboratory Assistants was left in charge and has acted as the Laboratory Superintendent. The department has so far failed to recruit sufficient Sanitary Inspectors but the response to the recruitment of Nurses has improved. Infectious Diseases Nurses have been recruited to nurse patients suffering from tuberculosis.

10. During the year two new ambulances were donated to the department by the Sierra Leone Branch of the British Red Cross Society. One was stationed in the Protectorate and the other in Freetown for services in the rural areas.

A further two new ambulances provided by Government for Makeni and Port Loko (Sierra Leone Protectorate) were handed over to the department in December

11. Finance:—

	£	*s.*	*d.*
Personal Emoluments	140,534	9	10
Other Charges	195,419	5	8
TOTAL	£335,953	15	6

12. In addition the following sums were expended under the Colonial Development and Welfare Act:—

	£	s.	d.
Malaria Control of Freetown (D. 1465) .	149	12	5
Protectorate Health Centres (D. 866) ..	12,168	0	0
Control of Endemic Diseases (D. 1049) ..	15,253	7	4
Health Centres Colony (D. 1641) .. .	9,130	5	1
TOTAL	£36,701	4	10

3—POLICY

13. The Service, as stated last year, is handicapped by the lack of officers of experience, and difficulty is experienced in planning new projects with staff who are already faced with more than whole time routine duties. It has however been possible to tuberculin test a greater number of the school children in Freetown and offer B.C.G. vaccine to those who gave negative response.

14. A report was received from Mr. Williamson of the United States of America Health Services, who visited Freetown in 1951 under Economic Co-operation Administrative Technical Assistance. From this report it appears that the value of the canalisation of the streams in Freetown as an anti-malarial measure would be off-set by the enormous expense such an undertaking would necessitate and that the replacement of larvicidal by imagocidal measures would be more efficient and cheaper. Careful consideration has been given to residual spraying and three areas in the Colony were so treated. A further extension of this method of control is contemplated with UNICEF assistance.

15. Patients suffering from leprosy were tending to collect in two towns in which Mission Hospitals were situated and where it was known that the sulphones were available. A public health problem was thus being created owing to congestion and over-crowding. Widespread publicity was subsequently given to the fact that the sulphones were available at all Government hospitals and dispensaries and Medical Officers were provided with recent literature concerning the treatment of leprosy by "Avlosulfon." It is hoped that lepers will report in future to the nearest institution and, after realising the advances made in the treatment of this disease, will spread the information to other patients. It will then be possible to guage the incidence of leprosy in this territory and offer treatment to those afflicted.

16. Mass treatment of yaws has been continued in the Northern Province and eighteen Chiefdoms have now been treated. The arsenicals have been used but it is hoped that in the future this campaign will be able to use penicillin and that UNICEF may assist.

17. Dr. Elmer G. Berry, under the auspices of Economic Co-operation Administrative Technical Assistance, made a widespread inspection of this territory to discover the incidence of *bilharzia*. It is realised that the eradication of the intermediate host is essential and it is hoped that in the following year the use of sodium Pentachloro phenate will be successful.

18. The following distinguished visitors gave valuable advice during their stay in Sierra Leone:—

Dr. J. C. R. Buchanan, C.M.G., M.D., F.R.C.P., Principal Medical Officer, Colonial Office.
Professor W. I. C. Morris, M.B., F.R.C.S., Professor of Obstetrics, University of Manchester.
Dr. R. Lees, M.D., F.R.C.P., Consultant Venereologist, Manchester University.
Dr. Elmer G. Berry, Senior Scientist, United States of America.
Professor B. G. Maegraith, Dean of the Liverpool School of Tropical Medicine.
Dr. C. A. Egger, Director for Europe and Near East, UNICEF.
Dr. Marti, UNICEF.
Dr. Mara, World Health Organisation.

In co-operation with the Government of Nigeria Dr. M. P. Hutchinson, Research Epidemiologist, W.A.I.T.R. visited this territory, similarly Dr. Gleize from Liberia visited the Endemic Diseases Control Unit at Kailahun.

19. Further improvements of the conditions of service of members of the Junior Staff were provided for in the 1953 estimates. Dispensers and Nurses have greater opportunities for promotion and, the Male attendents at Kissy Mental Hospital will be given better conditions of service in 1953. Provision is also made for an Examiner of Stores and a Registrar of Births and Deaths for Freetown. Both are new appointments.

20. Encouragement has been given to officers to obtain further experience. Three non-expatriate officers have been granted study leave in order to attend courses for the D.P.H., M.R.C.P. and F.R.C.S. respectively. One officer attended the World Health Organisation Fellowship course in Malaria in Nigeria and a further officer represented this territory at a "Centre *inter-national de l'enfance*" at Brazzaville.

4—DEVELOPMENT

21. Under a Colonial Development and Welfare Scheme three Health Centres were completed at Makali, Sumbuya and Kambia and two are under construction at Pendembu and Daru. Plans have been prepared for hospitals at Woama, Magburaka, Kenema and Lungi and the plan for the tuberculosis hospital at Murray Town is under consideration.

22. No staff has been appointed to the Sir Alfred Jones Laboratory.

23. A review of the training of the staff for the Native Administration Health centres is to be made. Seven Sanitary Overseers attended a refresher course and fourteen are undergoing training.

5—LEGISLATION

24. The following were enacted during the year:—

Public Notice No. 55/1952—The Public Health (Protectorate Ordinance)—Cap. 191.

Public Notice No. 56/1952—The Public Health (Protectorate Ordinance)—Cap. 191.

Public Notice No. 83/1952—The Dogs Ordinance—Cap. 67.

Public Notice No. 92/1952—The Public Health (Protectorate Ordinance)—Cap. 191.

Ordinance 28/1952—An Ordinance to amend the Medical Practitioners and Dentists and Druggists Ordinance—Cap. 139.

6—VITAL STATISTICS

25. The registration of births and deaths in Freetown and in the Colony is compulsory. The following tables give comparative statements:—

BIRTHS AND DEATHS—FREETOWN AND COLONY

BIRTHS

	1950			1951			1952		
District	M.	F.	*Total*	M.	F.	*Total*	M.	F.	*Total*
Freetown	1,290	1,270	2,560	1,346	1,314	2,660	1,370	1,279	2,649
Rest of Colony ..	919	874	1,793	929	872	1,801	938	948	1,886
Total ..	2,209	2,144	4,353	2,275	2,186	4,461	2,308	2,227	4,535

DEATHS

	1950			1951			1952		
District	M.	F.	*Total*	M.	F.	*Total*	M.	F.	*Total*
Freetown	832	658	1,490	758	656	1,414	865	716	1,581
Rest of Colony .	800	635	1,435	833	614	1,447	789	664	1,453
Total ..	1,632	1,293	2,925	1,591	1,270	2,861	1,654	1,380	3,034

26. *Infant Mortality*:—Out of 2,649 live births in Freetown, 378 deaths under one year were registered, giving an Infant Mortality rate of 143 per 1,000.

The figures for the past seven years are:—

1946	1947	1948	1949	1950	1951	1952
208	182	159	158	148	119	143

Of the 378 deaths under one year 60.5 per cent died during the first month of life.

27. Registration in the Protectorate remained voluntary except for the compulsory registration in six Chiefdoms and they have now completed their second year of compulsory registration. The figures for the registration of births and deaths in these Chiefdoms are:—

	Births			Deaths		
Chiefdoms	M.	F.	*Total*	M.	F.	*Total*
Nongowa	310	355	665	305	293	598
Kaiyamba	25	37	62	20	23	43
Nimi Koro	30	28	58	41	22	63
Jawi	51	48	99	67	32	99
Magbema	91	97	188	28	30	58
Jong	88	137	225	90	84	174
Total ..	595	702	1,297	551	484	1,035

Registration has been irregular in all these Chiefdoms with the possible exception of Nongowa. The Registrar in Kaiyamba Chiefdom has often been away on other duties and during his absence registration was not performed. Jawi Chiefdom sent no returns for November and Nimi Koro Chiefdom reported no death in January.

28. In the remainder of the Protectorate the following births and deaths were registered:—

Births			Deaths		
M.	F.	*Total*	M.	F.	*Total*
2,019	1,800	3,819	1,240	1,094	2,334

7—PUBLIC HEALTH

29. There have been no new innovations during the year. The investigation of *bilharzia* continues, the tuberculin testing of school children progressed and publicity was given to the fact that supplies of 'Sulphones' were available at all Government institutions for the treatment of leprosy. The incidence of smallpox remains low and there was no epidemic of cerebro-spinal meningitis.

30. The health of the population has remained fairly satisfactory considering the prevailing conditions. It is necessary to quote from the 1951 Annual Report which reads as follows.—

> "The socio-economic conditions however remain a problem. Until the standard of general living conditions can be raised, with especial reference to purer water supplies, night soil disposal, surface drainage of Freetown, improved housing and a better knowledge of the full untilisation of the local foods, the incidence of the intestinal diseases will not be reduced nor the general health improved, with the abolition of the polyavitaminosis and malnutrition."

31. Attention has been given to the prevention of tuberculosis and all new entrants to the nursing service have been tuberculin tested and negative reactors have been offered vaccination with B.C.G. Tuberculin testing of children has continued, Professor Heaf's multiple puncture test having now replaced the jelly test. During the year 2,875 school children were tested, 82 school-teachers, 44 student

nurses and a number of sanitary labourers in Freetown. One village school in the Colony was tested and also schools at Makeni and Magburaka in the Protectorate. It is planned to develop testing in the Protectorate as equipment becomes available in 1953. With the small numbers so far tested outside Freetown comparisons are uncertain, but it appears that though the crude percentage of positive reactors elsewhere is much the same as in Freetown, the intensity of reactions is less. Of 542 out of a total of 1,311 negatively reacting children whose parents have so far b9en offered vaccination, 508 presented themselves and were vaccinated. It is to ebe feared that in spite of considerable publicity, most people imagine that the tuberculin test is a vaccination against tuberculosis. Once the survey has been made it will probably be advisable to concentrate vaccination on young children and school entrants.

32. Samples from the Freetown treated water supply were taken almost daily. 334 samples were examined and of these 20 were unsatisfactory.

33. The housing conditions in Freetown show no improvement and in some areas there is a deterioration. The public Health legislation at present in force was drafted many years ago and new legislation is now required to meet with present conditions. Some property owners are rebuilding better planned houses and shops in permanent materials and, to avoid storm water from higher ground flooding their land during the rains, are building substantial walls. These act as effective dams and flood other property on the higher ground. An owner of property is unable to drain his land and carry the storm water through another person's property except by mutual arrangement thus under the existing legislation householders are unprotected against annual water-logging and in some instance actual flooding of their land.

34. There is an increasing demand for cooked foods, ice cream and mineral waters but, except in a few instances, the premises in which they are prepared cannot be suitably converted for the purpose. In the absence of suitable Legislation there can be no control over these industries except by appealing to the goodwill of the owners of the businesses. The conditions under which some of these commodities are prepared can only be described as appalling and consideration is being given to introduce legislation to control the preparation and sale of ice cream.

35. The Deep Water Quay is nearing completion and the danger of the introduction of plague is fully realised. Effective measures to reduce the local rat population and to prevent the importation of plague have been given consideration, and special measures are to be adopted. It is hoped to recruit an expatriate officer who has had experience of rodent control with particular reference to shipping and he will train a local officer. It has been arranged for an officer on the establishment, whilst on leave, to attend a course of instruction on rodent control.

36. The Lakka Infectious Diseases Hospital was kept in readiness for the reception of quarantinable diseases, but none occurred.

8—ENDEMIC DISEASES

37. *Malaria.*—The Malaria Control Unit is in charge of the anti-malarial work in Freetown and its environs. In the Protectorate anti-malarial work remained confined to swamp drainage and canalisation in the vicinity of the larger towns. Throughout the year 38,003 patients, of whom 59 died, were treated at Government hospitals and dispensaries. The figures for 1951 were 31,796 cases and 33 deaths. In addition four cases of Blackwater fever with one death were recorded among Africans.

38. The Unit continued their temporary larvicidal control measures using a D.D.T. emulsion. During the rains a mobile gang of between ten and twenty oilers augmented control in all areas.

39. Imagocidal measures were confined to the experimental treatment of the internal surfaces of houses with Gamexane water-dispersible powder and this played a prominent part in the control programme. Groups of houses were chosen in area

in which the control houses in the past showed high room density indices. The application of insecticide (6.5 per cent gamma isomer, diluent kaolin) was carried out effectively by means of " Vermorel " lime washing machines, which incorporated a vertical moving paddle, through a conical spray nozzle at an average deposit of 10 mgms, per sq. ft. No chemical analysis was made of the deposit and the estimate was based on an average house receiving a defined volume of fluid. In the urban areas between 2,000 and 2,500 houses lying between the Granville Brook and the Congo River were sprayed once between May and June. This represented approximately 20 per cent of the houses in the area. No houses were treated in the City Central and West Area. In the rural areas houses in the following villages received treatment by residual spraying:—

Village	*Treated*
Lungi Airport and surrounding villages	May and October
Wellington	May and October
Kissy	May and October
Lumley	April and July
Cockerill	April and October
Aberdeen	April and July
Levuma	April and July
Pendembu (near Goderich)	April and July

40. The permanent control measures were concerned with the Wellington and the Aberdeen polders. In the former, Anopheline production from the untreated bunded area remained low. The seepages and water holes fringing the polder were brought under larval control as was the village itself. The Bund gates continue to function satisfactorily In the Aberdeen bunded area the programme of clearing the mangrove was completed and new internal drains were cut. Routine maintenance was carried out and the low ground filled in with spoil derived from the drains. The Bund continues to show evidence of subsidence in parts, presumably due to consolidation in these sections and the level of the Bund was maintained by the addition of courses of blocks. The sluice gates worked efficiently but required repeated maintenance to the leading edges of the rafts. Further new internal drains are under construction.

The area was brought under larvicidal control and no Anophelines were found within the area.

41. The following table shows the monthly room density indices in Freetown of the female malaria vectors for the years 1943 to 1952:—

	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
January ..	0.24	0.20	0.01	0.02	0.02	0.00	0.002	0.006	0.000	0.001
February ..	0.22	0.23	0.01	0.02	0.01	0.003	0.000	0.028	0.009	0.012
March ..	0.63	0.26	0.00	0.03	0.00	0.003	0.000	0.002	0.002	0.001
April ..	0.30	0.04	0.01	0.02	0.00	0.006	0.000	0.004	0.000	0.003
May ..	0.43	0.03	0.06	0.14	0.01	0.035	0.001	0.015	0.001	0.002
June ..	0.46	0.26	0.33	0.68	0.12	0.045	0.091	0.061	0.073	0.026
July ..	0.28	0.45	0.11	0.19	0.14	0.020	0.082	0.086	0.030	0.021
August ..	0.17	0.19	0.04	0.02	0.01	0.001	0.014	0.007	0.005	0.000
September ..	0.22	0.05	0.20	0.00	0.00	0.005	0.003	0.000	0.006	0.000
October ..	0.16	0.01	0.00	0.00	0.00	0.005	0.001	0.000	0.006	0.001
November ..	0.05	0.00	0.00	0.00	0.00	0.003	0.001	0.000	0.004	0.001
December .	0.02	0.01	0.01	0.00	0.00	0.003	0.004	0.000	0.005	0.001

42. The annual average room density indices for the different areas during 1946 to 1952 were as follows:—

	1946	1947	1948	1949	1950	1951	1952
Freetown	0.08	0.027	0.011	0.017	0.017	0.012	0.006
Kissy	0.30	0.169	0.036	0.019	0.023	0.05	0.067
Western Area	0.34	0.095	0.095	0.106	0.113	0.28	0.018
Wellington	4.67	3.788	3.206	2.66	1.182	0.28	0.688

43. The distribution of the species of the important vectors caught in the various areas, was as follows:—

	G.		M.		F.		R.	
	1951	1952	1951	1952	1951	1952	1951	1952
Freetown control houses	110	53	—	—	4	—	1	—
Kissy control houses ..	116	131	—	1	2	1	—	—
Western Area (including Aberdeen Bund) control houses	783	56	139	1	—	—	—	—
Wellington control houses	459	2,562	108	225	98	96	—	—

G—gambiae giles

M.—gambiae var melas theo

F.—funestus giles

R.—rhodesiensis theo

44. The average room density index for the Urban Freetown Area is definitely lower than in recent years. Larval control has never been completely effective during the early rains, especially in June. It should be noted that the residual spraying in the Urban Area was undertaken in May and June. In the Western Area there has been a very marked reduction in the breeding of both *A. gambiae* and *A. gambiae var melas Theo* and the latter during 1952, was no longer an important vector. The Aberdeen bund, which is in this area, was previously responsible for heavy breeding of *A. gambiae*. The clearance of mangroves from the polder has now enabled larvicides to be used. There is a very marked increase in the number of *A. gambiae* and to a lesser extent an increase in *A. gambiae var melas theo* caught at Wellington. The rise in the average annual room density index also shows an increase but not to the same extent. During the latter part of 1951 the number of control houses was increased from 10 to 40 and these houses were retained throughout 1952. A further factor responsible was that the houses chosen as controls were closer to well-known anopheline breeding areas which were not subject to larvicidal measures.

45. The average parasite rates for infants attending the infant Welfare Clinic for the years 1945 to 1952 were:—

	Per cent
1945	20.1
1946	16.4
1947	11.8
1948	19.2
1949	25.3
1950	23.3
1951	23.9
1952	18.1

46. The percentages of School children with positive blood films for the years 1945 to 1952 are shown below:—

Area	1945	1946	1947	1948	1949	1950	1951	1952
Urban	16	11	8	8	14	11	13.4	7.4
Suburban	18	17	14	18	23	12	18.3	13.6
Controlled Rural ..	—	—	18	31	28	30	25.3	13.5
Uncontrolled Rural ..	—	—	36	36	45	40	43.6	39.1

Although the figures for the urban and controlled rural schools show a marked decrease, it is too early to make any further comment regarding the association between the lowered incidence and residual spraying.

47. The average parasite rates of expectant mothers attending the ante-natal clinic from 1945 to 1952 were:—

	Per cent
1945	16.3
1946	12.0
1947	9.5
1948	11.4
1949	19.4
1950	15.6
1951	21.2
1952	17.4

48. The following table gives details of all the films (excluding films from Europeans) examined at the Connaught Hospital from 1945 to 1952:—

	Total films examined excluding Europeans	*Positive*	*Percentage*	*Total out-patients attending the Connaught Hospital, the Infant Welfare Clinic and the Ante-natal clinic. "New Cases"*
1945	12,059	1,710	14	42,567
1946	12,086	937	7	40,261
1947	10,319	1,139	11	44,745
1948	12,415	1,810	14.8	47,910
1949	13,366	2,430	17.9	46,477
1950	12,252	2,244	18.3	40,410
1951	11,666	2,674	22.9	39,188 (excluding the figures for the infant Welfare Clinic)
1952	10,368	1,366	13.2	44,501

49. In view of the improvement in the previous figures, the following table of the number of blood films found to be positive for malaria among the African patients attending the Connaught Hospital from 1945 is of interest. These figures exlcude films taken from the patients attending the infant Welfare and ante-natal Clinics:—

	1945	1946	1947	1948	1949	1950	1951	1952
January	77	34	9	45	81	108	47	44
February	60	30	17	38	63	57	42	28
March	64	70	20	29	88	140	47	30
April	50	44	21	52	54	84	36	38
May	89	45	65	69	127	106	89	41
June	129	119	75	254	120	266	160	50
July	194	312	129	351	357	415	591	121
August	77	79	71	99	185	157	336	51
September	42	73	82	45	92	119	153	59
October	88	68	118	71	168	82	78	38
November	71	44	68	95	103	64	57	30
December	40	19	42	36	71	31	28	14
TOTAL	981	937	717	1,184	1,509	1,629	1,664	544

The peak period for the highest incidence of Anophelines is June. The above table demonstrates that the peak period for malaria is July. The figures for the positive blood films in July of 1952 are the lowest reached since 1945. The number of blood films examined in July of this year is also the lowest recorded since 1945.

50. It does appear to be a significant fact that the total percentage of positive blood films taken from the school children and from the patients attending the Clinics and the Connaught Hospital has decreased and there is a marked decline in the number of blood films found to be positive from patients attending the Connaught Hospital during the peak period. It cannot be ignored that associated with the marked improvement there has been residual spraying in Freetown and its environs.

9—THE ENDEMIC DISEASES CONTROL UNIT

51. The Endemic Diseases Control Unit has been chiefly concerned with yaws, sleeping sickness and bilharzia. Treatment of yaws and the investigation of bilharzia occupied the whole time of two medical officers—one of whom had to be transferred from the Unit in September and leave the treatment of yaws to a Senior Attendant.

52. The yaws campaign was limited to the Chiefdoms in the Northern Province. A census of the population was not made although its desirability was accepted. A census would have necessitated the employment of extra attendants or else would have considerably reduced the numbers treated. The people were examined in their own villages and treated with five double injections of " Acetylarsan " 2 c. cms. and bismuth salicylate 3 grains in 2 c. cms. of oil at intervals of five days. Penicillin is more efficient and would have allowed a larger number of patients to have been treated, but it was too expensive. The great majority of patients completed their course of treatment.

53. The summary of the results is as follows:—

Chiefdoms	*Estimated Population*	*Population Examined*	*Yaws Infectious*		*Yaws Non-infectious*		*Treated*		*Tropical Ulcers*
			No.	*Per cent*	*No.*	*Per cent*	*No.*	*Per cent*	*No.*
Kunike ..	11,060	8,032	119	1.5	354	4.4	473	5.9	—
Kunike Barina	5,165	3,901	30	0.8	83	2.1	113	2.9	—
Sambaia ..	8,180	7,459	196	2.6	250	3.1	446	5.9	—
Dansogoia ..	3,585	2,448	125	5.1	77	3.1	202	8.2	18
Kaiantuba ..	5,225	5,005	265	5.3	206	4.1	471	9.4	55
Kafe Simiria ..	8,330	6,578	415	6.2	214	3.2	629	9.4	102
Biriwa ..	16,475	14,420	1,053	7.3	906	6.3	1,959	13.6	358
Makari Gbanti	9,000	7,183	742	10.3	482	6.7	1,224	17.0	207
Bombali ..	7,475	6,692	372	5.6	578	8.6	950	14.2	149
Sela Limba ..	8,950	5,815	547	9.4	278	4.8	825	14.2	103
Pendembu ..	17,485	14,922	1,425	9.5	1,264	8 5	2,689	18.0	139
Gbanti Kamaranka ..	9,825	9,565	869	9.1	1,065	11.1	1,934	20.2	82
Magbaiamba ..	5,243	4,728	428	9.0	328	7.0	756	16.0	60
Sanda Loko ..	9,225	6,997	694	9.9	268	3.8	962	13.7	94
Sanda Tenraran	13,470	12,026	831	6.9	926	7.7	1,757	14.6	162
Total	138,693	115,771	8,111	7.0	7,279	6.3	15,390	13.3	1,529

54. A comparison with the figures for the previous year cannot be made. In 1951 the Unit was handicapped by the lack of Medical Officers and treatment was given to all who either had evidence of yaws or who stated that they had had yaws, whereas in 1952 treatment was restricted to those who had definite evidence of yaws. It is realised that the treatment of contacts is highly desirable and that latent cases should also be considered. This would necessitate giving treatment to everybody in some of the chiefdoms.

55. The above table shows the order in which the chiefdoms were treated during the year. There is obviously a large rise in the incidence of yaws during the wet season and the peak is reached about November. The low incidence in the chiefdoms of Bombali and Sela Limba is probably due to the presence of a hospital

in each of these chiefdoms and in Kunike Barina to the fact that this chiefdom was treated in 1951. Dansogoia and Kafe Simiria were also treated in the dry season of 1951 but now show no improvement over Kalantuba which has since been treated. It therefore appears to be necessary to give treatment during the wet season when the number of patients suffering from infectious yaws is greater or, alternatively there are a greater number of contacts and latent cases than if treatment is given during the dry season.

56. Four sections of Luawa and parts of Upper Bambara and Penguia chiefdoms were visited by the census and diagnosis teams and were given prophylactic "Pentamidine." Thus all the border chiefdoms from Mafindo in the North to Dia in the South-west have now received prophylactic "Pentamidine." Less than 100 new cases of Sleeping sickness have been treated this year. Further investigation is still required on the incidence of the disease in Sherbro Island and Koya, and in Niawa and Langrama chiefdoms in Kenema District.

	Census Population	*Population Examined*	*Sleeping Sickness*	*per cent*
Upper Bambara Section	2,812	2,239	7	0.3
Penguia	4,241	3,929	3	0.08
Luawa 2 Sections (Jan.)	3,012	2,853	2	0.07
Luawa 2 Sections (Dec.)	3,354	3,431	5	0.015
Total	13,419	12,452	17	0.14

Further investigations have been made regarding the hibernation of snail's in the mud, on the life span of the miracidia and on treatment with "Lucanthone." Dr. Elmer G. Berry made an inspection of many areas of the country and demonstrated the use of a chemical molluscicide. The distribution of *bilharzia* in the north is sporadic and the most northerly villages found to be infected are Ganya and Goeria Fotomou, north and north-east of Falaba. There is an isolated focus near Makali in Kunike Barina Chiefdom. From Blama to the east almost every village along the main and feeder roads is infected.

57. It was decided, towards the end of the year, to begin to treat leprosy at the treatment centres. It has so far only been possible for a Medical Officer to examine the patients at five centres and then start treatment. Already 102 patients are under treatment and many others are waiting to be examined.

58. Four new treatment centres have been opened at Sandaru (Penguia Chiefdom), Baiwala (Dia Chiefdom), Penguia (Lower Bambara Chiefdom) and Baoma (Koya Chiefdom). The centres now number twenty. The following table gives the figures for patients treated:—

	Sleeping Sickness	*Yaws*	*Bilharzia*	*Ameobic Dysentery*	*Leprosy*	*Total New cases*	*Subsequent attendances*
Koindu ..	10	233	298	68	20	2,790	28,217
Kangama ..	40	586	91	153	22	4,448	12,110
Dodo ..	9	101	112	67	8	2,971	3,427
Kailahun ..	18	298	413	117	—	4,282	4,716
Giehun ..	28	99	61	90	—	2,423	4,446
Mamboma	12	126	66	41	—	2,942	3,284
Sandaru ..	5	134	117	27	—	1,276	1,360
Bandajuma ..	2	63	98	38	—	1,952	3,207
Gandorhun ..	1	165	140	115	—	3,759	3,429
Kayima ..	—	165	116	21	—	1,926	2,414
Kainkordu ..	21	97	79	38	—	1,586	2,534
Mobai ..	7	94	254	155	36	4,178	3,090

	Sleeping Sickness	*Yaws*	*Bilharzia*	*Ameobic Dysentery*	*Leprosy*	*Total New cases*	*Subsequent attendances*
Baiwala ..	5	64	288	47	16	2,240	2,520
Nyeama ..	—	104	127	54	—	2,752	6,044
Panguma ..	—	86	84	31	—	2,034	1,497
Boadjibu ..	2	329	297	72	—	5,126	9,669
Sendumei ..	7	63	9	25	—	1,135	1,619
Giema ..	6	41	50	47	—	1,494	2,905
Baoma ..	2	79	25	37	—	1,184	2,733
Binkolo ..	—	615	—	1	—	1,750	N.R.
Total ..	175	3,542	2,725	1,244	102	52,248	99,221

59. *Yaws and Sleeping Sickness.*—In addition to the 18,932 patients treated for yaws and sleeping sickness by the Endemic Diseases Control Unit, 8,216 patients suffering from yaws were treated at Government hospitals and 7,481 were treated at Government dispensaries. A further 107 cases of sleeping sickness were reported.

60. *Tuberculosis.*—During the year 343 cases with 53 deaths were reported as compared with 289 cases with 46 deaths reported in 1951. There was no bovine tuberculosis but a few pigs were found infected with tuberculosis.

61. *Smallpox.*—Thirty-six cases and one death were reported as compared with 34 cases and no deaths in 1951. During the year 56,151 vaccinations were performed in the Colony and Protectorate.

62. *Cerebro-spinal Meningitis.*—No epidemic of this disease occurred in 1952 and only ten cases with three deaths were reported. The figures for 1951 were fourteen cases with six deaths.

63. *Veneral Diseases.*—Gonococcal infections accounted for 83 per cent of all cases of veneral diseases treated, and 10,848 patients were treated for Gonococcal infections, 532 for all forms of syphilis and 1,639 for other veneral diseases.

64. *Dysentery.*—The reported cases of amoebic and bacillary dysentery were 2,049 and 292 respectively. The true incidence of these diseases is very much higher than these figures suggest.

65. *Enteric Fever.*—Eighty-eight cases with nine deaths were notified during the year. Of these 50 cases with two deaths were reported from Freetown.

66. *Diseases of the Respiratory System.*—Twenty-six thousand two hundred and twenty-nine cases, with 76 deaths, of all forms of respiratory diseases, excluding pulmonary tuberculosis, were recorded in Government hospitals and dispensaries.

67. *Diseases of the Bones and Organs of Movement.*—This heading embraces numerous ailments. 13,938 cases, with three deaths, were recorded in Government hospitals and dispensaries.

68. *Typhus (Murine).*—Twelve cases with no deaths were reported during the year as compared with four cases and no deaths in 1951.

69. *Rabies.*—There were no human cases of rabbies recorded during the year. A total of seven dogs' brains was found positive for negri bodies out of eighteen dogs' brains examined.

70. *Plague.*—No cases of plague was reported and 4,019 rats were examined with negative results.

71. *Yellow Fever.*—No cases were reported. 1,784 inoculations were performed during the year.

10—MATERNITY AND CHILD WELFARE

72. All the hospitals offer facilities for dealing with maternity work. In the Protectorate Government Hospitals there were 514 admissions with 377 deliveries. In the Maternity Hospital at Freetown, there were 1,602 admissions and 1,104 were delivered. Out of 1,142 children born in the Maternity Hospital, 986 were discharged alive from the hospital.

73. Of the patients who were delivered in the Maternity Hospital at Freetown, 333 were primiparae and 771 were multiparae. There were 659 normal deliveries and 445 abnormal deliveries and of the latter 152 were only abnormal on account of tears of the soft parts. The following table is a list of the remaining 293 abnormal cases:—

Caesarean section	19
Episiotomies	9
Twins	38
Occipito posterior	15
Breech	19
Face	5
Premature	111
Still born	7
Forceps	27
Dead born	15
Ruptured uterus	2
Intra partum eclampsia	1
Central placenta praevia	1
Accidental haemorrhage	6
Retained placenta	6
Post partum haemorrhage	1
Transverse lie	2
Anencephalus	1
Uterine inertia	2
Hydrocephalus	1
Prolapsed cord	1
Craniotomy	4

74. The following tables show the comparative figures for the attendances at the clinics during the past four years:—

ANTE-NATAL CLINIC

	1949	1950	1951	1952
New cases	2,328	2,564	2,492	2,823
Subsequent attendances	7,222	6,817	8,095	8,231
Home visits	3,815	4,634	5,638	7,190

POST-NATAL CLINIC

New cases	787	946	1,006	1,300
Subsequent attendances	664	783	887	1,520

INFANT WELFARE CLINIC

New cases	1,660	1,630	Figures not available	1,733
Subsequent attendances	10,926	7,453	,,	9,789
Home visits	21,830	20,374	27,752	40,630

The number of home visits to patients who required ante-natal care has previously been recorded inacurately and only the number of subsequent visits has been given. The figures for the previous years have now been corrected and the figures now show the total visits paid. Likewise the figures for home visits under the Infant Welfare Clinic for 1951 have been corrected. The figures for 1950 were incomplete.

75. There were thirteen maternal deaths but three of these patients were moribund when admitted. The causes of the deaths were as follows:—

MATERNAL DEATHS

Ruptured uterus	2
Peritonitis Ruptured uterus	1
Intra partum eclampsia	2
Acute heart failure	1
Toxaemia of pregnancy	1
Post partum haemorrhage	1
Puerperal Sepsis	1
Obstructed labour Cardiac failure ..	1
Paralytic ileus	1
Ante partum eclampsia	1
Placenta praevia	1

11—SCHOOL MEDICAL SERVICE

76. A daily clinic was held by the Lady Medical Officer for the School children; 2,894 children attended and paid 2,407 subsequent visits. A further clinic was held at St. Joseph's Convent by a Sister and, 6,008 children were treated with 20,025 subsequent attendances. Routine visits of inspection were paid to the Islamia, Roosevelt, Cathedral Infants, Holy Trinity Infants, Bathurst Street, Municipal Intermediate and St. Anthony's Infant Schools. In all 994 children were examined. Approximately 30 per cent of the children showed minor degrees of malnutrition and in about 25 per cent of this group evidence of avitaminosis was present. Tuberculosis was suspected in 24 children and of these five were found to show an active infection.

12—LABOUR CONDITIONS

77. The three largest of the Mining Camps were inspected and a large area which one of the Mines intends to develop was visited. Careful consideration is being given to the planning of this area in order to prevent the sudden influx of new comers overcrowding existing villages.

13—PORT HEALTH WORK

78. *Freetown Port.*—The Port Health work was carried out by a Senior Sanitary Inspector under the general supervision of a Medical Officer of Health. During the year 818 vessels visited Freetown and no cases of quarantinable diseases occurred.

79. *Lungi Airport.*—The number of aircraft landed at the Airport was 332. The vaccination state against smallpox and yellow fever among the staff and families was well maintained. The International Sanitary Regulations (World Health Regulation No. 2) came into force on the 1st of October.

14—TRAINING OF JUNIOR STAFF

80. *Nursing.*—Nurses are trained at the Connaught and Bo Hospitals. One Nursing Sister is posted for whole time training duties at the Connaught Hospital and every effort is made to raise the standard. During the year, fourteen males and eleven females successfully completed the course. Seventy-six nurses are undergoing training.

81. *Midwives.*—Midwives are trained at the Maternity Hospital. Training was also formerly given at Bo but has had to be temporarily stopped owing to shortage of staff. Thirteen Midwives were successful in the local examination, and thus became entitled to local registration.

82. *Sanitary Inspectors.*—All the Sanitary Inspectors are trained in Freetown and four successfully completed the course. Encouragement is given to Sanitary Inspectors to sit for the Certificate of the Royal Sanitary Institute (West Africa) but no candidate attempted the examination during the year.

83. *Druggists.*—Four dispensers-in-training were successful in passing the local examination.

15—HOSPITALS AND DISPENSARIES

84. All the hospitals were staffed by Medical Officers throughout the year and only one dispensary at Panguma remained closed. This was opened later in the year by the Endemic Diseases Control Unit. A list of the hospitals with their yearly attendances and their bed strengths is given in Appendices II and III. The list of dispensaries is given in Appendix IV.

85. The following statistics show the number of patients treated at the various Government Institutions during the past four years:—

	1949	1950	1951	1952
I.—COLONY:				
(*a*) *Connaught Hospital*				
In-patients	3,696	3,143	2,799	2,948
Out-patients:				
New cases	42,489	36,216	36,696	39,945
Subsequent attendances	83,533	97,635	113,070	124,692
(*b*) *Hill Station Hospital*				
In-patients	359	387	337	354
Out-patients:				
New cases	446	528	410	511
Subsequent attendances	837	601	631	696
(*c*) *Dispensaries*				
New cases	44,751	42,341	47,814	45,543
Subsequent attendances	213,546	113,572	137,861	122,109
II.—PROTECTORATE:				
(*a*) *Bo Hospital*				
In-patients	1,595	1,461	1,388	1,805
Out-patients:				
New cases	16,819	15,415	15,411	17,755
Subsequent attendances	59,911	70,569	81,622	91,127
(*b*) *Other Hospitals*				
In-patients	1,930	3,029	2,361	3,372
Out-patients:				
New cases	35,967	63,282	45,343	66,589
Subsequent attendances	86,419	164,928	116,623	116,965
(*c*) *Dispensaries*				
New cases	107,889	82,748	97,891	81,058
Subsequent attendances	207,289	136,406	165,669	143,372

86. The surgical operations performed at the Connaught Hospital during the year were 4,053 and of this number 2,211 were cured and 1,789 were relieved.

16—KISSY MENTAL HOSPITAL

87. The general health of the patients has been fairly good but the hospital is overcrowded. Occupational therapy which includes gardening, basket, mattress and pillow making and domestic tasks was encouraged.

88. The hospital was visited on many occasions by various voluntary organisations and they provided local luxuries for the patients. The radio rediffusion was also greatly appreciated. The British Council continued their welcome supply of periodicals.

89. Electric light was installed throughout the hospital. It is controlled by a central switch in the administrative block. All wiring is concealed and only bulk head lights are fitted in the wards.

90. The following table gives statistical details:—

	1950	1951	1952
Admissions	54	61	66
Discharges	55	27	38
Deaths	15	16	33
Number of patients in hospital on 31st December	173	191	186

There has been a noticeable increase in the number of deaths but the majority fall into one of the three groups. The first group is associated with old age and consists of cerebral haemorrhage and thrombosis cases, the second group is neuro syphilis, and the last group is associated with intestinal disorders—the dysenteries and helminthic infestations.

17—THE MALE AND FEMALE INFIRMARIES

91. Early in the year the female patients were transferred to the new ward at the Male Infirmary. The majority of the patients are very feeble or bedridden but every encouragement is given to occupational therapy and this has consisted of the cultivation of gardens and needlework. The latter was instituted by the Social Welfare Department.

	Males	*Females*	*Male Lepers*
Remained in hospital on 31st December, 1951	57	29	9
Admissions	21	11	4
Discharges	4	4	1
Deaths	10	7	1
Absconded	5	1	3
Number of patients in hospital on 31st December, 1952	59	28	8

18—DENTAL SERVICES

92. A third Dental Officer was appointed during the year but owing to the incidence of leave only one visit was paid to the Protectorate. Detailed statistics were made of the dental treatment required by the children at the Annie Walsh Memorial, the St. Joseph's Convent and the Freetown Secondary School for Girls and treatment offered.

93. A dental mechanic from the Medical Department of the Gambia was posted to this centre for tuition for five months.

	Patients	*Fillings*	*Extractions*	*Other Treatment*	*Anaesthetics*
1948	9,866	1,240	9,391	751	7,574
1949	10,088	1,822	6,957	781	2,353
1950	8,421	1,085	7,743	341	6,253
1951	9,399	1,548	7,865	140	6,977
1952	10,909	2,372	8,377	1,066	7,046

19—X-RAY DEPARTMENT

94. X-Ray Units are available at the Connaught Hospital, Freetown, and at the Bo Hospital and both are in charge of radiographers. The following table records the number of examinations during the past five years.—

	FREETOWN				
	1948	1949	1950	1951	1952
Total patients examined ..	4,299	5,527	4,560	5,689	6,186
Radiographic examinations	8,963	10,663	9,317	10,229	11,616
Fluoroscopic examinations	676	854	780	1,409	673
Total radiological examinations ..	9,639	11,517	10,097	11,638	12,289

95. The transformer of the new unit which should have been installed in Bo had to be returned to the manufacturers for adjustments and the department at Bo has been handicapped by having to use an old unit of limited utility. No fluoroscopic examinations were possible. The number of patients examined was 1,100.

20—PATHOLOGICAL LABORATORY

96. The post of Pathologist still remains vacant and when the Senior Pathologist proceeded on leave the laboratory service had again to be restricted.

97. Appendix I details the work performed by the laboratory. A total of 48,062 examinations was made at the Freetown laboratory and 4,946 examinations were made at Bo. The figures for the previous year were 45,320 and 4,498 respectively.

98. A routine blood culture and a Widal examination are made from all patients admitted to hospital with " pyrexia of unknown origin ". Thus a correct diagnosis is made in most instances when a patient is suffering from typhoid fever, *Salm typhi* was isolated on 49 occasions from 26 patients and in 22 of these the blood cultures were positive. The dysenteries are common infections and there were 87 proved cases of amoebic dysentery and 120 of bacillary dysentery. *Sh. flexneri* W and Z were the commonest causative organisms. Two cases of infection with *Sh. shigae* and two of *Sh, boydii P* 143 were found.

99. Of the 847 specimens of sputum received from African patients 278 were positive for tubercule bacilli—but many of these were repeat examinations. Tuberculosis was the cause of death in fifteen post mortem examinations out of a total of 173.

21—HER MAJESTY'S PRISONS

100. The general health of the prisoners was satisfactory but the prison and the remand section remained overcrowded.

	1949	1950	1951	1952
Daily average number of prisoners ..	554	629	418	433
Admitted to hospital	302	166	269	289
Deaths	8	3	2	1
Out patients:—				
New cases	11,751	7,877	9,270	6,067
Subsequent attendances ..	50,057	29,643	28,897	18,485

22—CONCLUSION

101. Further appendices are given with this report:—

Appendix i—Details of the Laboratory investigations

Appendix ii—Government Hospitals and their bed strength

Appendix iii—Attendances at Government Hospitals

Appendix iv—Attendances at Government Dispensaries

Appendix v—Mission and Mining Hospitals and Dispensaries

Appendix vi—Returns of patients treated at Government Hospitals.

E. A. RENNER,
Director of Medical Services.

MEDICAL HEADQUARTERS,
FREETOWN.

APPENDIX I

DETAILS OF EXAMINATIONS, 1952

					Examined
Blood Films					10,554
	Total				
Connaught Hospital	4,476			(542)	
Infant Welfare Clinic	1,594			247	
Ante-Natal Clinic	2,651	P. falciparum		453	
Europeans	186			9	
Malaria Control Unit ..	1,647			117	
Total ..	10,554			1,368	
Faeces					2,842
Tænia				18	
Ascaris				491	
Ankylostome				204	
Enterobius				6	
Strongyloides				169	
Trichuris				153	
Ent. histolytica				68	
Ent. histolytica cysts				19	
Ent. coli				31	
Giardia				8	
Trichomonas				47	
Iod. butschlii				11	
Balantidium coli				1	
Sch. mansoni				2	
Blood and pus				616	
Urine					2,579
Albumen				945	
Sugar				129	
Acetone				24	
Bile				40	
Casts				88	
Sch. hæmatobium				40	
Blood				127	
Pus				341	
Venereal Disease					1,250
Urethral Smears:					
Africans	964	Gonococci ..		525	
Europeans	24	Gonococci ..		8	
Cervical Smears:					
Africans	123	Gonococci ..		2	
		Trichomonas ..		27	
Europeans	1	Gonococci ..		—	
		Trichomonas ..		—	
Eye Smear	26	Gonococci ..		7	
D.G.I.:					
Africans	98	Tr. pallidum ..		5	
Europeans	12	Tr. pallidum ..		—	
Frei Test	2				865
Sputum					
Africans	847	M. tuberculosis		278	
Europeans	18	M. tuberculosis		—	

APPENDIX I—*continued*

HAEMATOLOGY

	Examined
African Patients:	5,617
Red cell count	517
Hæmoglobin	2,314
Packed cell volume	2,048
Reticulocyte	208
Bleeding time	2
Coagulation time	1
Sedimentation rate	309
Blood Group	82
European Patients:	
Red cell count	9
Hæmoglobin	70
Packed cell volume	55
Reticulocyte	2

Anemia Africans:

	Moderate Hb. 7g—.10g.	*Severe under 7g.*
Normocytic orthochromic	119	37
Normocytic hypochromic	76	96
Microcytic orthochromic	2	9
Microcytic hypochromic	10	27
Macrocytic hypochromic	1	2

Ante-Natal Anemia:

	Total	*Moderate*	*Severe*
Normal	807	—	—
Orthochromic ..	339 (24 per cent)	302 (21 Per cent)	37 (3 per cent)
Hypochromic ..	271 (19 per cent)	206 (15 per cent)	65 (4 per cent)
Total	1,417	508	102

CEREBRO-SPINAL FLUIDS — 404

Cells increased			39
Protein increased			26
Chlorides			2
Colloidal gold (Lange)			3
Tubercle bacilli			1
Pneumococci			1
Kahn Tests ..	184	Positive	13
		Negative	171

BIOCHEMISTRY — 482

	Africans	*Increased or Positive*	*Europeans*	*Increased or Positive*
Blood urea	65	19	6	3
Urea clearance	5	—	2	—
Blood sugar	22	9	1	—
Sugar tolerance	11	5	4	2
Gastric test meal	20	—	5	—
Van den Bergh	70	25	12	4
Plasma bilirubin	30	—	3	—
Thymol turbidity	64	9	12	5
Zinc sulp. turbidity	52	9	12	4
Takata Ara test	64	52	13	—

APPENDIX I—*continued*

					Examined
Alkaline phosphatase	2	1	1	—	
Acid phosphatase ..	2	2	—	—	
Diastase	1	—	—	—	
Plasma sodium ..	1	—	—	—	
Plasma protein ..	—	—	1	—	
Plasma bromide ..	—	—	1	—	6,960
KAHN TESTS					
Africans		6,904	Positive ..	2,047	
Europeans		56	Positive ..	2	
					7,472
LAUGHLEN TESTS					449
AGGLUTINATION TESTS					
Africans		434			
Europeans		15			
	Titre ..	1:25	1:125		
		1:50	+		
Salm. typhi H		56	13		
Salm. typhi O		13	29		
Salm. paratyphi A		22	25		
Salm. paratyphi B		16	15		
Salm. paratyphi C		5	2		
S. enteritidis		23	15		
Salm. non-specific		13	14		
B. proteus X19		19	10		
B. proteus X2		16	23		
BACTERIOLOGY					2,117
Fæces					892
Urine					466
Blood					254
Pus					74
Throat swab					83
Eye swab					55
C.S.F.					19
Others					274
Organism Isolated:					
Salm. typhi		49	Blood 22	Fæces 27	
Salm. paratyphi C		1			
Salm. enteritidis		2			
Salm. typhi murium		4			
Salm. stanleyville		1			
Salm. ? new type O — XXXVIII H = Y, 1:5				.. 1	
Sh. flexneri V..		5			
Sh. flexneri W		33			
Sh. flexneri Z		32			
Sh. flexneri VZ		19			
Sh. flexneri 103		1			
Sh. newcastle		5			
Sh. shigæ		2			
Sh. sonnei		13			
Sh. schmitzi		8			
Sh. boyd P. 143		2			
					394
WATER EXAMINATION					
Freetown		334	unsatisfactory	20	
Hill Station		30	,,	4	

APPENDIX I—*continued*

			Examined
Lungi	11	„	—
Marampa	14	„	14
Waterloo	1	„	1
Bonthe	4	„	4
HISTOLOGY			238
Biopsy			94
Uterine biopsy			18
Post mortem tissues			108
Dog brain			18
Sections of Special Interest:			
Sarcoma			4
Melanoma			1
Kaposi hæmorrhagic sarcoma			1
Squamous carcinoma			8
Basal cell carcinoma			1
Adeno carcinoma sweat gland			1
Carcinoma thyroid			1
Carcinoma liver			1
Carcinoma stomach			1
Dysgerminoma ovary			2
Neuroblastoma adrenal			1
Teratoma (sacro-coccygeal)			1
Mixed salivary tumour			3
Squamous carcinoma cervix			2
Synovioma			1
Chondroma			1
Fibroma			6
Lipoma			5
Histiocytoma			1
Hæmangioma			2
Lymphangioma			1
Lymphadenoma			2
Myeloid epulis			1
Papilliferous cyst adenoma sweat gland			1
Hydatidiform mole			1
Metropathia hæmorrhagica			1
POST MORTEM			173
Coroner			73
Connaught Hospital			60
Mental Hospital			30
M.O.H.			10
Renal:			
Subacute nephritis			1
Chronic nephritis			1
Tuberculosis			1
Hydro nephrosis			1
Pyelo nephritis			2
Miscellaneous:			
Septicæmia S. enteritidis			1
Septicæmia pyocyaneus			1
Septicæmia streptococci			2
Typhoid			2
Pyæmia			3
Anæmia			4
Starvation			1

APPENDIX I—*continued*

						Examined
Old age					2	
" Natural causes "					3	
Lymphadenoma					2	
VETERINARY						3,730
Dog brain	18	Rabies		7		
Cow blood films	6	Anthrax		—		
Rats:						
R. rattus	3,496					
R. norvegicus	523					
Fleas:						
X. cheopis	210					
X. braziliensis	12					
MEDICO LEGAL						51
Vaginal smears	13	Gonococci		2		
Urethral smears	4	Gonococci		2		
Clothes	19	Blood		6		
Sheets, etc.	5	Blood		2		
Weapons	4	Blood		2		
Blood alcohol	4					
Sasswood	1					
Cannabis Sativa	1					
MISCELLANEOUS						101
Skin scraping	36	Tinea 3	B. lepræ	1		
Seminal fluids	15					
Blood film (filaria)	5					
Gland puncture	6					
Freidman pregnancy test	3					
Groundnut oil	2					
Guinea pig innoculation	1					
Fluids	22					
Others	11					
YELLOW FEVER INNOCULATION						1,784
TOTAL						48,062

EXAMINATION AT BO SUB-LABORATORY

BLOOD FILMS				1,799
	P.falciparum		811	
FAECES				937
Ankylostome			218	
Ascaris			315	
Trichuris			3	
Ent. histolytica			54	
Tænia			21	536
SPUTUM				
M. tuberculosis			11	
URETHRAL SMEARS				139
N. gonorrhoea			79	
URINE				1,415
MISCELLANEOUS				88
C.S.F.				2
AGGLUTINATION TESTS				30
TOTAL				4,946
GRAND TOTAL				53,008

APPENDIX I—*continued*

CAUSE OF DEATH

	Examined
Violence:	
Road accident	14
Drowning	8
Rupture intestine	1
Lightning	1
Burns	3
Electrocution	1
Asphyxia (pea nut)	1
Respiratory:	
Lobar pneumonia	4
Broncho pneumonia	8
Congestion lung	3
Abscess lung	3
Pleurisy	1
Infarct	3
Tuberculosis	11
Emphysema	1
Cardio Vascular:	
Aortitis	9
Rupture aneurysm	3
Gumma	1
Aneurysm heart	1
Pericarditis	4
Endocarditis	1
Coronary occlusion	2
Atheroma	1
Hypertension	2
Aortic incompetence	2
"Acute heart failure"	1
Alimentary:	
Amœbic dysentery	9
Bacillary dysentery	2
Colitis	2
Enteritis	3
Strangulated hernia	1
Volvulus	2
Tuberculosis	1
Cirrhosis liver	2
Carcinoma liver	2
Hepatitis	1
Perforated duodenal ulcer	1
Peritonitis	1
Necrosis liver	3
Central Nervous System:	
Cerebral hæmorrhage	12
Cerebral contusion	2
Syphilis	5
Encephalitis	2
Meningitis:—	
Purulent	2
Pneumococcal	1
Tuberculous	2

APPENDIX II
GOVERNMENT HOSPITAL BEDS

Name and Location of Hospital	*Number and Category of Beds*					*Remarks*
	General	*Obstetrical*	*Tuberculosis*	*Infectious*	*Mental*	
A.—COLONY						
Connaught	132	—	18	4	—	*Plus* 23 cots
Connaught Annexe	20	—	—	—	—	„ 2 „
Hill Station	30	—	—	2	1	„ 2 „
Maternity	—	42	—	—	—	„ 22 „
Murray Town	50	—	—	—	—	
Lakka Infectious Diseases ..	—	—	—	60	—	
Kissy Mental	—	—	—	—	112	
King George V Memorial Home	56	—	—	*8	—	For the aged and indigent
Female Infirmary	29	—	—	—	—	
B.—PROTECTORATE						
Bo	70	10	4	8	—	*Plus* 8 cots
Bo Annexe	4	—	—	—	—	
Bonthe	32	6	—	2	—	„ 2 „
Moyamba	18	—	—	—	—	
Pujehun	22	—	—	—	—	
Kailahun	23	—	—	—	—	
Makeni	26	—	—	—	—	„ 1 cot
Port Loko	18	—	—	—	—	
Kabala	30	—	—	—	—	
Lungi	12†	—	—	—	—	„ 1 „
Total	572	58	22	84	113	*Plus* 61 cots

* For Leprosy

† The twelve beds in this Institution are reserved for emergency and in the event of accident to an aircraft.

APPENDIX III

ATTENDANCES AT THE GOVERNMENT HOSPITALS

Name of Institution	*IN-PATIENTS*	*OUT-PATIENTS*		
		New Cases	*Subsequent Attend-ances*	*Total Attend-ances*
A.—Colony				
Connaught	2,948	39,945	124,692	164,637
Hill Station	354	511	696	1,207
Maternity	1,640	—	—	—
TOTAL	4,942	40,456	125,388	165,844
B.—Protectorate				
Bo	1,805	17,755	91,127	108,882
Bonthe	486	7,849	24,778	32,627
Moyamba	346	9,119	21,321	30,440
Makeni	508	13,965	32,366	46,331
Pujehun	493	7,670	2,468	10,138
Port Loko	293	8,931	7,036	15,967
Kailahun	632	5,707	10,944	16,651
Kabala	614	7,263	11,025	18,288
Lungi	—	6,085	7,027	13,112
TOTAL	5,177	84,344	208,092	292,436
Colony Hospitals ..	4,942	40,456	125,388	165,844
Protectorate Hospitals ..	5,177	84,344	208,092	292,436
GRAND TOTAL ..	10,119	124,800	333,480	458,280

APPENDIX IV

ATTENDANCES AT THE GOVERNMENT DISPENSARIES

		New Cases	*Subsequent Attendances*	*Total Attendances*
A.—Colony				
	Cline Town	14,954	55,909	70,863
	Regent	3,720	9,074	12,794
	York	8,192	5,745	13,937
	Kent (included in York's figures) ..	—	—	—
	Waterloo	3,708	6,359	10,067
	Songo	2,380	3,995	6,375
	Hastings	2,357	1,558	3,915
	Newton	1,721	3,252	4,973
	Kissy	5,998	30,170	36,168
	Wellington	1,975	5,222	7,197
	Bananas (Staffed by Dispenser during rainy season)	538	825	1,363
	TOTAL	45,543	122,109	167,652
B.—Protectorate				
South-western Province	Bauya	8,252	10,601	18,853
	Mabang	4,535	9,796	14,331
	Mano	3,681	4,046	7,727
	Njala	3,892	4,682	8,574
	Sembehun	4,668	5,984	10,652
	Sulima	1,751	2,717	4,468
	Sumbuya	4,202	17,437	21,639
	Gbap	3,143	8,531	11,674
	York Island	4,735	1,730	6,465
South-eastern Province	Blama	4,832	3,807	8,639
	Kenema	6,223	8,023	14,246
	Pendembu	2,631	5,079	7,710
	Daru	3,549	12,110	15,659
	Koidu	5,096	11,104	16,200
Northern Province	Mabonto	5,275	9,562	14,837
	Yonnibana	6,066	6,071	12,137
	Kambia	6,469	15,150	21,619
	Batkanu	2,058	6,942	9,000
	TOTAL	81,058	143,372	224,430
COLONY DISPENSARIES		45,543	122,109	167,652
PROTECTORATE DISPENSARIES		81,058	143,372	224,430
	GRAND TOTAL	126,601	265,481	392,082

APPENDIX V

MISSION AND MINING HOSPITALS AND DISPENSARIES BED STRENGTH

Name and Mission	Place	Number and Category of Beds					Remarks
		General	*Obstetrical*	*Tuberculosis*	*Infectious*	*Mental*	
		MISSION HOSPITALS					
American Wesleyan ..	Kamakwie	30	5	2	3	—	
Evangelical United Brethren in Christ	Rotifunk	24	8	—	—	—	*Plus* 7 Cots
	Tiama	11	—	—	—	—	
Methodist	Segbwema	36	20	—	16	—	
Church Missionary Society ..	Princess Christian Mission Hospital, Freetown	9	20	7	2	—	„ 20 „
	MISSION DISPENSARIES (not under the care of a resident Medical Officer)						
American Wesleyan ..	Kukuna *via* Rokupr ..	2	2	—	—	—	
	Bendembu *via* Makeni	—	1	—	—	—	
	Massumbo *via* Makeni	—	—	—	—	—	
	Kamabai *via* Makeni ..	1	1	—	—	—	
	Bafodia *via* Kabala ..	—	—	—	—	—	
United Brethren American ..	Mattru Jong	10	2	—	1	—	
	Gbangbaia (visited monthly)	—	—	—	—	—	
Missionary Church Association	Yifin (Nieni Chiefdom)	—	—	—	—	—	
	Ganya	—	—	—	—	—	
	Bendugu	—	—	—	—	—	
Methodist	Bunumbu	4	5	—	—	—	
	Jojoima	2	6	—	—	—	
Roman Catholic	Serabu	—	6	—	—	—	„ 6 „
	Carried forward	129	76	9	22	—	

APPENDIX V—*continued.*

Name and Mission	Place	Number and Category of Beds					Remarks
		General	*Obstetrical*	*Tuberculosis*	*Infectious*	*Mental*	
Brought forward		129	76	9	22		
Evangelical United Brethren in Christ	Jaima ..	—	—	—	—	—	
Mining Hospitals							
Sierra Leone Selection Trust ..	Yengema ..	50	—	—	20	—	
Sierra Leone Development Company	Lunsar ..	22	2	4	—	—	
Mining Dispensary (not under the care of a resident Medical Officer)							
Sierra Leone Development Company	Pepel ..	—	—	—	—	—	
Total		201	78	13	42	—	*Plus* 33 Cots

APPENDIX VI

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	Detailed List No.	Diseases	Expatriates						Non-Expatriates					
			In-Patients		Deaths		Out-Patients		In-Patients		Deaths		Out-Patients	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		Cause Groups												
A 1	001–008	Tuberculosis of respiratory system	3	—	—	—	2	—	75	35	32	15	127	65
A 2	010	Tuberculosis of meninges and central nervous system	—	—	—	—	—	—	1	3	—	2	1	4
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands	—	—	—	—	—	—	2	—	—	—	2	—
A 4	012, 013	Tuberculosis of bones and joints	—	—	—	—	—	—	7	9	1	2	9	9
A 5	014–019	Tuberculosis, all other forms	—	—	—	—	—	—	3	2	—	1	6	3
A 6	020	Congenital syphilis ..	—	—	—	—	—	—	1	—	—	—	3	—
A 7	021	Early syphilis	1	—	—	—	2	—	2	—	—	—	134	30
A 8	024	Tabes dorsalis	—	—	—	—	—	—	1	—	—	—	1	—
A 9	025	General paralysis of insane	—	—	—	—	—	—	—	—	—	—	—	—
A 10	022, 023 026–029	All other syphilis	—	—	—	—	—	—	11	5	1	—	70	24
A 11	030–035	Gonococcal infections ..	1	—	—	—	5	—	101	21	2	—	4,846	886
A 12	040	Typhoid fever	—	1	—	—	—	—	41	17	7	2	41	18
A 13	041, 042	Paratyphoid fever and other Salmonella infections	—	—	—	—	—	—	4	—	—	—	4	—
A 14	043	Cholera	—	—	—	—	—	—	—	—	—	—	—	—
		Carried forward ..	5	1	—	—	9	—	249	92	43	22	5,244	1,039

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List. No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	5	1	—	—	9	—	249	92	43	22	5,244	1,039
A 15	044	Brucellosis (Undulant fever)	—	—	—	—	—	—	—	—	—	—	—	—
A 16 (*a*)	045	Bacillary dysentery ..	6	4	—	—	4	—	37	23	7	5	120	62
(*b*)	046	Amœbiasis	5	—	—	—	3	—	105	48	11	7	298	194
(*c*)	047, 048	Other unspecified forms of dysentery	4	—	—	—	2	—	14	10	3	2	131	67
A 17	050	Scarlet fever	—	—	—	—	—	—	—	—	—	—	—	—
A 18	051	Streptococcal sore throat ..	2	1	—	—	4	4	1	2	—	—	7	21
A 19	052	Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—
A 20	053	Septicæmia and pyæmia ..	—	—	—	—	—	—	2	2	1	—	5	2
A 21	055	Diphtheria	—	—	—	—	—	—	—	1	—	1	—	1
A 22	056	Whooping cough	—	—	—	—	—	—	1	6	—	1	46	59
A 23	057	Meningococcal infections ..	—	—	—	—	—	—	6	3	2	1	6	5
A 24	058	Plague	—	—	—	—	—	—	—	—	—	—	—	—
A 25	060	Leprosy	—	—	—	—	—	—	5	—	1	—	113	67
A 26	061	Tetanus	—	—	—	—	—	—	34	23	20	13	34	25
A 27	062	Anthrax	—	—	—	—	—	—	—	—	—	—	—	—
A 28	080	Acute poliomyelitis ..	—	—	—	—	—	—	—	—	—	—	—	—
A 29	082	Acute infectious encephalitis	—	—	—	—	—	—	1	—	—	—	1	—
A 30	081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis	—	—	—	—	—	—	1	1	1	—	3	2
A 31	084	Smallpox	—	—	—	—	—	—	2	—	—	—	2	—
A 32	085	Measles	—	1	—	—	1	1	—	—	—	—	6	5
		Carried forward ..	22	7	—	—	23	5	458	211	89	52	6,016	1,549

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List. No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	22	7	—	—	23	5	458	211	89	52	6,016	1,549
A 33	091	Yellow fever	—	—	—	—	—	—	—	—	—	—	—	—
A 34	092	Infectious hepatitis ..	2	—	—	—	2	—	31	3	2	—	78	20
A 35	094	Rabies	—	—	—	—	1	—	—	—	—	—	—	—
A 36 (*a*)	100	Louse-borne epidemic typhus	—	—	—	—	—	—	—	—	—	—	—	—
(*b*)	101	Flea-borne epidemic typhus (murine)	—	—	—	—	—	—	6	1	—	—	6	1
(*c*)	104	Tick-borne epidemic typhus..	—	—	—	—	—	—	—	—	—	—	—	—
(*d*)	105	Mite-borne typhus ..	—	—	—	—	—	—	—	—	—	—	—	—
(*e*)	102, 103 106–108	Other and unspecified typhus	—	—	—	—	—	—	—	—	—	—	—	—
A 37 (*a*)	110	Vivax malaria (benign tertian)	—	—	—	—	—	—	—	—	—	—	—	—
(*b*)	111	Malariæ malaria (quartan)..	2	—	—	—	—	—	—	—	—	—	—	—
(*c*)	112	Falciparum malaria (malignant tertian)	9	1	—	—	9	1	187	121	10	6	997	395
(*d*)	115	Blackwater fever ..	—	—	—	—	—	—	3	1	—	1	3	1
(*e*)	113, 114, 116, 117	Other and unspecified forms of malaria	26	2	—	—	49	5	361	238	26	17	12,408	6,867
A 38 (*a*)	123.0	Schistosomiasis vesical (S. hæmatobium)	—	—	—	—	—	—	—	3	—	—	11	8
(*b*)	123.1	Schistosomiasis intestinal (S. mansoni)	—	—	—	—	—	—	—	1	—	—	—	1
(*c*)	123.2	Schistosomiasis pulmonary (S. japonicum)	—	—	—	—	—	—	—	—	—	—	—	—
(*d*)	123.3	Other and unspecified schistosomiasis	—	—	—	—	—	—	6	5	—	1	218	61
		Carried forward	61	10	—	—	84	11	1,052	584	127	17	19,737	8,903

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List. No.	Detailed List No.	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	61	10	—	—	84	11	1,052	584	127	77	19,737	8,903
A 39	125	Hydatid disease	—	—	—	—	—	—	—	—	—	—	—	—
A 40 (*a*)	127	Onchocerciasis	—	—	—	—	—	—	—	—	—	—	5	1
(*b*)		Loiasis	—	—	—	—	—	—	—	—	—	—	1	—
(*c*)		Filariasis (bancrofti) ..	—	—	—	—	—	—	31	1	—	—	57	12
(*d*)		Other filariasis	—	—	—	—	1	—	12	—	—	—	20	—
A 41	129	Ankylostomiasis	—	—	—	—	—	—	10	10	—	—	37	29
A 42 (*a*)	126	Tapeworm (infestation) and other cestode infestations	10	—	—	—	4	—	40	18	—	—	89	77
(*b*)	130.0	Ascariasis	—	—	—	—	—	1	23	19	—	—	2,200	2,004
(*c*)	130.3	Guinea worm (dracunculosis)	—	—	—	—	1	—	—	—	—	—	1	—
(*d*)	124, 128, 130.1, 130.2	Other diseases due to helminths	—	—	—	—	4	3	9	6	1	1	735	583
A 43 (*a*)	037	Bymphogranuloma venereum	—	—	—	—	1	—	14	1	—	—	192	54
(*b*)	038	Granuloma inguinale, venereal	—	—	—	—	—	—	12	5	—	—	151	71
(*c*)	039	Other and unspecified venereal diseases	—	—	—	—	1	1	18	11	—	—	703	150
A 43 (*d*)	049	Food poisoning infection and intoxication	5	2	—	—	1	2	1	1	1	1	4	6
(*e*)	071	Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—
(*f*)	072	Leptospirosis icterohæmorrhagica (Weil's disease)	—	—	—	—	—	—	—	—	—	—	—	—
(*g*)	073	Yaws	—	—	—	—	—	—	20	19	—	1	5,427	2,789
(*h*)	087	Chickenpox	—	1	—	—	—	2	32	3	—	—	109	50
(*i*)	090	Dengue	—	—	—	—	—	—	—	—	—	—	—	—
(*j*)	095	Trachoma	—	—	—	—	—	—	3	1	—	—	47	38
		Carried forward ..	76	13	—	—	97	20	1,277	679	129	80	29,515	14,767

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	76	13	—	—	97	20	1,277	679	129	80	29,515	14,767
	(*k*) 096.7	Sandfly fever	—	—	—	—	—	—	—	—	—	—	—	—
	(*l*) 120	Leishmaniasis	—	—	—	—	—	—	—	—	—	—	—	—
	(*m*) 121 (*a*)	Trypanosomiasis gambiensis	—	—	—	—	—	—	1	2	—	—	12	6
	(*b*)	Trypanosomiasis rhodesiensis	—	—	—	—	—	—	—	—	—	—	—	—
	(*c*)	Other and unspecified trypanosomiasis	—	—	—	—	—	—	—	—	—	—	2	—
	(*n*) 131	Dermatophytosis	4	—	—	—	16	7	—	—	—	—	1,156	638
	(*o*) 135	Scabies	1	—	—	—	—	—	—	1	—	—	2,139	1,186
	(*p*) 036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096.1–096.6, 096.8, 096.9, 122, 132–134, 136–138	All other diseases classified as infective and parasitic	1	—	—	—	9	3	15	4	—	—	421	174
A 44	140–148	Malignant neoplasm of buccal cavity and pharynx	—	—	—	—	—	—	—	—	—	—	—	—
A 45	150	Malignant neoplasm of œsophagus	—	—	—	—	—	—	—	—	—	—	—	—
A 46	151	Malignant neoplasm of stomach	—	—	—	—	—	—	1	—	—	—	1	1
		Carried forward ..	82	13	—	—	122	30	1,294	686	129	80	33,246	16,772

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	82	13	—	—	122	30	1,294	686	129	80	33,246	16,772
A 47	152, 153	Malignant neoplasm of intestine, except rectum	—	—	—	—	—	—	—	1	—	1	—	1
A 48	154	Malignant neoplasm of rectum	1	—	—	—	—	—	—	—	—	—	—	—
A 49	161	Malignant neoplasm of larynx	—	—	—	—	—	—	—	—	—	—	—	—
A 50	162, 163	Malignant neoplasm of trachea, and of bronchus and lung	1	—	—	—	—	—	1	—	—	—	1	—
A 51	170	Malignant neoplasm of breast	—	1	—	—	—	1	—	2	—	—	—	2
A 52	171	Malignant neoplasm of cervix uteri	—	—	—	—	—	—	—	4	—	—	—	4
A 53	172–174	Malignant neoplasm of other and unspecified parts of uterus	—	—	—	—	—	—	—	8	—	2	—	8
A 54	177	Malignant neoplasm of prostate	—	—	—	—	—	—	3	—	1	—	3	—
A 55	190, 191	Malignant neoplasm of skin	—	1	—	—	—	—	2	1	—	—	13	7
A 56	196, 197	Malignant neoplasm of bone and connective tissue	—	—	—	—	—	—	5	5	—	—	5	6
A 57	155–160, 164, 165, 175, 176, 178–181, 192–195, 198, 199	Malignant neoplasm of all other and unspecified sites	—	—	—	—	—	—	24	8	14	—	27	10
		Carried forward ..	84	15	—	—	122	31	1,329	715	144	83	33,295	16,810

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITAL

Intermediate List No.	Detailed List No.	Diseases	Expatriates						Non-Expatriates					
			In-Patients		Deaths		Out-Patients		In-Patients		Deaths		Out-Patients	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		Cause Groups—*contd.*												
		Brought forward	84	15	—	—	122	31	1,329	715	144	83	33,295	16,810
A 58	204	Leukæmia and aleukæmia ..	—	—	—	—	—	—	—	—	—	—	—	—
A 59	200–203, 205	Lymphosarcoma and other neoplasm of lymphatic and hæmatopoietic system ..	—	—	—	—	—	—	4	—	2	—	4	—
A 60	210–239	Benign neoplasms and neoplasms of unspecified nature	6	2	—	—	5	2	27	59	2	1	49	69
A 61	250, 251	Nontoxic goitre	—	—	—	—	—	—	2	—	—	—	5	3
A 62	252	Thyrotoxicosis with or without goitre	—	—	—	—	—	—	—	1	—	—	—	1
A 63	260	Diabetes mellitus	4	—	—	—	2	—	10	1	—	—	13	1
A 64 (*a*)	280	Beriberi	—	—	—	—	—	—	2	1	—	—	3	2
(*b*)	281	Pellagra	—	—	—	—	—	—	—	—	—	—	—	—
(*c*)	282	Scurvy	—	—	—	—	—	—	6	2	—	—	10	5
(*d*)	283–286	Other deficiency states ..	—	—	—	—	—	2	61	71	23	11	656	461
A 65 (*a*)	290	Pernicious and other hyperchromic anæmias ..	—	—	—	—	—	—	1	1	—	—	4	1
(*b*)	291	Iron deficiency anæmias (hypochromic)	1	2	—	—	—	—	8	12	—	1	83	143
(*c*)	292, 293	Other specified and unspecified anæmias	1	1	—	—	2	4	49	49	10	5	310	509
A 66 (*a*)	241	Asthma	2	1	—	—	2	3	15	5	—	—	72	20
(*b*)	240,242–245, 253, 254, 270–277, 287–289, 294–299	All other allergic disorders, endocrine, metabolic and blood diseases	2	—	—	—	5	3	10	4	2	1	22	113
		Carried forward ..	100	21	—	—	138	45	1,524	921	182	102	34,526	18,138

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	100	21	—	—	138	45	1,524	921	183	102	34,526	18,138
A 67	300–309	Psychoses	—	—	—	—	1	—	8	1	—	—	12	1
A 68	310–324, 326	Psychoneurosis and disorders of personality	10	—	—	—	5	—	4	1	—	—	9	2
A 69	325	Mental deficiency	—	—	—	—	—	—	2	2	—	—	3	3
A 70	330–334	Vascular lesions affecting central nervous system	1	—	—	—	—	—	5	2	2	2	10	3
71	340	Nonmeningococcal meningitis	—	—	—	—	—	—	4	4	3	—	4	3
A 72	345	Multiple sclerosis ..	—	—	—	—	—	—	—	—	—	—	—	—
A 73	353	Epilepsy	—	—	—	—	—	—	9	3	1	—	15	6
A 74	370–379	Inflammatory diseases of eye	2	—	—	—	5	11	35	7	—	—	1,018	272
A 75	385	Cataract	—	—	—	—	—	—	3	—	—	—	17	9
A 76	387	Glaucoma	—	—	—	—	—	—	—	—	—	—	4	1
A 77 (*a*)	390	Otitis externa	3	3	—	—	22	11	—	1	—	—	193	119
(*b*)	391–393	Otitis media and mastoiditis..	—	1	—	—	6	5	7	5	—	—	171	75
A 77 (*c*)	394	Other inflammatory diseases of ear	—	—	—	—	5	—	4	4	—	—	339	175
A 78 (*a*)	380–384, 386, 388, 389	All other diseases and conditions of eye	—	—	—	—	3	—	19	5	—	—	692	292
(*b*)	341, 344, 350–352, 354–357, 360–369, 395–398	All other diseases of the nervous system and sense organs	5	—	—	—	26	6	88	30	14	2	620	219
A 79	400–402	Rheumatic fever	—	1	—	—	—	—	1	—	—	—	130	94
		Carried forward ..	121	26	—	—	211	78	1,713	986	203	106	37,763	19,412

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	121	26	—	—	211	78	1,713	986	203	106	37,763	19,412
A 80	410–416	Chronic rheumatic heart disease	—	—	—	—	—	—	7	3	1	—	23	11
A 81	420–422	Arteriosclerotic and degenerative heart disease	3	1	1	—	1	1	10	4	4	2	38	11
A 82	430–434	Other diseases of heart ..	3	1	1	—	2	3	93	33	31	9	232	90
A 83	440–443	Hypertension with heart disease	—	1	—	1	—	—	5	1	3	—	7	1
A 84	444–447	Hypertension without mention of heart	—	—	—	—	1	—	3	5	—	1	4	4
A 85	450–456	Diseases of arteries ..	—	—	—	—	—	—	13	1	3	—	23	2
A 86	460–468	Other diseases of circulatory system	11	3	—	—	13	5	63	25	10	3	473	82
A 87	470–475	Acute upper respiratory infections	9	2	—	—	24	10	18	10	—	—	831	478
A 88	480–483	Influenza..	4	1	—	—	3	3	—	—	—	—	2	—
A 89	490	Lobar pneumonia ..	2	—	1	—	—	—	139	82	9	17	174	90
A 90	491	Broncho pneumonia ..	1	—	—	—	—	—	52	69	14	20	92	83
A 91	492, 493	Primary atypical, other and unspecified pneumonia	2	—	—	—	1	—	58	16	4	—	75	20
A 92	500	Acute bronchitis	—	1	—	—	3	—	40	52	—	2	1,060	668
A 93	501, 502	Bronchitis, chronic and unqualified	2	—	—	—	12	3	67	36	2	1	2,714	1,232
A 94	510	Hypertrophy of tonsils and adenoids	—	—	—	—	4	—	—	—	—	—	2	11
		Carried forward ..	158	36	3	1	275	103	2,281	1,323	284	161	43,513	22,195

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	Detailed List No.	Diseases	Expatriates						Non-Expatriates					
			In-Patients		Deaths		Out-Patients		In-Patients		Deaths		Out-Patients	
		CAUSE GROUPS—*contd.*	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		Brought forward ..	158	36	3	1	275	103	2,281	1,323	284	161	43,513	22,196
A 95	518, 521	Empyema and abscess of lung	—	—	—	—	—	—	8	3	3	2	8	3
A 96	519	Pleurisy	—	—	—	—	—	—	24	8	—	—	39	10
A 97 (*a*)	523	Pneumoconiosis	—	—	—	—	—	—	—	—	—	—	—	—
(*b*)	511–517, 520–522, 524–527	All other respiratory diseases	4	1	—	—	20	7	53	21	4	2	2,096	975
A 98 (*a*)	530	Dental caries	3	—	—	—	7	—	6	—	—	—	998	535
(*b*)	531–535	All other diseases of teeth and supporting structures	5	—	—	—	8	1	8	2	—	—	158	110
A 99	540	Ulcer of stomach	—	—	—	—	—	—	2	2	—	—	6	2
A 100	541	Ulcer of duodenum ..	3	—	1	—	3	—	7	—	—	—	14	9
A101	543	Gastritis and duodenitis ..	3	—	—	—	3	2	6	1	—	—	318	117
A 102	550–553	Appendicitis . ..	19	3	1	—	10	2	24	11	1	1	27	12
A 103	560, 561, 570	Intestinal obstruction and hernia	5	1	—	—	3	—	598	22	22	3	1,261	39
A 104 (*a*)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years	4	2	—	—	2	—	16	13	6	—	379	332
(*b*)	571.1	Gastro enteritis and colitis, ages 2 years and over	9	—	—	—	24	9	66	30	7	2	1,449	897
(*c*)	572	Chronic enteritis and ulcerative colitis	1	—	—	—	1	1	6	2	—	—	12	11
A 105	581	Cirrhosis of liver	1	—	—	—	—	—	21	2	5	1	26	2
A 106	584, 585	Cholelithiasis and cholecystitis	—	1	—	—	—	1	1	3	—	—	2	3
A 107	536–539, 542, 544, 545, 573–580, 582, 583, 586, 587	Other diseases of digestive system	12	2	1	—	29	5	85	54	12	3	4,963	2,942
		Carried forward ..	227	46	6	1	385	131	3,212	1,497	344	175	55,269	28,194

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	Detailed List No.	Diseases	Expatriates						Non-Expatriates					
			In-Patients		Deaths		Out-Patients		In-Patients		Deaths		Out-Patients	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		CAUSE GROUPS—*contd.*												
		Brought forward ..	227	46	6	1	385	131	3,212	1,497	344	173	55,269	28,194
A 108	590	Acute nephritis	—	—	—	—	—	—	3	2	—	1	6	3
A 109	591–594	Chronic, other and unspecified nephritis	—	—	—	—	1	—	10	5	2	1	31	1
A 110	600	Infections of kidney ..	1	1	—	—	—	1	9	48	2	—	20	13
A 111	602, 604	Calculi of urinary system ..	7	1	—	—	1	1	4	1	1	—	4	1
A 112	610	Hyperplasia of prostate ..	—	—	—	—	—	—	2	—	1	—	2	—
A 113	620, 621	Diseases of breast.. ..	—	—	—	—	—	1	1	22	—	—	1	82
A 114 (*a*)	613	Hydrocele	—	—	—	—	—	—	69	—	1	—	371	—
(*b*)	634	Disorders of menstruation ..	—	1	—	—	—	7	—	28	—	—	—	1,715
(*c*)	601, 603, 605–609, 611, 612, 614–617, 622–633, 635–637	All other diseases of the genito-urinary system	7	14	—	—	11	20	145	138	14	9	914	847
A 115	640–641, 681, 682, 684	Sepsis of pregnancy, child birth and the puerperium	—	—	—	—	—	—	—	27	—	4	—	38
A 116	642, 652, 685, 686	Toxæmias of pregancy and the puerperium	—	—	—	—	—	—	—	78	—	5	—	40
A 117	643, 644 670–672	Hæmorrhage of pregnancy and childbirth	—	—	—	—	—	—	—	20	—	2	—	8
		Carried forward ..	242	63	6	1	398	161	3,455	1,866	365	197	56,618	30,954

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward ..	242	63	6	1	398	161	3,455	1,866	365	197	56,618	30,954
A 118	650	Abortion without mention of sepsis or toxæmia	—	7	—	—	—	1	—	150	—	—	—	142
A 119	651	Abortion with sepsis ..	—	—	—	—	—	—	—	29	—	2	—	26
A 120 (*a*)	645–649, 673–680, 683, 687–689	Other complications of pregnancy, childbirth and the puerperium	—	3	—	—	—	2	—	426	—	13	—	156
(*b*)	660	Delivery without complications	—	2	—	—	—	2	—	1,155	—	—	—	348
A 121	690–698	Infections of skin and subcutaneous tissue	33	11	—	—	110	37	169	84	8	5	2,727	1,589
A 122	720–725	Arthritis and spondylitis ..	1	4	—	—	3	4	40	20	2	—	1,198	466
A 123	726, 727	Muscular rheumatism and rheumatism unspecified	1	—	—	—	11	2	41	19	—	—	3,665	1,572
A 124	730	Osteomyelitis and periostitis	—	—	—	—	—	—	38	16	—	—	67	36
A 125	737, 745–749	Ankylosis and acquired musculoskeletal deformities	—	—	—	—	—	—	1	5	—	—	12	10
A 126 (*a*)	715	Chronic ulcer of skin (including tropical ulcer)	—	—	—	—	1	—	161	122	—	2	3,980	2,616
(*b*)	700–714, 716	All other diseases of skin ..	2	1	—	—	17	8	71	46	1	1	1,913	1,387
(*c*)	731–736, 738–744	All other diseases of musculoskeletal system	—	—	—	—	4	—	14	7	—	1	101	33
A 127	751	Spina bifida and meningocele	—	—	—	—	—	—	—	—	—	—	—	—
A 128	754	Congenital malformations of circulatory system	—	—	—	—	—	—	—	—	—	—	—	2
		Carried forward ..	279	91	6	1	544	217	3,990	3,945	376	221	70,281	39,337

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

Intermediate List No.	Detailed List No.	Diseases	Expatriates						Non-Expatriates					
			In-Patients		Deaths		Out-Patients		In-Patients		Deaths		Out-Patients	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		CAUSE GROUPS—*contd.*												
		Brought forward ..	279	91	6	1	544	217	3,990	3,945	376	221	70,281	39,337
A 129	750, 752, 753, 755–759	All other congenital malformations	—	—	—	—	—	—	1	5	—	—	8	6
A 130	760, 761	Birth injuries	—	—	—	—	—	—	—	3	—	—	—	3
A 131	762	Post-natal asphyxia and atelectasis	—	—	—	—	—	—	—	—	—	—	—	—
A 132 (*a*)	764	Diarrhœa of newborn (under 4 weeks)	—	—	—	—	—	—	—	—	—	—	—	—
(*b*)	765	Ophthalmia neonatorum ..	—	—	—	—	—	—	1	1	—	—	8	6
(*c*)	763, 766–768	Other infections of newborn ..	—	—	—	—	—	—	3	1	—	—	3	—
A 133	770	Hæmolytic disease of newborn	—	—	—	—	—	—	—	—	—	—	—	—
A 134	769, 771, 772	All other defined diseases of early infancy	—	—	—	—	—	—	8	16	2	4	9	8
A 135	773, 776	Ill-defined diseases peculiar to early infancy and immaturity, unqualified	—	—	—	—	—	—	—	15	—	—	22	27
A 136	794	Senility without mention of psychosis	—	—	—	—	—	—	1	2	—	—	25	56
A 137 (*a*)	788.8	Pyrexia of unknown origin ..	15	3	—	—	14	9	9	1	1	—	138	61
(*b*)	793	Observation, without need for further medical care	2	1	—	—	1	1	37	50	—	—	88	113
(*c*)	780–787, 788.1–788.7, 788.9, 789–792, 795	All other ill-defined causes of morbidity	17	10	—	—	29	16	112	101	10	5	794	305
		Carried forward ..	313	105	6	1	588	243	4,162	4,140	389	230	71,376	39,922

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

"*E*" CODE

ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE)

Intermediate List No.	Detailed List No.	Diseases — Cause Groups	Expatriates						Non-Expatriates					
			In-Patients		Deaths		Out-Patients		In-Patients		Deaths		Out-Patients	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		Brought forward ..	313	105	6	1	588	243	4,162	4,140	389	230	71,376	39,922
AE 138	E810–E835	Motor vehicle accidents ..	3	—	—	—	5	2	57	16	8	3	294	86
AE 139	E800–E802, E840–E866	Other transport accidents ..	1	—	—	—	1	—	12	4	1	—	84	11
AE 140	E870–E895	Accidental poisoning ..	—	—	—	—	—	—	2	3	—	—	3	4
AE 141	E900–E904	Accidental falls	22	9	—	—	28	15	172	39	5	1	3,448	1,408
AE 142	E912	Accident caused by machinery	—	—	—	—	—	—	16	1	1	—	578	35
AE 143	E916	Accident caused by fire and explosion of combustible material	1	—	—	—	2	—	22	8	—	1	59	17
AE 144	E917, E918	Accident caused by hot substance, corrosive liquid, steam and radiation	1	1	—	—	—	2	17	15	—	—	86	55
AE 145	E919	Accident caused by firearm..	—	—	—	—	—	—	38	4	5	—	51	13
AE 146	E929	Accidental drowning and submersion	—	—	—	—	—	—	—	—	—	—	1	—
AE 147														
(*a*)	E920	Foreign body entering eye and adnexa	3	—	—	—	1	—	2	—	—	—	132	16
(*b*)	E923	Foreign body entering other orifice	1	1	—	—	4	1	10	1	—	—	59	48
		Carried forward ..	345	116	6	1	629	263	4,510	4,231	409	235	76,171	41,615

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

"*E*" *CODE—continued*

Intermediate List No.	*Detailed List No.*	Diseases	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
		Cause Groups—*contd.*												
		Brought forward	345	116	6	1	629	263	4,510	4,231	409	235	76,171	41,615
	(*c*) E927	Accidents caused by bites and stings of venemous animals and insects	—	1	—	—	4	2	28	2	3	—	101	33
	(*d*) E928	Other accidents caused by animals	—	1	—	—	1	3	37	12	—	1	217	103
	(*e*) E910, E911, E913–E915 E921–E922 E924–E926 E930–E965	All other accidental causes ..	3	1	—	—	18	5	314	104	12	1	4,445	1,153
AE 148	E970–E979	Suicide and self inflicted injury	—	—	—	—	—	—	—	—	—	—	—	—
AE 149	E980–E985	Homicide and injury purposely inflicted by other persons (not in war)	—	—	—	—	—	—	2	2	—	—	19	18
AE 150	E990–E999	Injury resulting from operations of war	—	—	—	—	—	—	—	—	—	—	—	—
		Total ..	348	119	6	1	652	273	4,891	4,351	424	237	80,953	42,922

APPENDIX VI—*continued*

RETURN OF PATIENTS TREATED AT GOVERNMENT HOSPITALS

"N" CODE

ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (NATURE OF INJURY)

Intermediate List No.	*Detailed List No.*	Diseases — Cause Groups	Expatriates						Non-Expatriates					
			In-Patients		*Deaths*		*Out-Patients*		*In-Patients*		*Deaths*		*Out-Patients*	
			M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
AN 138	N800–N804	Fracture of skull	1	—	—	—	—	—	22	4	6	3	27	6
AN 139	N805–N809	Fracture of spine and trunk..	3	1	—	—	2	—	35	2	4	—	37	2
AN 140	N810–N829	Fracture of limbs ..	8	3	—	—	6	4	163	38	3	—	271	54
AN 141	N830–N839	Dislocation without fracture	—	—	—	—	2	—	19	8	—	—	189	35
AN 142	N840–N848	Sprains and strains of joints and adjacent muscle	4	—	—	—	9	4	19	9	—	—	1,444	296
AN 143	N850–N856	Head injury (excluding fracture)	1	—	—	—	—	—	37	12	3	1	261	58
AN 144	N860–N869	Internal injury of chest, abdomen, and pelvis	1	—	—	—	—	—	9	1	4	—	41	2
AN 145	N870–N908	Laceration and open wounds	7	3	—	—	13	8	155	33	7	—	2,877	930
AN 146	N910–N929	Superficial injury, contusion and crushing with intact skin surface	6	2	—	—	18	7	93	25	—	—	3,045	1,158
AN 147	N930–N936	Effects of foreign body entering through orifice	3	1	—	—	4	2	11	1	—	—	143	47
AN 148	N940–N949	Burns	1	1	—	—	2	2	25	22	—	1	162	74
AN 149	N960–N979	Effects of poisons	—	1	—	—	3	1	12	3	2	—	31	16
AN 150	N950–N959 N980–N999	All other and unspecified effects of external causes	—	2	—	—	5	2	129	53	6	2	1,049	322
		Total ..	35	14	—	—	64	30	729	211	35	7	9,577	3,000

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