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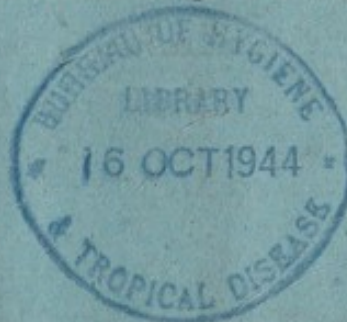
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NIGERIA

**Report on the Medical Services
for the Year 1942**

*Laid on the Table of the Legislative Council
as Sessional Paper No. 8 of 1944*



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CONTENTS

	<i>Page</i>
I—Administration :	
A.—Staff	1
B.—Legislation	1
C.—Finance	3
II—Public Health :	
A.—General Remarks	3
B.—School of Medicine	4
C.—School of Pharmacy	4
D.—Lunacy	4
E.—General Diseases	4
F.—Native Administration Dispensaries	5
III—Vital Statistics	5
IV—Hygiene and Sanitation :	
(i) Preventive Measures	6
(ii) General Measures	10
(iii) School Hygiene	10
(iv) Labour Condition	11
(v) Food in relation to Health and Disease	11
(vi) Port Health Work and Administration	11
(vii) Maternity and Child Welfare ..	11
Return of Diseases and Deaths—Europeans and Africans	12
Appendices :	
A.—Report upon Laboratory Service ..	15
B.—Report upon Sleeping Sickness Service	15

Report on the Medical Services for the Year 1942

I.—ADMINISTRATION

A.—STAFF

Despite depleted staffs volume of work has steadily increased. That this has been possible reflects the greatest credit on all the personnel of the Department.

2. Shipping difficulties have at times been acute and the length of tour of the European staff becomes correspondingly extended.

3. During the year ten medical officers proceeded on leave prior to invaliding or retirement and three left on transfer to other colonies. Nine nursing sisters left the service.

4. Dr. Kauntz, C.M.G., M.B.E., Assistant Medical Adviser to the Secretary of State for the Colonies paid two visits to Nigeria during the year, while touring the African Tropical Dependencies. On the latter of these visits he acted as chairman of the West African Anti-Amaryl Conference composed of representatives of the Medical Services of the British Colonies, the Belgian Congo and French Cameroons together with staff and Medical Officers of His Majesty's Navy, Army and Air Force and representatives of the United States Army Medical Corps. Important decisions were reached regarding the control of transcontinental air traffic.

5. The most cordial relationship between this department and the medical services of His Majesty's Forces has continued and we have been able to give considerable assistance in training nursing orderlies for Army Hospitals while the services have always responded to any calls we have made on them, and have given the department much valuable help which has been very greatly appreciated.

B.—LEGISLATION

LIST OF ORDINANCES, REGULATIONS, ETC., AFFECTING PUBLIC HEALTH ENACTED DURING THE YEAR 1942

Serial No.	Date	Short Title	Provisions
<i>Ordinances</i>			
5	1.4.42	The Labour (Amendment) Ordinance, 1942	Amending section 62 of the Labour Ordinance No. 1 of 1929 providing for payment of compensation to labourers.
15	1.1.43	The Dogs Ordinance, 1942	Providing for destruction of suspected dogs and prevention of spread of diseases in Dogs.
16	6.10.42	The Vaccination (Northern Provinces Native Authorities) (Amendment) Ordinance, 1942	(a) Power to Native Authorities in the Northern Provinces to Order Vaccination. (b) Appointment of additional public Vaccinators by a Native Authority. (c) Amends section 11 of Chapter 53.
<i>Regulations</i>			
11	10.2.42	The Medical Practitioners and Dentists Ordinance (Amendment) Regulations, 1942	Amending section 15 of Ordinance No. 20 of 1934.
12	5.2.42	The Poisons and Pharmacy (Exemption from Fees) (Amendment) Regulations, 1942	Amending Regulation 21 of Regulations No. 19 of 1937.
21	10.3.42	The Labour (Amendment) Regulations, 1942	Deletion and substitution of Regulations 28, 29 and 30 of Regulations No. 6 of 1929.

LIST OF ORDINANCES, REGULATIONS, ETC., AFFECTING PUBLIC HEALTH
ENACTED DURING THE YEAR 1942—*continued*.

Serial No.	Date	Short Title	Provisions
<i>Regulations—contd.</i>			
25	10.3.42	The Ikorodu Native Authorities (Births and Deaths Registration Fees) Regulations, 1942	Fees for registration of births.
34	17.4.42	The Nigeria General Defence (Passive Defence Measures) (Amendment) Regulations, 1942	Identification and disposal in the case of persons dying as a result of war operations.
50	12.5.42	The Quarantine (Aerial Navigation) (Amendment) Regulations, 1942	Amending Regulation 26 of Regulations No. 9 of 1936.
62	2.6.42	The Quarantine (Aerial Navigation) (Exemption—Amendment) Regulations, 1942	Amending Regulations No. 9 of 1936 and 50 of 1942.
84	25.7.42	The Nigeria Defence (Building Restriction) Regulations, 1942	Restrictions upon buildings and power to exempt buildings.
103	8.9.42	The Quarantine (Aerial Navigation) (Fees Amendment) Regulations, 1942	Amending the Fifth Schedule of Regulations No. 9 of 1936 (Overtime fees).
<i>Orders-in-Council</i>			
2	5.2.42	The Births, Deaths and Burials (Calabar Cemeteries) Order in Council, 1942	African Cemetery, Akim Qua Town, Calabar.
4	10.3.42	The Workmen's Compensation (Employment—Amendment) Order in Council	Amending paragraph 24 of Order in Council No. 31 of 1941.
8	28.4.42	The Births, Deaths and Burials (Military Cemetery at Ibadan) Order in Council, 1942	Military Cemetery, Ibadan.
11	26.5.42	The Public Health (Application to Enugu Urban Districts and Environs) Order in Council, 1942	Application of Public Health Ordinance to Enugu Urban Districts and Environs.
16	7.7.42	The Births, Deaths and Burials (New Military Cemetery at Enugu) Order in Council, 1942	New Military Cemetery at Enugu.
20	18.8.42	The Public Health (Application to Sapele Urban District) Order in Council, 1942	Application of Rules 1-25 and 82 of the Public Health Rules No. 2 of 1917 to Sapele Urban District.
27	15.9.42	The Births, Deaths and Burials (Calabar Cemeteries) (No. 2) Order in Council, 1942	African Cemetery—Big Qua Town, Calabar.
28	20.10.42	The Births, Deaths and Burials (Port Harcourt African and Military Cemeteries) Order in Council, 1942	(a) African Cemetery Extension, Port Harcourt. (b) Military Cemetery, Port Harcourt.
29	20.10.42	Vaccination (Plateau Province) Order in Council, 1942	Vaccination of Adults and Children in the Plateau Province.
<i>Public Notices</i>			
200	10.8.42	The Compulsory National Service (Essential Mines Northern Provinces) (No. 2) Regulations, 1942	Medical facilities for workers under Essential Mines Service.

C.—FINANCE

Financial Year, 1941-42

A.—Medical, Health and Laboratory Services

			£	s	d
Total Revenue, 1940-41	..	..	44,719	6	3
„ 1941-42	..	..	60,279	1	2
Total Expenditure, 1940-41	..	..	413,666	17	3
„ 1941-42	..	..	423,745	2	1

B.—Sleeping Sickness Service

			£	s	d
Total Expenditure, 1940-41	..	..	36,710	16	6
„ 1941-42	..	..	21,930	10	7

II.—PUBLIC HEALTH

A.—GENERAL REMARKS

6. The increased work thrown on all members of the Department is shown in the increase both of in and out-patients.

7. Total in-patients treated in 1942 exceed those in 1941 by 7,700, while the increase in out-patients over 1941 exceeded 72,000. There was a slight fall in the numbers of European in-patients due to the provision by the military authorities of European hospitals. In Lagos, however, where the Government hospital has to deal with all cases of diseases among merchant seamen the numbers have increased from 1,258 in 1941 to 1,447 in 1942.

8. Although the percentage of malaria cases treated in the European hospitals is lower than last year, the fact that 35.4 per cent of all admissions were due to malaria a figure which can only be regarded as extremely high.

9. Another matter of serious import is the rise in incidence of tuberculosis. 25 per cent of all invalidings of African officials during the year were due to this disease. The high mortality, the ease of spread in the overcrowded areas and the lack of immunity among the people of this country produce a situation of extreme gravity. A small tuberculosis hospital has been erected at Yaba, but it is the early curable cases we must endeavour to control. The whole subject is receiving earnest consideration.

10. A comparison of diseases treated in the Northern and Southern Provinces yields interesting details. In both cases the principal cause of hospitalisation is that large conglomerate group of "diseases of the skin, cellular tissue, bone and organs of locomotion". The second cause in the north is venereal disease. Of all cases treated in hospitals in the north 16.3 per cent were cases of venereal disease. In the south the same group only accounts for 4.7 per cent. In southern hospitals the second largest group is diseases of pregnancy, etc., representing 14.2 per cent. In the north this group accounts for only 3.6 per cent of cases treated in hospital. The third group in the north is that of helminthic diseases representing 9.3 per cent of the Northern total while in the South this accounts for only 1.56 per cent. Over 33,000 cases of helminthiasis were treated in out-patients in the south but the majority of them were for round worm infection, while in many areas in the North schistosomiasis is predominant. Respiratory diseases are percentage roughly equal in north and south and in both over 50 per cent of the cases were pneumonias, but while in the North the mortality was 9.9 per cent in the South it was 18.6. The percentage number of cases of tuberculosis treated is equal but the mortality rate is much higher in the north.

11. *Minesfields*.—The loss of Malaya and the consequent urgent need for increased output of tin in Nigeria has necessitated a large increase in the labour force on the Plateau, and increased medical facilities. All labour has to be examined at the recruitment centres. A 62-bedded hospital is to be erected at Barakin Ladi. Kafanchan hospital is to have additional bed accommodation for thirty-two patients, while a further extension of Jos Hospitals is being made. Ten field posts for out-patient treatment of labourers are being constructed at various points on the minesfields, and will be looked after by dispensary attendants trained by the Sleeping Sickness Service under the general supervision of an Inspecting Medical Officer.

12. *Medical Stores*.—All medical stores for Nigeria, *i.e.*, for Government, Native Administrations, missions and chemists are to be purchased in bulk by this Department and distributed. This has thrown a great deal of extra work on the store staff. A temporary Assistant Storekeeper has been appointed and the construction of additional store accommodation to handle this very large increase is being proceeded with.

B.—SCHOOL OF MEDICINE

13. The number of students in attendance during the year were : 1st year 6, 2nd year 6 (3 eliminated), 3rd year 6, 4th year 9 and 5th year 5.

14. Only one student graduated during the year. The total number of graduates now practising is twenty-six.

15. The facilities of the anatomy, physiology, and organic chemistry department were made available to five veterinary students and assistance in their training given by the Lecturer in Physiology and the Superintendent, Pharmacy School.

16. A project for the enlargement of the physiology block by the addition of a bio-chemistry section has been drawn up. This includes provision of a students laboratory, a routine and research laboratory and students reading room.

C.—SCHOOL OF PHARMACY

17. Twenty-eight students attended the dispensers courses from January to June and twenty-seven from October to December. Ten attended the chemist and druggist's course from July to September.

18. At the statutory examination in June twelve students passed the Dispensers' Qualifying Examination Part I, while two passed in December. Seven candidates were successful in the Chemist and Druggist's Examination in June and nine were successful in December.

Hydnocarpus Oil Preparations

19. During the year 1,758 "reputed quart" bottles of hydnocarpus oil containing 4 per cent creosote were prepared and sent out to the leper institutions.

D.—LUNACY

20. A much needed extension to the lunacy block at the European Hospital, Lagos, was erected during the year. With the increased stress and strain of war time conditions, separation of families, etc., it is more than probable that this accommodation may become overtaxed. The remarks made under lunacy in the 1941 Report remain substantially true.

E.—GENERAL DISEASES

21. The following table gives the European Hospitals figures for the last three years :—

		1940	1941	1942
In-patients	.. ..	2,142	3,706	3,341
Out-patients	.. ..	11,440	14,003	10,989

22. The number of invalidings of European officials rose from 74 per cent in 1941 to 103 per cent in 1942 and of these half were due to debility and neurasthenia—a sign of the effect of the prolonged tours and family separation brought about by war conditions. We do not have the figures for European unofficials but the same circumstances apply in both cases. As was pointed out in last year's report leave spent in South Africa does not have the same beneficial effect as leave in the United Kingdom.

23. As already mentioned malaria accounted for 35.4 per cent of all in-patients, a figure too high. There were seventeen cases of black-water fever with six deaths treated in hospitals as compared with sixteen cases and eleven deaths in 1941.

24. One case of undulant fever and four cases of typhus occurred among Europeans during the year.

25. The figures for African hospitals for the last three years are as follows :—

		1940	1941	1942
In-patients	.. ..	71,592	75,665	83,741
Out-patients	.. ..	727,585	676,959	752,349

26. The importance of venereal disease has already been mentioned. The work of the hospitals alone will never stamp out this curse and only by mass attack can any lasting results be obtained. The numbers of women attending for diseases of pregnancy in the south steadily increases and is a sure sign of progress, but one would like to see more rapid progress in the north. The total number of deliveries in hospitals and native administration maternity homes rose from 7,976 in 1941 to 9,678 in the year under review. A further 8,000 were conducted in the mission hospitals and maternity homes. The total number of cases of all diseases treated by the missions was 180,000. Sufferers from intestinal complaints attending out-patients are far too numerous and show that sanitary consciousness is a long way from being fully awakened.

27. *Leprosy*.—Progress is being maintained steadily but the leprosy problem is a very big one in Nigeria and we will have to go much further in our drive against this disease. The problem is being studied closely and further steps planned. The cost of hydnocarpus oil has trebled itself—a further reason for pushing forward with the cultivation of the trees here on a large scale.

F.—NATIVE ADMINISTRATION DISPENSARIES

28. These continue to give treatment to masses of the population who would otherwise be without any medical care as their villages are remote from any hospital. Where provision is made for a midwife and sanitary inspector as well as dispensary attendant their usefulness is enhanced a hundredfold.

29. The figures for the last two years are :—

	<i>Northern Provinces</i>		<i>Southern Provinces</i>	
	1941	1942	1941	1942
Cases treated ..	440,390	482,189	960,439	784,654
Total attendances ..	2,357,425	2,233,614	2,881,485	2,550,745

III.—VITAL STATISTICS

30. The births and deaths of non-natives are compulsorily registrable in the whole of Nigeria.

31. Compulsory registration of the local population under the Births and Deaths Ordinance is in force in the townships of Lagos, Calabar, Port Harcourt, Enugu and Aba and in the township and the adjoining Sabon-gari (foreign native settlements) of Kano and in limited areas of Minna, Bida, Abuja, Kontagora. In addition, Native Administrations have made rules for, and adopted, the registration of births and deaths for Makurdi town, for the Egba Division of Abeokuta Province, for the Oyo Division and for Ife-Ilesha District of Oyo Province, for the towns of Badagry and Ikorodu in the Colony of Lagos.

32. For Lagos town, compulsory registration has been in force for over half a century. Some data for 1942 are compared below with the corresponding 1941 figures :—

	1941	1942
Estimated population	165,500	167,600
Births (live)	5,272	5,929
Crude birth-rate (per thousand)	31.8	35.4
Corrected birth-rate (per thousand)	28.3	31.5
Deaths	2,623	3,098
Crude death-rate (per thousand)	15.8	18.5
Corrected death-rate (per thousand)	21.6	25.4
Deaths within the first year of life	601	733
Infant mortality (per thousand)	113.9	123.8
Still births	164	194
Rate of still births per 100 live births	3	3
Deaths from diseases of pregnancy and childbirth	45	74
Maternal mortality (per 1,000 live births)	8.4	12.5

IV.—HYGIENE AND SANITATION

I.—PREVENTIVE MEASURES

(i) *Mosquito and other Insect-borne Diseases*

(a) *Malaria.*

33. This disease remains one of the leading causes of mortality in infants and young children and a common cause of sickness and invaliding in the adult non-native. This endemic disease is probably of minor importance in native adults who have a considerable degree of resistance to such infection. There is no doubt, however, of the extreme usefulness of suppressive drugs for the native infant and young child, while they are building up their natural resistance, and for the non-native inhabitant who shows no such racial resistance to malaria.

34. During 1942, mosquito and malaria surveys (with a view to control) have been made at Apapa and other parts of Lagos township, Ikeja (in Lagos Colony), Ibadan, Oshogbo, Enugu, Lokoja, Makurdi, Maiduguri and Yola. Some of these surveys are undertaken by the Mosquito Control Officer (Civil) and some by specialist officers of the services in Nigeria. The data collected should prove very valuable in the development of future control work.

35. New swamp reclamation works by drainage and filling have been constructed in Lagos and Apapa, Abeokuta, Ibadan, Ilorin, Oshogbo, Sapele, Kano, Maiduguri, Lokoja, Makurdi and Kaduna.

36. Measures have been taken further to reduce the risks of malaria to which seamen are exposed in Nigerian ports. Port Health Officers have been instructed to endeavour personally to discuss the subject with ships' masters, enquiring about quinine and other preventive measures in operation for the protection of the crew and ensuring that every master has a copy of M178—a pamphlet issued by the Ministry of War Transport on the subject of "Malaria in Merchant Seamen". (Lagos has a whole-time Port Health Officer: Port Harcourt has a whole-time Medical Officer of Health who looks after the town and the port: in other ports, the Government medical officer is also *ex-officio* the Medical Officer of Health and Port Health Officer).

37. In the course of ship inspections particular attention has been paid to the degree of protection provided against mosquitoes. At the Apapa anchorage, where the risk of contracting malaria is greater than at other Lagos moorings, crews' quarters are regularly treated with insecticides by the Port Health staff.

38. The principal sources (breeding sites) of mosquitoes around Lagos harbour are the extensive swamp areas. Considerable amounts of paris green and gas oil are applied in selected areas, but the vast extent of the possible breeding grounds preclude complete control until extensive reclamation co-ordinated with anti-malaria drainage has been completed. Work is steadily proceeding with the means available. Additional funds were granted to complete the reclamation of three marsh areas and to improve the drainage works in two other in Lagos and Apapa.

39. Funds have also been provided to strengthen the mosquito control organisation for the protection of Ikoyi Airport and the results already obtained have justified this extra expenditure.

(b) *Yellow Fever.*

40. Two cases of yellow fever occurred in Onitsha and Warri Provinces respectively: both diagnoses were confirmed by post-mortem histological examination of the liver. Both cases were European and contracted the infection when touring. One case had not availed himself of the facilities for immunisation. In the other, a period of three years had elapsed since inoculation with vaccine virus.

41. Routine house-to-house inspections by sanitary inspectors remained the main measures of control against the domestic breeding of *aedes aegypti*. In Maiduguri, dry pot inspections have been successfully introduced, with the support of the Native Authority, for the native town.

42. Well over a quarter of a million routine sanitary inspections of houses were made by the staff of the Lagos Town Council.

43. Through the generous support of the Rockefeller Foundation, a pool of yellow fever vaccine for the supply of all British West African Colonies, including services' as well as civilians needs, has now been established in Yaba.

44. The Rockefeller Foundation has decided to re-establish at Yaba a research unit to study problems still awaiting solution in the epidemiology and control of yellow fever. The Governments of the West African Colonies are co-operating to contribute part of the cost of this research work which will be of great value to the inhabitants of these countries.

45. In consequence of the increasing importance of the transcontinental air route, a conference of representatives of West African Territories and of His Majesty's Forces met in Lagos to discuss the principles to be adopted for the control of mosquito-borne diseases on, and in the neighbourhood of aerodromes and to prevent the transmission of yellow fever by aerial traffic to other countries. Arising out of the conference an area board was created of representatives of the civil Government and the services to advise on the measures required at the aerodrome in Nigeria and to co-ordinate the activities of the various authorities concerned. At all important aerodromes extensive drainage schemes have been undertaken and the supervision of the traffic (both personnel and aircraft) effectively organised.

(c) *Typhus Fever.*

46. Twelve cases of this disease—almost certainly the variety carried by rat-fleas—have been diagnosed. Eight of these occurred in Lagos, the remainder being in Abeokuta, Onitsha and Kano Provinces.

(d) *Trypanosomiasis.*

47. See special section of this report.

(ii) *Epidemic Diseases*

(a) *Smallpox.*

48. There were 2,514 cases seen with 502 deaths—a case mortality of just under 20 per cent. The figures are for the 52-week period ending on the 26th December, 1942. All but two cases were in Africans. In the corresponding 52-week period of 1941, there were seen 1,097 cases of smallpox with 210 deaths—a case-mortality of just over 19 per cent.

49. Extensive movements of population resulting from war requirements, *e.g.*, military recruitment, and abnormal labour recruiting for increased mineral production, are no doubt largely responsible for the increased incidence of this disease. A sanitary Superintendent, released from the Army in November, has been posted to Sokoto Province to carry out a vaccination campaign.

50. Civilian vaccinations in the Northern, Eastern and Southern Provinces and in Lagos township amounted to a total of 1,169,000 as against 916,000 in the previous year.

51. The Government lymph production institute at Yaba provided all the vaccine lymph required by both civilian and service authorities in Nigeria, and some vaccine lymph has been supplied to other West African territories.

(b) *Cerebro-spinal Fever.*

52. There were 828 cases with 180 deaths giving a case mortality rate of under 22 per cent. In 1941, the corresponding figures were 139 cases with forty-eight deaths, equivalent to a case mortality rate of nearly 35 per cent. It is anticipated that increased successful use of sulphonamides in the treatment of this scourge will steadily become more widely known: a factor which should lead to earlier notification of outbreaks.

(c) *Enteric Fever.*

53. There were seen thirty-two cases—all sporadic—with nine deaths.

(d) *Dysentery.*

54. There were no epidemic outbreaks of dysentery. 3,963 cases of dysentery of all types were reported.

55. Cysts of *entamoeba histolytica* were found 281 times in the course of examining 23,245 specimens of stools from the local population. Free *E. histolytica* was found 275 times.

56. Out of 2,864 specimens of stools cultured, the dysentery bacillus (Flexner, Sonne, Schmitz or Shiga types) was isolated 142 times.

(e) *Yaws.*

57. A total of 37,151 cases are known to have been treated, of which 1,372 were encountered by Sleeping Sickness Teams in the course of sleeping sickness surveys.

58. Yaws in Nigeria is a mass disease especially suitable for mass treatment. (In many cases it can be diagnosed at sight). The dramatic result of arsenical remedies encourages patients to seek treatment and this in turn aids the simultaneous treatment of other mass diseases in the community.

(iii) *Other Diseases*

(a) *Tuberculosis.*

59. In Lagos, where notification is more frequent than anywhere else in Nigeria, there were 265 deaths notified from tuberculosis of all types, representing a crude death-rate of 1.58 per thousand of population. Data are not available to estimate a corrected tuberculosis death rate. In England and Wales the corrected tuberculosis (all forms) death rate in recent (pre-war) years was approximately half the above (763 per million in 1934). Deaths from tuberculosis amongst the native population represented 8.6 per cent of all deaths in Lagos township, during 1942: this percentage shows no change from 1941.

60. In other medical stations of Nigeria, outside Lagos, an increasing number of cases of tuberculosis are being seen by Medical Officers, who notified a total of 1,111 cases. The disease is known to be rapidly fatal in the majority of cases, though only a proportion of the deaths come to the notice of the medical authorities owing to the vast scattered population and the limited number of medical practitioners available outside a few large towns.

(b) *Pneumonia.*

61. In Lagos, deaths from all forms of pneumonia amounted to 500, or 16 per cent of total deaths, again showing no appreciable change from the corresponding rate in 1941.

(c) *Undulant Fever.*

62. Three cases of brucellosis were notified during the year—all from the Northern Provinces.

(d) *Rabies.*

63. No cases of hydrophobia were recorded under this heading in the Medical Report for 1941, whereas six cases of the disease appeared in the Return of Diseases at the end of that report. Further investigations have been made and only in two cases can the diagnosis be accepted.

64. One case of hydrophobia has been seen in 1942. The infection appears to have been contracted in Asaba near Onitsha, but the disease developed and ended fatally in Lagos.

65. Twenty-five cases of animal rabies—twenty-three being canine and two feline—were confirmed by histological examination. The distribution of the cases was Lagos three, Ilorin three, Maiduguri three, Onitsha three, Ikot Ekpene two, Gusau two, Zaria two, Ibadan two, Akure one, Enugu one, Katsina one, Sokoto one, Victoria one.

66. An amended Dogs Ordinance is now in force which has made control of an outbreak of rabies less difficult.

(iv) *Helminthic Infections*

67. The incidence of helminthic infection is commented upon by several medical officers. The disappearance of guinea-worm where water supplies are improved is constantly observed.

68. Infection and re-infection with roundworm and hookworm will be better controlled as an improved standard of rural sanitation is achieved.

69. Helminthic infections, including bilharziasis and taeniasis, can only be satisfactorily controlled by a combination of propaganda, mass treatment and improved general sanitation which are dependent on increased staff and co-operation of the people and their local authorities.

II.—GENERAL MEASURES

(a) *Sewage Disposal.*

70. The disposal of nightsoil by composting is making steady if slow, progress and several more stations have tentatively made a start. Weather conditions frequently present difficulty.

71. In Ondo Province, the Sanitary Superintendent has devised a method by which the nightsoil is composted in silo-like towers built of concrete. Once the bottom few feet of contents have matured, the process becomes quite automatic, the fresh offensive nightsoil being in the top layers, while inoffensive mould is periodically withdrawn through an opening at the bottom. Several of these units have been in successful use for over two years.

(b) *Refuse Disposal.*

72. There is nothing fresh to report.

(c) *Water Supplies.*

73. The public water supply at Jos is now in operation though difficulties with the chlorinating equipment necessitate the boiling of the water supplied at present.

74. Satisfactory progress has been made with the Ibadan major scheme.

75. At Maiduguri, a minor pipe-borne supply to the Government residential area has been constructed jointly by Pan American Airways and the Public Works Department.

76. At Jebba, two springs have been impounded to give a pipe-borne supply.

77. A total of twenty-five public well supplies were completed by the Geological Survey Department during 1942.

III.—SCHOOL HYGIENE

78. In Lagos, 8,155 new cases and 1,675 old cases attended the school clinic a total of 20,507 times.

79. In Bauchi Province, all the pupils of Toro Elementary Training Centre have been medically examined.

80. At Yola, 131 schoolboys were submitted to the usual annual medical examination.

81. In Bida, 149 boys were medically examined at the Government Middle School and there were found sixty-seven cases of ankylostomiasis and twenty-four cases of bilharziasis. The Medical Officer remarks that the better sanitary condition of school life, as compared with the pupils' life at home, is reflected in the lower incidence of helminthic infection in those longer resident in the school.

82. In Katsina, 259 school children were medically examined.

IV.—LABOUR CONDITION

83. Labour welfare has made much progress during the year.

84. Cost of living indices have been worked out after a very thorough investigation in Lagos and cost of living allowances have been granted by Government and the leading firms to their lower paid employees all over the country.

85. Regulations have been laid down establishing ration scales, minimum wages and medical and other welfare facilities for mines labourer in the tin-fields. Funds were granted for an extension of medical arrangements providing for labour in the tin-mining area to meet the requirements of the drive for increased production.

86. An excellent housing scheme has been under construction during the year for the coal-miners at Enugu.

V.—FOOD IN RELATION TO HEALTH AND DISEASE

87. A considerable number of cases showing signs of minor riboflavin deficiency have been seen in the inmates of the Lagos prison and an investigation has been undertaken with a view to determining the cause and devising preventive methods.

88. Goitre is very prevalent in some areas, *e.g.*, Bornu Province, the Pankshin Division of the Plateau Province and parts of the British Cameroons; the question of iodising the salt imported to the affected areas has been taken up with the Nigeria Supply Board.

89. The supply of fresh milk bottled under clean conditions in Kano, Kaduna and Lagos is stimulating a rising demand for this valuable food.

VI.—PORT HEALTH WORK AND ADMINISTRATION

90. Control measures against the risk of malaria in seamen have already been referred to earlier on in this report.

91. No seaport or airport had to be declared infected in the course of the year and no major infectious disease has been imported through any port.

92. Owing to war exigencies, all airport health control has been taken over by the Royal Air Force except for the Flying Boat Base at Lagos which remains under civil health control. The strengthened organisation for the anti-mosquito control in the neighbourhood of the flying boat base at Ikoyi has been referred to earlier on in this report.

VII.—MATERNITY AND CHILD WELFARE

93. The number of confinements in Government (or Native Administration Institutions), or attended at home by midwives sent out from such institutions, totalled 4,385 as against ~~3,742~~ ^{7,937} in 1941—a rise of ~~17~~ ²⁰ per cent.

94. The Infant Welfare Department of the Lagos Town Council held 198 clinics with an aggregate of 7,069 attendances. The Lagos Health Visitors paid a total of 45,200 home visits.

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1942

EUROPEANS AND AFRICANS

Disease	Total In-patients treated	Total Deaths in In-patients	Total Out-patients	Total Deaths in Out-patients
1. (a) Typhoid fever.. ..	32	10	-	-
(b) Paratyphoid fever	5	-	-	-
2. Typhus	12	1	1	-
3. Relapsing fever	1	-	-	-
4. Undulant fever	3	-	-	-
5. Smallpox	532	102	44	-
6. Measles	112	-	199	-
7. Scarlet fever	1	-	-	-
8. Whooping cough	68	1	447	-
9. Diphtheria	3	-	-	-
10. Influenza :—				
(a) with respiratory complications	146	-	537	-
(b) without respiratory complications	-	-	-	-
11. Cholera	-	-	-	-
12. Dysentery :—				
(a) Amoebic	1,119	85	1,610	-
(b) Bacillary	268	28	252	-
(c) Unclassified	675	69	2,346	-
13. Plague :—				
(a) Bubonic	-	-	-	-
(b) Pneumonic	-	-	-	-
(c) Septicaemic	-	-	-	-
14. Acute poliomyelitis	3	-	10	-
15. Encephalitis lethargica	10	4	-	-
16. Cerebro-spinal fever	575	113	24	-
17. Rabies	4	4	-	-
18. Tetanus	166	87	38	-
19. Tuberculosis of the respiratory system	685	250	495	-
20. Other tuberculosis diseases ..	233	32	231	-
21. Leprosy	243	2	592	-
22. Venereal diseases :—				
(a) Syphilis	3,633	20	10,848	-
(b) Gonorrhoea	3,810	10	21,076	-
(c) Other venereal diseases ..	857	6	1,769	-
23. Yellow fever	2	2	-	-
24. Malaria :—				
(a) Benign	82	1	2	-
(b) Subtertian	3,462	46	21,614	-
(c) Quartan	10	-	40	-
(d) Unclassified	2,879	37	46,568	-
25. Blackwater fever	38	11	7	-
26. Kala-azar	-	-	1	-
27. Trypanosomiasis	619	39	1,270	-
Carried forward	20,288	960	110,021	-

Disease	Total In-patients treated	Total Deaths in In-patients	Total Out-patients	Total Deaths in Out-patients
<i>Brought forward</i>	20,288	960	110,021	—
28. Yaws	608	4	33,226	—
29. Other protozoal diseases ..	45	—	2	—
30. Ankylostomiasis	1,569	20	3,525	—
31. Schistosomiasis	582	14	1,262	—
32. Other helminthic diseases ..	2,053	10	40,389	—
33. Other infectious or parasitic diseases	983	39	7,800	—
34. Cancer and other tumours :—				
(a) Malignant	134	43	46	—
(b) Non-malignant	639	14	1,198	—
(c) Undetermined	132	5	251	—
35. Rheumatic conditions	1,075	1	45,963	—
36. Diabetes	77	5	66	—
37. Scurvy	25	1	154	—
38. Beriberi	28	7	169	—
39. Pellagra	43	3	156	—
40. Other diseases :—				
(a) Nutritional	63	7	1,723	—
(b) Endocrine glands and general	75	2	386	—
41. Diseases of the blood and blood- forming organs	1,278	97	12,480	—
42. Acute and chronic poisoning ..	59	6	16	—
43. Cerebral haemorrhage	241	36	220	—
44. Other diseases of the nervous system	1,080	121	5,504	—
45. Trachoma	14	—	41	—
46. Other diseases of the eye and annexa	1,322	18	18,177	—
47. Diseases of the ear and mastoid sinus	294	1	14,523	—
48. Diseases of the circulatory system :—				
(a) Heart	730	158	1,133	—
(b) Other circulatory diseases ..	1,727	44	6,611	—
49. Bronchitis	2,072	27	51,499	—
50. Pneumonia :—				
(a) Broncho-pneumonia	1,125	243	614	—
(b) Lobar-pneumonia	2,450	275	486	—
(c) Otherwise defined	5	—	—	—
51. Other diseases of the respiratory system	1,014	54	7,551	—
52. Diarrhoea and enteritis :—				
(a) Under 2 years of age	169	18	2,944	—
(b) Over 2 " " "	2,193	112	22,058	—
53. Appendicitis	118	4	73	—
54. Hernia, intestinal obstruction ..	4,052	130	2,920	—
<i>Carried forward</i>	48,362	2,479	393,187	—

5,194
1,844

Disease	Total In-patients treated	Total Deaths in In-patients	Total Out-patients	Total Deaths in Out-patients
<i>Brought forward</i>	48,362	2,479	393,187	—
55. Cirrhosis of the liver	148	41	80	—
56. Other diseases of the liver and biliary passages	889	60	1,250	—
57. Other diseases of the digestive system	2,309	126	90,313	—
58. Nephritis :—				
(a) Acute	218	51	252	—
(b) Chronic	194	30	1,225	—
59. Other non-venereal diseases of the genito-urinary system	5,381	74	18,262	—
60. Diseases of pregnancy, childbirth and the puerperal state :—				
(a) Abortion	885	8	737	—
(b) Ectopic gestation	88	2	20	—
(c) Toxaemias of pregnancy ..	487	39	475	—
(d) Other conditions of the puer- peral state	6,625	124	295	—
61. Diseases of the skin, cellular tissue, bones and organs of locomotion	13,156	142	149,808	—
62. Congenital malformation and diseases of early infancy :—				
(a) Congenital debility	377	100	1,909	—
(b) Premature birth	106	55	2	—
(c) Injury at birth	27	12	1	—
63. Senility	18	6	152	—
64. External causes :—				
(a) Suicide	12	6	9	—
(b) Other forms of violence ..	7,195	222	66,338	—
65. Ill-defined	605	86	39,023	—
 Total	 87,082	 3,663	 763,338	 —

LABORATORY SERVICE

The volume of work performed by the Research Institute and Clinical Laboratories has increased greatly during the year, and has included much work done for the Armed Forces, both in the examination of material and in the preparation of media, etc.

Preparation of Antigen.—2,124 c.c.'s of Kahn antigen were prepared and standardised of which 1,395 c.c.'s were issued to the Forces while of 2,000 c.c.'s of Ide Antigen 1,171 c.c.'s went to the Military.

Preparation of Media.—A total of 124,000 c.c.'s of the various media were prepared of which 34,000 c.c.'s were issued to the Civil and 90,000 c.c.'s to the Army laboratories.

PREPARATION OF VACCINE

(1) *Anti-Variola.*—The total yield during 1942 was 4,912 grams and 73,084 tubes were issued. There was a very high mortality rate among the sheep (38.1 per cent). To obviate this in future a fly proof quarantine building has been constructed to house them while waiting to be used. In addition to the supply of vaccine to other West African Colonies it is possible in the near future in view of our increased production that we may be able also to supply some of the West Indian Colonies.

(2) *Anti-Rabies.*—37,480 c.c.'s were prepared using twenty-two sheep.

(3) *T.A.B. Vaccine.*—67,000 c.c.'s were prepared for the use of the Military during the year.

Yellow Fever.—265 protection tests were made of which 167 were done at the request of the Armed Forces. Nine of these were negative. Eighty-one viability tests were made and all those done on the Rockefeller Vaccine were positive. 4,330 inoculations were given with Rockefeller Vaccine.

The Military were issued with 890 twenty-two dose and 218 one hundred and ten dose ampoules. For civil use outside Lagos 167 small and three large ampoules were issued.

Appendix B

REPORT OF THE SLEEPING SICKNESS SERVICE, 1942

In 1942 the sleeping sickness service remained on a maintenance basis. Only one sleeping sickness team was at work. The control service was carried on by a skeleton staff.

In spite of this, progress has been satisfactory. Most new surveys were done in the lightly infected central part of Tiv division of Benue Province. In new areas some 168,658 people were examined and 2,200 cases found, an average infection rate of 1.3 per cent. Another 34,456 people were examined at re-surveys and 793 cases found, an average of 2.3 per cent. It is noteworthy that of 11,000 people re-examined, in what used to be a more heavily infected part of Tiv, the infection rate was 1.2 per cent. It was 9.8 per cent in 1939. The other re-surveys were done in areas which used to be very heavily infected and these also showed a proportionate reduction.

Including control of mines labour, over a quarter of a million examinations were carried out during the year, with an average infection rate of less than 2 per cent. This compares favourably with the position a few years ago. In the period 1931-1938 over two million people were examined and 250,000 cases found, an average of 11.2 per cent. From 1939 onwards, another million people were examined at new surveys and about 50,000 cases found, an infection rate of about 5 per cent. In the same period, over half a million people were examined at re-surveys and 6,534 cases found, an average of only 1.2 per cent.

Since the survey system was first started in 1931, some 307,456 cases have been diagnosed and treated by the teams. A further 68,680 cases have been treated at dispensaries during the last seven years. These together with about 43,000 cases treated at general hospitals and missions give a total of about 420,000 cases of sleeping sickness treated during the last twelve years. Of these 30,000 to 50,000 were relapsed cases.

The success of the policy of surveys and mass treatment followed by the establishment of dispensaries as permanent treatment centres is shown by the general reduction which has occurred in infection rates. There is probably only a fifth or sixth of the amounts of the disease that there used to be.

This year 11,313 cases were treated at dispensaries. This increase over last year, inspite of a gradual falling off in cases at some of the older established dispensaries, was largely due to new treatment centres in Benue Province. Treatment is already available at nineteen centres there and six new sleeping sickness dispensaries are being built. Much general medical work was done. At the Zaria dispensaries alone there were over 120,000 attendances during the year. At Shangev South, one of the new Benue dispensaries there were 8,102 new cases, the first year, of which 390 were sleeping sickness. Total attendances amounted to 37,682 of which 8,270 were for yaws.

The control of mines labour in the sleeping sickness restricted areas of Plateau, Niger, Kabba and Ilorin Provinces continued. Progress was satisfactory on the whole. Over 51,289 examinations were carried out and 1,042 cases found, the average infection rate being 2 per cent, compared with 4.3 per cent in 1941 and 6 per cent in 1940. This was partly due to a recent decrease in gold mining in some of the more heavily infected areas. Even there the present infection rates are only small fractions of the old figures. With the increased war time need for tin, work in Southern Division and Jemaa is increasing in importance.

Approximately 17,350 cases were treated altogether, allowing for about 2,000 cases at general hospitals and missions.

Co-operating with the Zaria Native Administration and the Agricultural, Veterinary and Forestry Department, a propaganda team consisting of trained African representatives of each Department is being formed. This will work under the direction of the Medical Propaganda Officer (one of the Control Officers) in the neighbouring districts of Zaria emirate. The team is being financed by the Native Administration. Members have had a special training in health, agricultural, forestry and livestock problems and will teach their own departmental policy. They should help to spread the knowledge of these subjects and start new methods in areas which otherwise might only be affected indirectly by settlement work.

