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Government of Northern Rhodesia.

MEDICAL REPORT

ON

Health and Sanitary Conditions for the Year 1936.

Price 2*s.* 6*d.*

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1937.

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Medical Report on Health and Sanitary Conditions for the Year 1936.

SECTION I.

ADMINISTRATION.

(*a*) Staff.

EUROPEAN :

The authorised staff is given in Table I at the end of this Report. The chief changes during the year are as below :

Appointments :

Dr. R. A. Newsom, Medical Officer.
Dr. F. A. Thompson, Temporary Medical Officer.
Dr. K. C. P. Thompson, Medical Officer.
Mrs. A. J. Baxter, Nursing Sister.
Miss B. Bourne, Nursing Sister.
Miss J. McLean, Nursing Sister.
Miss A. I. M. Thomas, Nursing Sister.
Miss M. M. Tucker, Nursing Sister.

Departures :

Dr. H. A. Gilkes, Medical Officer (Transfer on promotion).
Dr. T. R. F. Kerby, Medical Officer (Resignation).
Dr. A. Scott, Medical Officer (Resignation).
Dr. F. A. Thompson, Medical Officer (Termination of temporary appointment)
Miss J. K. Cookson, Nursing Sister (Resignation).
Miss T. Fischer, Nursing Sister (Resignation).
Miss H. Grill, Nursing Sister (Resignation).
Miss F. Kirch, Nursing Sister (Resignation).
Miss O. Rowe, Nursing Sister (Resignation).
Miss D. Swarbreck, Nursing Sister (Resignation).

Financial considerations again prevented any increase of staff either by way of restoration of officers retrenched in 1933 or otherwise. Indeed, owing to transfer, resignations and illness the department worked almost throughout the year at a strength below its already exiguous establishment. The European population may be said to have been adequately provided with medical attention but, although a high proportion of medical officers doing general duties hold the qualifications required of medical officers of health, the pressure of purely clinical duties made it impossible for them to carry out more than a minimum of the public health activities which should be actively carried on. Indeed, the pressure of work at certain stations has taxed the medical officers' energies and resources to a degree which occasions me concern. Of the medical care of the native population one can write with less satisfaction. With only twelve medical officers' stations in an area bigger than Kenya (bigger indeed than France) and 10 of these sited primarily in European interests, there are inevitably very large numbers of natives,and some very considerable aggregations of them, totally out of reach of medical aid, and this situation is not very greatly relieved by the maintenance of 23 rural dispensaries staffed by very imperfectly trained native assistants. Some relief is provided by various missions doing medical work (about 3 have doctors) which are subsidised by Government to a total of £3,050 and without which medical provision for natives would be even poorer.

NATIVE STAFF.

The Department employed during the year 93 natives (including learners) classed as " medical orderlies " (it is proposed to change the name to " hospital assistants ") and 7 microscopists. The most highly trained of these come from Nyasaland and have commonly received their training at one or other branch of the Livingstonia Mission. It is now Government's policy not to employ natives of other territories unless it is found impossible adequately to fill a post by a native of Northern Rhodesia. For a long time past " medical orderlies ", often unable to speak English, have been recruited at any medical officer's station and have picked up a smattering of elementary ward work with no systematic teaching whatever. At larger hospitals, notably at Livingstone, some small attempt at definite instruction was made. On 1st October of the year now reported on, on the day upon which I left on leave on urgent private affairs, I had the pleasure and satisfaction of opening the first training school for African medical staff ever attempted in this

Territory. This School was made possible by the fact that His Excellency the Governor keenly welcomed the proposal when put before him and made available £250 which had not been provided on the Estimates. With this sum a rather dilapidated building at the native hospital in Lusaka was put in order, painted and fitted with electric light and converted into dormitories and class rooms and rather scantily equipped. Twenty-four pupils were enlisted mostly from mission schools, all of whom could read, write and speak some English. The attempt was made to take only boys who had passed the Standard VI examination, but a few of Standard IV were accepted. There was no lack of enthusiasm and the school opened under the happiest auspices with Dr. A. J. Board in charge, whose successful work at Balovale, an entirely native station, gave good augury of success in the new venture. By the end of the year, that is after three months' teaching of very elementary science, it was evident that from among the 24 pupils we could expect to obtain at least 15 who would excel any "medical orderlies" hitherto available to the Department. The opening and establishment of this school is the major event of the Department's history for many years.

(*b*) **Ordinances and Regulatings affecting the Public Health enacted during 1936.**

No new enactments fall to be recorded but certain existing Regulations were applied to places where formerly they had not been applied as follows:

Public Health (Building) Regulations: Applied to Kitwe Township.

Public Health (Drainage and Latrine) Regulations: Applied to Kitwe Township.

Public Health (Sale of Bakery Products) Regulations: Applied to Livingstone Municipality.

Public Health (Sale of Ice and Aerated Waters) Regulations: Applied to Ndola Municipality.

Public Health (Sale of Ice and Aerated Waters) Regulations: Applied to Broken Hill Township.

(*c*) **Finance.**

	£	s.	d.
Total Revenue of Colony	863,255	0	0
Health Vote Revenue:			
Hospital Fees	6,036	8	11
Medical Subsidies	200	0	0
Sale of Drugs and Vaccine	235	2	6
	£6,471	11	5

Health Vote Expenditure:	£	s.	d.
Personal Emoluments	36,666	0	0
Other Charges	28,425	0	0
	£65,091	0	0

Health Vote Expenditure=7.54% of total Revenue of Colony.

SECTION II.

PUBLIC HEALTH.

General Remarks.

The statistical information available as to the general health of the Territory's population is negligible in quantity and unreliable in quality. There appears, however, no reason to think there was any notable improvement or deterioration of the public health during 1936. There were no major or serious epidemics and there was no serious food shortage.

Comparative figures of the work of the hospitals for the past five years are given below:

	Europeans		Natives	
	In-patients	Deaths	In-patients	Deaths
1932 ...	1,442	37	7,046	362
1933 ...	1,349	30	8,376	325
1934 ...	1,483	25	9,078	398
1935 ...	1,666	28	10,643	397
1936 ...	1,691	23	10,700	402

These figures show a steady increase in the work of the hospitals which is not due to steady increase of population nor to increased morbidity but to increased use of facilities available. The figures show an increase of native in-patients by over fifty per cent in five years.

The following table shows the total cases (in-patients) treated in each of twelve native hospitals and mortality rate per cent for the past three years :

Station	Cases Treated			Mortality Per Cent. Treated		
	1934	1935	1936	1934	1935	1936
Livingstone ...	1,274	1,408	1,406	7.77	7.24	5.26
Choma	247	264	386	4.04	2.26	2.33
Mazabuka ...	588	635	687	3.06	1.25	3.34
Lusaka	960	981	940	6.25	7.54	7.66
Broken Hill ...	1,515	1,833	1,637	4.09	3.16	3.72
Ndola	1,008	1,257	1,433	5.65	4.93	5.32
Fort Jameson ...	420	332	468	4.76	4.52	4.99
Kasama... ...	285	299	342	3.15	4.01	4.09
Fort Rosebery	399	416	718	2.78	1.44	1.39
Abercorn ...	—	146	260	—	0.68	1.92
Mongu	1,138	1,061	889	2.98	3.67	3.26
Balovale ...	1,244	1,536	1,534	1.44	0.91	1.23

Those mortalities which are noticeably higher than the average, appear to be at the stations where facilities exist for treating, especially by operation, the more serious cases which elsewhere might be sent home because nothing could be done. The figures indicate an increasing confidence in and use of modern medical facilities and the very sharp rise in total cases treated at Fort Rosebery coincides with the posting to that station of a medical officer (Dr. Davies) who both professionally and personally strikingly commands the confidence and respect of the African people.

(1) General Diseases.

There is nothing special to record under this head. Syphilis is as prevalent as ever among the Baila people in the Namwala District. There is no resident doctor in the district, either Government or missionary. In the Report for 1935, it was mentioned that I had been informed that certain missions, professing to do medical work, refuse to treat cases of venereal disease. All missions subsidised by Government for medical work have been communicated with and all except two and one subsidised dispensary run by a retired missionary's wife have assured me that all cases presenting themselves are treated irrespective of the disease. One missionary reported that during the absence of the trained nurse on leave, he is in charge of medical work but does not care to treat venereal cases. The retired missionary's wife is herself a trained nurse and gives no reason for her not treating venereal disease. Once again medical officers have commented upon the rarity of stricture as a sequela of untreated or partially treated gonorrhoea. Chest complaints seem to have been less prevalent than in 1935, but various forms of pneumonia still cause a large part of total mortality.

(2) Communicable Diseases.

(*a*) Mosquito or Insect Borne.

Malaria was as usual, the chief cause of sickness among Europeans, the admissions to hospital for that disease numbering 486 as compared with 457 in 1935. Blackwater cases among Europeans numbered 14 with 2 deaths as compared with 8 cases with 4 deaths in 1935. Medical Officers report (without the support of accurate figures) that European blackwater cases occur mainly among the very poor Dutch farming community among whom the standard of living and especially of nutrition is very low.

Malaria was very prevalent in the new capital of Lusaka in the early months of 1936. This had to be expected, for the reasons indicated in my Report for 1935,

The malaria and blackwater admissions to Government European hospitals, with deaths, for the past five years are shown in the following table :

Station	1932		1933		1934		1935		1936	
	Malaria	Black-water	Malaria	Black-water	Malaria	Black-water	Malaria	Black-water	Malaria	Black-water
Livingstone ...	124	7 (4)	79	5	111	—	102 (1)	1 (1)	168	3 (2)
Lusaka	111	7 (3)	120	—	65 (1)	1	85	3 (1)	94 (1)	5
Broken Hill... ...	82 (1)	7 (2)	53	5 (1)	111	1	77	1 (1)	67	2
Ndola	70 (2)	—	87	4 (1)	108	4 (3)	178	3 (1)	140 (1)	4
Kasama	7	1	3	—	7 (1)	—	1	—	1	—
Mongu	—	—	—	—	1	—	1	—	1	—
Fort Jameson ...	11	—	3	—	10	—	13	—	15	—
Totals ...	405 (3)	22 (9)	345	14 (2)	413 (2)	6 (3)	457 (1)	8 (4)	486 (2)	14 (2)

NOTE.—Figures in brackets indicate fatal cases.

Relapsing Fever.

Kasama, always a focus of this disease, showed 21 cases ; Mongu only 77 as compared with 95 in 1935 ; Fort Jameson had 90 cases. The disease is less common than would be expected from the frequency with which the tick vector is found in native huts. The disease yields readily to treatment by neosalvarsan.

Sleeping Sickness.

The total of cases recorded for the year 1936 was 28 with 5 deaths, as compared with 49 with 14 deaths in 1935. The focus of this disease in the Mumbwa District reported on last year provided 9 cases with no deaths but the measures adopted in 1935 have checked the epidemic occurrence of the disease. Cases continued to be reported from the shore of Lake Tanganyika near Abercorn ; this was infection by *T. gambiense* conveyed by *G. palpalis*. All other cases in the Territory were infections by *T. rhodesiense* conveyed by *G. morsitans*.

(3) **Infectious Diseases.**

Notifications were as follows :

Corresponding Number in International List, 1926	Diseases	Cases		Deaths	
		Europeans	Natives	Europeans	Natives
1a	Typhoid fever	9	24	—	—
3	Relapsing fever	—	186	—	1
5c	Blackwater fever	22	1	4	—
6	Variola	—	96	—	—
7	Measles	126	224	—	16
8	Scarlet fever...	9	—	—	—
9	Whooping cough	30	94	—	—
10	Diphtheria	8	2	1	—
11	Influenza	4	698	—	78
16a	Dysentery-Amoebic	16	38	—	1
b	Dysentery-Bacillry	3	17	—	—
c	Dysentery-Undefined	7	139	—	2
20	Leprosy	—	166	—	1
21	Erysipelas	3	3	—	2
22	Anterior Poliomyelitis	—	3	—	—
24a	Cerebro-Spinal Meningitis	—	15	—	8
25a	German Measles	3	—	—	—
b	Varicella	24	66	—	1
g	Yaws	—	178	—	—
h	Trypanosomiasis	28	—	—	5
27	Anthrax	—	8	—	—
31	Tuberculosis-Pulmonary	2	71	1	16
34	Tuberculosis-Spine	—	4	—	—
36	Tuberculosis-Miliary	—	1	—	1
36a	Tuberculosis-Skin	—	3	—	—
e	Tuberculosis-Glands	6	—	—	—
42	Meningococcal-Meningitis	—	6	—	1
107	Phthisis	—	4	—	—
146	Puerperal fever	—	2	—	2
155	Tropical Ulcers	—	630	—	2

Enteric Group.

The Government hospital incidence of this group is given in the table below :

	1935				1936			
	Europeans		Natives		Europeans		Natives	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Livingstone ...	—	—	—	—	—	—	—	—
Lusaka	—	—	1	1	—	—	—	—
Broken Hill ...	5	—	—	—	2	—	—	—
Ndola	2	1	3	2	1	—	1	—
Mongu	—	—	—	—	—	—	—	—
Balovale	—	—	—	—	—	—	5	—
Fort Jameson ...	—	—	1	1	1	—	—	—

The above table shows that the incidence of disease of the enteric group is slight. For some years, the site of chief incidence has been Nkana where there is no Government hospital. In 1936 the three mine hospitals had the following figures for cases of the enteric group.

	Europeans		Natives	
	Cases	Deaths	Cases	Deaths
Nkana	3	—	9	2
Mufulira	—	—	1	—
Roan Antelope	—	—	6	2

Influenza.

This disease was less prevalent and apparently less virulent than in 1935. Four European and 678 Native cases were notified with nil and 78 deaths.

Measles.

Measles was much less prevalent than in 1935. Several small epidemics were reported but neither the mortality among children nor the accompanying conjunctivitis were so severe as the year before.

Smallpox.

No cases of variola major occurred during the year. A small epidemic of variola minor occurred near Pemba in the Mazabuka District with no mortality. 10,712 vaccinations were performed.

Plague.

No cases were reported during the year.

Pneumonia.

This continues to be an important cause of morbidity and mortality among the native population. The Government native hospitals treated 351 cases with 100 deaths and the Medical Officer, Fort Rosebery, notes that he regards lobar-pneumonia in the elderly and broncho-pneumonia in the young as the most important causes of mortailty in his district.

Tuberculosis.

Evidence is accumulating that this disease is more prevalent than has sometimes been supposed. Several Medical Officers draw attention to this. The native hospitals treated 55 cases of pulmonary tuberculosis with 23 deaths and 12 cases of other forms of the disease with two deaths. In all, 73 cases of the pulmonary form were notified and 14 of other forms.

87.

(4) Helminthic Diseases.

Increasing information shows these diseases to be more prevalent than was realised. Hookworm infection is certainly very wide-spread but many infestations are not severe and more than one Medical Officer records the finding of hookworm eggs by routine stool examinations in cases which show no symptoms of infection whatever. Bilharzia infections is certainly common in some areas. The Medical Officer, Fort Rosebery, reports its prevalence along the Luapula River and in the Bangweulu Lake and Swamp area where also ascariasis and heavy infection with

Strongyloides stercoralis prevail. From Balovale comes a report of the occurrence of infection by both *S. haematobium* and *S. mansoni*, the former being by far the commoner. The Medical Officer, Broken Hill, referring to schistosomiasis says: "There is no doubt but that the disease is common in the district, especially among children, but few cases come to hospital voluntarily as the treatment with antimony tartrate is unpopular".

The Medical Officer, Fort Jameson, says "This disease seems to be commoner than at first thought". He treated 11 cases. At Mazabuka, schistosomiasis is found to be the most prevalent helminthic infection, but no bowel infection is reported and only *S. haematobium*. The reported sources of infection are the Kafue Swamps in the Mumbwa area and the Bwenga River in the Rusangu area.

(5) **Rabies.**

The frequency of occurrence of this disease among dogs and jackals continues to be a cause of real anxiety and heavy expense. Reported outbreaks occur every year and although no European cases have been definitely ascertained there are reports of native deaths, and the steady rise in the number of outbreaks among domesticated dogs is very disquieting.

	1929	1930	1931	1932	1933	1934	1935	1936
Number of outbreaks reported	6	14	7	20	32	26	36	44

Mazabuka alone experienced 21 outbreaks in 1936. The Veterinary Department has been appealing for years for strong action to be taken. Hitherto the Health Department has only been affected by the increasing expenditure upon vaccine for the protection of contacts, which runs into hundreds of pounds a year and by the consumption of valuable time in giving the protective injections.

VITAL STATISTICS.

(1) **Native Population.**

The following estimates have been given of the native population in recent years:

1930	1931	1932	1933	1934
1,331,231	1,372,235	1,382,705	1,371,213	1,366,425

There is probably justification for saying that the native population numbers something over a million and a quarter; beyond that I would not venture to go and as no figure is obtainable for total births or total deaths that could be regarded as even approximately reliable, no attempt has been made to calculate rates.

(2) **European Population.**

Knowledge of the number of the European population is little if at all more reliable than in the case of the African population. Some put the present European figure at 14,000, but this is little more than a guess and does not justify calculation and presentation of birth and death rates. Immigrants are recorded but not emigrants. European births during 1936 (on the assumption that even these are fully and correctly registered) numbered 313 (male 159, female 154): European deaths were 78 in 1936. The chief causes of European deaths were malaria and "external causes" (accidents). The deaths, according to age periods are shown below:

EUROPEAN DEATHS

Ages	Number of Deaths
Under 1 day	2
1 to 7 days	3
1 to 4 weeks	—
4 weeks to 3 months	—
3 to 6 months	1
6 to 9 months	—
9 to 12 months	—
1 to 2 years	5
2 to 3 years	2
3 to 4 years	—
4 to 5 years	—
Total under 5 years	13
Deaths at all Ages	78

European Infant Mortality

Year	Deaths under 1 year	Births	Deaths under 1 year per 1,000 Births
1936	6	313	19.16

Deaths of Males and Females from Various Causes at all Ages

Corresponding number in International List. (1929 Revision)	Causes of Deaths	1936		Totals
		Males	Females	
10	Diphtheria	—	1	1
13a	Dysentery-Amoebic	1	—	1
c	Dysentery-Undefined	—	1	1
14c	Septicaemia	1	—	1
38b	Malaria-Subtertian	6	3	9
44	Blackwater Fever	5	—	5
44	Meningitis	3	—	3
45-55	Cancer and other Tumours	2	2	4
59	Diabetes	1	—	1
64	Rupture of Spleen	1	—	1
69	Dropsy	—	1	1
82	Cerebral Haemorrhage	6	—	6
90-95a	Heart Diseases	4	3	7
96-103	Other circulatory diseases	—	1	1
106	Bronchitis	4	—	4
107	Phthisis	1	—	1
107a	Pneumonia-Broncho	2	—	2
109	Septic Pharyngitis	1	—	1
109c	Pneumonia-Undefined	1	1	2
109e	Pneumonia-Hypostatic	1	—	1
111b	Duodenal Ulcer	—	1	1
121	Appendicitis	1	—	1
126	Peritonitis	—	1	1
130-132	Nephritis (all forms)	2	—	2
140-150	Diseases of Pregnancy, Child Birth and other puerperal state ...	1	3	4
142b	Ectopic Gestation	—	1	1
159b	Premature Birth	1	—	1
162	Senility	1	2	3
163-198	External Causes	10	—	10
199-200	Ill-defined Causes	—	1	1
		—	—	—
	Total	56	22	78

(3) European and Native Officials.

	European 1932	1933	1934	European 1935	Native 1935	European 1936	Native 1936
Total number of officials resident	750	650	540	552	2,595	611	2,550
Average number of officials resident ...	598	525	452	466	2,409	536	2,376
Total number on sick list	352	239	238	246	2,252	269	3,972
Total number of days on sick list	3,661	2,204	1,991	2,547	15,143	2,845	15,649
Average daily number on sick list	10.03	6.03	5.45	6.97	41 .48	7.82	42.87
Percentage of sick to average number resident	1.67	1.14	1.20	1.49	1.72	1.45	1.80
Average number of days on sick list for each patient	10.40	9.22	8.36	10.35	6.72	10.57	3.93
Average sick time to each resident	6.12	4.19	4.40	5.44	6.28	4.65	6.58
Total number invalided	2	2	1	1	16	—	25
Percentage of invalidings to total residents ...	.26	.31	.18	.18	.62	—	.98
Total deaths	5	1	—	2	19	—	13
Percentage of deaths to total residents ...	.66	.15	—	.36	.73	—	.50
Percentage of deaths to average number of residents	.83	.19	—	.43	.78	—	.54

SECTION III.

HYGIENE AND SANITATION.

General Review of Work Done and Progress Made.

(1) Preventive Measures.

Preventive measures require staff and money. Apart from a staff of medical officers of whom many are well qualified to carry out preventive measures but all too occupied with clinical duties to give practical preventive work much time or energy, the Health Department possessed throughout 1936 three officers (Health Inspectors) whose primary duties are concerned with the organisation and carrying out of preventive measures and one of these was on leave during the year. So much for staff. As for money, the approved estimate for anti-malaria work in 1936 was £915. £180 from Public Works Department funds was paid for anti-malaria work in Luanshya Township, carried out by Roan Antelope Mine staff. From the Public Works Department vote for "Minor Works", totalling £1,200 for the whole Protectorate, about £259 became available for projects coming within the terms hygiene and sanitation and no doubt certain small sums were spent upon objects within or bordering upon the same category from the funds under the heading of "Maintainance" which are administered by the Provincial Administration. Certainly District Officers gave every help within their power to District Medical Officers in the latter's efforts to make a shilling do a pound's work.

This less than a minimum of preventive work which the Health Department itself achieved was eked out by the activities of the two municipalities, and of the several township management boards and District Commissioners, so that in the chief centres of European population it may be claimed that fair standards were maintained in regard to water and food supply, disposal of rubbish and excreta, grass and bush cutting and the prevention of the grosser forms of nuisance. Some recent attempts by the Department's staff to raise sanitary standards of food storage and supply to something approaching what should obtain and could be enforced by law, have been resented by the parties at fault and reluctance to use their powers has been displayed by the local authorities concerned. I think it unfortunate that the care of the public health seems, in British dependencies to be among the first of the matters in which power and responsibility are delegated by the central government to young local authorities. The Municipality of Ndola, though it has enjoyed municipal status for $4\frac{3}{4}$ years, still expects to be given free the services of one of my Department's three Health Inspectors. I shall find it impossible to permit this after the middle of 1937. Livingstone Municipality and Lusaka Township have each appointed a qualified sanitary inspector; Broken Hill Township has a whole-time employee for such work, and I can see no reason why Ndola Town Council should not face and shoulder its health responsibilities by making financial provision for public health staff.

About the middle of the year a report was made to Government about the prevalence of malaria in the new capital of Lusaka with the recommendation that "Botha's dam", the only permanent anopheles breeding ground dangerously near the new township, should be drained. Prison labour was made available and using this and with advice and help from the Chief Engineer, the main job was completed before the November rains for the sum of £226. The work included the handling of 15,000 tons of soil and assumed the proportions of a considerable drainage work. It was ably supervised by Mr. R. H. Thomas, one of the Department's Health Inspectors and stood up well to the flow of a very large volume of water and gives promise (which, writing in May, 1937, one can say was fulfilled) of very appreciably reducing new Lusaka's malaria rate.

It is regretted that last year's report incorrectly stated that neither the Broken Hill Mine nor any one of the three copper mining companies, employ innoculation as a routine measure for proction of their employees against the enteric group of diseases. Such protection is provided and I took the opportunity to correct my misstatement when present on the occasion on which my report was under consideration by the Colonial Medical Advisory Committee.

(2) General Measures of Sanitation.

The disposal of sewage by septic tanks and soakage pits at the new capital has worked satisfactorily at private houses. At the Personal Servants' Compound, the Governor's Village and the Northern Rhodesia Regiment Barracks, soakage pits have given trouble being apparently unable to absorb the required volume of water. This has been especially serious in the case of soakage pits receiving sullage.

At Ndola combined hospitals, this difficulty with soakage pits has gone on for years, necessitating appreciable expenditure for making new pits which in turn ceased to absorb. The Chief Engineer drew up proposals for piping sullage and septic tank effluents right away from the hospital to a site where, after aeration by spraying, they are passed through a filter bed and discharged without offence into an existing earth drain. Government sanctioned the proposals which were carried out within the estimate of £1,500 (provided from Loan Funds) and have proved completely successful. To complete this improvement an expenditure of about £100 is required for structural modification of the septic tanks.

Lusaka water supply from boreholes continued to be adequate in quantity. The storage capacity of the tanks is in my opinion deficient to the point of danger and it appears that the reserve pumping capacity is not adequate to compensate for this, although in my last report, using the information given to me, I stated that it was.

(3) School Hygiene.

Government Medical Officers inspected all European schools and scholars twice during the year. The effects of chronic malaria were noted, numerous cases of enlarged tonsils and a good deal of evidence of poor nutrition. There is no doubt that there is an appreciable number of European children whose diet consists almost entirely of coffee, often without milk, bread, mealie-meal porridge with a little sugar, and very occasionally a little meat. A Children's Seaside Holiday Fund in the Ndola and copper mines area has benefitted the health of many school children and the Mayor of Ndola has been indefatigable in collecting funds for that organisation and arranging the seaside holidays. During 1936 a similar organisation was formed in Lusaka and from the first was very successful.

Dental inspections are made twice yearly by dentists subsidised by Government. The response by parents in having remedied the defects discovered continues to be very disappointing, only a small minority getting the teeth attended to although the impecunious can have that service free. The Director of European Education has actively cooperated with me in efforts to improve this situation.

(4) Labour Conditions.

Organised recruiting of labour for employment outside Northern Rhodesia increased during 1936 and a considerable stream of natives goes voluntarily to the Rand via Kazungula in Bechuanaland, where the Witwatersrand Native Labour Association engages them and transports them under very satisfactory conditions to the Rand mines.

The conditions under which native labour is employed at the three large copper mines and at Broken Hill mine are excellent. Housing, rationing, sanitary arrangements, safety precautions and medical facilities are very good ; and a high standard of anti-malaria activity is maintained in and around the townships and compounds of the copper mines.

The housing, rationing, sanitary arrangements, safety precautions and medical facilities provided for their employees by the Zambesi Saw Mills Limited are less excellent and complete than those of the industrial concerns referred to above, both in Livingstone and at Mulobezi Mill and also in the forest camps, but conditions are very fair and are being improved. The Company has now stationed a trained nurse in the camp at Mulobezi where skilled first aid was badly needed in dealing with the rather frequent accidents.

I reported last year that I was dissatisfied with the medical care given to native employees in agriculture. I am no more satisfied now and repeat my recommendation of last year that employers of less than 100 employees should enjoy the privilege of having their employees treated free in Government hospitals.

I know of no evidence that any mining at present conducted in Northern Rhodesia is productive of silicosis.

(5) Housing.

The housing of industrial employees has been referred to in the preceding paragraph dealing with labour conditions. The housing of agricultural labourers hardly anywhere comes up to the standard required by law and on too many farms is frankly bad. Among the very worst housing in the Territory is the accommodation provided for many Government officers' servants in Livingstone.

(6) Food in Relation to Health and Disease.

In Livingstone, Lusaka, Broken Hill, Ndola and in the three mine townships of the Copperbelt, there is reasonably adequate inspection and control of food. Elsewhere there is little inspection but there is no reason to suppose that food which is deficient in value or dangerous in quality is at all commonly supplied to the public.

Milk supplies are nowhere to be regarded as safe without boiling or pasteurisation.

No serious shortage of food in native areas came to my notice in 1936. Towards the end of the year, His Excellency the Governor appointed a Committee to report on nutrition in the Territory in connection with an enquiry being made in all British dependencies at the instance of the Secretary of State for the Colonies.

Measures taken to spread the knowledge of Hygiene and Sanitation.

In all schools, native and European, lessons in hygiene are given and the same subject is taught in the special curricula of those in training to be teachers.

In the Jeanes School, special emphasis is given to hygiene in the courses undergone by prospective Jeanes Teachers and their wives. Reports of the activities of Jeanes Teachers in connection with hygiene and sanitation in native areas continue to be most satisfactory and these activities have begun to attract the co-operation and support of the statutory Native Authorities.

Training of Sanitary Personnel.

Reference has been made earlier in this report to the opening of a medical training school for subordinate personnel. It was not found possible in 1936 to commence training Africans as sanitary inspectors but such training will be given as soon as it becomes practicable to extend the scope of the present teaching which is confined to the training of hospital assistants.

Recommendations for Future Work.

I repeat last year's recommendation for the early provision of a medical laboratory. This is in no sense a request for a luxury. The whole of the clinical and hygienic activities of the Department are handicapped by lack of a laboratory. The enthusiasm of Medical Officers is damped and their efficiency is lowered because they are deprived of opportunity for scientific investigation of their cases; bacteriological investigation of public health problems is left undone unless the expensive, complicated and not always possible expedient is adopted of calling in the aid of another Territory's laboratory; medico-legal investigations which would be of important assistance to the Courts and Police cannot be carried out.

Recommendations are in course of preparation for submission to Government in connection with—

(*a*) the present medical arrangements at Broken Hill, which from Government's point of view are quite uneconomic;

(*b*) the staffing of the Medical Department in relation to the medical and public health needs of the Territory;

(*c*) the present extremely inconvenient arrangement whereby medical headquarters is in Lusaka but the medical store in Livingstone; and the waste of material, reduplication of equipment and general inconvenience and extravagance inherent in the hitherto prevailing system whereby each medical station has been supplied with stores by means of an individual indent sent to and received direct from the Crown Agents.

SECTION IV.

PORT HEALTH WORK AND ADMINISTRATION.

The only port in the Territory is Mpulungu on Lake Tanganyika, visited monthly by a lake steamer belonging to the Tanganyika Government. The Medical Officer, Abercorn, visits the ship and performs the ordinary duties of a port health officer. Nothing requiring record occurred in the course of this duty in 1936.

SECTION V.

MATERNITY AND CHILD WELFARE.

The welfare clinics established at Livingstone, Lusaka, Ndola and Luanshya have been maintained.

That at Livingstone is managed by the Local District Nursing and Welfare Association and receives a grant of £200 per annum from Government and subsidies from the Beit Trustees, Rhodesia Railways and Livingstone Municipality. The Government Medical Officer stationed at Livingstone, in his capacity as Medical Officer of Health of the Municipality, directs the clinic's operations. In addition to the strict functions of a maternity and child welfare clinic, the Association provides treatment for minor ailments among natives at the Maramba Dispensary.

The records show a gratifying increase in the use made of the services provided.

The Lusaka and District Welfare and Nursing Association continued to be active among Europeans and her duties among these fully occupied the Nursing Sister provided by Government for the Association's work :

Number of patients seen at clinic	179
Number of district visits	133
Number of attendances	354
Total number of visits to houses in Lusaka and District ...	904

The Native Welfare Clinic at Lusaka, with a Nursing Sister, and a native male assistant provided by the Lusaka Management Board from Beer Hall profits, and attended by the Medical Officer of Lusaka continues to do a very large amount of work and like all native clinics here, does a very large amount of what can only be called general practice. Working on a part-time basis, Mrs. F. A. Thomson, M.R.C.S., L.R.C.P., continues to conduct at this clinic a well-attended V.D. clinic for women.

	Males	Females and Children
Number of patients...	2,423	4,335
Number of attendances	9,156	21,823

The number of attendances averaged 85 per day.

Ndola.

European Clinic.

The European clinic at Ndola continues to flourish and is much appreciated. Thanks are due once more to Dr. Adderley who, in the midst of a busy private practice, has acted as medical officer to this clinic.

Ninty-three children over one year of age and 49 infants were attended during the year. In all there were 4,771 attendances at the clinic including the daily attendance of 18 school children for milk and tonics when prescribed by the medical officer.

Seven hundred and fifty-five visits were paid to homes.

Native Clinic.

The native welfare clinic at Ndola is in my view one of the best pieces of medical work among natives in the Territory and its especial success is attributable to the outstanding personal and professional qualities of Miss Hodnett the nursing sister in charge. Every type of case comes to the clinic and none (not even males) are turned away.

Cases Treated :

Men	1,347
Women	1,690
Children	3,301
Total	6,338

Number of maternity cases attended ... 12

The total attendances numbered 26,173 or 71 per day.

Weekly classes for weighing infants and giving advice to mothers were held and were well attended there being 600 attendances during the year.

The infant mortality has decreased noticeably in the compound.

Mention must be made of a large volume of welfare work done very successfully by the three copper mining companies all of whom employ a nursing sister and subordinate native staff who work among the women and children dependents of the mines native employees.

SECTION VI.

HOSPITALS, DISPENSARIES AND VENEREAL CLINICS.

Government maintained 7 European and 12 Native hospitals throughout the year. No additional hospitals were built and no existing hospitals were replaced by new buildings. The roof of the very new hospital at Lusaka leaked in the wet season and this hospital seriously needs the addition of a maternity section separated structurally from the main building. This building which in general has proved convenient, is annoyingly noisy and the crying of young infants is heard all over. There is also urgent need for a separate building at Lusaka for isolation purposes. The native hospital at Abercorn still remains housed in a building condemned as a goal 7 years ago ; that at Fort Jameson is semi ruinous and urgently requires replacement. That at Lusaka is old, dark and unsuitable in many ways ; its water supply by pump from a well is precarious and its situation is most inconvenient to most patients and to the staff. Provision for replacement of these three native hospitals has been made in an application to the Colonial Development Committee for assistance in improving medical service to the native population. Minor improvements were effected during the year to several hospitals.

The Roan Antelope, Mufulira and Rhokana copper mining companies continued to maintain admirable fully staffed and equipped hospitals for both European and Native employees, and by arrangement with Government treat, on a fee basis, Government officials and many unemployed natives in the mining area.

During 1936 Government maintained 18 rural dispensaries staffed by native orderlies and a number of them take a few in-patients. Those dispensaries which are situated at administrative stations (the majority) are under the immediate supervision of the District Officers all of whom show care and interest in this work and several of whom display very definite skill in diagnosis and treatment.

Various missions throughout the Territory continued to do very valuable medical work in outlying districts. There are 27 mission hospitals and dispensaries in the Territory, but there are few if any mission stations where some medical aid is not given to natives. Five of the mission stations have qualified medical practitioners, several more have trained nurses and others have missionaries who have received partial training at missionary medical colleges. This medical work by missions forms a very important extension of Government's medical provision for natives and is subsidised by Government to the amount of £3,050. I receive frequent requests from representatives of missions for my support for an application to Government for a grant to enable a new mission dispensary to be opened. It may be well to state in a document available to the public that the Health Department will seldom recommend to Government that a grant-in-aid should be made for such a purpose. That Department accepts responsibility for deciding where medical aid to natives is best placed and for providing it so far as its finances permit. Where a missionary society has itself established a medical post in a place where the Department considers such is necessary and no Government medical aid is there available I shall always be glad to consider a grant-in-aid. I have noticed an inclination for some missionary societies to multiply dispensaries (as some mutiply schools) in relation to the activities of societies of different denomination rather than to the broad medical needs of the population.

As stated last year there are no special venereal diseases clinics except the weekly one for women at Lusaka but all hospitals and the majority of the dispensaries treat venereal disease day in and day out.

European Hospitals

Hospital	Year	Admissions	Deaths	Daily Average
Livingstone	1935	466	6	12.24
	1936	435	5	11.5
Lusaka	1935	372	3	8.96
	1936	405	6	10.29
Broken Hill	1935	265	3	6.02
	1936	297	8	5.57
Ndola	1935	435	13	16.93
	1936	444	4	11.81
Fort Jameson	1935	59	2	1.29
	1936	58	—	1.41
Kasama	1935	18	1	.56
	1936	3	—	.10
Mongu	1935	5	—	.09
	1936	10	—	.20

Native Hospitals.

	Year	Admissions	Deaths
Livingstone	1935	1,331	102
	1936	1,289	74
Choma	1935	264	6
	1936	363	9
Mazabuka	1935	635	8
	1936	657	23
Lusaka	1935	981	74
	1936	916	72
Broken Hill	1935	1,833	58
	1936	1,556	61
Ndola	1935	1,257	62
	1936	1,355	72
Kasama	1935	299	12
	1936	225	14
Fort Rosebery	1935	416	6
	1936	706	10
Fort Jameson	1935	332	15
	1936	448	14
Abercorn	1935	146	1
	1936	248	5
Mongu	1935	1,061	39
	1936	799	29
Balovale	1935	1,536	14
	1936	1,432	19

Out-Patients—Natives.

Hospital	Number Treated	Number of Attendances
Livingstone	1,020	3,343
Choma	876	5,368
Mazabuka	2,925	28,208
Lusaka	2,863	6,994
Broken Hill	3,745	8,117
Ndola	11,760	—
Kasama...	2,847	9,253
Fort Rosebery	5,636	16,410
Fort Jameson	2,326	—
Mongu	9,111	51,183
Balovale	5,007	9,568
Abercorn	4,035	26,720

Dispensaries.

Place	In-patients	Out-patients	Attendances
Lundazi	113	1,624	15,469
Petauke	49	496	6,256
Njobo	194	1,369	24,745
Nkanda	86	821	8,710
Maguya	317	2,561	17,277
Kawaza	175	1,002	14,944
Kapalala ...	—	1,373	5,768
Kafulwe	—	2,101	8,548
Luwingu ...	—	2,168	6,003
Chitimukulu ...	11	—	2,311
Chambezi ...	22	—	3,343
Muchinshi ...	—	2,385	4,943
Mpika	93	—	5,165
Malima	—	1,848	4,908
Kapata	—	2,609	4,647
Mpulungu ... (Nov. and Dec.)	—	516	—
Tafuna's ... ... (Nov. and Dec.)	—	197	—
Mumbwa ...	128	1,984	—
Mwinilunga ...	346	1,106	4,186

Solwezi (no figures available).

SECTION VII.

PRISONS AND ASYLUMS.

There are no asylums or mental hospitals in the Territory. All European and certain native cases of mental illness are sent to Ingutsheni in Southern Rhodesia or other institutions outside Northern Rhodesia at Government expense. The cost to Government in 1936 was £1,811 12*s*. 4*d*., and in 1935, £1,849 14*s*. 7*d*. Other cases of mental disease in natives are confined in the prisons unless they can be taken care of in their villages. As previously reported and generally admitted the confinment of cases of mental disease in prisons is entirely unsuitable and it is hoped that prospects of improving revenue may make possible the early carrying out of already prepared plans to remedy the present situation.

The health of prisoners has been satisfactory and the sanitary state of prisons good. There have been in the prisons no epidemics and no cases of institutional or deficiency disease.

SECTION VIII.

METEOROLOGY.

Temperatures are moderate during the winter months viz., from April to August. In low-lying parts the temperature varies from 70° to 90° with a maximum of 103° and a minimum of 56°. In the high plateau the temperature varies from 55° to 75° with a maximum of 86° and a minimum of 40°.

The average rainfall varies from 50 inches in the northern and high-lying portions of the Territory to 25 and 30 inches in the southern and south-eastern parts. On the average little or no rain falls during the period May to September. The month of October usually brings from about half an inch to two inches. The period, November to March, is the real wet season, during which from 70% to 90% of the total annual rainfall occurs.

SECTION IX.

SCIENTIFIC.

No laboratory work other than the routine examinations of urine, blood and stools was done during the year. There being no medical laboratory, it goes without saying that no research was conducted.

Native microscopists were stationed at all the large hospitals on the railway line and did useful work.

Under the supervision of Dr. Board, the medical officer in charge of the Native Medical Training School, the native microscopists attached to Lusaka Native Hospital did excellent work in training the school pupils in simple laboratory work.

Examinations during the year revealed the following:

LUSAKA LABORATORY ANNUAL REPORT, 1936.

Month	No. of slides examined	Albumin	Ancylostome	Bilharzia	Trichomonas	Strongyloides	Tubercle Bacilli	Trypanosome	Filaria	Taenia	Leprosy	Gonococci	Tick Fever	Amoeba	Malaria	Meningococci
January ...	530	89	45	7	3	2	—	4	1	—	—	5	1	2	100	—
February ...	406	79	20	34	1	2	2	—	2	—	—	—	2	—	61	—
March	302	63	35	9	—	—	—	3	1	—	—	4	—	—	60	—
April	208	45	19	2	2	3	2	1	1	1	—	—	—	2	68	—
May	363	60	15	2	2	5	3	—	3	—	—	—	—	2	69	—
June	239	27	28	12	—	—	—	—	4	—	1	—	—	2	28	—
July	208	14	25	19	—	—	—	—	2	—	—	—	—	1	14	—
August	380	24	21	22	—	—	2	2	3	1	—	—	—	4	18	—
September ...	284	25	7	10	—	1	1	1	2	—	—	—	—	4	22	—
October ...	350	12	4	6	—	1	—	2	2	—	—	—	—	—	10	—
November ...	220	15	12	4	1	3	2	1	3	—	—	5	—	2	20	1
December ...	510	16	18	22	1	5	4	—	9	—	—	8	—	2	35	—
Total ...	4,164	469	249	149	10	22	16	13	33	2	1	22	3	21	505	1

JOHN F. C. HASLAM, M.C., M.D., F.R.C.P.E., D.P.H.
Director of Medical Services.

RETURNS.

ADMINISTRATION.

TABLE I.

Staff as at 31st December, 1936.

European :

Director of Medical Services	1
Specialist Surgical Officer	1
Medical Officers	16
Pharmacist and Storekeeper	1
Pharmacist	1
Clerk Dispenser	1
Accountant	1
Clerks	3
Matrons	2
Nursing Sisters	30
Female Ward attendants	5
Health Inspectors	3
Dispenser (part paid by the Broken Hill Development Company)	1

African :

Native Clerks	10
Orderlies	93
Microscopists	7
Other Servants	162
Native Porters	11
Office Boys	7
Sleeping Sickness Guard	1
Vaccinators	5
Labourers	26
Sanitary Overseers	5
Malaria Control Boys	61

APPENDIX I.

RHODESIA BROKEN HILL DEVELOPMENT COMPANY, LIMITED, BROKEN HILL.

Natives :

Daily Average employed	2,087
Total Admissions to Hospital	922
Total Deaths (including accidents)	11
Mortality per mille employed	5.27

Accidents :

Total Major	13
Total Major Deaths	1
Total Minor	304
Total Minor Deaths	—

RHOKANA CORPORATION LIMITED.—NKANA MINE.

Natives :

Daily Average employed	5,240
Total Admissions to Hospital	2,355
Total Deaths (including accidents)	42
Mortality per mille employed	7.90

Accidents :

Total Major	64
Total Major Deaths	10
Total Minor	1,027
Total Minor Deaths	—
Routine Hookworm Examinations	844

ROAN ANTELOPE COPPER MINE.—LUANSHYA.

Natives :

Daily Average employed	44,56
Total Admissions to Hospital	1,804
Total Deaths (including accidents)	26
Mortality per mille employed	5.83

Accidents :

Total Major	104
Total Major Deaths	3
Total Minor	663
Total Minor Deaths	—

MUFULIRA COPPER MINE.—MUFULIRA.

Natives :

Daily Average employed	2,767
Total Admissions to Hospital	1,490
Total Deaths (including accidents)	16
Mortality per mille employed	5.78

Accidents :

Total Major	43
Total Major Deaths	5
Total Minor	634
Total Minor Deaths	—

TABLE V.

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.

ALL EUROPEAN HOSPITALS.

Diseases	Remaining in Hospital at end of 1935	Yearly Totals: Admissions	Yearly Totals: Deaths	Total cases Treated	Remaining in Hospital at end 1936
I. Epidemic, Endemic and Infectious Diseases.					
1. Enteric Group					
a. Typhoid Fever	...	6	...	6	...
d. Paratyphoid not defined...	...	3	...	3	...
4. Undulant Fever	...	1	...	1	...
5c. Malaria Aestivo Autumnal	7	486	2	493	12
e. Blackwater	...	14	2	14	...
7. Measles	...	2	...	2	...
8. Scarlet Fever	...	3	...	3	...
9. Whooping Cough...	...	2	...	2	...
10. Diptheria	...	6	2	6	...
11. Influenza	...	33	...	33	...
16a. Dysentry-Amoebic	...	8	...	8	...
b. Dysentry-Bacillary	...	3	...	3	...
c. Dysentry-Undefined	1	11	...	12	...
21. Erysipelas	...	3	...	3	...
25a. Rubella	...	1	...	1	...
b. Varicella	...	2	...	2	...
31. Tuberculosis, Pulmonary	...	1	1	1	1
40a. Gonorrhoea and its complications ...	...	4	...	4	...
II. General Diseases not mentioned above.					
43. Cancer	1	2	1	3	...
48. Cancer-Sarcoma	...	1	...	1	...
49. Cancer-Malignant Tumours	...	1	...	1	...
51. Acute Rheumatism	...	4	...	4	...
52. Chronic Rheumatism	...	6	...	6	...
57. Diabetes	...	3	...	3	...
58b. Anaemia	...	11	...	11	...
66. Alcoholism	1	8	1	9	1
68. Purpura Haemorrhagica	1	...	...	1	...
III. Affections of the Nervous System and Organs of the Senses.					
71. Meningitis	...	2	1	2	...
73. Disseminated Sclerosis	...	1	...	1	...
74a. Haemorrhage	...	1	...	1	...
b. Apoplexy	...	3	1	3	...
77. Other forms of Mental Alienation ...	...	3	...	3	1
78. Epilepsy	...	2	...	2	...
82a. Hysteria	...	5	...	5	...
b. Neuritis	...	9	...	9	...
c. Neurasthenia	1	13	...	14	...
85b. Conjunctivitis	1	3	...	4	...
c. Other affections of Eye	1	7	...	8	1
86. Affections of the Ear	...	9	...	9	...
IV. Affections of the Circulatory System.					
88. Acute Endocarditis	...	2	...	2	...
89. Agina Pectoris	...	1	...	1	...
90a. Valvular Disease of the Heart	...	4	...	4	...
Mitral Disease of the Heart	...	3	...	3	...
b. Myocarditis	...	8	...	8	...
93. Haemorrhoids	...	8	...	8	1
94. Filariasis	...	2	...	2	...
Lymphadenits	...	4	...	4	...
Adenitis	...	1	...	1	...
Carried forward	14	716	11	730	17

TABLE V.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.
ALL EUROPEAN HOSPITALS.

	Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total cases Treated	Remaining in Hospital at end of 1936
			Admissions	Deaths		
	Brought forward ...	14	716	11	730	17
V.	**Affections of the Respiratory System.**					
97.	Adenoids	...	7	...	7	...
	Coryza	...	1	...	1	...
98.	Laryngitis...	...	1	...	1	...
99a.	Bronchitis, Acute	...	17	1	17	1
b.	Bronchitis, Chronic	1	3	...	4	...
100.	Broncho-Pneumonia, ...	...	11	2	11	...
101a.	Lobar Pneumonia, ...	1	7	1	8	...
b.	Unclassified Pneumonia, ...	...	4	...	4	...
102.	Pleurisy	2	5	...	7	1
	Empyema	...	2	...	2	2
105	Asthma	...	6	...	6	...
107.	Lung Abscess	...	1	...	1	...
VI.	**Diseases of the Digestive System.**					
108a.	Dental Caries	...	13	...	13	...
	Pyorrhoea	...	1	...	1	...
b.	Edentation	...	55	...	55	...
b.	Stomatitis	...	1	...	1	...
109.	Tonsillitis	...	99	...	99	...
	Pharyngitis	1	1	1	2	...
	Quinsy	...	2	...	2	...
111a.	Ulcer of the Stomach	...	6	...	6	1
b.	Ulcer of the Duodenum	...	3	...	3	...
112.	Gastritis	...	23	...	23	1
113.	Diarrhoea	...	2	...	2	...
113.	Enteritis under 2 years	...	2	...	2	...
114.	Enteritis over 2 years	...	23	...	23	...
	Colitis	...	3	...	3	...
	Colic	...	1	...	1	...
115.	Ankylostomiasis	...	3	...	3	...
116a.	Cestoda	...	1	...	1	...
	Taenia Solium	...	2	...	2	...
c.	Haematemesis	...	1	...	1	...
117.	Appendicitis	4	69	...	73	1
118.	Hernia	...	12	...	12	...
119a.	Fistula	...	5	...	5	...
b.	Constipation	...	5	...	5	...
122.	Cirrhosis of the Liver	...	5	...	5	...
	Hepatitis	...	4	...	4	1
	Cholecystitis	1	9	...	10	1
126.	Peritonitis	...	2	...	2	...
127.	Diverticulitis	...	1	...	1	...
127.	Ruptured Spleen	...	1	...	1	...
	Subphrenic Abscess	...	1	1	1	...
VII.	**Diseases of the Genito-Urinary System.**					
128.	Acute Nephritis	...	2	...	2	...
129.	Chronic Nephritis	...	2	1	2	...
131.	Pyelitis	...	31	...	31	...
132.	Renal Calculus	...	4	...	4	...
	Renal Colic	...	1	...	1	...
133.	Cystitis	1	7	...	8	...
	Retention of Urine	...	1	...	1	...
	Carried forward	25	1,185	18	1,210	26

TABLE V.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.

ALL EUROPEAN HOSPITALS.

Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total cases Treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
Brought forward ...	25	1,185	18	1,210	26
VII. Disease of the Genito-Urinary (*continued*).—					
134a. Stricture of Urethra	1	...	...	1	1
134b. Urethral Fistula	...	6	...	6	...
136. Hydrocele	...	4	...	4	...
Phimosis	...	5	...	5	...
137. Ovarian Cyst.	...	3	...	3	...
138. Salpingitis	...	1	...	1	...
139. Uterine Tumours...	...	5	...	5	1
140. Uterine Haemorrhage	...	2	...	2	...
141B. Other affections of the Female Genito-Organs	...	19	...	19	...
141A. Metritis	...	7	...	7	...
B. Menorrhagia	...	1	...	1	...
Dysmenorrhoea	...	10	...	10	...
Leucorrhoea	...	2	...	2	...
142. Abscess of Breast	...	2	...	2	...
VIII. Puerperal State.					
143A. Normal Labour	2	140	...	142	2
Ba. Abortion	1	19	...	20	1
b. Ectopic Gestation	...	7	1	7	...
c. Other Accidents of Pregnancy	...	8	...	8	...
145. Other Accidents of Parturition...	...	2	...	2	...
148. Puerperal Eclampsia	...	1	...	1	...
149. Sequelae of Labour	...	5	1	5	...
IX. Affections of the Skin and Cellular Tissues.					
152. Carbuncle	...	4	...	4	...
153. Abscess	1	14	...	15	...
Whitlow	...	5	...	5	...
Cellulitis	1	32	1	33	...
Furunculosis	...	1	...	1	...
155. Other diseases of the skin	...	12	...	12	...
X. Diseases of the Bones, and Organs of Locomotion (Other than Tuberculosis).					
156. Osteitis	...	5	...	5	1
Osteomyelitis	1	4	...	5	...
157. Arthritis	...	4	...	4	...
Synovitis	...	1	...	1	...
158. Other Diseases of the Bones and Organs of Locomotion	...	4	...	4	...
XII. Diseases of Infancy.					
160. Marasmus	...	1	...	1	...
Other affections of infancy	...	2	...	2	...
XIII. Affections of Old Age.					
164. Anaemia	1	...	...	1	...
Senility	...	3	1	3	...
Carried forward	33	1,526	22	1,559	32

TABLE V.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.

ALL EUROPEAN HOSPITALS.

Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total cases Treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
Brought forward	33	1,526	22	1,559	32
XIV. Affections produced by External Causes.					
170. Firearms	...	1	1	1	...
175. Food Poisoning	1	...	...	1	...
177. Accidental Poisoning	...	1	...	1	...
178. Burns by Fire	...	3	...	3	...
184. Wounds by Cutting Instruments etc. ...	...	5	...	5	...
185. Wounds by Fall	...	4	...	4	...
187. Wounds by Machinery	...	2	...	2	...
189. Injuries inflicted by Animals	1	1	...	2	...
194. Sunstroke	...	2	...	2	...
201A. Dislocations	1	2	...	3	...
B. Sprain	...	9	...	9	...
C. Fracture	1	30	...	31	1
202. Other External Injuries	2	22	...	24	1
XVI. Diseases, the total of which have not caused ten Deaths.	...	44	...	44	...
Total	39	1,652	23	1,691	34

TABLE Va.

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.
ALL NATIVE HOSPITALS.

	Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total cases treated	Remaining in Hospital at end of 1936
			Admissions	Deaths		
I. Epidemic, Endemic and Infectious Diseases.						
1.	Enteric Group	...	...	...	...	...
a.	Typhoid Fever	...	6	...	6	1
3.	Relapsing Fever	1	74	2	75	1
5c.	Malaria Aestivo Autumnal	21	1,067	25	1,088	28
e.	Blackwater	1	1	...	2	...
6.	Alastrim	...	13	...	13	...
7.	Measles	...	40	3	40	1
9.	Whooping Cough...	...	14	1	14	3
10.	Diphtheria	...	1	...	1	...
11.	Influenza	13	140	6	153	...
13.	Mumps	...	1	...	1	...
16a.	Dysentery-Amoebic	...	48	2	48	4
b.	,, -Bacillary	...	11	...	11	...
c.	,, -Undefined	...	11	1	11	...
20.	Leprosy	82	146	3	228	76
21.	Erysipelas...	...	3	3	3	...
22.	Acute Poliomyelitis	...	2	...	2	...
24.	Cerebro-spinal Fever	...	8	7	8	...
25a.	Inantile Jaundice	...	1	...	1	...
b.	Varicella	5	48	...	53	1
g.	Yaws	12	282	1	294	10
h.	Trypanosomiasis	8	22	2	30	...
27.	Anthrax	...	5	...	5	3
28.	Rabies	...	18	...	18	...
29.	Tetanus	...	1	1	1	...
30.	Mycosis	...	1	...	1	...
31.	Tuberculosis-Pulmonary	5	50	23	55	4
33.	Tuberculosis-Vertebral Column ...	...	7	3	7	...
36c.	Tuberculosis-Lymphatic System ...	2	10	2	12	2
38.	Syphilis	...	...	...	...	...
a.	,, -Primary	59	695	...	754	45
b.	,, -Secondary	4	129	...	133	15
c.	,, -Tertiary	5	56	...	61	...
d.	,, -Hereditary	3	37	4	40	4
e.	,, -Period not indicated ...	42	1,043	10	1,085	62
39.	Soft Cancre	...	3	...	3	...
40a.	Gonorrhoea and its Complications ...	22	215	...	237	12
c.	Gonorrhoeal Arthritis	1	4	...	5	...
41.	Septicaemia...	...	12	12	12	...
II. General Diseases not mentioned above.						
43.	Cancer	...	3	2	3	...
44.	Cancer of Stomach	...	6	4	6	...
45.	Cancer of Rectum	...	2	1	2	...
46.	Cancer of Uterus	...	1	...	1	1
47.	Cancer of Liver	...	1	1	1	...
48.	Cancer of Neck	...	5	1	5	...
49.	Malignant Tumours	1	4	2	5	...
50.	Tumours-Non-malignant	...	39	...	39	2
51.	Acute Rheumatism	1	98	1	99	6
52.	Chronic Rheumatism	7	124	...	131	4
53.	Scurvy	6	46	2	52	4
54.	Pellagra	4	9	1	13	...
55.	Beri-Beri	...	7	...	7	1
57.	Diabetes	...	2	...	2	...
58b.	Anaemia	...	3	...	3	...
60.	Diseases of Thyroid Grands Goitre ...	...	15	...	15	...
	Carried forward	305	4,590	126	4,895	290

TABLE Va.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.
ALL NATIVE HOSPITALS.

Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total Cases Treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
Brought forward ...	305	4,590	126	4,895	290
II. General Diseases not mentioned above.—*Ctd.*					
64. Diseases of the Spleen	1	10	5	11	...
65b. Hodgkins Disease	...	3	1	3	1
66. Alcoholism	...	2	...	2	...
69. Onyalai	1	8	...	9	...
III. Affections of the Nervous System and Organs of the Senses.					
71. Meningitis...	...	5	5	5	...
73. Other affections of the Spinal Cord ...	...	1	1	1	...
74a. Haemorrhage	...	4	3	4	...
c. Thrombosis	...	7	...	7	...
75a. Hemiplegia	1	1	...	2	...
b. Paralysis	...	14	...	14	...
77. Other forms of Mental Alienation ...	1	27	...	28	3
78. Epilepsy	1	50	4	51	3
78. Neuralgia	...	1	...	1	...
82A. Hysteria	...	8	1	8	...
B. Neuritis	...	27	...	27	1
C. Neurasthenia	...	8	...	8	...
84. Paralysis	...	2	...	2	...
84. Desiminated Sclorosis	...	1	...	1	...
85b. Conjunctivitis	25	329	...	354	9
c. Trachoma	...	6	...	6	...
d. Tumour of Eye	...	6	...	6	...
e. Other affections of Eye	...	59	...	59	...
86. Affections of the Ear	4	63	...	67	4
IV. Affections of the Circulatory System.					
87. Pericarditis	...	5	1	5	2
90a. Valvular Disease of the Heart	...	8	1	8	...
b. Myocarditis	1	15	10	16	...
c. Tachycordia	...	2	...	2	...
91a. Aneurism	...	1	...	1	...
92. Embolism	...	1	1	1	...
93. Haemorrhoids	...	4	...	4	...
Varicose Veins	...	5	...	5	...
Phlebitis	...	2	2	2	...
94. Lymphangitis	...	9	...	9	1
Lymphadenitis	2	22	1	24	2
Filariasis	...	4	...	4	...
95. Haemorrhage of undetermined Cause ...	...	1	...	1	...
96. Other affections of the Heart	...	4	...	4	1
V. Affections of the Respiratory System.					
97. Sinusitis	...	5	...	5	...
Coryza	...	101	1	101	5
98. Laryngitis	1	2	...	3	...
99a. Bronchitis-Acute	6	104	...	110	3
b. Bronchitis-Chronic	3	23	...	26	...
100. Bronco-Pneumonia	4	40	17	44	2
101a. Lobar Pneumonia	9	110	36	119	3
b. Unclassified Pneumonia...	2	186	47	188	13
102. Pleurisy	...	31	...	31	...
Empyema...	...	5	...	5	...
105. Asthma	1	7	...	8	...
107. Lung Abscess	...	1	1	1	...
VI. Diseases of the Digestive System.					
108A. Dental Caries	1	10	...	11	...
Pyorrhoea...	...	9	...	9	...
B. Edentation	...	5	1	5	...
Carried forward	369	5,954	265	6,323	346

TABLE Va.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.
ALL NATIVE HOSPITALS.

	Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total Cases Treated	Remaining in Hospital at end of 1936
			Admissions	Deaths		
	Brought forward ...	369	5,954	265	6,323	346
VI. Diseases of the Digestive System.—*Continued.*						
B.	Stomatitis	...	14	...	14	...
	Salivary Calculus...	...	1	...	1	...
109.	Tonsillitis	2	22	1	24	...
	Pharyngitis	...	1	...	1	...
110.	Ulcer of Oesophagus	...	1	...	1	...
111A.	Ulcer of the Stomach	...	1	1	1	...
B.	Ulcer of the Duodenum	...	1	...	1	...
112.	Gastritis	3	14	...	17	1
113.	Diarrhoea	...	18	1	18	...
113.	Enteritis under 2 years	...	17	6	17	2
114.	Enteritis over 2 years	1	44	5	45	1
	Colitis	...	5	...	5	1
115.	Ankylostomiasis	1	168	2	169	10
116a.	Cestoda	1	3	...	4	...
	Taenia Solium	3	7	...	10	1
c.	Ascaris	...	11	...	11	1
118.	Hernia	2	54	2	56	1
119A.	Fistula	...	2	...	2	...
B.	Constipation	2	28	...	30	...
122.	Cirrhosis of the Liver	...	9	5	9	...
124.	Abscess of Liver	...	17	...	17	...
	Hepatitis	...	3	...	3	...
	Cholecystitis	...	5	...	5	...
125.	Diabetes	...	1	1	1	...
126.	Peritonitis...	...	5	3	5	1
	Intestinal Obstruction	...	13	7	13	...
VII. Diseases of the Genito-Urinary System (Non-Venereal).						
128.	Acute Nephritis	2	19	7	21	1
129.	Chronic Nephritis	2	3	...	5	...
130B.	Schistosomiasis	7	85	3	92	3
c.	Bilharzia	...	86	...	86	6
131.	Pyelitis	...	11	3	11	...
133.	Cystitis	...	18	...	18	...
	Haematuria	...	2	...	2	...
134a.	Stricture of Urethra	...	10	...	10	1
b.	Urethral Fistula, ...	...	1	...	1	...
136.	Hydrocele	...	12	...	12	1
	Orchitis	...	12	1	12	...
	Epidymitis	...	2	...	2	...
	Phimosis	...	8	...	8	...
	Ovarian Cyst	1	45	...	46	...
137.	Retention of Urine	...	4	...	4	...
138.	Salpingitis	...	5	1	5	...
	Pelvic Cellulitis	...	1	1	1	...
139.	Uterine Tumours	...	4	1	4	...
	Vaginitis	...	1	...	1	...
140.	Uterine Haemorrhage	...	5	...	5	...
141A.	Metritis	...	4	...	4	...
	Endometritis	...	2	...	2	...
B.	Amenorrhoea	...	3	...	3	...
	Metrorrhagia	...	3	...	3	...
	Dysmenorrhoea	...	1	...	1	...
142.	Mastitis	...	12	...	12	1
	Abscess of Breast	...	3	...	3	...
	Carried forward	396	6,781	316	7,177	378

TABLE Va.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.
ALL NATIVE HOSPITALS.

Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total Cases Treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
Brought forward ...	396	6,781	316	7,177	378
VIII. Puerperal State.					
143A. Normal Labour	...	56	1	56	...
Ba. Abortion	...	22	...	22	...
c. Other Accidents of Pregnancy	...	19	5	19	...
144. Puerperal Haemorrhage	...	1	1	1	...
145. Other Accidents of Parturition ...	...	4	...	4	...
146. Puerperal Septicaemia	...	2	2	2	...
149. Sequelae of Labour	...	3	...	3	...
IX. Affections of the Skin and Cellular Tissues.					
151. Gangrene	1	3	...	4	2
152. Boil	...	23	...	23	6
Carbuncle	...	9	...	9	...
153. Abscess	19	400	10	419	17
Whitlow	1	40	...	41	3
Cellulitis	26	114	2	140	16
154A. Tinea	1	6	...	7	...
B. Scabies	...	481	...	481	16
155. Other Diseases of the Skin	6	67	1	73	3
Tropical Ulcer	32	161	1	193	25
Impetigo	...	3	...	3	...
Ulcer	4	127	3	131	4
Pemphigus	...	5	1	5	...
Elephantiasis	...	18	...	18	...
Pediculosis Pubis	...	1	...	1	...
X. Diseases of the Bones, etc.					
156. Osteitis	3	7	...	10	...
Osteomyelitis	1	8	1	9	...
157. Arthritis	4	34	...	38	...
Bursitis	...	1	...	1	...
Synovitis	2	22	...	24	...
Myositis	...	14	3	14	...
158. Other diseases of the Bones etc. ...	1	37	1	38	...
159. Ainhum	...	3	...	3	...
XI. Malformations.	...	1	...	1	...
XII. Diseases of Infancy.					
160. Malformations	...	1	...	1	...
160. Congenital Debility	1	7	5	8	...
161. Premature Birth	...	1	1	1	...
162. Marasmus	1	8	4	9	...
XIII. Affections of Old Age.					
164. Senile Dementia	...	1	1	1	...
Debility	1	13	2	14	2
Senility	...	4	4	4	2
XIV. Affections produced by External Causes.					
171. Attempted Suicide by cut throat ...	...	1	...	1	...
175. Food Poisoning	...	1	...	1	...
176. Snake Bite	...	27	...	27	1
Insect Bite	...	8	...	8	...
177. Accidental Poisoning	...	13	...	13	...
178. Burns by Fire	21	151	11	172	16
179. Burns other than by Fire	...	7	...	7	...
Carried forward	521	8,716	376	9,237	491

TABLE Va.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1936.

ALL NATIVE HOSPITALS.

Diseases	Remaining in Hospital at end of 1935	Yearly Total		Total Cases Treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
Brought forward ...	521	8,716	376	9,237	491
XIV. Affections produced by External Causes.—*Continued*					
183. Wounds by Firearms	...	4	...	4	1
184. Wounds by Cutting Instruments etc. ...	22	181	3	203	4
185. Wounds by Fall	...	45	...	45	5
187. Wounds by Machinery	...	259	...	259	29
188. Wounds by Railway etc.	...	3	...	3	...
189. Injuries inflicted by Animals	2	32	3	34	4
199. Murder	...	1	1	1	...
Attempted Suicide	...	1	...	1	...
201A. Dislocation	...	11	...	11	...
B. Sprain	...	14	...	14	...
C. Fracture	12	125	7	137	15
202. Other External Injuries	27	480	1	507	30
XV. Ill-defined Diseases.					
205A. Ascites	3	18	4	21	1
Asthenia	...	1	...	1	...
B. Malingering	11	30	...	41	...
XVI. Diseases the total of which have not caused 10 deaths	8	173	7	181	...
Total	606	10,009	402	10,700	583