Annual medical and sanitary report / Bechuanaland Protectorate.

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For the Year 1934.

Published for the Government of the Bechuanaland Protectorate
by the Crown Agents for the Colonies, 4, Millbank, London, S.W.1.
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BECHUANALAND PROTECTORATE.

ANNUAL MEDICAL AND SANITARY REPORT.

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SECTION 1. - ADMINISTRATION.

1. STAFF.

The authorised Staff consists of :

European:

1 Principal Medical Officer
6 Medical Officers
2 District Surgeons - Subsidised Medical Missionaries
2 Hospital Matrons
4 Staff Nurses
1 Welfare Nurse
2 Dispensers
1 Principal Medical Officer's Clerk

Native:

2 Dispensers
2 Pupil Dispensers
2 Medical Orderlies
5 Male Nursing Orderlies
5 Female Nurses (Probationers)

2. Appointments, changes etc., in the Staff:

Dr. H.W. Dyke, Principal Medical Officer, resumed duty on 2nd January from overseas leave, and Dr. D. Drew who had been acting Principal Medical Officer, returned as Medical Officer to Francistown.

Dr. C.W. Thompson, temporary Medical Officer resigned on 31st January, 1934.

Dr. R.E. Fleming M.B., Ch.B. (Witwatersrand University) appointed temporary Medical Officer from 1st February, 1934 to 5th July, 1934, and was stationed first at Lobatsi to relieve Dr. Henderson on leave and subsequently at Maun,

Ngamiland to assist in combating a Malaria epidemic.

Dr. D.J.M. Mackenzie M.B., Ch.B. (Edin.) appointed Medical Officer 30th July 1934, and posted to Maun, Ngamiland vice Dr. R. Meyerstein.

Miss M.T. Kelly, Matron Lobatsi Hospital, resigned 31st May, 1934.

Miss K. Barr, Staff Nurse, promoted Matron 1st June, 1934, vice Miss Kelly.

Miss A.F. Jack appointed Staff Nurse 1st May, 1934 vice Miss D. Davis resigned 30th April 1934.

Miss I.S. Hodges appointed Staff Nurse 3rd July 1934.

Miss M. Ford appointed Staff Nurse 29th December 1934 vice Miss E.F. Cannon on leave, pending resignation.

Miss D. Mearns appointed Principal Medical Officer's Clerk/typist 8th October 1934, vice Miss M. Wilson resigned.

3. Postings of Staff on 31st December, 1934:

Mafeking:

Principal Medical Officer, Dr. H.W. Dyke.
Clerk/Typist Miss D. Mearns.
1 Medical Orderly.

Francistown:

Medical Officer, Dr. D. Drew
Dispenser, Mr. H.F. Bennett
1 Native Pupil Dispenser

Serowe:

Medical Officer, Dr. A.A. Morgan
Matron, Miss C.H. Mitchell
Staff Nurse, Miss M. Ford
Welfare Nurse, Miss E. Haile
Dispenser, Mr. T.E. Booker
1 Pupil Dispenser
2 Native Male Nursing Orderlies
2 Native Female Nurses (Probationers)

Gaberones:

Medical Officer, Dr. M. Gerber
1 Native Dispenser

Lobatsi:

Medical Officer, Dr. D.J.D. Henderson.
Matron, Miss K. Barr
Staff Nurses, Miss J.M. Young)
Miss A.F. Jack)
Miss I.S. Hodges)
1 Native Dispenser
2 Native Nursing Orderlies
3 Native Female Nurses (Probationers)

Ngamiland:

Medical Officer, Dr. D.J.D. Mackenzie
1 Native Male Nursing Orderly
1 Native Medical Orderly

Kanye:

District Surgeon (Medical Missionary subsidised)
Dr. Tonge
Trained Nurse, Miss Bain.

Mochudi:

District Surgeon (Medical Missionary subsidised)
Dr. Fischer
Trained Nurse, Miss Wahl.

4. The European Medical and Nursing Staffs were maintained at full strength and their health was consistently good throughout the year. There were fewer changes in the Nursing Staff than in previous years and less difficulty was experienced in securing in South Africa the services of European Nurses mostly trained in South African Hospitals.

5. The Native Staff continues to give satisfactory service - one pupil dispenser after three years training in a Government Dispensary was promoted to Native Dispenser.

Difficulty was experienced in keeping Native female nurse probationers from having moral lapses. During the year under review two had to be sent away because they were pregnant. However careful is their supervision it is impossible for those in charge to exercise surveillance all the time. From all quarters of the Protectorate reports are current that sexual irregularity among the Native adolescents in their homes is becoming increasingly more common. It is a difficulty that will hamper the

training of future Native Nurses in the Territory. In other respects their work is excellent and they invariably show exceptional aptitude in acquiring the practical side of the work.

6. Ordinances and Regulations affecting public health enacted during the year :

(i) Bechuanaland Protectorate Medical, Dental and Pharmacy Proclamation No. 62 of 1934

(ii) Health and Sanitation (Mines and Works) Bechuanaland Protectorate Proclamation No. 54 of 1934

(iii) Bechuanaland Protectorate Sanitary Regulations - High Commissioner's Notice No.116 of 1934 under provisions of Public Health (Bechuanaland Protectorate) Proclamation No.12 of 1934

7. The law relating to licensing of Medical and Dental practitioners in the Territory was a Cape Colony Ordinance of 1830 and their registration was provided for in Proclamation No.30 of 1927. In view of developments in the Territory (mining and otherwise) it was essential that legislation be introduced unifying all previous enactments and making better provision for the control of Medical and Dental Practitioners, Nurses, Midwives and Pharmacists. In order not to interfere unduly with Native customs, provision has been made to legalise Native herbalists, as such, practising according to Native usage, they are however, debarred by law from dealing in sorcery and witchcraft which unfortunately play an important role in the methods of Native "Doctors".

8. Health and Sanitation (Mines and Works).

Regulations make provision for dealing particularly with mining camps where most of the labour is Native. These regulations in addition to sanitation provide by law

for the proper care of such labourers in the way of housing, diets, wash houses, medical attention and so forth. The necessity for such legislation has become necessary in view of extensive mining activity in the Tati District during the last year. Up till a year ago one or two mines operated in a small way, now, with the profits resulting from Gold Mining, several new mines have opened up. In some of the mines over 150 Native labourers are in regular employment.

9. The Bechuanaland Protectorate Sanitary Regulations under provision of the Public Health Proclamation now unify previous separate enactments and in addition make it possible to introduce improvements in sanitation and public health. As most of the Territory is Native Reserve it has been deemed advisable not to apply these Regulations generally to the whole Territory but only to defined areas where Europeans are in close settlements such as the more important railway stations surrounded by a European village.

10. Financial: - in respect of financial years ending 31st March 1934 and 31st March 1935 -

ORDINARY REVENUE:

Hospital and Dispensary fees for year ending 31st March, 1934	£541.11. 9
Hospital and Dispensary fees for year ending 31st March, 1935	£792.19. 9

ORDINARY EXPENDITURE:

Personal emoluments	£8,531.14. 1	
Other charges	£4,365.16.11	
For year ending 31st March, 1934		£12,897.11. -
Personal emoluments	£8,792.15. 3	
Other charges	£5,422.12. 9	
For year ending 31st March, 1935		£14,215. 8. -

Total Expenditure of Protectorate for year ending 31st March, 1934	£159,580.13. 1
Total expenditure of Protectorate for year ending 31st March, 1935	£141,627. 2. 8
Relation of Medical Expenditure to total expenditure for year ending 31st March, 1934	8.09%
Relation of Medical Expenditure to total expenditure for year ending 31st March, 1935	10.03%
Capital Expenditure	Nil

SECTION II - PUBLIC HEALTH.

11. In the Annual Report for 1933 it was stated that the health of the Territory had suffered because of drought and because of the parlous economic situation into which the country was forced by the total prohibition of the export of animals and vegetable produce owing to the presence of Foot and Mouth Disease among cattle in the country. In 1934 the rainfall was above the average both as regards quantity and distribution, except in one or two isolated places, and it was anticipated that throughout the whole Territory record crops would be obtained; but early in the year when the crops of maize and millet (Kaffir corn) were well advanced, there occurred a most serious invasion of locusts from the North, with the result that in the Ghanzi District, most of Ngamiland and a large portion of the Ngwato Reserve, a large section of the population were once again reduced to semi-starvation.

12. In April a renewed outbreak of Foot and Mouth Disease resulted in the continued complete closure of exports from the Territory, thus prolonging and accentuating the economic paralysis and Government was again forced to alleviate poverty and starvation especially in the Ghanzi and Kalahari districts.

13. As a result of the good rains, green foodstuffs were moderately plentiful and there was a small incidence of vitamin deficiency disease, - scurvy and allied complaints; but on the other hand the abundant and evenly distributed rainfall was a mixed blessing in that the Western portions of the Territory sustained one of the worst Malaria epidemics on record. Apart from the Malaria outbreaks in Kgalagadi and Ghanzi Districts the Territory throughout 1934 escaped any serious epidemics.

14. Towards the end of the year typhus fever, which has for many years been a serious scourge in other parts of South Africa but not in the Protectorate, made its appearance among a section of the Baralong Tribe living in the Cape Province within a few miles of the Protectorate border, and as the Baralong of the Protectorate are in continual communication with their relatives and friends across the border, there was cause for apprehension - however, no cases have occurred in this Territory and as the Union Health authorities have successfully smothered the local adjacent outbreak, it is hoped that the Protectorate will escape. Vigilance is being maintained and Medical Officers are on the alert for the occurrence of any cases.

15. Another communicable disease that is causing apprehension is plague. Cases of human plague have very recently occurred within 50 miles of this Territory. Field rodents, gerbilles, multimammate mice etc., -which fall ready victims to rodent plague and from which human plague is contracted have, during the past year, alarmingly increased in number throughout the whole Territory, and it will be little short of miraculous if rodent plague does not sweep through the Protectorate, as there are no natural

or other geographical features to prevent the disease coming across its boundaries. Vigilance is therefore being maintained, Natives are being encouraged to destroy the rodents in and around their villages and cattle posts, and arrangements are in progress to train squads of rodent inspectors and destroyers to protect the immediate vicinity of European settlements and large Native villages. Any scheme for complete rodent destruction on a large scale is, for financial reasons, quite out of the question both because of the sparse population, and of the wide and general distribution of field rodents.

16. Avitaminosis: Under this generic term Scurvy is the most prominent, and every year a fluctuating number present themselves for treatment. In 1934 there were 114 obvious cases as compared with 268 in 1933. These figures do not represent the total incidence of vitamin deficiency in the diets of a very large proportion of the population and must only be taken as a relative indication for a particular year. A study of the annual numbers of outpatients and of the number of cases of Scurvy in each year is a very good reflection of the general nutrition of a year. The better nourishment of 1934 was shown by the almost complete absence of cases showing lack of vitamin "B" that were such a prominent feature in 1933.

17. Respiratory Diseases, excluding Pulmonary Tuberculosis, call for no special comment - 2,011 were treated as compared with 1,671 in 1933 - nor is there any special feature worthy of note among diseases of the digestive system except that there were more cases of diarrhoea than in the previous year - 548 compared with 376 in 1933.

18. Syphilis: The total number of new cases of Syphilis treated - 7,163 - was lower than in the previous two years both as regards the actual number and the proportion of these in relation to the total number of outpatients.

	Number of cases of Syphilis.	Total number of outpatients	Proportion of Syphilitics to outpatients.
1932	9,412	30,006	31%
1933	9,143	22,815	40%
1934	7,163	26,194	27%

While it cannot be claimed that the disease is generally being brought under control there is however evidence to show that within a limited range of the doctor there is a noticeable reduction in the number of new infections, and in the mutilating effects of old standing cases. There is, however, a very much bigger proportion of the total inhabitants living at too great a distance to obtain adequate treatment and among whom the disease is as widespread as ever. The fact that manifest Syphilitic lesions are diminishing among those people living within reach of treatment, and that a large number of apparently healthy people now present themselves for treatment because "they had Syphilis in childhood" or because "they fear that their future offspring may have Syphilis" is encouraging, and indicates that, given the proper facilities for making treatment available to those living in remote regions, the disease could and would be brought under control.

19. Yaws: The same comments which have been made on Syphilis are applicable to Yaws of which the total number of new cases treated in 1934 - 85 - is one less than in 1933. In the treatment of these diseases the arsenical

preparations have been used more liberally than in previous years, this has been made possible by a slight increase in the Medical Vote; but very much greater supplies of these remedies should be available to Medical Officers whose demands far exceed the amount that the present Medical Vote can supply. Bismuth preparations are also administered more widely than they were in previous years.

20. Gonorrhoea. Though the number of cases treated in 1934 (392) is less than it was in 1933 (423) Medical Officers are of opinion that only a fraction of those infected seek treatment, and that the disease is becoming more widespread. Those competent to judge are of the opinion that laxity in the morals of the young adults is increasing rapidly and which bodes ill for the future of the Tribes. Lack of parental control, and weakening of tribal discipline, are blamed for this. With the present medical and nursing staff it is impossible to establish special clinics for the treatment of this disease - generally all that can be done is to supply remedies with instructions as to how they are to be used at home.

21. Tuberculosis: A fairly comprehensive survey of the incidence and spread of the disease in the Protectorate was given in the Annual Report of 1933. Actually the total number of new cases treated is the same as in 1933, i.e. 345 - though it is a serious increase when compared with a total of 36 cases seen in 1927. The following observations made by the Medical Officer, Lobatsi from the cases seen by him in his district are useful, in that they reflect what is occurring in other districts in the Southern Protectorate and to a certain extent in the Northern Protectorate -

"56 cases of Pulmonary Tuberculosis were notified,

and most of these were in the late stages Of these 31 were males and 25 females.

There were also seen :

Tuberculosis of the Intestines and Peritoneum	2.
Tuberculosis of the Vertebral Column	5.
Tuberculosis of the Bones	2.
Tuberculosis of the Lymphatic System	23.
Disseminated Tuberculosis	2.
Total	34.

This makes a total of 90 cases of Tuberculous disease in a fractional part of a country whose climate approximates the optimum in anti-tuberculous properties, and in a race which lives very much in the open air. There is no doubt that Tuberculosis is spreading in the Protectorate and that its present rate of spread can no longer as one often hears, be ascribed solely to the return of infected men from the mines. The 25 female cases of Pulmonary Tuberculosis and the fact that nearly all the cases of Tuberculosis of other organs were in children or young adults is evidence enough. It must be remembered too that these cases are probably a fraction of the number of cases existing in the villages, of which one never hears. The Protectorate is not as yet a hotbed of the disease, as are some Native areas elsewhere. It will however, soon become so if preventive measures are not taken. This is a big problem, but there is one fact I wish to stress. A large proportion of the 56 cases of Pulmonary Tuberculosis came to the Outpatient Department, many of them from long distances, begging to be admitted to Hospital. In all but a few cases this was impossible owing to lack of accommodation, and the cases admitted were only kept for a week or two as

a "placebo". These cases were undoubtedly reservoirs of infection for the communities in which they live. It seems to me that here is a point at which the spread of the disease could be attacked. One would like to see in the future segregation of phthisical patients on the lines followed with lepers, but in the meantime, is it too much to ask that accommodation be provided in the form of a tuberculosis block erected near the present hospital where cases as above described could be treated and prevented from being a menace to their friends and relations?"

22. Malaria: Reference has been made in previous Annual Reports to the very low incidence of Malaria throughout the Territory since 1930. This comparative immunity was maintained in 1934 in the Eastern and most densely populated portion of the Protectorate which adjoins the railway line that traverses the country from South to North. With a population of over 190,000 living in this area, only 734 cases were reported. Notwithstanding the fact that by March there was a very widespread breeding of Anopheles (Gambiae) in the Lobatsi, Gaberones and Tati Districts, and in the Bakwena, Bakgatla and Ngwato Reserves - nevertheless, comparatively few cases sought treatment, nor did subsequent splenic survey of children show any appreciable index of infection though the breeding places were in close proximity (less than 800 yards) to villages. One can only assume that the lack of malarial human reservoirs was the reason for an epidemic not occurring as invariably anti-malaria measures (screening, spraying or quinine) were not used. Cold weather set in early in May and mosquitoes disappeared, cutting short what might otherwise have been a serious outbreak.

23. Unfortunately in the Western (Kalahari) portions of

the Territory - Ghanzi and Kgalagadi Districts a very serious epidemic occurred. Exceptionally heavy rains had steadily fallen there and in the adjoining Territories (South West Africa and North Western Cape Province) from December to April. The rainfall in addition to being heavy, was evenly spread over the summer months which did not allow small "pans" and other collections of water to dry up between the rains as they usually do in four or five days. Unfortunately no Medical Officer is stationed at either of these places and the epidemic had assumed serious proportions before any information of it was received. The nearest Medical Officer to Ghanzi is at Maun over 200 miles away - communication is by motor vehicle over rough bush tracks and takes two heavy days travelling to accomplish - while Lehututu, the central part of Kgalagadi District, is 400 miles from the nearest Medical Officer - a four days journey over exceptionally sandy and bad bush tracks. There is no telegraphic communication between these places and the outside world. The first notification obtained was by telegram from the Medical Officer, Ngamiland, stationed at Maun, early in May. He had gone to Ghanzi on his periodic quarterly tour and discovered that a most serious epidemic had commenced four weeks or so previously. Practically 100% of the population, European and Native, in the immediate neighbourhood were affected. Their resistance was lowered owing to lack of food, locusts having destroyed their cultivated crops, wild melons and berries (which form a great part of the diet of the Kalahari Natives) and because of Foot and Mouth Disease restrictions they had been unable to export their cattle, which is their normal source of income. In addition, there having been little or no malaria during the previous

five years they had no acquired immunity. The Medical Officer was immediately furnished with large quantities of quinine, armed with which he proceeded to tackle the epidemic in Ghanzi District. At Maun it was feared that Malaria would also assume serious proportions and as there were a large number of officials and Native Police posted on Cordons for the control of Foot and Mouth Disease outbreak in Ngamiland - an additional Doctor was engaged and sent to take charge of that Station.

24. A week after having received the information of the Ghanzi epidemic headquarters was notified that a similar epidemic had broken out with great severity over practically all the sparsely inhabited Southern and South-Western Kalahari. As no Government Medical Officer was available a European Dispenser with considerable experience in Malaria was despatched with quinine supplies to accompany the Administrative Officer in charge of the District on a tour of the affected villages to give treatment.

25. Lack of proper nourishment had so lowered the vitality and resistance of the population, that in addition to treating the disease, Government had to make emergency arrangements for supplying food to the major portion of European settlers at Ghanzi and to the Natives of that District and most of the Kalahari - a no easy matter with the nearest Railway Station over 200 miles away, and very indifferent motor roads. In the distribution of quinine, use was made of an aeroplane which had been commissioned in connection with the control of the Foot and Mouth Disease outbreak in Ngamiland - this enabled the Medical Officer to obtain and distribute the remedies in very much less time than could have been accomplished

by motor car. Through the energetic way in which the epidemics were tackled by Dr. Meyerstein (Medical Officer in charge) and Dispenser Booker, willingly assisted by the Administrative Officers and aided by the advent of cold weather, the epidemic was completely controlled and smothered within four weeks.

26. Accurate statistics of the epidemic are not available. It was, however, estimated that out of the total European and Eur-African population of Ghanzi, numbering 140 all of whom contracted Malaria, there was a death rate of 4%. Among the Ghanzi Native population it was estimated that 2,200 were affected and supplied with quinine - out of these 227 are reported to have died, giving a death rate among Natives of approximately 10%. In the Kgalagadi District - out of an estimated population of some 5,000 it is reckoned that 3,200 suffered from the epidemic, of whom 121 are reported to have died.

27. Table showing incidence of Malaria in 1934.

	Estimated Population	Cases of Malaria	Reported deaths from Malaria	Death Rate
Ghanzi District - (Europeans and Eur-Africans)	140	140	5	3.5%
Natives	2,200	2,200	227	10.3%
Kgalagadi District	5,000	3,200	121	2.4%
Remainder of Protectorate	195,000	745	No figures	-

28. Owing to the difficulties and stress under which the Medical Officer was working singlehanded it was impossible for him at the time to make many microscopic examinations. The few slides taken by him and examined on

his return to Maun mostly showed the Benign Tertian type. The only outstanding feature in the epidemic was the large number of cerebral cases, many of whom succumbed to a very short illness.

29. In previous annual reports attention has been called to the irregular cyclic nature of Malaria epidemics in most of Bechuanaland and that these epidemics are dependent on the distribution of the annual rainfall, a year of widespread Malaria may be followed by four or five years of comparative and indeed absolute freedom. A sense of false security is therefore engendered, prophylaxis by quinine and otherwise is neglected, so that when conditions are favourable for Malaria to occur, people are, so to say, caught unawares, and it is difficult to get them to take ordinary precautions each year during the potential malaria season (generally February, March and April).

30. As it is the custom for most of the Bechuana to leave their tribal villages and to live widely scattered at their cattle posts during the rainy season where very few (if any) can make their huts mosquito proof, it is obvious that Malaria control by anti-larval or other mechanical methods could not at present be contemplated because of the expense and other difficulties. Europeans and a few of the more affluent Natives living in Native townships, have their homes mosquito proof, and in the more closely settled villages endeavours are made to reduce the mosquito breeding places by oiling. Notwithstanding the disfavour with which quinine prophylaxis is regarded by many authorities, it is strongly advocated in this territory as being the only prophylactic available to the majority of the population. Some of the worst cases

of Malaria one has seen among Europeans recently have occurred in those who refused to take quinine because they had been told or read that quinine in many malarious countries was now entirely discarded on the advice of eminent malariologists! Whereas the experience in Ngamiland where Malaria is endemic is that officials and others who take quinine regularly throughout the summer months are seldom incapacitated for their work even though when on journeys they were exposed to certain and unavoidable infection.

31. Sleeping Sickness: Since 1908 rumours have been current among Natives in Ngamiland that at certain places in the Tsetse fly belt, in the Okavango and Chobe Swamps, people contracted a disease which always terminated fatally, to which they give the name "Kgotsela" or "Go Otsela" (meaning light intermittent slumber). In 1909 Dr. R.M. Moffatt was engaged for a short period to investigate. He was unable to get in touch with actual cases and his findings was inconclusive. In 1910 Dr. W.R.W. James (previously of the Uganda Medical Service) was stationed for a year at Tsao in Ngamiland to carry on the work which Dr. Moffatt had initiated. His results were similarly inconclusive. The matter then lapsed and in 1930 one of the traders at Maun again brought up the subject of these Native rumours but as no case could be discovered with symptoms suggestive of the condition, the rumours remained unconfirmed or disproved.

In November, 1934, the Administrative Officer in charge of the Chobe District reported that two Native Constables who two months previously had been on patrol in the region of Latitude 18°, Longitude 24° (where they intersect) were very ill and asked that the Medical

Officer Ngamiland, might be sent to investigate the illness. Dr. MacKenzie, Medical Officer, stationed at Maun (240 miles from Chobe District Headquarters) did so. Clinically he first thought he was dealing with some type of Malaria; but in one of the blood slides which he took back to Maun for microscopic examination, in addition to Malaria parasites he discovered two trypanosomes. As the men were too ill to be conveyed to Maun, through the kindess of the Northern Rhodesia Administration the one man who survived was admitted to the Livingstone Government Hospital where gland punctures proved conclusively an acute trypanosome infection. He was successfully treated and discharged cured some weeks later.

As soon as the diagnosis of Sleeping Sickness had been made no patrols were allowed to traverse those regions where Natives report that the disease may be contracted. Most of the Fly Belt appears to be inhabited with immunity by a limited number of Native hunters; but there are two areas within the fly belt where they maintain that the disease will be contracted - the one where these constables were infected and the other in the region of Longitude 23°, Latitude 19.5°. There are approximately 300 Natives living in the Fly Belt area - certain portions of which they have of their own accord abandoned because of "Kgotsela".

The Administration before taking active measures to deal with these infective areas either by depopulation or otherwise considers that more accurate information should be obtained regarding the distribution of Sleeping Sickness in the fly belt, and to do this it will be necessary to obtain the services of a Medical Entomologist experienced in the field with Sleeping Sickness.

32. Dysentery: 116 cases were notified from the various stations - generally sporadic - and at no place did it amount to an epidemic. The two stations where there were the greatest number of cases were Francistown (26) and Mochudi (23).

33. Influenza: 300 cases were recorded, generally in very limited and mild epidemic form - though in one of the Native villages of the Lobatsi Block some of the cases were so severe as to suggest that one of the more formidable epidemic diseases had occurred, namely, enteric or typhus fever, but the course of the illnesses, and blood examinations, dispelled these doubts.

34. Alastrim: There was a small outbreak at Francistown two cases - prompt measures of quarantine and vaccination terminated the trouble.

35. Chicken Pox: 102 cases were notified. It occurred as a mild epidemic in several places and many cases did not bother to seek treatment. The greatest number were reported from Molepolole - 69 cases.

36. Measles: 14 cases were reported - the largest number in one place was 8 at Maun.

37. Whooping Cough: This occurred extensively along the railway line in a very mild form. The 60 cases brought to the notice of Medical Officers are a fraction of the total incidence. The largest number for any one station was at Francistown - 47 cases.

38. Leprosy: Seven cases presented themselves for treatment - six were old standing cases whose existence was known, but one was a new case. No provision has yet been made for the segregation of Lepers. It is estimated that the total number of Lepers in the Territory does not exceed 40. Most of them come from distant outlying cattleposts.

Until funds allow for a proper survey being made to ascertain the exact number, one is reluctant to recommend expenditure for providing segregation because, living as they do in isolated posts, the opportunities of extension outside the family are very small.

39. Bilharzia: 101 cases were treated during the year, of these 98 were from the Bakgatla Reserve - the other three were reported from Gaberones and in all probability they were infected in the adjoining Bakgatla Reserve - it can therefore be assumed with certainty that the remainder of the Territory is free of infection.

40. Vital Statistics. Lack of the necessary staff does not permit of detailed records being kept and therefore data from which vital statistics can be compiled are scanty. No census has been taken since 1921. The following figures supplied by District Magistrates are indicative of the more important facts dealing with the European population in 1934 in the Protectorate :

Total European population (estimated)	1,749
Total European births	40
Total European deaths	25
European birthrate per thousand	22.8
European deathrate per thousand	14.28

41. The census of 1921 gave the total Native population as 151,240. Since then no census has been taken and it is impossible to ascertain what increase or decrease in the Native population there has been, neither are there any records kept showing births and deaths; but last year's estimate of the Native population is 200,000. The

introduction of recent legislation defining the duties of Native Chiefs will in due course make it possible to obtain from them records from which Native vital statistics can be compiled.

SECTION III - SANITATION AND HYGIENE.

42. The promulgation of Sanitary Regulations under the Public Health Proclamation is a step forward in putting sanitation in the European settlements on a better basis. Hitherto certain sanitary regulations could be applied to one area and not to another. Certain areas came under sanitary regulations and others had none, as was discovered when a case of Diphtheria occurred in a European settlement and no measures could be taken by law to deal with an insanitary butchery where the case had occurred. In none of the European villages is the population big enough to establish village management boards and the Magistrate of the district (in consultation with the Medical Officer) performs the functions of such a board. Already within four months of promulgating these regulations sewage disposal schemes at Lobatsi and Mahalapye have been greatly ameliorated. It has now been made legally possible to inspect butcheries, to demand fly-proofing, cleanliness, etc. At Francistown, a small abattoir is being erected in place of the former haphazard and insanitary slaughter place. But in all such matters the Administration is moving quietly and in sympathy with the pecuniary circumstances of the inhabitants.

43. In Native Reserves - for financial reasons - no new sanitary developments have been possible, nevertheless as a result of propaganda there are indications in certain

Native villages of some amelioration. Lectures by Medical Officers have been given at teachers' "refresher" courses, and at the training camps of "Wayfarer" and "Pathfinder" leaders (Native Boy Scouts and Girl Guides) both in sanitation and hygiene. The effect of such propaganda and lectures is noticeable when tribal schools are visited and inspected - the children are certainly cleaner and better cared for than was the case four or five years ago. Unfortunately the time of the Medical Officers is now so fully taken up with the increasing hospital and dispensary work that it has not been possible for them to continue with the systematic school medical inspections that were initiated and carried out two and three years previously.

44. Social and Welfare Work conducted by the Welfare European Nurse at Serowe continues to grow and develop. During the year, 508 huts were visited to give assistance in midwifery, sick nursing, etc. A regular ante-natal clinic was opened in August and during the five latter months of the year 106 women came regularly for examination and advice. During the course of the year 202 women at some period of their pregnancy were given attention, of these, 79 were attended at their confinement. Of the above 202 pregnancies, there were :

37 females born
56 males born
12 miscarriages
3 still births
78 not yet born
16 not traced

There was one maternal mortality and three infants died (under three months). A most creditable record considering the ignorance, superstitious customs and unhygienic circumstances under which the work was carried out.

45. At Ramoutsa village work of a similar nature has

been commenced by a European trained nurse of the German Lutheran Mission.

46. In previous reports emphasis has been laid on the totally insanitary and unhygienic custom whereby most Bechuana live in large villages with populations of anything from 3,000 to over 20,000 inhabitants most of whose diet for at least six months of the year is entirely devoid of green foodstuffs or milk - because of the distance of cattleposts and gardens from the villages. Adults and very small children are better off in this respect than children of average school going age - 8-16 - because the latter have to attend school in the tribal village throughout the greater part of the year, while the former live for most of the summer months at the cattleposts. Unless steps are taken to dissolve the large villages, devoid of sanitation, and encourage the majority of the people to live all the year round near their cattleposts and agricultural lands, so that the children of all ages can get milk and the green produce of the lands, there is not much hope of the physique of the Bechuana improving.

47. The establishment of Native dairies and the collection of cream from cattleposts has been strenuously developed in the Native Reserves, with the object of bringing revenue into the country. It is questionable if the small additional revenue will in any way compensate for the reduction of the much-needed milk and cream in their diet.

SECTION IV - HOSPITALS AND DISPENSARIES.

48. The total number of attendances at the Government and Medical Mission Dispensaries and at Outstations was 55,500 - of these 26,759 were first attendances, being an increase

of 33% total attendances and of 18% first attendances on the figures for 1933. This increase is partly accounted for by the large number of Malaria patients treated in Ghanzi and Kgalagadi District - and also by the greater confidence of patients which results in their coming more regularly for subsequent treatment. The following table shows the number of attendances for each station:

	FIRST ATTENDANCES	SUBSEQUENT ATTENDANCES	TOTAL
Lobatsi	2,184	2,463	4,647
Gaberones	1,367	2,202	3,569
Serowe	3,327	6,506	9,833
Francistown	3,859	3,494	7,353
Ngamiland (Including Ghanzi and Kalahari)	6,651	1,069	7,720
Kanye	4,120	2,102	6,222
Mochudi	1,824	3,922	5,746
Molepolole	2,500	5,987	8,487
Mafeking	927	996	1,923
	26,759	28,741	55,500

49. In last year's Annual Report a detailed list was given of the Outstations visited by Medical Officers, the population served at each Outstation, and the distance to be travelled. These visits take up a considerable amount of the Medical Officers' time and during the rainy season these journeys, accomplished by motor transport over bush tracks, are at times a formidable undertaking, however, the ever increasing attendances indicate that confidence is being established. At most of the places visited, good dispensary huts have been erected for the use of the Doctor and indeed one Headman with his people, cut and

levelled a very decent road through 40 miles of dense bush so as to facilitate the Doctor's journey. Many more such Outstations would be opened up with great advantage were the medical personnel and the travelling vote larger.

50. Hospitals: The number of inpatients who received hospital treatment during the year was 1,198 - an increase of 359 on those for 1933. The following table shows the number treated at each Station in 1934 as compared with 1933 :

	1933	1934
Lobatsi	319	472
Serowe	269	350
Francistown	30	44
Kanye	136	176
Molepolole	47	85
Mochudi	38	71
	839	1,198

51. General: The Medical Officers at their Stations are single-handed to carry out the administration of the Hospital and treatment (including surgical operations) as well as conducting the dispensaries at the Station and at the outlying dispensaries, it is therefore obvious that these men have their hands full and have little time for the public health work of their districts.

52. Remarks of appreciation are due to the Nursing Staff. At the Lobatsi Hospital in particular the work is heavy on the European Nurses who, in addition to supervising the work of the Native wards, perform all the nursing of European patients, of whom 79 were treated in the Hospital last year, most of them for serious illnesses or major operations. Though the official number of beds for the

Hospital is 30, for many days last year there were over 40 patients in the Hospital - the surplus being accommodated on verandahs.

53. An X-Ray apparatus has been added to the Lobatsi Hospital. This was made possible by the generosity of the former High Commissioner - the Earl of Athlone - and Her Royal Highness Princess Alice who, when they left South Africa, donated a very substantial sum of money for this object. In modern medicine and surgery an X-Ray apparatus is essential and when funds permit Serowe Hospital should be supplied with one.

54. Francistown Government Hospital. The recent expansion of mining in the Tati District has rendered the erection of this Hospital urgently imperative. Cases of illness and accidents among the mining population are at present being treated either in their compounds or in two thatched huts near the Government Dispensary - the more serious cases have to be sent by rail to the Bulawayo Hospital, 100 miles distant. Towards the end of 1934 funds were authorised to erect a Government Hospital at Francistown - it is in course of erection and will be completed at the end of May. It will have accommodation for four (and in emergency six) European and 18 Native patients, besides having a well equipped operating theatre, and will be served by two European Nurses and Native Staff. In addition to the Hospital proper, a Nurses' Home is being erected, also accommodation for the Native staff. The total cost of buildings, equipment, and etc. is estimated at £4,000. 0. 0.

55. Medical Mission Hospitals: Good work is being done at the Medical Mission Hospitals and Dispensaries - Kanye (Seventh Day Adventist); Mochudi (Dutch Reformed Church)

and Molepolole (United Free Church of Scotland.) The doctors in charge are doing excellent work and their co-operation with Administration is most cordial and helpful. In the districts where they are stationed they perform the duties of a Government district surgeon. Annual subsidies of £200. 0. 0. per annum are paid to the Medical Missions at Kanye and Mochudi. For this the Missionaries give free treatment to Syphilic cases in addition to the other duties performed by them for Government - it is therefore clear that the subsidies are not commensurate with the services rendered and should be substantially increased. At Molepolole the Medical Missionary prefers not to take a subsidy but to be paid for services performed - the annual cost of which to Government is very small. The Mission bears all the cost of Syphilic and other remedies, any fees that they may be able to collect from Natives being nominal in amount - never more than 1s. 0d. for an attendance - in the majority of cases this fee has to be waived.

56. Scottish Livingstone Memorial Hospital - the United Free Church of Scotland last year erected a first class hospital at Molepolole - with accommodation for 20 Native patients, fully equipped on modern lines with operating theatre. It is staffed by two European nurses and Native ward attendants (male and female) all housed in excellent quarters. A separate well-equipped outpatients department has been provided. It is a very valuable addition to the Medical work of the Territory and particularly to the Bakwena tribe of which Molepolole is the Capital. The total cost of the buildings, furniture and equipment was borne by the Mission Society, the buildings were built entirely by Native labour (skilled and unskilled) under the supervision of a European Superintending Clerk of Works, seconded by

Government to the Mission for the purpose. The Assistant Resident Commissioner took part at the official opening, which was performed by Mrs. Dyke, wife of the Principal Medical Officer.

57. As in previous annual reports the useful work of Medical Missions in the Territory has been commented on; but there is a feature in the expension of such work which requires consideration. Missionary bodies cannot dis-associate the spiritual from the medical aspect, and in providing medical services they have the motive of winning converts. Provided a Society co-operating with Govern-ment develops medical work in areas where no medical work exists, such efforts are all to the good and should be encouraged. There is, however, a definite risk that in its desire to win souls to its own particular denomination or sect, a Society may wish to establish a Medical Mission in an area where already adequate medical services are being given - either by Government or by some other Society, and as a result of such overlapping in addition to uncalled for expense and re-duplication of the work, friction and administrative difficulties will occur. There is therefore need for some defined policy which will enable the Adminis-tration to regulate and control the geographical distribu-tion of such medical activities on the part of Missions.

58. Official visits and inspections:

During the year under review, His Excellency the High Commissioner, Sir Herbert Stanley G.C.M.G. visited and inspected the Government Hospital at Lobatsi. All Medical Stations and Hospitals were inspected by The Resident Commissioner Lieut.-Colonel C.F. Rey, C.M.G. The Principal Medical Officer in addition to paying half-yearly visits of inspection to all Government stations

undertook in September an extensive tour through Ngamiland to Ghanzi and again in November a 500 mile tour of the Eastern Ngwato Reserve, accompanied by the District Magistrate and the Tribal Chief Tshekedi - for the purpose of surveying the Medical requirements of the area and the possible sites for further hospitals.

59. Augmentation of Medical Services:

Recommendations have been made in previous annual reports and in special memoranda for increasing the number of Medical Officers and for giving medical services to many thousands of Natives who in their remote areas never see a Medical man. The Southern Protectorate is now adequately served by Government Medical Officers and Medical Missions; but in the Northern Protectorate, Ngamiland and Kalahari, considerable augmentation and expansion is necessary to be effective. A valuable step in that direction will be made in 1935, Government funds have been authorised to assist Missions in establishing Hospitals in Ngamiland and in the Tswapong area of the Ngwato Reserve.

In Ngamiland, at Maun a properly appointed 20-bedded Hospital will be erected. It will be served by two Doctors and staffed by a qualified European Nurse of the Seventh Day Adventist Mission, with Native nurses. The Doctors, in addition to their Hospital work will, as is done at present by the Government Medical Officer, itinerate in Ngamiland and Ghanzi, conducting at certain central places dispensaries. When this arrangement is put into effect the Government Medical Officer of Ngamiland will be withdrawn and posted elsewhere. At Tswapong the London Missionary Society will establish a 18 bedded Hospital under the charge of a qualified Medical Missionary and qualified nurse.

But to make the Medical Services adequate for remote

areas it would be necessary to have two Medical Officers furnished with properly equipped travelling dispensary units to reach these extensive but very sparsely populated areas and in addition to have Hospitals established in the Bobirwa (population 15,000) and Bokalaka (population 20,000) areas of the Ngwato Reserve whose nearest point to a qualified Medical Officer is over 100 miles.

SECTION V - PRISONS AND ASYLUMS.

60. There were 969 prisoners in the gaols throughout the Territory during 1934. The general health was good - five died from natural causes - 3 Malaria; 1 Pneumonia; 1 Myocarditis. Three were released on account of ill-health - Scurvy, Debility, Tuberculosis. No alteration in the diets for prisoners was considered necessary as the prisoners are all well nourished and have kept free of scurvy. Improvements were effected in the gaol buildings at Lobatsi and Gaberones where additional cells were erected. Weekly inspection of gaols and prisoners is made by Medical Officers.

61. Asylums: As has been stated in previous reports there are no asylums in the Territory - dangerous lunatics are transferred to mental institutions in the Union of South Africa. At present there are nine under detention. Recommendations were made in last year's report for erecting a small asylum in the Territory where lunatics who are not dangerous could be cared for; but for financial reasons this has not been put into effect.

H.W. DYKE,

PRINCIPAL MEDICAL OFFICER
BECHUANALAND PROTECTORATE.

APPENDIX I.

OUTPATIENTS FOR THE YEAR, 1934.

DISPENSARIES.

Diseases by Systems or Groups.	Nos.	Principal Diseases	Nos.
1. EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.	14,841	1. Typhoid Fever	3
		2. Tickbite Fever	5
		5. Malaria	
		(a) Tertian	6,130
		(c) Aestivo-autumnal	22
		(e) Blackwater Fever	1
		6. Smallpox	2
		7. Measles	13
		9. Whooping Cough	103
		11. Influenza	366
		13. Mumps	6
		15. Epidemic Diarrhoea	70
		16. Dysentery	
		(A) Amoebic	53
		(c) Undefined	51
		20. Leprosy	7
		22. Acute Poliomyelitis	4
		24. Epidemic Cerebro Spinal Fever	2
		25. (b) Varicella	105
		(g) Yaws	83
		27. Anthrax	1
		29. Tetanus	1
		30. Mycosis	1
		31. Tuberculosis (Pulmonary)	181
		33. Tuberculosis of the Intestines or Peritoneum	2
		34. Tuberculosis of the Vertebral Column	13
		35. Tuberculosis of Bones and Joints	12
		36. Tuberculosis of other organs	
		(b) Bones	11
		(c) Lymphatic System	43
		37. Tuberculosis Disseminated:	
		(a) Acute	4
		38. Syphilis:	
		(a) Primary	24
		(b) Secondary	785
		(c) Tertiary	2,714
		(d) Hereditary	1,552
		(e) Period not indicated	2,088
		39. Soft Chancre	12
		40. (a) Gonorrhoea and its complications	355
		(b) Gonorrhoeal Ophthalmia	6
		(c) Gonorrhoeal Arthritis	8
		42. Trypanosomiasis	2
2. GENERAL DISEASES NOT MENTIONED ABOVE	1,040	43. Cancer or other malignant tumours of the Buccal Cavity	3
		45. Cancer or other malignant tumours of the Peritoneum, Intestines, Rectum	1
		47. Cancer or other malignant tumours of the Breast	1
Carried forward :	15,881		14,846

Diseases by Systems or Groups.	Nos.	Principal Diseases	Nos.
Brought forward:	15,881		14,846
2. GENERAL DISEASES NOT MENTIONED ABOVE		49. Cancer or other malignant tumours of organs not specified	2
		50. Tumours non-malignant	56
		51. Acute Rheumatism	234
		52. Chronic Rheumatism	581
		53. Scurvy	105
		58. Anaemia (b) Other Anaemias and Chlorosis	26
		59. Diseases of the Pituitary Body	1
		60. (a) Exophthalmic Goitre	2
		64. Diseases of the Spleen	1
		65. (b) Hodgkin's Disease	13
		67. Chronic Poisoning by Mineral substances	6
		68. Chronic Poisoning by organic substances	1
		69. Other general diseases	2
		Purpura Haemorrhagica	5
3. AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES	1,392	72. Loco motor ataxia	1
		74. Apoplexy (a) Haemorrhage	2
		75. Paralysis (a) Hemiplegia	12
		(b) Other Paralyses	12
		76. General Paralysis of the Insane	1
		77. Other forms of mental alienation	16
		78. Epilepsy	20
		80. Infantile Convulsions	14
		81. Chorea	2
		82. (a) Hysteria	26
		(b) Neuritis	85
		(c) Neurasthenia	31
		84. Other affections of the Nervous System, such as Paralysis Agitans	66
		85. Affections of the organs of vision - Cataract	14
		(a) Diseases of the eye	132
		(b) Conjunctivitis	561
		(c) Trachoma	14
		(d) Tumours of the eye	6
		(e) Other affections of the eye	107
		86. Affections of the ear or mastoid sinus	270
4. AFFECTIONS OF THE CIRCULATORY SYSTEM	233	87. Pericarditis	1
		88. Acute Endocarditis or Myocarditis	3
		89. Angina Pectoris	1
		90. Other Diseases of the Heart (a) Valvular	9
		Mitral	56
		Aortic	15
Carried forward :	17,506		17,358

Diseases by Systems or Groups	Nos.	Principal Diseases	Nos.
Brought forward:	17,506		17,358
4. AFFECTIONS OF THE CIRCULATORY SYSTEM		Tricuspid	3
		Pulmonary	1
		(b) Myocarditis	30
		91. Diseases of the Arteries	
		(A) Aneurism	1
		(b) Arterio-Schlerosis	10
		(c) Other Diseases	3
		93. Diseases of the Veins	
		Haemorrhoids	17
		Varicose Veins	16
		Phlebitis	1
		94. Diseases of the Lymphatic System	
		Lymphangitis	3
		Lymphadenitis	27
		95. Haemorrhage of undetermined cause	26
		96. Other affections of the circulatory system	10
5. AFFECTIONS OF THE RESPIRATORY SYSTEM	2,011	Foreign Body	1
		97. Diseases of the Nasal Passages	24
		Adenoids	14
		Polypus	2
		Rhinitis	9
		Coryza	194
		98. Affections of the Larynx	
		Laryngitis	71
		99. Bronchitis	88
		(a) Acute	757
		(b) Chronic	468
		100. Broncho-Pneumonia	47
		101. Pneumonia	
		(a) Lobar	24
		(b) Unclassified	3
		102. Pleurisy, Empyema	34
		104. Gangrene of the Lungs	5
		105. Asthma	56
		106. Pulmonary Emphysema	3
		107. Other affections of the lungs	
		Pulmonary, Spirochaetosis	6
		Bronchial Catarrh	205
6. DISEASES OF THE DIGESTIVE SYSTEM	3,331	108. (a) Diseases of the teeth or gums	
		Caries, Pyorrhoea, etc.	534
		(b) Other affections of the mouth	
		Stomatitis	57
		Glossitis, etc.	9
		109. Affections of the Pharynx or tonsils	
		Tonsillitis	259
		Pharyngitis	23
		110. Affections of the Oesophagus	1
		111. (b) Ulcer of the Duodenum	4
Carried forward:	22,848		20,404

Diseases by systems or groups.	Nos.	Principal Diseases	Nos.
Carried forward:	22,848		20,404
DISEASES OF THE DIGESTIVE SYSTEM		112. Other affections of the stomach	
		Gastritis	73
		Dyspepsia, etc.	299
		113. Diarrhoea and enteritis	73
		Under two years	195
		114. Diarrhoea and enteritis (Two years and over)	257
		Colitis	9
		116. Diseases due to intestinal parasites	
		(a) Cestoda	33
		(c) Ascaris	11
		Trichocephalus dispar	1
		Oxyuris	22
		(e) Other parasites	1
		(f) Unclassified	4
		117. Appendicitis	27
		118. Hernia	18
		119. (a) Affections of the anus, fistula, etc.	7
		(b) Other affections of the Intestines	
		Enteroptosis	4
		Constipation	1,386
		122. Cirrhosis of the Liver	
		Hepatitis	5
		123. Biliary Calculus	3
		124. Other affections of the liver	
		Cholecystitis	4
		Jaundice	8
		126. Peritonitis of unknown cause	1
		127. Other affections of the Digestive System	3
7. DISEASES OF THE GENITO-URINARY SYSTEM (Non Venereal)	925	128. Acute Nephritis	4
		129. Chronic	8
		130. A. Chyluria	13
		B. Schistomiasis	101
		131. Other affections of the kidneys, Pyelitis, etc.	12
		132. Urinary Calculus	1
		133. Diseases of the Bladder Cystitis	59
		134. Diseases of the Urethra	
		(A) Stricture	8
		(b) Other	20
		135. Diseases of the Prostate	
		Hypertrophy	2
		Prostatis	1
		136. Diseases (non-Venereal) of the Genital Organs of Man	
		Epididymitis	7
		Orchitis	5
		Hydrocele	6
		Ulcer of Penis	3
Carried forward:	23,773		23,098

Diseases by systems or groups	Nos.	Principal Diseases	Nos.
Brought forward:	23,773		23,098
DISEASES OF THE GENITO URINARY SYSTEM (Non Venereal)		137. Cysts or other non-malignant Tumours of the Ovaries	18
		138. Salpingitis	5
		Abscess of the Pelvis	67
		139. Uterine Tumours (non-malignant)	36
		140. Uterine Haemorrhage (non-puerperal)	10
		141. A. Metritis	10
		B. Other affections of the Female Genital Organs	75
		1. Displacements of Uterus	79
		Amenorrhoea	33
		Dysmenorrhoea	289
		Leucorrhoea	35
		142. Diseases of the Breast (non-puerperal)	
		Mastitis	15
		Abscess of Breast	3
8. PUERPERAL STATE	176	143. A. Normal Labour	46
		B. Accidents of Pregnancy	
		(a) Abortion	15
		(b) Ectopic Gestation	3
		(c) Other accidents of Pregnancy	5
		145. Other accidents of Parturition	3
		146. Puerperal Septicaemia	7
		149. Sequelae of Labour	14
		150. Puerperal affections of the Breast	7
9. AFFECTIONS OF THE SKIN AND CELLULAR TISSUES	507	151. Gangrene	3
		152. Boil	18
		Carbuncle	24
		153. Abscess	61
		Whitlow	48
		Cellulitis	19
		154. A. Tinea	30
		B. Scabies	24
		155. Other Diseases of the Skin	
		1. Erythema	22
		2. Urticaria	65
		3. Eczema	159
		4. Herpes	24
		5. Psoriasis	4
		7. Myiasis	6
10. DISEASES OF BONES AND ORGANS OF LOCOMOTION (Other than Tuberculosis)	119	156. Diseases of Bones	4
		Osteitis	16
		157. Diseases of Joints	
		Arthritis	38
		Synovitis	52
		158. Other Diseases of Bones or organs of Locomotion	8
		159. Malformations	4
12. DISEASES OF INFANCY	62	160. Congenital Debility	5
		161. Premature Birth	1
		162. Other affections of Infancy	46
		163. Infant neglect (infants of three months or over)	10
Carried forward:	24,637		24,564

Diseases by systems or groups.	Nos.	Principal Diseases	Nos.
Brought forward :	24,637		24,564
13. AFFECTIONS OF OLD AGE	4	164. Senility Senile Dementia	4
14. AFFECTIONS PRODUCED BY EXTERNAL CAUSES	1,176	168. Suicide by hanging or strangulation	1
		175. Food Poisoning	1
		176. Attacks of poisonous animals	
		Snake Bite	25
		Insect Bite	42
		177. Other accidental Poisonings	14
		178. Burns (By fire)	126
		179. Burns (other than by fire)	41
		182. Drowning (accidental)	1
		183. Wounds (by Firearms, war excepted)	3
		184. Wounds (by cutting or stabbing instruments)	330
		185 Wounds (by Fall)	84
		186. Wounds (in Mines or Quarries)	33
		187. Wounds (by Machinery)	10
		188. Wounds (crushing, e.g. railway accidents, etc.)	56
		189. Injuries inflicted by Animals, Bites, Kicks, etc.	43
		192. B. Hunger or Thirst	1
		194. Exposure to Heat	
		Sunstroke	3
		195. Lightning Stroke	4
		198. Murder by cutting or stabbing instruments	1
		199. Murder by other means	2
		200. Infanticide (Murder of an infant under one year)	1
		201. A. Dislocation	2
		B. Sprain	120
		C Fracture	22
		202 Other external Injuries	210
15. ILL-DEFINED DISEASES	353	205. A. Diseases not already specified or ill-defined	101
		Ascites	10
		Malnutrition	12
		Asthenia - Debility	146
		B. Malingering	9
		Medico-legal examinations and others	75
		Ante-natal examinations	76
16. DISEASES, THE TOTAL OF WHICH HAVE NOT CAUSED 10 DEATHS	21	Diseases, the total of which have not caused 10 deaths	21
	26,194		26,194

APPENDIX II.

RETURN OF DISEASES AND DEATHS - INPATIENTS - FOR THE YEAR 1934.

DISEASES	Remaining in Hospital 1934.	Yearly Admissions.	Total Deaths	Total Cases Treated	Remaining in Hospital 1935.
1. EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.					
1. Enteric Group					
(a) Typhoid Fever	-	5	-	5	-
5. Malaria					
(a) Tertian	-	42	1	42	-
(c) Aestivo-Autumnal	-	3	-	3	-
6. Smallpox:					
Alastrim	-	2	-	2	-
7. Measles	-	1	-	1	-
8. Scarlet Fever	1	2	-	3	-
11. Influenza	-	20	-	20	1
16. Dysentery:					
Amoebic	-	6	2	6	-
Bacillary	-	1	-	1	-
Undefined or due to other causes.	-	12	-	12	-
21. Erysipelas	-	1	-	1	-
22. Acute Poliomyelitis	-	1	-	1	-
24. Epidemic Cerebro-spinal Fever	-	1	1	1	-
25. Other Epidemic Diseases:					
(g) Yaws	-	2	-	2	-
27. Anthrax	-	1	-	1	-
31. Tuberculosis, Pulmonary and Laryngeal		35	2	35	1
32. Tuberculosis of the Meninges or C.N.S.	-	1	-	1	1
33. Tuberculosis of the Intestines or Peritoneum	-	4	1	4	-
34. Tuberculosis of the Vertebral Column	-	6	-	6	2
36. Tuberculosis of other organs:					
(a) Skin or Subcutaneous Tissue (Lupus)	-	5	-	5	1
(b) Bones	1	-	-	1	-
(c) Lymphatic System	2	8	-	10	1
(d) Genito-Urinary	-	6	-	6	3
37. Tuberculosis disseminated:					
(a) Acute	-	4	2	4	-
(b) Chronic	-	4	-	4	3
38. Syphilis:					
(a) Primary	-	3	-	3	-
(b) Secondary	3	7	-	10	1
(c) Tertiary	3	36	2	39	4
(d) Hereditary	-	14	1	14	2
(e) Period not indicated	-	3	-	3	-
40. A. Gonorrhoea and its complications:	1	22	1	23	1
2. GENERAL DISEASES NOT MENTIONED ABOVE:					
45. Cancer or other malignant Tumours of the Peritoneum Intestines, Rectum	-	1	-	1	-
Carried forward :	11	259	14	270	21

DISEASES	Remaining in Hospital 1934.	Yearly Admissions	Total Deaths	Total Cases Treated	Remaining in Hospital 1935.
Brought forward:	11	259	14	270	21
2. GENERAL DISEASES NOT MENTIONED ABOVE (Contd.)					
46. Cancer or other malignant Tumours of the Female Genital Organs	-	2	-	2	-
47. Cancer or other malignant Tumours of the Breast	-	3	-	3	-
49. Cancer or other malignant Tumours of Organs not specified	-	4	2	4	1
50. Tumours non-Malignant	1	11	-	12	-
51. Acute Rheumatism	1	4	-	5	-
52. Chronic Rheumatism	-	1	-	1	-
53. Scurvy	2	7	-	9	1
54. Pellagra	4	13	-	17	-
56. Rickets	-	1	-	1	-
58. Anaemia:					
(b) Other Anaemias and Chlorosis	1	3	-	4	-
66. Alcoholism	-	2	-	2	-
67. Chronic poisoning by mineral substances	-	2	1	2	-
69. Other general diseases:					
Purpura Haemorrhagica	-	2	-	2	-
3. AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.					
75. Paralysis:					
(a) Hemiplegia					
(b) Other Paralyses	-	1	-	1	-
77. Other forms of Mental Alienation	-	3	-	3	-
78. Epilepsy	-	1	1	1	-
80. Infantile Convulsions	-	1	-	1	-
81. Chorea	-	1	-	1	-
82. A. Hysteria	-	2	-	2	-
B. Neuritis	-	5	-	5	-
C. Neurasthenia	-	5	-	5	-
83. Cerebral Softening	-	1	1	1	-
84. Other affections of the Nervous System, such as Paralysis agitans	-	1	-	1	-
85. Affections of the Organs of Vision:					
(a) Diseases of the Eye	-	17	-	17	-
(b) Conjunctivitis	-	4	-	4	-
(c) Trachoma	-	1	-	1	-
(d) Tumours of the eye	-	7	-	7	2
(e) Other affections of the eye	1	8	-	9	-
86. Affections of the Ear or Mastoid Sinus	-	12	-	12	2
4. AFFECTIONS OF THE CIRCULATORY SYSTEM.					
87. Pericarditis	-	2	1	2	1
88. Acute Endocarditis or Myocarditis	1	2	-	3	-
90. Other Diseases of the Heart:					
Mitral	-	6	2	6	-
Aortic	-	4	1	4	-
Tricuspid	-	1	-	1	1
Carried forward :	22	390	20	412	28

DISEASES	Remaining in Hospital 1934.	Yearly Admissions.	Total Deaths	Total Cases Treated	Remaining in Hospital 1935.
Brought forward :	22	390	20	412	28
4. AFFECTIONS OF THE CIRCULATORY SYSTEM (Contd.)					
93. Diseases of the Veins:					
Haemorrhoids	-	3	-	3	-
Varicose Veins	-	3	-	3	-
Phlebitis	-	1	-	1	-
94. Diseases of the Lymphatic System:					
Lymphangitis	-	2	-	2	-
Lymphadenitis, Bubo	-	2	-	2	-
95. Haemorrhage of undetermined cause	-	4	1	4	-
96. Other affections of the Circulatory System	-	1	-	1	-
5. AFFECTIONS OF THE RESPIRATORY SYSTEM:					
Adenoids	-	10	-	10	-
Polypus	-	1	-	1	-
Coryza	-	2	-	2	-
98. Affections of the Larynx					
Laryngitis	-	4	1	4	-
99. Bronchitis					
(a) Acute	-	12	-	12	-
(b) Chronic	-	8	-	8	-
100. Broncho-Pneumonia	-	14	3	14	-
101. Pneumonia					
(a) Lobar	-	15	3	15	1
(b) Unclassified	-	5	-	5	1
102. Pleurisy, Empyema	-	13	-	13	1
103. Congestion of the Lungs	-	2	-	2	-
105. Asthma	1	4	-	5	1
106. Pulmonary Emphysema	1	-	-	1	-
107. Other affections of the lungs	-	5	2	5	-
6. DISEASES OF THE DIGESTIVE SYSTEM.					
108. A. Diseases of teeth or gums:					
Caries Pyorrhoea, etc.	-	9	-	9	-
B. Other affections of the mouth	-	6	1	6	-
Stomatitis	-	2	-	2	-
109. Affections of the pharynx or tonsils: Tonsillitis	1	61	-	62	-
111. A. Ulcer of the stomach	-	1	-	1	-
B. Ulcer of the duodenum	-	1	-	1	-
112. Other affections of the Stomach:					
Gastritis	2	4	-	6	-
Dyspepsia	-	1	-	1	-
113. Dyorrhoea and Enteritis under two years	1	5	-	6	-
114. Dyorrhoea and Enteritis Two years and over	2	9	1	11	2
115. Ankylostomiasis	-	1	-	1	-
116. Diseases due to Intestinal Parasites: A. Cestoda	-	3	-	3	-
C. Nematoda	-	2	-	2	-
D. Other parasites	-	1	-	1	-
117. Appendicitis	1	22	-	23	1
118. Hernia	-	6	1	6	-
Carried forward :	31	649	37	680	37

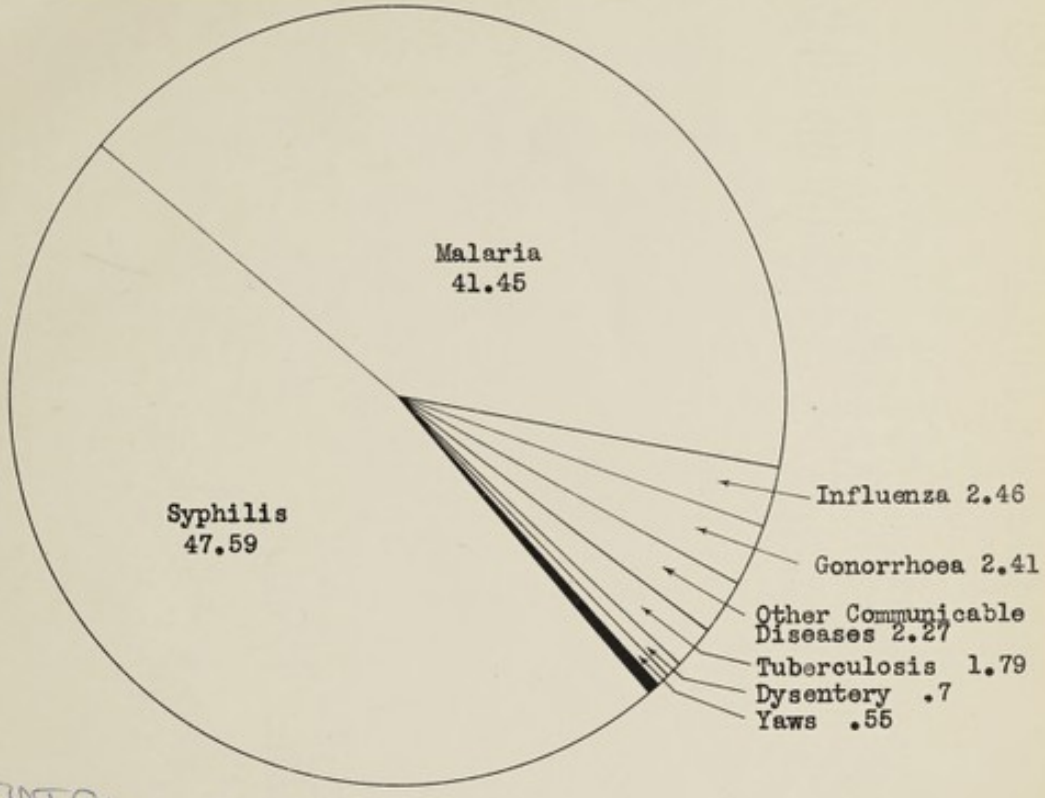
DISEASES.	Remaining in Hospital 1934.	Yearly Admissions	Total Deaths	Total Cases Treated	Remaining in Hospital 1935.
Brought forward :	31	649	37	680	37
6. DISEASES OF THE DIGESTIVE SYSTEM (Contd.)					
119. A. Affections of the Anus, Fistula, etc.	-	4	-	4	-
B. Other affections of the Intestines: Enteroptosis	-	1	-	1	-
Constipation	-	12	-	12	-
122. Cirrhosis of the Liver: B. Other forms	-	3	-	3	1
123. Biliary Calculus	-	1	-	1	-
124. Other affections of the Liver: Abscess	-	4	2	4	-
Hepatitis	-	1	-	1	-
Cholecystitis	-	2	-	2	-
126. Peritonitis (of unknown cause)	-	1	-	1	-
7. DISEASES OF THE GENITO-URINARY SYSTEM (non-venereal)					
128. Acute Nephritis	-	6	2	6	-
129. Chronic	1	1	1	2	-
130. B.Schistosomiasis	-	5	-	5	-
131. Other affections of the Kidneys: Pyelitis etc.	-	5	-	5	-
133. Diseases of the Bladder: Cystitis	-	4	-	4	-
134. Diseases of the Urethra: (a) Stricture	-	2	-	2	-
135. Diseases of the Prostate: Hypertrophy	1	5	-	6	1
Prostatis	-	3	-	3	1
136. Diseases (non-Venereal) of the Genital Organs of Man: Epididymitis	-	2	-	2	-
Orchitis	-	2	-	2	1
137. Cysts or other non-malignant Tumours of the Ovaries	-	8	-	8	-
138. Salpingitis	2	13	-	15	2
Abscess of the Pelvis	1	16	-	17	1
139. Uterine Tumours (non-malignant)	-	4	-	4	-
140. Uterine Haemorrhage (non-puerperal)	-	10	-	10	-
141. A. Metritis	-	3	-	3	-
B. Other affections of the Female Genital Organs	-	19	-	19	1
Displacement of Uterus	-	15	-	15	1
Amenorrhoea	-	5	-	5	-
Dysmenorrhoea	-	18	-	18	-
142. Diseases of the Breast: (non-puerperal) Mastitis	-	2	-	2	-
Abscess of Breast	-	6	-	6	-
8. PUERPERAL STATE: Ante-Natal Examinations:	-	2	-	2	1
143. A.Normal Labour	-	19	-	19	-
B.Accidents of Pregnancy (a) Abortion	-	9	-	9	1
(b) Ectopic Gestation	-	3	-	3	-
(c) Other accidents of Pregnancy	-	9	1	9	-
Carried forward :	36	874	43	910	48

DISEASES	Remaining in Hospital 1934.	Yearly Admissions	Total Deaths	Total Cases Treated	Remaining in Hospital 1935.
Brought forward:	36	874	43	910	48
8. PUERPERAL STATE (Contd.)					
144. Puerperal Haemorrhage	-	3	-	3	-
145. Other accidents of Parturition	-	1	-	1	-
146. Puerperal Septicaemia	-	3	1	3	-
147. Phlegmasia Dolens	1	2	1	3	1
149 Sequelae of Labour	2	5	-	7	-
150. Puerperal affections of the breast	-	7	-	7	-
9. AFFECTIONS OF THE SKIN AND CELLULAR TISSUES:					
151. Gangrene	-	1	-	1	-
152. Boil:					
Carbuncle	-	3	-	3	-
153. Abscess	-	1	-	1	-
Whitlow	1	7	-	8	-
Cellulitis	-	7	1	7	-
155. Other diseases of the Skin:					
Brythema	-	1	-	1	-
Eczema	-	4	-	4	1
10. DISEASES OF BONES AND ORGANS OF LOCOMOTION (other than Tuberculosis)					
156. Diseases of Bones					
Osteitis	3	4	-	7	1
157. Diseases of Joints:					
Arthritis	-	14	-	14	1
Synovitis	-	3	-	3	-
158. Other Diseases of Bones or Organs of Locomotion	-	9	-	9	2
11. MALFORMATIONS:					
159. Malformations:					
Hydrocephalus	-	1	-	1	-
12. DISEASES OF INFANCY:					
160. Congenital Debility	-	1		1	-
162. Other affections of Infancy:	-	1	-	1	-
13 AFFECTIONS OF OLD AGE					
164. Senility:					
Senile Demontia	-	1	-	1	-
14. AFFECTIONS PRODUCED BY EXTERNAL CAUSES:					
176. Attacks of poisonous animals:					
Snake Bites	-	4	-	4	1
Insect Bites	-	1	-	1	-
177. Other accidental Poisonings	-	12	-	12	-
178. Burns (by Fire)	1	8	-	9	1
179. Burns (Other than by fire)	1	4	2	5	-
183. Wounds (by Firearms)	-	4	-	4	-
184. Wounds (by cutting or stabbing instruments)	-	13	-	13	1
185. Wounds (by Fall)	-	23	1	23	1
186. Wounds (in Mines or Quarries)	-	13	-	13	1
187. Wounds (by Machinery)	-	5	-	5	1
188. Wounds (crushing, e.g. railway accidents, etc.)	-	15	-	15	2
189. Injuries inflicted by Animals, Bites, Kicks etc.	1	18	-	19	1
Carried forward :	46	1073	49	1119	63

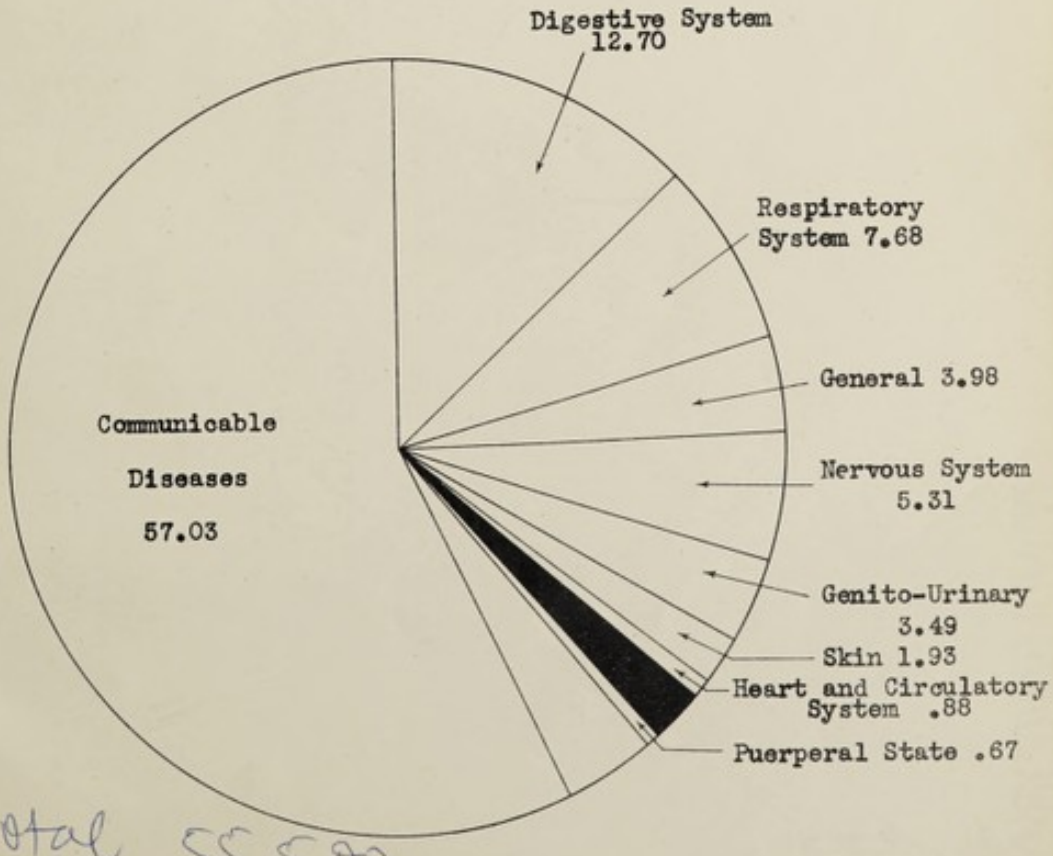
DISEASES	Remaining in Hospital 1934.	Yearly Admissions.	Total Deaths	Total Cases Treated	Remaining in Hospital 1935.
Brought forward :	46	1073	49	1119	63
14. AFFECTIONS PRODUCED BY EXTERNAL CAUSES: (Contd.)					
201. A. Dislocation	-	1	-	1	-
B. Sprain	1	13	2	14	5
C. Fracture	2	33	-	35	4
15. ILL-DEFINED DISEASES.					
Ascites	-	6	2	6	-
Oedema	-	1	-	1	-
Asthenia	1	15	-	16	-
16. DISEASES, THE TOTAL OF WHICH HAVE NOT CAUSED 10 DEATHS	-	18	-	18	1
TOTAL	50	1,160	53	1,210	73

APPENDIX 3. 1934

Diagrams showing incidence of Disease. – COMMUNICABLE



TOTAL - 14,841



Total 55,500