Bechuanaland Protectorate Government

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# Annual Medical and Sanitary Report

for the year 1953

Office of the Director of Medical Services, MAFEKING

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# Annual Medical and Sanitary Report

for the year 1953

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## ANNUAL MEDICAL AND SANITARY REPORT for the year 1953

#### SECTION I — ADMINISTRATION

#### 1. STAFF

#### Senior Service

Director of Medical Services.

10 Medical Officers.

3 Health Inspectors.

4 Matrons.

10 Sisters.

1 Housekeeper.

2 Clerks.

1 Lady Clerk.

1 Typist.

2 Rodent Officers.

#### Junior Service

5 Health Assistants.

18 Dispensers.

1 Microscopist.

1 Senior Sanitary Inspector.

4 Sanitary Inspectors.

2 Pupil Sanitary Inspectors.

4 Learner Rodent Assistants.

17 Medical Orderlies.

23 Staff Nurses.

27 Probationer Nurses.

4 Male Attendants (Mental Home).

3 Female Attendants (Mental Home).

5 Cooks.

1 Assistant Cook.

4 Clerks.

6 Drivers.

6 Lorry Labourers.

4 Kitchen Helps.

5 Gardener/Messengers.

6 Labourers.

4 Launderers.

13 Assistant Launderers.

4 Sewing Women.

22 Housemaids.

2. The staff position has again been unsatisfactory during the year.

3. Two Medical Officers resigned during the year and one was appointed. One Medical Officer proceeded on overseas leave. One station, Gaberones,

was without a Medical Officer from April 30th and the vacancy was not filled during the rest of the year; as a locum Medical Officer could not be obtained, the station was visited once weekly from Lobatsi.

- 4. One Nursing Sister resigned, and two new sisters were appointed. Two Nursing Sisters proceeded on overseas leave.
- 5. It has still not been possible to fill permanently the post of House-keeper at Lobatsi hospital; the post has been held so far by a series of locums.
- 6. Sister J. W. Wardlaw was awarded a World Health Organisation Fellowship for the purpose of taking a Midwifery Teacher's Training Course in England.
- 7. The High Commissioner appointed the Director of Medical Services as liaison officer between the High Commission Territories and the British Empire Society for the Blind on all matters relating to blindness in the three Territories.

#### 8. Staff Changes

Dr. E. G. Hales resigned 30.4.53.

Dr. W. E. Laufer resigned 26.9.53.

Sister M. L. Crawford appointed 12.4.53.

Sister P. Burger proceeded on overseas leave pending transfer to Malaya 16.5.53.

Dr. J. Quantrill appointed 18.6.53.

Sister S. van Dyk resigned 30.12.53.

Health Inspector L. du Pisani proceeded on leave pending retirement on account of ill-health 7.11.53.

Sister K. D. Francis appointed 31.12.53.

Miss F. M. E. Pepper, Matron, Serowe, transferred to Basutoland 31.8.53.

#### VISITS

- 9. Sir Eric Pridie, K.C.M.G., D.S.O., O.B.E., M.D., B.Sc., Chief Medical Adviser to the Colonial Office, visited the territory in June.
- 10. General Daubenton, World Health Organisation Regional Director for Africa, visited Mafeking in September for a few days, during which time he visited Lobatsi and Molepolole.
- 11. The Director of Medical Services attended the World Health Organisation Yellow Fever Seminar and the World Health Organisation regional meeting at Kampala, and afterwards visited the Sudan.

#### **LEGISLATION**

- 12. High Commissioner's Notice No. 257 of 1952. Published 2.1.53. Cancellation of Medical Service Regulations.
- 13. Government Notice 79 of 1952. Published 2.1.53. Charges in Government Hospitals.
- 14. High Commissioner's Notice 78 of 1953. Published 22.5.53. Amends Medical Service Regulations published under High Commissioner's Notice 54 of 1930 and is aimed at the provision of free ordinary medical attention for all temporary or daily paid Government employees, but not for their families.

15. High Commissioner's Notice 97 of 1953. Published 26.6.53. Amend-

ment to Public Health Regulations.

16. Proclamation 61 of 1953. Published 18.9.53. The Bechuanaland Protectorate Regulation of advertisements Proclamation regulates and controls the publication of advertisements relating to medicines and medical treatment.

17. High Commissioner's Notice 160 of 1953. Published 18.9.53. Amend-

ment to Public Health Regulations.

18. Proclamation 67 of 1953. Published 2.10.53. Granting of licences in the Protectorate (Page 15. Item 6—Chemist and Druggist).

#### SECTION II — PUBLIC HEALTH

#### BILHARZIASIS

19. 40 (69)\* cases were reported, of whom 13 were admitted to hospital. Twenty-five of the cases were notified from the Bakgathla Reserve, where bilharziasis has been prevalent along the banks of the Notwani-Crocodile rivers for many years.

#### DIPHTHERIA

20. No extensive epidemics occurred during the year, but small outbreaks were recorded from Mahalapye and Ghanzi, and sporadic isolated cases from other areas, notably the Serowe and Mahalapye districts.

21. A total of 11 deaths was reported, but it was stated that 29 deaths and an indefinite number of cases occurred in the Ghanzi district before any report reached the Medical Officer, Ngamiland. In all 12.965 prophylactic

inoculations were given.

22. The distribution of cases notified from district Medical Headquarters is shown in Table I (as some of the Ghanzi cases were unverifiable, they have not been included in the table).\*

### TABLE I

		Di	phth	eria			
District						(	Cases
Maun and Gh	anz	i			 	35	(5)
Mochudi					 	2	(6)
Francistown					 	11	(26)
Serowe					 	39	(26)
Ramoutsa					 	1	(2)
Molepolole					 	21	(22)
Mahalapye					 	47	(7)
Moffat Hospi	tal,	Kan	ve		 	2	(10)
Lobatsi					 	6	(7)
Mafeking					 	1	(0)
Gaberones					 	1	(1)
							-
						166	(112)

Number of deaths 11: 11 (9) deaths other than those mentioned above were notified.

<sup>\*</sup>Figures in brackets, where given, show the comparative figures for 1952.

#### DYSENTERY

23. 1,022 (723) cases were reported, of which 552 were bacillary dysentery, 129 amoebic, and 321 unspecified.

#### LEPROSY

24. 19 (30) cases were notified, all of whom lived in Ngamiland.

#### MALARIA

- 25. No large epidemic occurred during the year, the total number of cases notified being 1,865 (2,044).
- 26. There was again heavy rainfall in the Francistown area, which added to the difficulty of carrying out anti-malarial control measures. All European and Coloured dwellings were sprayed thrice during the season with DDT and all African huts with M.25; all collections of water were treated with M.25 or "Malariol."
- 27. At Maun, routine anti-malarial work was carried out as usual, i.e. weekly spraying of river bank edges and pools in the controlled area at Maun with 1/300 M. 25, three monthly spraying of all African huts in the controlled area with 1/8 M.25, and of all brick houses with 5% DDT in Kerosene.
- 28. The inter-territorial agreement with the Union Health Department regarding control measures on both sides of the border along the Crocodile and Molopo Rivers remained in force.
  - 29. The distribution of cases is given in Table II.

#### TABLE II

#### Malaria

District						(	Cases
Maun				 		563	(527)
Kazungula				 		312	(541)
Kanye Medic	al N	1issic	n	 		5	(2)
Mochudi				 		14	(5)
Francistown				 		415	(805)
Serowe				 		404	(176)
Molepolole				 		102	(6)
Mahalapye				 		19	(6)
Moffat Hospi	ital,	Kan	ye	 		17	(-)
Lobatsi			•	 		1	(5)
Gaberones				 		13	(5)
					1	,865	(2,044)

There were 3 (4) deaths.

#### MALNUTRITION AND DEFICIENCY STATES

30. There was no drought in 1953 comparable to that which occurred in 1952; the total number of cases of deficiency disease recorded was 1,682 (2,351).

31. As a "screening" method for the assessment of the incidence of malnutrition in African school children under circumstances where it is not possible to carry out a clinical survey, the use of tongue prints has been developed, and is proving of great use. In the Lobatsi district, tongue prints are taken regularly at several African schools. As the prints once dry, are permanent, they form a useful record of each child's nutritional status. For reference, see paragraph 91 "Publications."

#### PLAGUE

- 32. No case of plague was recorded during the year. Routine antiplague measures were carried out.
- 33. In the Tsau-Nokaneng and Rakops areas, and a small section of the Ghanzi area, large rodent concentration occurred in the winter. Special attention was paid to these areas. About October the rodent concentration lessened greatly. Special surveys were carried out at this time, and during November; fleas were collected where possible, and forwarded to the South African Institute for Medical Research for examination. All examinations for plague infection were negative.
- 34. Except for the rodents killed in the near neighbourhood of the settlement by poisoned bait, no dead rodents were reported during the year. Figures for the rodent surveys are given in Table III.

#### TABLE III

#### Rodent Surveys

Number of rodents trapped 25	(60)
Number of fleas found on trapped rodents 49	(not given)
Number of huts tested for presence of fleas 6,566	(5,740)
Number of fleas caught in huts 11	(156)
Number of huts disinfected with Cyanogas 213	(290)
Number of rodents killed in huts 10	(not given)
Number of fleas found on rodents killed in huts	(not given)
Number of huts dusted with DDT (10% in	
talc) 44,211	
Amount of DDT (10% in talc) used 24,7071	bs. (20,498lbs.)
Amount of Cyanogas used 1071	bs. (204lbs.)
Amount of poisoned bait (grain) used 1101	bs. (69lbs.)

#### RABIES

- 35. No cases of human rabies were diagnosed during the year. 14 persons were bitten by dogs, and all received full courses of anti-rabies vaccine. Most of the dogs were destroyed immediately, but of those kept under observation, none were notified as having developed rabies.
- 36. One case of rabies was confirmed by the Veterinary Department in a dog from Palapye district. This animal had not bitten anybody.

#### RESPIRATORY DISEASES

37. 10,256 (13,348) were recorded, amongst which there were 20 deaths. 339 cases of pneumonia were treated in hospital, with 12 deaths, a mortality rate of 2.8%. This figure is a great reduction on the rates of the last two years, 5.6% and 8.1% respectively.

#### **SMALLPOX**

- 38. 34 (67) cases only were reported during the year.
- 39. Most of these were isolated cases; the greatest number occurring at once in any locality was 4.
- 40. 11,086 vaccinations were performed during the year, apart from those given to all mine recruits.

#### **TRYPANOSOMIASIS**

- 41. Four cases of trypanosomiasis were admitted to Maun hospital during the year, one case of which proved fatal. One only of these cases had worked in the Tsetse Fly Control scheme. For treatment the routine method employing pentamidine, isethionate, suramin and tryparsamide was used throughout.
- 42. At the request of the West Africa Institute for Trypanosomiasis Research, Vom, Nigeria, guinea-pigs inoculated with blood from these cases were sent thither, in an attempt to obtain a strain of human trypanosomes from Bechuanaland. After some unsuccessful attempts, two injected guinea-pigs arrived safely in Vom.
- 43. For the first half of 1953, owing to the absence of a Tsetse Fly Control Officer, the Tsetse Fly Control Scheme was under the direct control of the District Administration.
  - 44. The post of Tsetse Fly Control Officer was filled in June.
- 45. In the field, a 300 yard wide clearing on the Maun side of the inner fence was continued to the river, and eventually to Marophe. By June, there was in effect a 600 yard clearing extending from Makula to Marophe. The work was then, however, discontinued on the advice of Dr. Ford of the East African Tsetse and Trypanosomiasis Research and Reclamation Organisation, who pointed out that sheer barrier clearing less than 3 miles wide does not constitute a real obstacle to the passage of fly.
- 46. The line of the south-west flank fence has been altered, as the surrounding country is an unsuitable habitat for fly, and no fly have ever been reported in the past outside the inner fence.
- 47. The fence has been shortened, and now runs from Makwelekwele on the inside fence to a point three-quarters of a mile south-west of the Matsebe on the outer fence.
- 48. In this way the length of fence has been reduced from 25 miles to 8 miles, thus rendering maintenance easier.
- 49. No fly rounds were instituted by the new Control Officer, as to do so was considered unprofitable until a proper policy had been formulated after a study of East African methods.

- 50. Surveys: The Tsau-Nokaneng bulge was surveyed by the District Commissioner on a grid basis, with fly boys operating on regular overlapping paths.
- 51. The Seronga-Tsau area was surveyed in September, and no positive smear was found.

#### **TUBERCULOSIS**

- 52. The findings of the Mass Radiography Survey, the performance of which was described in the 1952 report have been followed up as far as possible during the year.
- 53. For treatment a combination of P.A.S. (12 gm. daily) with streptomycin (1 gm. every third day) was laid down as a routine, and encouraging results have been reported from District Medical Officers in charge of hospitals.
- 54. Arrangements were made for a tuberculosis consultant to visit the territory during 1953, but no visit was possible during the year.
- 55. 1,579 cases of tuberculosis were treated during 1953. The distribution of cases in the various areas is given in Table IV.

#### TABLE IV

District						Ca.	ses
Maun				 	 	91	(40)
Kazungula				 	 	3	(3)
Kanye Medic	cal N	lissic	on	 	 	258	(242)
Mochudi				 	 	26	(100)
Francistown				 	 	130	(239)
Serowe				 	 	211	(91)
Ramoutsa				 	 	281	(115)
Molepolole				 	 	205	(348)
Mahalapye				 	 	34	(30)
Moffat Hosp	ital.	Kan	ve	 	 	109	(—)
Lobatsi				 	 	196	(160)
Mafeking (H	eado	uart	ers)	 	 	5	(5)
Gaberones				 	 	4	(4)
Chobe				 	 	26	(14)
						1,579	(1,391)

Total number of deaths 31 (23).

56. Of this number, respiratory tuberculosis accounted for 1,188 cases, glandular and miscellaneous tubercular infections for 394, bone and joint tuberculosis for 133, tuberculosis of peritoneum and intestines for 57 and tuberculosis of the meninges and central nervous system for 7.

#### VENEREAL DISEASES

57. 11,269 (11,714) were treated. Syphilis and gonorrhoea accounted for all but 42; this latter number were diagnosed as lymphogranuloma venereum. One case of General Paralysis of the Insane was recorded.

#### YELLOW FEVER

- 58. In the World Health Weekly Epidemiological Record R.E.H. 319 of the 5th February, 1953, the whole of the Bechuanaland Protectorate was declared a yellow fever reception area.
- 59. Regarding the present yellow fever position in the territory a summary of a paper read by the Director of Medical Services at Kampala in September, 1953, is appended.
  - "(a) Human immunity surveys carried out in different parts of the territory indicate that the number of positive immunes is very small (1%) and is not increasing.
  - (b) There is no evidence of infection amongst the monkey population. Further investigations into other possible intermediary hosts are contemplated.
  - (c) Yellow fever carrying mosquitoes have been identified in various parts of the Bechuanaland Protectorate. It is thought unlikely that the yellow fever virus is actively transmitted during the long dry winter spell. Conditions favourable for active transmission are only possible for a relatively short period during the rainy season.
  - (d) Yellow fever is, therefore, most unlikely to be endemic in any part of the territory.
  - (e) Conditions for the air transport of mine recruits to the territory are described."
  - 60. 158 Yellow Fever Inoculation Certificates were issued during the year.
- 61. Blood samples from a group of Francistown native school children, 10 in number, were again tested for Yellow Fever immune bodies. There were no positives.

#### MISCELLANEOUS INFECTIOUS AND CONTAGIOUS DISEASES

62. These are given in Table V.

#### TABLE V

Miscellaneous Infectious and Contagious Diseases

Diseases							Cas	ses
Measles						 	575	(732)
Pertussis						 	1,006	(1,210)
Cerebrospin	al Me	ening	itis			 	_	(28)
Varicella						 	138	(94)
Acute Anter	ior P	olion	nyeli	tis		 	4	(4)
Typhoid and	d Para	atypl	noid !	Feve	r	 	9	(13)
Anthrax						 	1	(1)

2 deaths were recorded in pertussis infections. No deaths were recorded for other diseases mentioned in the table.

#### SECTION III — VITAL STATISTICS

63. The last available census figures of 1946 are given below:—

TA	DI	T	VII

Europeans			 	 	2,379
Africans			 	 	292,755
Asiatics			 	 	94
Coloured		* *:	 	 	1,082
To	tal		 	 	296,310

This total corresponds with a population density of just over 1 per square mile.

#### TABLE VII

#### European Birth Rates and Death Rates.

Total European births .		 	 63
Births per 1,000			25.2
Total European deaths.			15
Deaths per 1,000			6.0
Deaths under 1 year of a			2

#### TABLE VIII

#### Causes of European Deaths

Malignant N	eopl	asms		 	 	3
Cerebral Hae	emor	rhag	e	 	 	2
Cardiac Faile	ire			 	 	4
Coronary Th	rom	bosis		 	 	2
Pneumonia				 	 	1
Diphtheria						1
Prematurity				 	 	1
Gastro-enter	itis					1

#### ILLNESS OF OFFICIALS

64. The cause of morbidity amongst European and African officials who were off duty for more than 14 days is given in Table IX and Table X.

#### TABLE IX

#### Europeans

Heart Disease				 	 1
Skin affections				 	 1
Neoplasm				 	1
Nervous diseases				 	 2
Duodenal Ulcer				 	 1
					1
Appendicitis				 	 1
Influenza					2
Spontaneous pne	umo	thora	1X	 	 1
Osteo-arthritis				 	 1
Hernia					1
Debility				 	 1

#### TABLE X

#### Africans

Malaria						 2
Respiratory D						 14
Pulmonary Tu						 4
Hernia						1
Appendicitis						4
Salpingitis						1
Mental Instab						 2
Injuries						 11
Conjunctivitis						 3
Neoplasm						 1
Tonsilitis						 1
Disease of the	Circula	tory	Syst	em		 6
Septic Infectio						 2
Relapsing Fev	er					 1
Disease of the	Central	l Nei	rvous	Svs	tem	 1
Varicella .						 2
Ureteric Stone						 1
Muscular Join	t Diseas	ses				3
Infective Hepa	titis					 1
Haemorrhoids						 1

#### SECTION IV — HYGIENE AND SANITATION

#### MATERNITY AND CHILD WELFARE

65. Figures for the year are given in Table XII.

#### TABLE XII

#### Maternity and Child Welfare

Number of deliveries	. 1,352
Accidents and complications of pregnancy	
including abortions	345
Ante-natal attendances (5 centres only)	7,126
Child Welfare (Maun Maternity Centre	
attendances	216

#### RECRUITMENT OF NATIVE LABOUR

- 66. The total number of recruits examined or in transit was 37,488. Most of these were recruited for the Native Recruiting Corporation, Witwatersrand Native Labour Association, Theron's Recruiting Organisation, and South African Manganese.
  - 67. The number passing through each depot are given in Table XIII.

#### TABLE XIII

#### Native Labour Recruitment

Station	Total No.	Rejects
Lobatsi	2,940	138
Serowe	2,693	159
Francistown	20,991*	_
Maun	614	40
Mahalapye	1,102	81
Ramoutsa	198	5
Ramathlabama	394	13
Molepolole	2,647	110
Kanye	1,446	36
Mochudi	265	3
Kazungula	3,233**	-
Khale	965	22
	37,488	607
		-

<sup>\*20,765</sup> in transit.
\*\*In transit.

#### AIR-LIFT FOR RECRUITS

68. This was continued successfully during 1953. The flights are from Lilongwe, Nyasaland, and Mohembo and Maun in the Bechuanaland Protectorate, to Francistown.

Relevant data are given below:-

evant data are given o	oro ii .				
Nyasaland					
Recruits airlifte	d Jan	-Dec.,	1953		15,940
Repatriates ,,	,,	,,	,,		11,857
Europeans—sta	ff ,,	,,	,,		4
Francistown/Maun/N	<b>Johem</b>	bo:			
Recruits airlifte			1953		3,325
Repatriates ,,	,,	,,	,,		3,231
Europeans "	,,	,,	,,		69
Flights Flown:					
Nyasaland "	,,	,,	,,		522
Mohembo "	,,	,,	,,		132
Miles flown—19	953				836,000
					Nil.
Transported by Roa	d:				
JanDec., 195		ancistow	n/Ma	aun/	
Mohembo					465
JanDec., 1953					
Mohembo					547
S.W.A. Natives enga	oed at	Grootfo	ntein	and	
transported by					
Total for year 1					1,035

#### S.W.A. Repatriates (number approximately 2,100)

These are transported from Francistown to Grootfontein via Maun by Diesel trucks.

69. The year 1953 has seen two further extensions to the new "Wenela Air Services," namely Katima Mulilo and Mongu via Livingstone.

#### PRISONS AND ASYLLIMS

70. The two gaols at Gaberones and Francistown normally cater for long-term prisoners, short-term cases being accommodated in "lock-ups" at the District Headquarters.

#### General Health

- 71. General health of prisoners was good, and but little malnutrition was diagnosed in newly admitted prisoners. Isolated cases of venereal disease also occurred in newly admitted prisoners, but all cases responded to treatment.
- 72. Cases admitted to hospital included, besides minor conditions, one of appendicitis, one of pulmonary tuberculosis, one of chronic asthma and three of heart disease. No gaol epidemics were recorded.

#### Diet

73. The diet introduced during 1952 has been continued, and has proved satisfactory.

#### Facilities for Medical Inspection and Treatment

74. Regular weekly gaol inspections are held where a Medical Officer is available, and complaints are investigated. Prisoners also report to the dispensary at times other than that of the inspection; cases needing hospital treatment are sent to the nearest hospital.

#### **Hospital Admissions**

75. There were 32 during the year. The proportion of daily average number of prisoners in hospital to daily average prison population was less than 1%.

#### Deaths

76. No deaths occurred during the year.

#### Sanitation

- 77. Lobatsi is still the only gaol where water-borne sanitation is provided. Otherwise except at Ghanzi and Kasane, where pit privies are employed, the bucket system of night soil disposal is employed.
  - 78. Insect infestation is controlled by regular use of insecticide.

#### Asylum

- 79. The Lobatsi Mental Home was enlarged during the year, the accommodation being thereby increased from 12 to 22.
- 80. The arrangement whereby Southern Rhodesia accepted mental patients from this territory who were dangerous, or who were likely to benefit by treatment remained in force. The number of patients sent under this arrangement during the year was 4.

#### MEAT INSPECTION

81. The number of animals slaughtered and inspected is given in Table XIV.

#### TABLE XIV

	Bovines	Sheep and Goats	Pigs	Calves
Francistown	854	701	16	3
Maun	442	424	12	
Lobatsi	465	1,578	14	-
Kanye	429	295	_	-

Condemnations and nature thereof are given in Table XV.

#### TABLE XV

Be	ovines	Sheep and Goats	Pig.
Francistown		1	0
Cysticerus bovis	70	-	1
Tuberculosis	2		
Bruising	7	_	_
Emaciation	4	_	_
Pleurisy	1	100	-
Septicaemia	1	1	
Caseous lymphadenitis	_	11	
Jaundice	_	1	
Actinomycosis	9		
Abscess and Inflamma-			
tions	8	69	-
Pneumonia		2	-
Stilesia hepatica	-	257 (Livers only)	-
Echinococcus	6	_	
Mastitis	6	-	
Nephritis	6	-	
Pericarditis	7	_	
Bacillary necrosis	1		_
Capillary Angiomata	. 8		_
Ulcerations	1		
Maun			
Stilesia hepatica		65 (Livers only)	
Flukes	96	51	
Abscesses	3	_	
Echinococcus		12	
Pneumonia	2		
Nephritis	1	-	-
Bruising	1	-	
Emaciation	1		

Bov	ines	Sheep and Goats	Pigs
Lobatsi			
Measles	20	2	1
Mastitis	12	_	-
Necrosis	2	3	-
Caseous lymphadenitis	_	30	
Abscess and Inflamma-			
tions	22	4	_
Bruising	5	2	_
Synovitis	1	-	-
Hepatitis	2		-
Cirrhosis	7	1	_
Calcification (presternal)	3		-
Pericarditis	6	_	_
Pleurisy and Pneumonia.	1	5	1
Tuberculosis		2	_
Tumours	3	1	_
Pyaemia	1	_	_
Tenuicollis		1	
Achninobacillosis	1	_	
Botriomycosis	1	_	_
Actinomycosis	1	-	
Distoma Hepat	1	_	_
Sarcocystosis	1	3	1
Pentastoma	2		-
Amphistoma	10	2	
Stilesia hepatica	4	1,431	-
Oesophagistoma	7	25	-
Strongylus		5	_
Coenurus	_	1	_

#### **NEW HOUSING**

82. The following have been in building or completed during the year:—

#### Lobatsi

Outpatient dressing room.

Wash-up shelter for Tuberculosis Wards.

Extension to Mental Home.

#### Serowe

Ante-natal Clinic.

#### Kalkfontein

New dispensary and dispenser's quarters.

#### SECTION V — HOSPITALS AND DISPENSARIES

#### **OUT-PATIENTS**

83.

#### TABLE XVI

First attendances Subsequent attendances	91,432 (93,702) 166,257 (257,534)	
	257,689 (351,236)	

The drop in the figure for subsequent attendances is mainly due to the great reduction in activities of Kazungula as a recruiting centre.

#### **IN-PATIENTS**

84. At the end of 1953, there were 532 (459) hospital beds available in the Territory, 36 European and 500 African, of which Government provides 32, and 288 respectively. Leading hospital statistics are given in Table XVII.

#### TABLE XVII

#### Hospital Statistics

	Beds		Pati	ents	Operations		
Hospital	Euro-		Ad-		•		
	pean	African	missions	Deaths	Major	Minor	
Francistown	6	46	1,272	38	13	407	
Kanye (Seventh Day Ad-			,			,	
ventist)	2	66	1,137	21	62	120	
Kanye (United Free							
Church of Scotland).	-	33	512	6	16	94	
Kazungula	-	6	155				
Khale (Roman Catholic							
Mission)	-	5	45		-		
Lobatsi	15	100	1,465	46	278	154	
Mahalapye		8	71	9		_	
Maun	5	29	687	22			
Maun Maternity Centre							
(London Missionary							
Society)	-	10	105	_			
Molepolole (United Free							
Church of Scotland).	-	56	889	15	15	264	
Mochudi (Dutch Re-							
formed Church)	_	21	240	6	-		
Ramoutsa (Hermansburg							
Mission)	-	13	143			-	
Serowe	4	107	1,805	72	134	110	
	32	500	8,526	235	518	1,149	

#### DISPENSARIES

85. Kalkfontein dispensary was opened during the year. Visits to Kachikau by the dispenser from Chobe Timber Concessions, Ltd., or Serondellas were discontinued in September owing to shortage of staff.

#### SECTION VI — MISCELLANEOUS

#### MILITARY PENSIONS

- 86. The following Boards on military pensioners were held in 1953:—
  Bechuanaland Protectorate . . . . . 13
  Union of South Africa Pensioners . . . . 9
- 87. The Director of Medical Services, as Chairman of the Basutoland Military Pensions Appeal Board, visited Basutoland once during 1953 to hear appeal cases.

#### HABIT FORMING DRUGS

- 88. Import certificates numbering 13 were issued during 1953.

#### NURSING EXAMINATIONS

90.

#### TABLE XVIII

	No. of Candidates	No. Passed	No. Failed
Preliminary Examinations	. 49	44	5
Final Medical and Surgical Nurs	S-		
ing Examinations	. 11	10	1
Final Midwifery Examination .	. 7	7	

#### PUBLICATIONS

91.

- Freedman, M. L. and Laufer, W. E.: Camoquin in Malaria, S. Afr. Med. J., 31/1/53, 27.
- Squires, B. T.: Human Salivary Amylase in Relation to Diet, J. Physiol., 1953, 119, 153.
- Squires, B. T.: Ultra-Violet Fluorescence of the Tongue in African Children, S. Afr. Med. J., 1953, 27, 759.
- Squires, B. T.: Tongue Patterns of African Children in Health and in Malnutrition, *Trans. Roy. Soc. Trop. Med. & Hyg.*, 1953, 47, 329.

#### KALAHARI EXPEDITION

- 92. In July a scientific expedition, which included Drs. A. R. P. Walker and T. Gerritsen (S.A. Council for Scientific and Industrial Research), Professor J. W. Groenewald (Onderstepoort, Pretoria), Dr. E. Kahn (Baragwanath Hospital, Johannesburg), Dr. B. T. Squires, Mr. M. D. Watson, and a European technician and mechanic visited the Tshane area, about 300 miles west of Molepolole.
- 93. Over 200 subjects, mainly Bakgalakgadi and including 15 Bushmen were examined, and blood samples, etc., collected from over 150.
- 94. Investigations upon albumin-globulin ratio, iron-binding capacity of serum, blood-cholesterol, and sundry liver function tests were carried out on the spot, whilst other sera were taken back to Johannesburg for examinations requiring more elaborate techniques.
- 95. A further collection of tongue patterns was made and the ultraviolet fluorescence phenomena of the tongue investigated. Professor Groenewald undertook an examination of grasses and of stock.

#### EXTRA-VENEREAL TREPONEMATOSIS SCHEME

- 96. This project, the outline of which was formulated in 1952, is sponsored jointly by the World Health Organisation (W.H.O.), the United Nations Children's International Emergency Fund (UNICEF) and the Bechuanaland Protectorate Government.
- 97. It provides for the investigation and treatment of the non-venereal treponemal disease known locally as "Dichuchwa." The project is to continue for three years, during the first of which an intensive survey of the disease as it occurs in the Kwena reserve is to be carried out. In succeeding years, mass treatment is to be initiated in the Protectorate.
- 98. The first year's work is to be carried out by a mobile field unit in charge of a medical officer appointed by W.H.O. During this period the South African Institute for Medical Research will co-operate in carrying out epidemiological, serological, histopathological, biological and biodemical investigations in an endeavour to elucidate the nature of "Dichuchwa." The Bechuanaland Protectorate Government, through the Medical Department, is to be responsible for the direction and operation of the project with the technical advice and assistance of W.H.O. and UNICEF.
- 99. The project was actually begun at Molepolole towards the end of November.
- 100. Dr. A. M. Merriweather, of the Scottish Livingstone Hospital, Molepolole, has been appointed as Medical Officer in charge.

## COLONIAL DEVELOPMENT AND WELFARE FUND SCHEMES D.1037 and D.2014

101. The funds of Scheme D.1037 are almost exhausted; of the funds available, £1,800 has been diverted to Scheme D.2014 for payment of personal emoluments to subsidise any staff of the Extra-Venereal Treponematosis Scheme.

#### GOVERNOR-GENERAL'S NATIONAL WAR FUND

102. No new applications were granted during the year.

#### FINANCES

103.	Total Revenue:—		
	Hospital and Dispensary Fees £6,877	0	0
	Total Ordinary Expenditure of Medical Department:		
	(a) Personal Emoluments (b) Other Charges £90,595	5	4
	Total ordinary revenue of Bechuanaland Protectorate	0	0
	Proportion of ordinary medical expenditure to ordinary revenue of Protectorate 9.97%		
	Total ordinary expenditure of Protectorate £891,700	0	0
	Proportion of ordinary medical expenditure to ordinary expenditure of Protectorate 10.15%	5	
101	7.0		

104. It is again a pleasing duty to record the co-operation and willing work of officers in the Department.

B. T. SQUIRES,
Acting Director of Medical Services.

## Return of DISEASES AND DEATHS for the year 1953

	IN-PATIENTS								
	DISEASES	† Remaining in Hospital at end of	Yearly	Total	‡Total	¶Remaining in Hospital	Mala	E	
	DISERSES	1952	Admissions	Deaths	Cases Treated	at end of 1953	Male	Female	
A.									
1.	Tuberculosis of respiratory system	26	224	26	250	52	329	401	
2.	Tuberculosis of meninges and central							1	
2	nervous system		4	2	4		3	1 1	
3.	Tuberculosis of intestines, peritoneum		1.5						
4.	and mesenteric glands Tuberculosis of bones and joints	6	15 36	1	15	0	20	22	
5.		6	41	1	42	8	48	43	
6.	C14-1 1-111	0	14	1	49 14	1	167	186	
7.	Early syphilis		29	1	29	1	627	721	
8.	Tabes dorsalis		29		29	1	1116	1598	
9.	General paralysis of insane							1	
10.	All other syphilis	4	59		63	4	1487	2004	
11.	Gonococcal infections	1	100		101	1	1923	1792	
12.	Typhoid fever		5		5	1	2	2	
13.	Paratyphoid fever and other Salmonella						2	2	
	infections								
14.	Cholera								
15.	Brucellosis (undulant fever)								
16.	(a) Bacillary dysentery	1	33	4	34		195	257	
	(b) Amoebiasis	2	23	2 2	25		70	59	
17	(c) Other unspecified forms of dysentery		36	2	36		132	209	
17. 18.	Scarlet fever		2		2 21				
19.	Streptococcal sore throat		21		21		331	524	
20.			6	1			-		
21.			60	11	6		5	1	
22.	Whooping cough		25	11 2	60 25	1	47	63	
23.	Meningococcal infections		10	3	10	1	434	547	
24.	Plague		10	3	10		8	17	
25.	Leprosy	1	2		3	1	12	9	
26.	Tetanus	i	2 3		4	1	1	9	

30.	Anthrax		2 1 1	1	2 1 1		1 2 9	2 1 11
	Smallpox	2	75		77	1	246	250
33. 34.	Yellow fever	-	10	1	10		9	11
	(murine)		1		1		9	5
37.	(e) Other and unspecified typhus (a) Vivax malaria (benign tertian) (b) Malariae malaria (quartan)		1		1		3 6	2
	(c) Falciparum malaria (malignant tertian)	3	162	3	165 1		709	488
	(e) Other and unspecified forms of malaria		19		19		241	230
38.	(a) Schistosomiasis vesical (S. Laematobium)		11		11	1	29	10
	(b) Schistosomiasis intestinal (S. mansoni)		2		2		8)	1
39.	(d) Other and unspecified schistosomiasis							1
	. Total carried forward	55	1048	62	1103	71	8222	9469

<sup>\*</sup>This form is adapted in accordance with the "Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death. World Health Organisation, Geneva, 1948."

<sup>†</sup>i.e. the year previous to that for which the return is made.

<sup>&</sup>quot;Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

The figures in this column to be carried on to the next year's Return,

#### **IN-PATIENTS**

**OUT-PATIENTS** 

	DISEASES	†Remaining in Hospital		Yearly	Total	‡Total	¶Remaining in Hospital		
		at end of 1952	Admissions	Deaths	- Cases Treated	at end of	Male	Female	
	Brought forward	55	1048	62	1103	71	8222	9469	
10. 11.	(a) Onchocerciasis (b) Loiasis (c) Filariasis (bancrofti) (d) Other filariasis Ankylostomiasis (a) Tapeworm infestation and other		2		2		2	1	
	(b) Ascariasis		15 6		15 6		83 53	108 77	
3.	(d) Other disease due to helminths (a) Lymphogranuloma venereum (b) Granuloma inguinale, venereal (c) Other and unspecified venereal	1	1 5 1		1 6 1	2	35 33 6	40 2 1	
	(d) Foodpoisoning infection and in-	1	8		- 9		45	212	
	(e) Relapsing fever. (f) Leptospirosis icterohaemorrhagica (Weil's disease).		3 6	1	3 6	I	11 4	6 2	
	(g) Yaws (h) Chickenpox (i) Dengue	1	3 18		3 19		15 50	18 69	
	(j) Trachoma (k) Sandfly fever (l) Leishmaniasis		13		13		39 8	66 16	
	b Trypanosomiasis rhodesiensis c Other and unspecified Trypanosomiasis	1	4	1	5				

11	10	

	(n) Dermatophytosis	1	2 24		2 25		1444	14 1522
	(p) All other diseases classified as infective and parasitic	1	4		5		58	40
44.	Malignant neoplasm of buccal cavity and pharynx	1	2	1	3		4	2
45.	Malignant neoplasm of oesophagus						2	3
46.	Malignant neoplasm of stomach		3	1	3		4	4
47.	Malignant neoplasm of intestine, except rectum		3		2		3	5
48.	Malignant neoplasm of rectum		1		1		3	1
49.			1		1		3	1
	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary						4	2
51.	Malignant neoplasm of breast		5		5			10
52.			14	4	14			20
53.	Malignant neoplasm of other and un-							
-	specified parts of uterus		2	1	2		1	12
54.			1		1		1	1500000
55.	Malignant neoplasm of skin		3		3		158	208
56.	Malignant neoplasm of bone and connective tissue	1	2		3		5	2
57.	Malignant neoplasm of all other and	4	27	2	20		20	50
50	unspecified sites	1	27	2	28	1	38	50
	Leukaemia and aleukaemia		1	1	1		1	
39.	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic sys-							7
60	tem		1		1		5	1
00.	Benign neoplasms and neoplasms of unspecified nature	2	70	2	72	3	65	314
61	Nontoxic goitre	-	. 1	~	1	5	1	8
62.	Thyrotoxicosis with or without goitre		2		2		•	3
63.	Diabetes mellitus		-		~			
	(a) Beriberi		3		3		30	40
	(b) Pellagra	1	7		8		109	139
	(c) Scurvy	Î	5		6		103	123
	(d) Other deficiency states	7	55	8	62	2	484	598
65.	(a) Pernicious and other hyperchromic				-			250
	anaemias		1		1.		2	1
	Total carried forward	75	1372	84	1447	80	11140	13216

#### **IN-PATIENTS**

**OUT-PATIENTS** 

	DISEASES	† Remaining in Hospital at end of	Yearly	Total	‡Total Cases	¶Remaining in Hospital at end of	Male	Female
		1952	Admissions	Deaths	Treated	1953	Maic	Temate
	Brought forward (b) Iron deficiency anaemias (hypo-	75	1372	84	1447	80	11140	13216
	chromic)	1	15	1	16		142	503
	anaemias		22	3	22	1	146	282
6.	(a) Asthma	1	31	1	32		244	267
	crine, metabolic and blood diseases		33	1	33	2	196	258
7.	Psychoses	14	13	-	27	14	24	49
8.	Psychoneuroses and disorders of per-							1
	sonality		14		14	1	22	38
9.	Mental deficiency						9	6
0.	Vascular lesions affecting central ner-						7.0	
	vous system	1	21	5	22	1	14	15
1.	Nonmeningococcal meningitis		4	2	4		4	2
2.	Multiple sclerosis						1	
3.	Epilepsy	1	11		12		54	48
1.	Inflammatory diseases of eye		97		97	4	975	1099
5.	Cataract	1	20		21	2	54	43
).	Glaucoma	3	9		12		5	9
7.	(a) Otitis externa	1	10		11		159	145
	(b) Otitis media and mastoiditis	2	26		28		248	228
	(c) Other inflammatory diseases of ear		3		3		217	207
3.	(a) All other diseases and conditions of							
	eye	3	41		44	3 •	411	436
	(b) All other diseases of the nervous							
	system and sense organs	2	41	3 .	43		233	250
).	Rheumatic fever		35		35	3	107	141
).	Chronic rheumatic heart disease		39	11	39		49	74
	Arteriosclerotic and degenerative heart			0.5		1		
	disease	2	23	11	25		18	21

82. 83. 84. 85. 86. 87. 88. 89.	Other disease of heart Hypertension with heart disease Hypertension without mention of heart Diseases of arteries Other diseases of circulatory system Acute upper respiratory infections Influenza Lobar pneumonia Bronchopneumonia	3	36 2 4 5 63 151 204 111 228	3 3 3 3 9	42 3 4 5 66 151 204 112 229	1 1 2 2 1 1 4	163 7 28 25 130 1744 772 131 193	313 8 47 24 153 1596 1045 154 220
91. 92. 93. 94. 95. 96.	Primary atypical, other and unspecified pneumonia Acute bronchitis Bronchitis, chronic and unqualified Hypertrophy of tonsils and adenoids Empyema and abscess of lung Pleurisy	1 1 3	112 97 51 156 2 41	2	112 97 51 157 3 44	1 1	69 905 1228 331 5 78	100 855 1194 560 8 87
97. 98. 99.	<ul> <li>(a) Pneumoconiosis</li> <li>(b) All other respiratory diseases</li> <li>(a) Dental caries</li> <li>(b) All other diseases of teeth and supporting structures</li> <li>Ulcer of stomach</li> <li>Ulcer of duodenum</li> </ul>		57 16 45 2 2	1	57 16 45 2 2	2	947 848 371 16 7	590 1014 441 20 3
101. 102. 103. 104.	Gastritis and duodenitis Appendicitis Intestinal obstruction and hernia (a) Gastro-enteritis and colitis between 4 weeks and 2 years (b) Gastro-enteritis and colitis, ages 2	2	16 64 35 31	3	16 66 35 31	2 2 1	450 38 232 772	404 57 202 880
105. 106. 107.	years and over (c) Chronic enteritis and ulcerative colitis	1 1	3 11 3 108	2	3 12 3 109	3	499 119 54 9 2067	590 221 103 10 2775
108. 109. 110.	Acute nephritis Chronic, other and unspecified nephritis Infections of kidney  Total carried forward	131	8 17 24 3627	171	8 17 25 3758	1 143	152 85 102 27049	58 58 161 31288

#### **IN-PATIENTS**

**OUT-PATIENTS** 

	DISEASES	†Remaining in Hospital at end of	Yearly	Total	‡Total	¶Remaining in Hospital	Male	
		1952	Admissions	Deaths	Cases Treated	at end of 1953		Female
	Brought forward	131	3627	171	3758	-143	27049	31288
111.			7	1	7		18	6
112.	Hyperplasia of prostate	120	10		10	2	36	
113.	Diseases of breast	1	32		33			108
114.	(a) Hydrocele	1	16		17		33	
	(c) All other disease of the genito-	1	47		48			3685
	urinary system	6	390	3	200	-	561	2505
115.	Sepsis of pregnancy, childbirth and	0	390	3	396	5	561	2686
	the puerperium	3	21	3	24	1		18
116.	Toxaemias of pregnancy and the puer-	5	21	5	24	1		10
	perium	1	20		21			77
117.	Haemorrhage of pregnancy and child-							11
	birth		16		16	3		77
118.	birth	-2-						
119.	toxaemia	2	103		105	2		172
120.	Abortion with sepsis		21		21			52
120.	(a) Other complications of pregnancy, childbirth and the puerperium	0	214	7	222			
	(b) Delivery without complications	10	314 1181	7	323	5		349
121.	Infections of skin and subcutaneous	10	1101		1191	15	10	1726
12.1.	tissue	7	197	1	204	7	1256	1540
122.	Arthritis and spondylitis	1	31	1	32	2	1256 274	1548
123.	Muscular rheumatism and rheumatism,	. 1	31		32	2	2/4	299
	unspecified	• 4	118		122	1	1919	1811
124.	Osteomyelitis and periostitis	2	46		48	3	75	90
125.	Ankylosis and acquired musculoskeletal						,5	50
	deformities	1	31		32	1	24	31
126.	(a) Chronic Ulcer of Skin (including	100						
	tropical ulcer)	1	21		22	1	301	434

30

	<ul><li>(b) All other diseases of skin</li><li>(c) All other diseases of musculoskeletal</li></ul>	2	96		98	1	1207	1614
127.	system	1	101 2	1	102		155 2	173
128.	Congenital malformations of circulatory system		1		1		3	5
129.	All other congenital malformations	11	3	11	14		18	21
130.	Birth injuries	11	6	3	6		1	2
131.	Postnatal asphyxia and atelectasis		7	4	7		1	2
132.	(a) Diarrhoea of newborn (under 4							
	weeks)		9	1	9		60	81
	(b) Ophthalmia neonatorum		2		2			
	(c) Other infections of newborn		1		1		3	4
133.	Haemolytic disease of newborn		14	10	14			
134.	All other defined diseases of early				1			
	infancy	2	2	1	4	1	115	157
135.	Ill-defined diseases peculiar to early				Ac.		Total Control	1
	infancy and immaturity, unqualified		2 4	1	2		73	83
136.			4		4	-	9	14
137.		2	53	1	55	6	77	49
	(b) Observation, without need for	10	1145		1162	20	(7.1	1007
	further medical care	18	1145		1163	30	674	4997
	(c) All other ill-defined causes of mor-		69	2	69	- 1	(10	7/7
	bidity		09	2	09	1	618	767
Accid	lents, poisonings, and Violence							
	(External Cause)							100
120	A.E.	120	1	1				
138.	Motor vehicle accidents	1	14	2.	15	0	27	16
139.	Other transport accidents	14	42	1	42	8	62	15
140. 141.	Accidental poisoning	1	8		9	0	14	10
141.		1	103	1	104	9 2	581	313
	Accident caused by machinery Accident caused by fire and explosion of	2	24		26	2	40	8
145.	combustible material	2	60	5	62	1	294	261
144	Accident caused by hot substance,	4	00	3	02	1	294	201
1.77.	corrosive liquid, steam and radiation		68	4	68	5	103	102
145.	Accident caused by firearm		5	1	5	3	7	2
146.	Accidental drowning and submersion		3	1	3		1	2
	-	221	0000	225	0214		27500	
(20-	Total carried forward	224	8090	235	8314	254	35689	53154

#### BECHUANALAND PROTECTORATE.

#### RETURN OF DISEASES, INJURIES AND CAUSES OF DEATH FOR THE YEAR 1953

#### **IN-PATIENTS**

#### **OUT-PATIENTS**

	DISEASES	†Remaining in Hospital at end of	Yearly	Total	‡Total Cases	Remaining in Hospital at end of	Male	Female
	DISEASES	1952	Admissions	Deaths	Treated	1953	iviaic	T cinaic
-	Brought forward	224	8090	235	8314	253	35689	53154
147.	Foreign body entering eye and adnexa Foreign body entering other orifice Accidents caused by bites and stings of	1 1	19 32		20 33		69 77	25 79
	venomous animals and insects Other accidents caused by animals	1	35 74	3	35 75	4	145 144	118 60
148. 149.	All other accidental causes Suicide and self inflicted injury Homicide and injury purposely inflicted	2	188		194	4	1139 13	392
150.	by other persons (not in war) Injury resulting from operations of war	1	88	5	89	2	189	131
	TOTAL	236	8526	235	8751	263	37465	53967

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