

Annual medical and sanitary report / Bechuanaland Protectorate.

Contributors

Bechuanaland Protectorate. Office of the Director of Medical Services.

Publication/Creation

London : printed by Waterlow, [1957]

Persistent URL

<https://wellcomecollection.org/works/w8kv4bb3>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

AC. 167

94



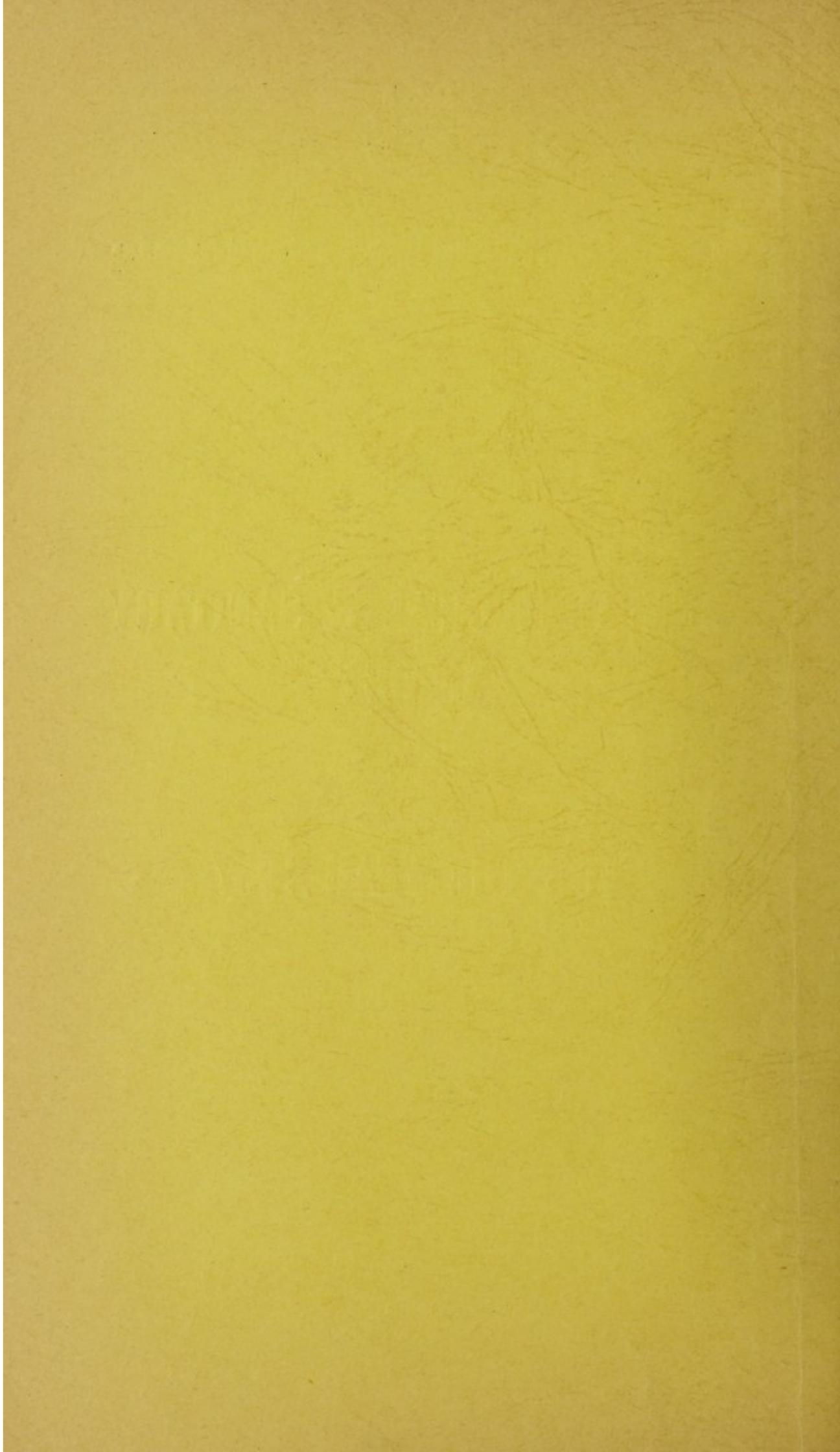
Bechuanaland Protectorate

**ANNUAL MEDICAL & SANITARY
REPORT**

FOR THE YEAR 1957



C



ERRATUM

Malaria map facing page 5.

Delete the two lines from "co-operative - - - South boundaries" and substitute the following :-

"Areas of co-operative anti-malarial field work between Bechuanaland Protectorate and the Union of South Africa during 1957 are shown by fine line shading along part of the southern boundary and by the enclosure marked 'Tuli Block' on the eastern boundary."

CHAPTER I

The first part of the book is devoted to a general survey of the subject. It begins with a discussion of the nature of the problem and the scope of the inquiry. The author then proceeds to a detailed examination of the various aspects of the problem, including its history, its present status, and its future prospects. The book is written in a clear and concise style, and is intended for the use of students and researchers alike.

ANNUAL MEDICAL AND SANITARY REPORT

FOR THE YEAR 1957

C O N T E N T S

<u>Section</u>	<u>Paragraph</u>
I. <u>ADMINISTRATIVE</u>	1 - 5
Staff	1 - 3
Visitors	4
Legislation	5
II. <u>PUBLIC HEALTH</u>	6 - 45
Staff	6 - 9
Bilharziasis	10 - 14
Diphtheria	15 - 18
Dysentery	19
Enteric Fever	20
Leprosy	21
Malaria	22 - 25
Malnutrition and Deficiency States	26 - 27
Plague	28
Poliomyelitis	29
Rabies	30
Relapsing Fever	31
Respiratory Diseases	32
Smallpox	33
Trypanosomiasis	34
Tuberculosis	35 - 36
Venereal Diseases	37
Whooping Cough	38 - 39
Miscellaneous Infectious and Contagious Diseases	40
Meat Inspection	41 - 43
Housing and Town Planning	44
New Buildings	45
III. <u>VITAL STATISTICS</u>	46 - 48
IV. <u>MATERNITY AND CHILD WELFARE</u>	49 - 50
V. <u>HOSPITALS AND DISPENSARIES</u>	51 - 63
VI. <u>GENERAL</u>	64 - 81
African Labour Recruitment	64 - 66
Prisons	67 - 71
Mental Home	72 - 74
Colonial Development and Welfare Fund Schemes	75 - 77
World Health Organization and UNICEF	78
Habit Forming Drugs	79
FINANCE	80 - 83

CONTENTS

Page	Section
1	ADMINISTRATIVE
2	Staff
3	Visitors
4	Expenditure
5	PUBLIC HEALTH
6	Boiler
7	Electricity
8	Sanitation
9	Water
10	Waste
11	Drainage
12	Public Buildings
13	Public Baths
14	Public Toilets
15	Public Drinking Water
16	Public Markets
17	Public Amusements
18	Public Libraries
19	Public Parks
20	Public Cemeteries
21	Public Hospitals
22	Public Dispensaries
23	Public Asylums
24	Public Workhouses
25	Public Prisons
26	Public Police
27	Public Fire Department
28	Public Fire Insurance
29	Public Fire Brigades
30	Public Fire Engines
31	Public Fire Trucks
32	Public Fire Ladders
33	Public Fire Hooks
34	Public Fire Axes
35	Public Fire Belongs
36	Public Fire Drills
37	Public Fire Examinations
38	Public Fire Inspections
39	Public Fire Reports
40	Public Fire Statistics
41	Public Fire Accidents
42	Public Fire Losses
43	Public Fire Damages
44	Public Fire Compensation
45	Public Fire Insurance Companies
46	Public Fire Insurance Policies
47	Public Fire Insurance Premiums
48	Public Fire Insurance Claims
49	Public Fire Insurance Settlements
50	Public Fire Insurance Statistics
51	Public Fire Insurance Accidents
52	Public Fire Insurance Losses
53	Public Fire Insurance Damages
54	Public Fire Insurance Compensation
55	Public Fire Insurance Companies
56	Public Fire Insurance Policies
57	Public Fire Insurance Premiums
58	Public Fire Insurance Claims
59	Public Fire Insurance Settlements
60	Public Fire Insurance Statistics
61	Public Fire Insurance Accidents
62	Public Fire Insurance Losses
63	Public Fire Insurance Damages
64	Public Fire Insurance Compensation
65	Public Fire Insurance Companies
66	Public Fire Insurance Policies
67	Public Fire Insurance Premiums
68	Public Fire Insurance Claims
69	Public Fire Insurance Settlements
70	Public Fire Insurance Statistics
71	Public Fire Insurance Accidents
72	Public Fire Insurance Losses
73	Public Fire Insurance Damages
74	Public Fire Insurance Compensation
75	Public Fire Insurance Companies
76	Public Fire Insurance Policies
77	Public Fire Insurance Premiums
78	Public Fire Insurance Claims
79	Public Fire Insurance Settlements
80	Public Fire Insurance Statistics
81	Public Fire Insurance Accidents
82	Public Fire Insurance Losses
83	Public Fire Insurance Damages
84	Public Fire Insurance Compensation
85	Public Fire Insurance Companies
86	Public Fire Insurance Policies
87	Public Fire Insurance Premiums
88	Public Fire Insurance Claims
89	Public Fire Insurance Settlements
90	Public Fire Insurance Statistics
91	Public Fire Insurance Accidents
92	Public Fire Insurance Losses
93	Public Fire Insurance Damages
94	Public Fire Insurance Compensation
95	Public Fire Insurance Companies
96	Public Fire Insurance Policies
97	Public Fire Insurance Premiums
98	Public Fire Insurance Claims
99	Public Fire Insurance Settlements
100	Public Fire Insurance Statistics

Digitized by the Internet Archive
in 2019 with funding from
Wellcome Library

BECHUANALAND PROTECTORATE

A N N U A L M E D I C A L

A N D

S A N I T A R Y R E P O R T

FOR THE YEAR 1957

SECTION I - ADMINISTRATION

1. STAFF

SENIOR SERVICE

	Director of Medical Services
1	Medical Officer of Health
14	Medical Officers
4	Health Inspectors
2	Field Officers
1	Matron
3	Sisters-in-Charge
12	Nursing Sisters
1	District Nursing Sister
1	Housekeeper
3	Clerks
2	Lady Clerks

JUNIOR SERVICE

9	Health Assistants
7	Clerks
27	Dispensers
1	Microscopist
1	Senior Sanitary Inspector
8	Sanitary Inspectors
1	Pupil Sanitary Inspector
4	Rodent Assistants
17	Medical Orderlies
36	Staff Nurses
39	Probationer Nurses
6	Male Nurses
4	Male Attendants (Mental Home)
3	Female Attendants (Mental Home)
10	Cooks
11	Drivers
7	Lorry Labourers
5	Gardener/Messengers
7	Labourers
78	General Duty Assistants

2. European staffing difficulties remained acute throughout the year, especially as regards Nursing Sisters. Four Sisters resigned during the year leaving, at the end of the year, four Sisters only on the fixed establishment, one of whom was on an overseas course during the whole year, the other vacancies

being../

being held by a series of locums.

3. Two Medical Officers were recruited during the year.

4. VISITORS:

Professor T. H. Davey, Liverpool Institute of Tropical Medicine.

Dr. F. Zumpt, South African Institute for Medical Research.

Mr. W. H. Brauns, South African Institute for Medical Research.

Dr. A. E. Lewis, Tsetse Fly Control Consultant.

Mr. J. Pilson, Ecologist, Tsetse Fly Control.

5. LEGISLATION:

Government Gazette No. 3011 - High Commissioner's Notice No. 103 of 1957 : Approval of Clauses of the High Commission Territories Nursing Council.

Government Gazette No. 3024 - Proclamation No. 71 of 1957 : Bechuanaland Protectorate Medical, Dental and Pharmacy (Amendment) Proclamation, 1957.

SECTION II - PUBLIC HEALTH

6. STAFF

SENIOR SERVICE

1 Medical Officer of Health
2 Health Inspectors
3 Field Officers

JUNIOR SERVICE

1 Senior Sanitary Inspector
7 Sanitary Inspectors
9 Health Assistants
1 Pupil Sanitary Inspector
4 Rodent Assistants.

7. The Medical Officer of Health covered 8,303 miles on duty during the year; the Health Inspector of the Northern Division 3,678 miles and the Health Inspector of the Southern Division 7,874 miles.

8. Two Field Officers were appointed during the year, one of whom was attached to C.D.F. Scheme D.3067 (Diphtheria/Whooping Cough Campaign). The third post remained vacant during the year.

9. The Field Officers carried out their usual plague control duties, in addition to which the Field Officer stationed at Gaberones was attached to C.D.F. Scheme D.3067 for the first four months of the year.

The first of these is the fact that the
The second is the fact that the

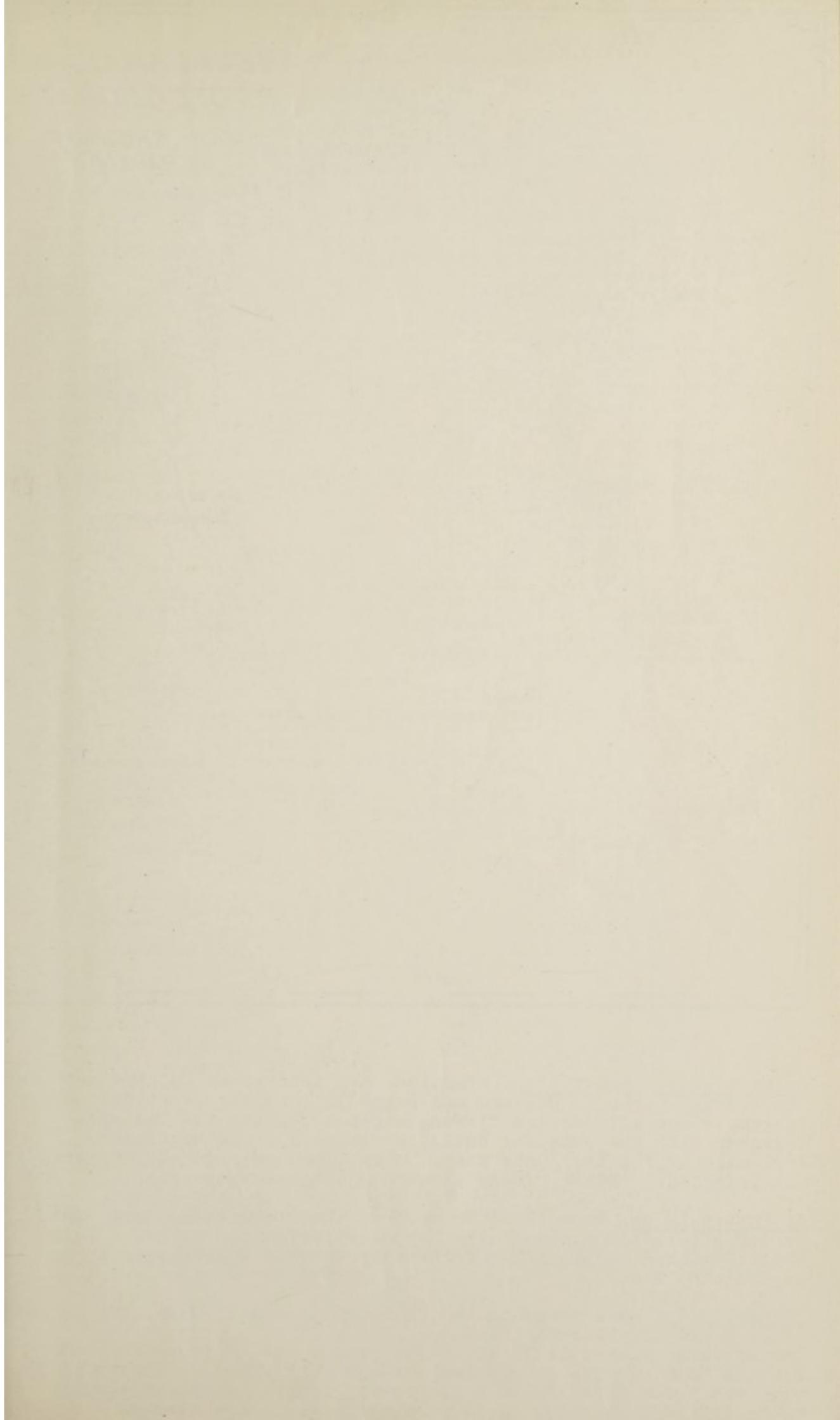
The third is the fact that the
The fourth is the fact that the
The fifth is the fact that the

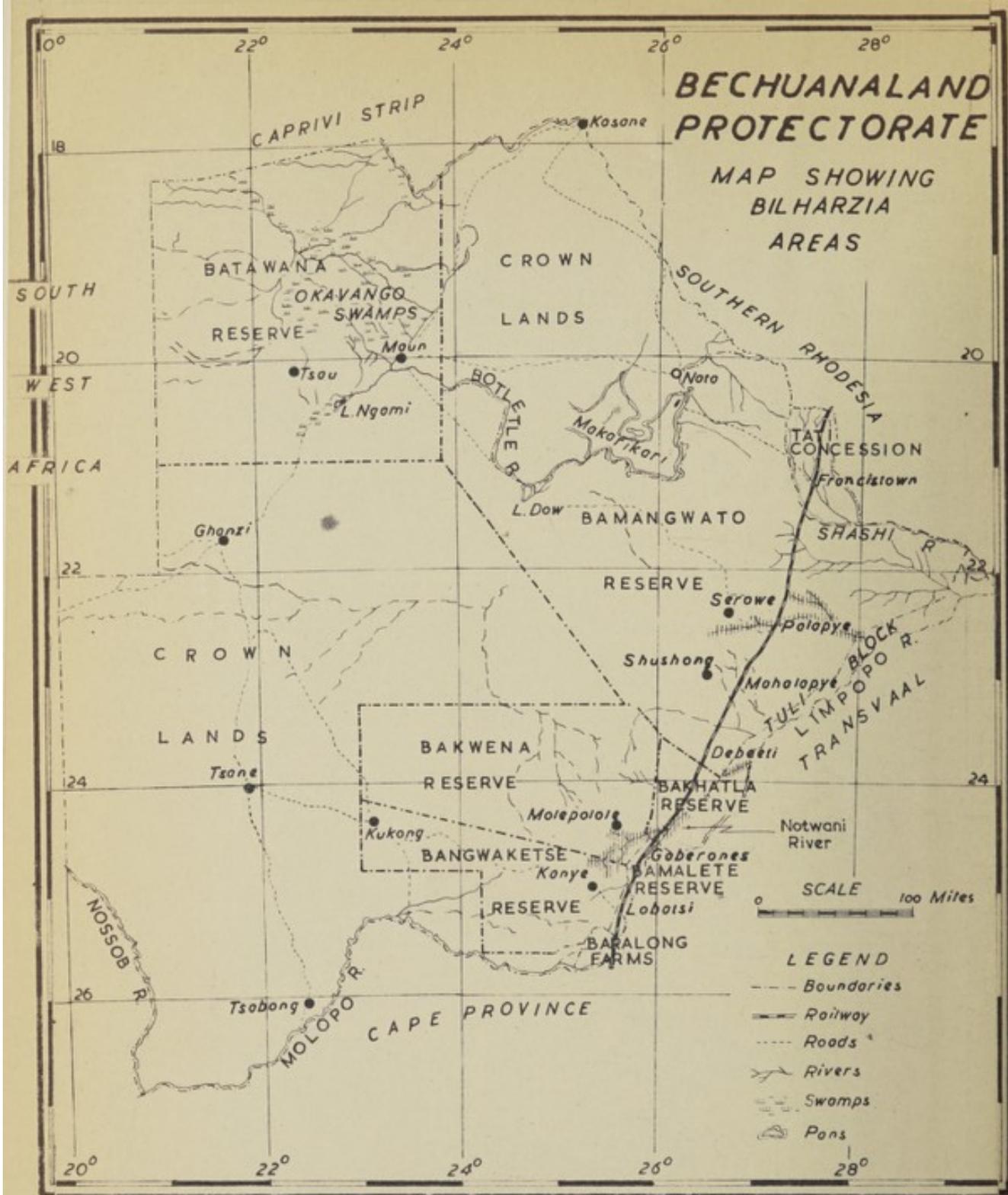
The sixth is the fact that the
The seventh is the fact that the
The eighth is the fact that the

The ninth is the fact that the
The tenth is the fact that the
The eleventh is the fact that the

The twelfth is the fact that the
The thirteenth is the fact that the
The fourteenth is the fact that the

The fifteenth is the fact that the
The sixteenth is the fact that the
The seventeenth is the fact that the





Bilharzia: S. haematobium infections are intense at Palapye and along the Notwani river in Bakwena and Bakgatla reserves (vertical shading). Suspected are all eastern flowing streams feeding the Limpopo, together with the Nata and Botletle rivers and the Mogobane irrigation works near Gaberones. The Okovango and Molopo rivers are not infected. River floods alter snail habitat yearly.

B. Physopsis sp. were found in most of the river beds where pools formed after floods and in the Mogobane irrigation works. Those cattle drink dams which become heavily charged with faeces appear to house no snails.

Planorbis sp. were found in the Okovango system at Maun, but no cases of S. Mansoni were recorded. The Okovango and Botletle and Chobe swamps and their associated streams move slowly, persisting through most years. Rivers on the east and south sides flood during rains leaving many large pools along dry beds in which snails propagate for a few months.

10. NOTES ON DISEASES OF PUBLIC HEALTH INTEREST

BILHARZIASIS. A snail survey to locate Bilharzia carriers was continued from the previous year. By the end of 1957 a large proportion of the territory had been covered. Specimens of snails collected by the field staff have been submitted to the Snail Identification Section of the Malaria and Bilharzia Research Laboratory at Salisbury, Southern Rhodesia. A better appreciation of the host-snail habitat has already resulted from this work. Workers in the Mochudi area several years ago reported Physopsis species found in the Notwani river within the village area, but this finding was not confirmed in 1956 and 1957. Many specimens of this carrier species were found, however, in stagnant river pools both upstream and downstream from the village; it has become clear that the habitat varies from year to year in this river, most probably because of the variable scouring effect of periodic floods. Physopsis and Biomphalaria spp. have been found only in certain streams, and not in such artificial dams and cattle drinking pools as are not in communication with a river bed. If this observation, which appears to be in line with the findings of Transvaal Research teams, is confirmed, control measures will be much facilitated. The Notwani river and its tributaries, together with the Lotsani river, yielded infected specimens of Bulinus (Physopsis) africana during several months. Of urine specimens taken from school children at Mogobane, Gobane and Mochudi in the Notwani riverine system, and Palapye in the Lotsani system, 30 - 40% were infected. All other rivers flowing to the east, together with the Chobe and Botletle rivers, are suspected of harbouring infected snails. The Molopo river, which seldom flows throughout its entire length, the Okavango swamps to the north west of Maun and the Thamalokane river appeared to be uninfected, although numerous specimens of Bulinus africana and Biomphalaria pfeifferi are frequently found in the latter river at Maun.

11. The survey is to be extended during 1958.

12. A list of snails so far identified at Salisbury is given in Annexure "A".

13. Cases reported from hospitals and dispensaries number 224 in 1957. Of these 5 were admitted to hospital. The distribution is as follows :-

TABLE I

Francistown	7
Gaberones	54
Kanye	2
Mahalapye	12
Maun	4
Mochudi	75
Molepolole	7
Serowe	<u>63</u>
	<u>224</u>

14. As emphasised in the 1956 report, the results of special urine tests performed on groups of school children at various villages makes it likely that the real incidence of Schistosomal infection is greater than the above figures would indicate.

15. DIPHTHERIA. The number of cases was 42. There were no extensive outbreaks. The cases were distributed thus :-

TABLE II../

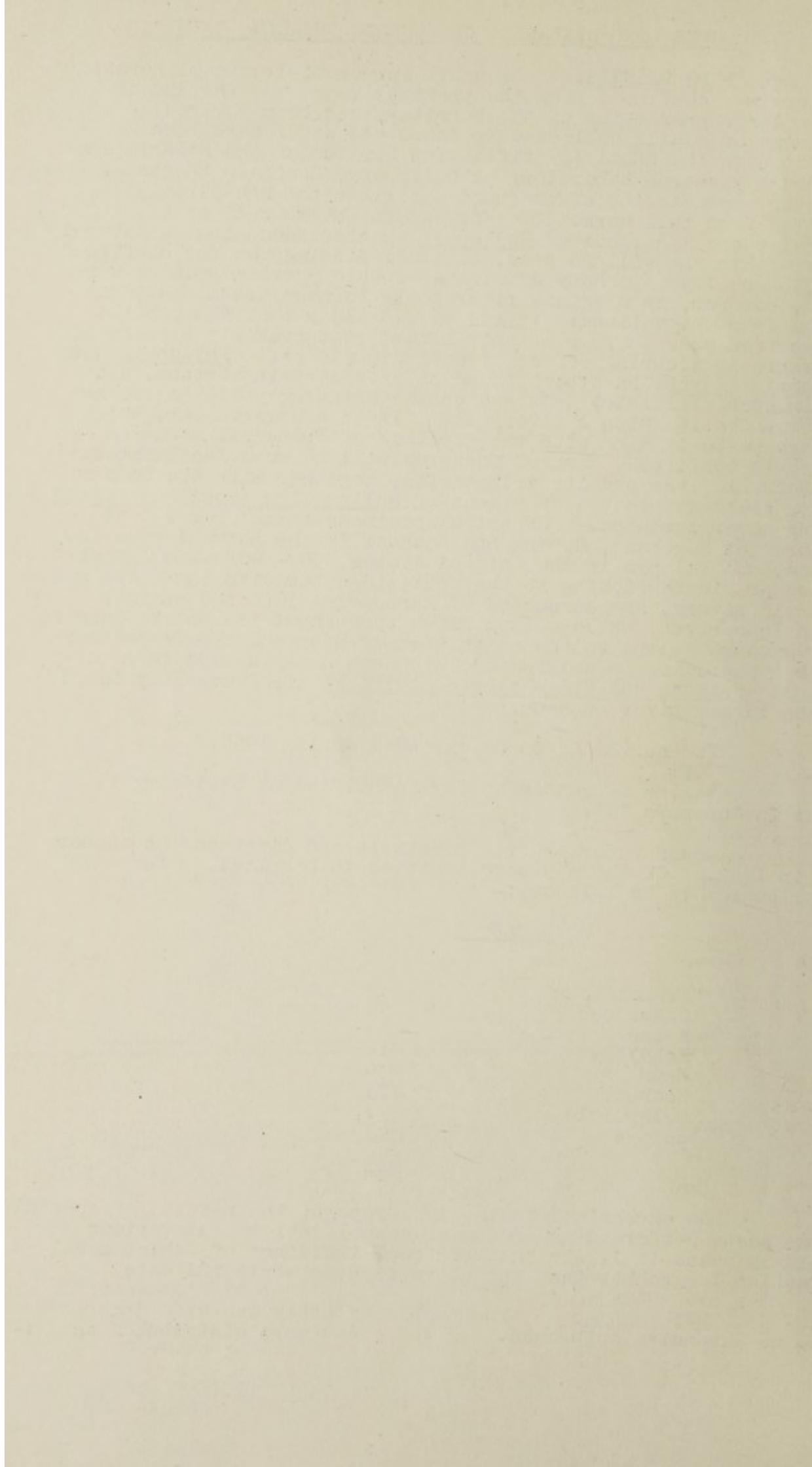


TABLE II

Francistown	13
Kanye	5
Lobatsi	9
Mahalapye	1
Maun	1
Ramoutsa	2
Molepolole	3
Serowe	8
	<u>42</u>

16. The UNICEF and C.D. & W.F.-assisted mass campaign to immunise all Protectorate children against diphtheria failed in its object owing to lack of response from the people. Their seasonal migration to the arable lands from the villages caused so much defection in attendance that, after the initial dose, attendance fell to negligible numbers for later doses. After a gruelling and costly effort to reach all the children in the areas dealt with, the campaign had to be abandoned.

17. Government hospitals and dispensaries are now pressing their local population to accept the inoculation in an alternative effort to create blocks of immune persons in the more densely populated areas. The campaign is being continued, therefore, on a smaller scale without outside help, at a speed of action acceptable to the inhabitants and in areas which offer satisfactory chances of maintaining the desired standard of immunity in after years.

18. It is hoped that the UNICEF equipment issued for this campaign against diphtheria and whooping cough will be reallocated for use on current public health work and surveys operated by the territorial medical staff with its own finances.

19. DYSENTERY. One thousand, seven hundred and sixty three cases were notified, of which 782 were bacillary, 10 were amoebic and 76 unspecified. 3 deaths were recorded. It is to be emphasised that owing to the absence of laboratory facilities, differential diagnosis is difficult.

20. ENTERIC FEVER. Two cases only were notified. The low incidence of fevers of the enteric group continues to be remarkable in view of the almost complete lack of sanitary measures in the greater part of the reserves.

21. LEPROSY. Thirty four cases were reported. Many of these cases are, it is believed, long standing infections. Observations in Ngamiland and Chobe river areas indicate a possibly higher rate of infection amongst the fisher folk in those swamp areas than elsewhere in the Protectorate, but the incidence is not believed to be serious.

22. MALARIA. One thousand, seven hundred and ninety three cases were reported. Of these, 1,172 were in Ngamiland and Chobe areas.

23. Malaria control has received increasing attention, and close co-operation with surrounding countries has been maintained. In October an inter-territorial meeting was convened at Pietersburg by the Chief Health Officer of the Northern Transvaal. The meeting was attended by the Director of Medical Services and Medical Officer of Health of this territory, and by the Director of the Malaria Research Laboratory, Salisbury, Southern Rhodesia.

24. The South African Institute for Medical Research has reported../

1	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
---	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.

Government hospitals and laboratories are now providing facilities for the study of infectious diseases. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.

It is noted that the number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.

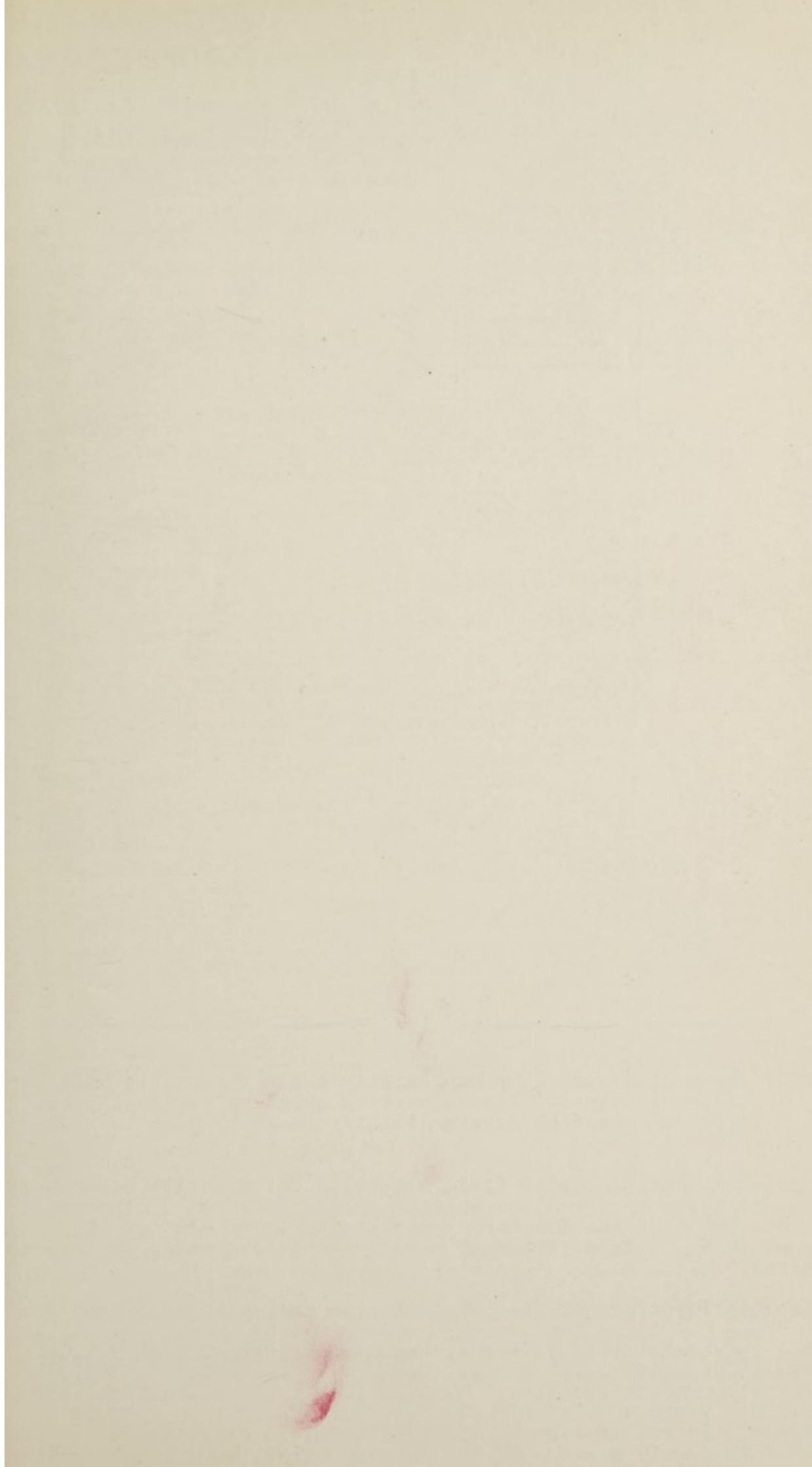
One thousand seven hundred and sixty three cases were reported in the United States during the period from 1940 to 1960. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.

Two cases only were reported in the United States during the period from 1940 to 1960. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.

Thirty four cases were reported in the United States during the period from 1940 to 1960. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.

One hundred and thirty three cases were reported in the United States during the period from 1940 to 1960. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.

The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table. The number of cases reported in the United States during the period from 1940 to 1960 is shown in the following table.





LEGEND: Areas of Malarial Hypoendemicity shown by east to west bars.
 Areas of Malarial Mesoendemicity shown by vertical bars.
 Areas of Malarial Hyperendemicity shown by slanting bars.

Co-operative anti-malarial field work with Union Health Department units are shown by fine line shading on the East and South boundaries. Unshaded parts of the Kalahari semi-desert, lying West of the Bamangwato and Bakwena reserves record occasional cases of imported malaria.

Factors influencing malarial distribution and malaria control are :-

Area in square miles of the Bechuanaland Protectorate	275,000
Population total	300,000
Occupation of the people	Pastoral 95%
Altitude averages	3,000 ft.
Rainfall yearly average of the South Western semi-desert	5-6 ins.
Rainfall yearly average of the Eastern areas	25 ins.
Absence of flowing streams or permanent lakes in the south west.	
Inland drainage to swamps of the Okovango and Nata rivers in the northern area, together with swamps along the Chobe river on both	

reported upon blood smears taken by the field survey team. These records, combined with additional data supplied by reports from hospitals, health centres and dispensaries, have provided the source from which a preliminary assessment of the distribution of malaria in the territory has been made. (See Map "B")

25. It appears that the hyperendemic areas of the Okavango, Maun, Chobe and Kachikau areas provide the centres from which the majority of the cases in the western and central areas of the territory are derived.

26. MALNUTRITION AND DEFICIENCY STATES. The number of cases recorded was three thousand, five hundred and thirty. Of these, 404 were diagnosed as beri-beri, 289 as pellagra, 348 as scurvy and 25 as other deficiency states.

27. The rainy season of 1956/57 was a poor one, and in the Ghanzi area famine relief measures were applied during the winter months.

28. PLAGUE. No cases of plague were recorded. Routine control surveys were carried out during the year.

29. POLIOMYELITIS. Eight cases were reported with two deaths. Inoculations, with vaccine obtained both from the Union and Great Britain in limited quantities, were carried out, at request, throughout the year.

30. RABIES. No cases were reported.

31. RELAPSING FEVER. Nine cases were diagnosed.

32. RESPIRATORY DISEASES. The total number recorded was twenty two thousand, two hundred and fifty five. Of these, 1,856 were diagnosed as pneumonias, of which 575 were lobar pneumonia, 1,162 broncho-pneumonia and 121 atypical and unspecified forms. The total number of deaths from pneumonia of all kinds was 23 or 1.3%. Cases diagnosed as influenza numbered 2,783

33. SMALLPOX. An epidemic broke out in the Kasane area in October. Sixty five cases with 3 deaths were recorded. The source of the infection is believed to have been extra-territorial. Owing to the prevalence of floods a mass vaccination campaign was prolonged into 1958.

34. TRYPANOSOMIASIS. Nineteen cases were reported from Ngamiland : all were infected with Trypanosoma rhodesiense. Most of these cases were from the Tsau - Nokaneng area. All were admitted to hospital and made good progress with appropriate treatment. Routine blood smears were taken from employees of the Tsetse Fly Control staff during the year. Only one case of Trypanosomiasis was detected amongst these workers.

35. TUBERCULOSIS. One thousand, five hundred and fifty five cases were recorded during the year of which respiratory tuberculosis accounted for 939, tuberculosis of bones and joints for 86, intestinal tuberculosis for 130, tuberculosis of the central nervous system for 10 and other forms for 390. There were 44 deaths.

36. Further plans for the control of tuberculosis awaited the receipt of the Tuberculosis Survey Team report which had not been received by the end of the year.

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several paragraphs and includes some underlined sections. The overall appearance is that of a document page with very low contrast and significant fading.

37. VENEREAL DISEASES. The total cases recorded were fourteen thousand and eighty of which 14,043 were due to syphilis and gonorrhoea. The remaining 73 were comprised of 3 cases of lymphogranuloma, 2 cases of granuloma inguinale and 14 cases of unspecified venereal disease.

38. WHOOPING COUGH. One thousand, five hundred and forty cases were reported. Of this number, 532 occurred in the Mahalapye area and 390 in the Serowe area.

39. With regard to the prophylactic campaign, the same remarks apply as in paragraph 16 (Diphtheria).

40. MISCELLANEOUS INFECTIOUS AND CONTAGIOUS DISEASES.

The recorded incidence of these diseases is as follows:-

Meningitis (Cerebro-spinal)	21
Measles	1,196
Varicella	161

41. MEAT INSPECTION. Meat inspection and slaughter control is exercised at present in four of the large settlements only.

42. Meat inspection at the Colonial Development Corporation export abattoir at Lobatsi, and the Lobatsi village abattoir where the kill is for local consumption, is undertaken by the Veterinary Department. At other centres this duty devolves upon the Health Inspector and a Sanitary Inspector.

43. The village abattoirs at Francistown and Lobatsi are owned and maintained by Government. At other villages each licensed butcher has his own slaughter pole.

44. HOUSING AND TOWN PLANNING. All plans for new buildings are examined by Medical Headquarters in co-operation with the Architect on the staff of the Public Works Department.

45. NEW BUILDINGS. The following were completed or begun during the year:-

- (a) New offices for the Health Inspector, Lobatsi
- (b) Lecture room, Lobatsi
- (c) Matron's office at the Athlone Hospital, Lobatsi
- (d) Addition to the office of the Health Inspector, Francistown.
- (e) Dispensary, Maun Hospital.

SECTION III - VITAL STATISTICS

46. There is no compulsory registration of African births and deaths.

47. Figures for the 1956 census are not yet available for Africans. Europeans, Asiatic and Coloured are given below:-

TABLE III

Europeans	3,174
Africans	292,755 x
Asiatic	248
Coloured	676
<hr/>	
Total population:	<u>296,853</u>

x 1946 census

The .../

The mean population density is just over 1 per square mile.

European births and deaths TABLE IV

European births	110
Births per 1,000	36
European deaths over 1 year of age	19
Deaths per 1,000	7
Deaths under 1 year of age	7

Causes of European Deaths

TABLE V

Accident	4
Arteriosclerosis	2
Assault	1
Cancer	1
Cardiac Failure	6
Cerebral Haemorrhage	2
Coronary Thrombosis	1
Enteritis	1
Gastritis	1
Hydrocephalus	1
Malaria	1
Neo-natal death	1
Pneumonia	1
Poliomyelitis	1
Snake bite	1
Suicide	1

26

48.² ILLNESS OF OFFICIALS. Causes of morbidity amongst Senior and Junior Service officers who were off duty for more than 14 days are given in Table VI.

TABLE VI

SENIOR SERVICE

Appendicitis	1
Cardiac Failure	1
Fractures	2
Haemorrhoids	2
Infectious Hepatitis	1
Influenzal Infection	1
Inguinal hernia	1
Malaria	1
Mastoiditis	1
Neurosis	2
Ovarian Cyst	1

Fibromata/

... population density is just over 1 per square mile.

TABLE IV

100	European deaths over
35	1 year of age
15	Deaths over 1 year
7	of age

TABLE V

1	Switzerland
1	Denmark
1	Norway
1	Sweden
1	Finland
1	Poland
1	Czechoslovakia
1	Yugoslavia
1	Soviet Union
1	Germany
1	France
1	Italy
1	Spain
1	Portugal
1	Greece
1	Turkey
1	Iran
1	India
1	China
1	Japan
1	USA

... cases of ... and ... who were all ... in Table VI.

TABLE VI

1	Switzerland
1	Denmark
1	Norway
1	Sweden
1	Finland
1	Poland
1	Czechoslovakia
1	Yugoslavia
1	Soviet Union
1	Germany
1	France
1	Italy
1	Spain
1	Portugal
1	Greece
1	Turkey
1	Iran
1	India
1	China
1	Japan
1	USA

...

Fibromata	1
Pertussis	1
Verrucae	1

JUNIOR SERVICE

Accident	1
Appendicitis	3
Arthritis	1
Bronchiectasis	1
Bronchitis	1
Carcinoma	1
Cardiac Failure	1
Cataract	1
Diphtheria	1
Fractures	3
Gastritis	1
Hypertension	1
Miscarriage	1
Pleurisy	1
Tuberculosis	1

There was one African death.

SECTION IV - MATERNITY AND CHILD WELFARE

49. MATERNITY AND CHILD WELFARE. Two thousand, eight hundred and ninety six normal confinements were recorded at the various centres. A further 396 cases were admitted for complication, not including abortion or miscarriage. Two hundred cases of abortion or miscarriage were admitted.

50. Ante-natal attendances number fifteen thousand, six hundred and sixty five and post natal 1,236. Attendances at Child Welfare Clinics number 2,048.

SECTION V - HOSPITALS AND DISPENSARIES

51. OUT-PATIENTS. The number of initial attendances was one hundred and forty seven thousand, one hundred and fifteen with 290,389 subsequent attendances. Total - 437,504.

52. IN-PATIENTS. Admissions numbered twelve thousand, four hundred and seventy six with 512 remaining in hospital at the end of 195. The total number treated was 12,988.

53. At the end of the year the number of hospital beds available in the Territory, both Government and Mission, was six hundred and eighty. Of these 29 were European, 539 African, with 112 cots. This gives a bed population ratio of approximately 1 : 490. This increase is mainly due to extra accommodation at the Mission hospitals.

54. The distribution of beds and patients is given in Table VII :

TABLE VII

	<u>BEDS</u>			<u>PATIENTS</u>	
	<u>European</u>	<u>African</u>	<u>Cots</u>	<u>Admissions</u>	<u>Deaths.</u>
Francistown	5	67	15	2,995	94

Gaberones /

1950
1951
1952

TABLE I

Accidents
Amputations
Asphyxiation
Blunt force trauma
Burns
Choking
Drowning
Electrocution
Fire
Hanging
Injury
Poisoning
Suffocation
Terrorism
Unintentional

There are one million deaths.

TABLE II - MORTALITY AND MORBIDITY

TABLE II - MORTALITY AND MORBIDITY
The following table shows the number of deaths and the number of persons injured in the United States in 1950, 1951, and 1952. The total number of deaths in 1950 was 1,000,000, in 1951 was 1,050,000, and in 1952 was 1,100,000. The total number of persons injured in 1950 was 10,000,000, in 1951 was 10,500,000, and in 1952 was 11,000,000.

TABLE III - MORTALITY AND MORBIDITY

TABLE III - MORTALITY AND MORBIDITY
The following table shows the number of deaths and the number of persons injured in the United States in 1950, 1951, and 1952. The total number of deaths in 1950 was 1,000,000, in 1951 was 1,050,000, and in 1952 was 1,100,000. The total number of persons injured in 1950 was 10,000,000, in 1951 was 10,500,000, and in 1952 was 11,000,000.

TABLE IV

Year	Deaths	Injured
1950	1,000,000	10,000,000
1951	1,050,000	10,500,000
1952	1,100,000	11,000,000

	European	African	Cots	Admission	Deaths
aberones	-	8	5	438	21
anye (S.D.A.)	2	74	6	1,418	25
anye (Moffat)	1	32	7	640	14
hale	-	5	-	-	-
obatsi (including Mental Home)	11	117	15	1,272	16
ahalapye	-	13	1	379	14
aan	5	32	4	675	23
aan Maternity Centre	-	12	10	128	1
ochudi (D.R.C.)	-	32	8	366	13
olepolole (U.F.C.)	-	49	10	853	9
amoutsa (Hermanns- burg Mission)	-	13	-	90	-
erowe	5	85	31	3,222	105
	<u>29</u>	<u>539</u>	<u>112</u>	<u>12,476</u>	<u>335</u>

5. HEALTH CENTRES AND DISPENSARIES. The Health Centres at aberones and Mahalapye are now fully established. The number of out-patient attendances during the year was 10,082 and 15,196 respectively.

6. Dispensaries are established at the following centres and are visited regularly by a Medical Officer :-

Dikgatlong	Nokaneng
Gabane	Palapye
Ghanzi	Pilikwe
Kalamari	Rakops
Kalkfontein	Ramoutsa
Kasane	Sefhare
Kumukhuane	Sehitwa
Machaneng	Shakawe
Moeng	Tsau

7. The following centres are visited regularly by a dispenser and, whenever possible, by a Medical Officer :-

Nojane, Kuli and Karakobis from Kalkfontein ;
Kachikau, Satau and Panda-ma-Tenka from Kasane ;
Sepopa and Seronga from Shakawe.

8. The following centres are now visited by Mission doctors :-

Digawana	(3)	Mabule	(3)
Ga-Thamaga	(4)	Mmathete	(3)
Hukunsi	(5)	Mmangodi	(4)
Kakia	(5)	Moshupa	(1)
Kang	(5)	Mogemani	(3)
Kukong	(5)	Moshaneng	(1)
Lehututu	(5)	Ntswelatsu	(4)
Letlakeng	(4)	Pitsani-Molopo	(4)
Lokwabe	(5)	Ranaka	(3)
Magweraapitsi	(3)	Tshane	(4)
Molopojani	(3)	Tshidilamolomo	(3)
Manyana	(3)		

- (1) Weekly visits
- (3) Every three weeks
- (4) Monthly visits
- (5) Every two months.

Year	Number of cases	Number of deaths	Number of recoveries
1911	1,470	117	1,353
1912	1,470	117	1,353
1913	1,470	117	1,353
1914	1,470	117	1,353
1915	1,470	117	1,353
1916	1,470	117	1,353
1917	1,470	117	1,353
1918	1,470	117	1,353
1919	1,470	117	1,353
1920	1,470	117	1,353
1921	1,470	117	1,353
1922	1,470	117	1,353
1923	1,470	117	1,353
1924	1,470	117	1,353
1925	1,470	117	1,353
1926	1,470	117	1,353
1927	1,470	117	1,353
1928	1,470	117	1,353
1929	1,470	117	1,353
1930	1,470	117	1,353
1931	1,470	117	1,353
1932	1,470	117	1,353
1933	1,470	117	1,353
1934	1,470	117	1,353
1935	1,470	117	1,353
1936	1,470	117	1,353
1937	1,470	117	1,353
1938	1,470	117	1,353
1939	1,470	117	1,353
1940	1,470	117	1,353
1941	1,470	117	1,353
1942	1,470	117	1,353
1943	1,470	117	1,353
1944	1,470	117	1,353
1945	1,470	117	1,353
1946	1,470	117	1,353
1947	1,470	117	1,353
1948	1,470	117	1,353
1949	1,470	117	1,353
1950	1,470	117	1,353
1951	1,470	117	1,353
1952	1,470	117	1,353
1953	1,470	117	1,353
1954	1,470	117	1,353
1955	1,470	117	1,353
1956	1,470	117	1,353
1957	1,470	117	1,353
1958	1,470	117	1,353
1959	1,470	117	1,353
1960	1,470	117	1,353
1961	1,470	117	1,353
1962	1,470	117	1,353
1963	1,470	117	1,353
1964	1,470	117	1,353
1965	1,470	117	1,353
1966	1,470	117	1,353
1967	1,470	117	1,353
1968	1,470	117	1,353
1969	1,470	117	1,353
1970	1,470	117	1,353
1971	1,470	117	1,353
1972	1,470	117	1,353
1973	1,470	117	1,353
1974	1,470	117	1,353
1975	1,470	117	1,353
1976	1,470	117	1,353
1977	1,470	117	1,353
1978	1,470	117	1,353
1979	1,470	117	1,353
1980	1,470	117	1,353
1981	1,470	117	1,353
1982	1,470	117	1,353
1983	1,470	117	1,353
1984	1,470	117	1,353
1985	1,470	117	1,353
1986	1,470	117	1,353
1987	1,470	117	1,353
1988	1,470	117	1,353
1989	1,470	117	1,353
1990	1,470	117	1,353
1991	1,470	117	1,353
1992	1,470	117	1,353
1993	1,470	117	1,353
1994	1,470	117	1,353
1995	1,470	117	1,353
1996	1,470	117	1,353
1997	1,470	117	1,353
1998	1,470	117	1,353
1999	1,470	117	1,353
2000	1,470	117	1,353

The following table shows the number of cases of diphtheria reported in the United States during the period 1911-1920. The total number of cases reported during this period was 14,700. The number of deaths reported during this period was 1,353. The number of recoveries reported during this period was 13,347.

The following table shows the number of cases of diphtheria reported in the United States during the period 1921-1930. The total number of cases reported during this period was 14,700. The number of deaths reported during this period was 1,353. The number of recoveries reported during this period was 13,347.

Year	Number of cases	Number of deaths	Number of recoveries
1921	1,470	117	1,353
1922	1,470	117	1,353
1923	1,470	117	1,353
1924	1,470	117	1,353
1925	1,470	117	1,353
1926	1,470	117	1,353
1927	1,470	117	1,353
1928	1,470	117	1,353
1929	1,470	117	1,353
1930	1,470	117	1,353

The following table shows the number of cases of diphtheria reported in the United States during the period 1931-1940. The total number of cases reported during this period was 14,700. The number of deaths reported during this period was 1,353. The number of recoveries reported during this period was 13,347.

The following table shows the number of cases of diphtheria reported in the United States during the period 1941-1950. The total number of cases reported during this period was 14,700. The number of deaths reported during this period was 1,353. The number of recoveries reported during this period was 13,347.

Year	Number of cases	Number of deaths	Number of recoveries
1941	1,470	117	1,353
1942	1,470	117	1,353
1943	1,470	117	1,353
1944	1,470	117	1,353
1945	1,470	117	1,353
1946	1,470	117	1,353
1947	1,470	117	1,353
1948	1,470	117	1,353
1949	1,470	117	1,353
1950	1,470	117	1,353

The following table shows the number of cases of diphtheria reported in the United States during the period 1951-1960. The total number of cases reported during this period was 14,700. The number of deaths reported during this period was 1,353. The number of recoveries reported during this period was 13,347.

59. The Kalahari area was visited six times during the year by one of the medical missionaries from the Seventh Day Adventist Mission at Kanye. Besides the established visits to Tsane, Kakia and Kukong, extensions have been made to Hukuntsi, Lokwabi and Kang. During these visits the Mission Medical Officer carried out a large number of vaccinations using lymph provided gratis by this department.

60. The number of centres where medical treatment can be obtained, even though periodically, is now 53 as against 42 in 1956 and 36 in 1955.

61. NURSING EXAMINATIONS

TABLE VIII

NURSING EXAMINATION RESULTS

	<u>Number of Candidates</u>	<u>Passed</u>	<u>Failed</u>
First Year General Medical and Surgical	51	44	7
Second Year General Medical and Surgical	21	15	6
Third Year General Medical and Surgical	15	10	5
Final Midwifery	9	7	2

There were ten passes with merit.

62. GENERAL. The total number of operations performed was two thousand, five hundred and thirty three, of which 487 were reckoned as major. 2,749 x-ray examinations were conducted.

63. MEDICAL EXAMINATIONS ON FIRST APPOINTMENT. Two hundred and eighty two examinations were made, with x-ray report.

SECTION VI - GENERAL

64. AFRICAN LABOUR RECRUITMENT. The total number of recruits examined and attested in the territory was 20,360 who were examined at the centres shown in Table IX. On these, 1,381 were transported by air lift.

65. In addition 47,205 recruits from Barotseland and Nyasaland were transferred by air lift to Francistown, the total number of miles flown being 1,680,591 without accident.

The Federal area was visited six times during the
 by one of the medical inspectors from the
 District of Columbia. Besides the scheduled visits
 to the Federal area, extensive work has been done at
 the National Health Center. During these visits the
 and a large number of examinations were conducted
 by the inspectors.

The number of centers where medical inspectors
 were present is shown in the following table for
 the year 1957.

TABLE VIII

TABLE VIII

TABLE VIII

Center	Number of Examinations	Number of Examinations	Total
Washington, D.C.	11	11	22
Atlanta, Ga.	12	12	24
San Francisco, Calif.	10	10	20
St. Louis, Mo.	7	7	14

The total number of examinations conducted
 at the centers listed in the above table is 70.

The total number of operations performed
 at the centers listed in the above table is 117.
 The X-ray examinations were conducted
 at the centers listed in the above table.

TABLE VIII - (Continued)

TABLE VIII

The total number of
 examinations conducted in the territory was 1,381.
 The total number of operations performed was 1,381.
 The total number of X-ray examinations was 1,381.

The total number of
 examinations conducted in the territory was 1,381.
 The total number of operations performed was 1,381.
 The total number of X-ray examinations was 1,381.

TABLE IX

	<u>Number examined</u>	<u>Number of rejects</u>
Francistown	1,142	47
Gaberones	1,811	50
Kanye	1,891	52
Lobatsi	2,872	30
Mahalapye	1,769	48
Maun	3,569	80
Mochudi	318	--
Molepolole	3,169	80
Serowe & Palapye	3,819	133
	<u>20,360</u>	<u>520</u>

66. Rejected candidates comprised 2.5% of the total number examined. The main causes of rejection were chronic affections, extreme youth and poor physique.

67. PRISONS. Regular weekly gaol inspections are held at all centres where a Government Medical Officer is stationed. A sick parade is held at the same time, but prisoners may report for medical attention whenever there is urgent need.

68. Rations were provided according to the diet prescribed in 1952 and no complaints were received.

69. For many years Lobatsi was the only prison with water borne sanitation but at the end of 1957 such sanitation was being installed at Maun gaol.

70. Two prisoners died in hospital during the year. The only case of notifiable disease reported was one of pulmonary tuberculosis which was removed to hospital.

71. In general, the health of the prison population was good. The daily ratio of number of prisoners in hospital to the total prison population was less than 1%.

72. MENTAL HOME. The Lobatsi Mental Home maintained its full complement of patients (24) throughout the year. One patient was admitted during the year and one discharged.

73. There were no deaths and no transfers to Ingutsheni Mental Hospital.

74. The general health of the patients was good, and the usual facilities for out-door occupations were available throughout the year.

75. COLONIAL DEVELOPMENT AND WELFARE FUND SCHEMES.

Scheme D.1037 (Extra-venereal Treponematosi) was concluded.

76. Scheme D.2835 (Diphtheria and Whooping Cough Prophylaxis) was abandoned.

77. Scheme D.3067 (Development of Medical Services) was continued during the year. Towards the end of the year a lecture room and an office for the matron were erected at Lobatsi and new store accommodation for the Health Inspectors at Lobatsi and Francistown. X-ray equipment was purchased for Gaberones and Mahalapye Health Centres.

Number of cases

47	1,248	Pennington
50	1,811	Shelton
52	1,881	Worcester
53	2,822	Worcester
54	1,788	Worcester
55	3,389	Worcester
56	113	Worcester
57	3,163	Worcester
58	1,819	Worcester & Palmer
59	20,750	

Rejected patients comprised 2.5% of the total population. The main cause of rejection was physical conditions, excess youth and poor physique.

Regular weekly visit inspections are held in all centers where a Government Medical Officer is stationed. All records are held at one time, but prisoners may report to medical attention whenever there is urgent need.

Patients were provided according to the class prescribed in 1955 and no complaints were received.

The first year of the trial was the only year with a high percentage of patients who were rejected at the time of their admission to the hospital.

The percentage of patients who were rejected during the trial was 2.5%. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

In general, the health of the prison population was good. The high rate of rejection of prisoners is probably due to the fact that the trial was held in 1955.

The hospital had a high percentage of patients who were rejected during the trial. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

There were no deaths and no transfers to hospital during the trial. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

The general health of the patients was good, and a high percentage of patients were rejected during the trial. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

There were no deaths and no transfers to hospital during the trial. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

There were no deaths and no transfers to hospital during the trial. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

There were no deaths and no transfers to hospital during the trial. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

There were no deaths and no transfers to hospital during the trial. The main cause of rejection was physical conditions which were reported as being unsuitable for hospital treatment.

78. WORLD HEALTH ORGANIZATION AND UNICEF.

Schemes in progress and completed during the year were :-

- (a) Extra-Venereal Treponematosi s - World Health Organization Scheme Bechuanaland 1.

This was concluded in October; the total number of people inoculated during the second part of the scheme was 230,446.

- (b) Tsetse-Fly Control - Bechuanaland 2.

The scheme was continued : a consultant visited the territory during the year.

- (c) Tuberculosis Control - Bechuanaland 3.

At the end of 1957 decision in the project was still held up pending the receipt of a report from the Tuberculosis Assessment Team who visited the territory during 1956.

- (d) Diphtheria/Whooping Cough Immunization - Bechuanaland 4.

~~These~~ ^{this} scheme was abandoned (paragraph 16).

- (e) Health Education and Development of Public Health Services - Bechuanaland 5.

After further discussion in Mafeking, action was delayed pending further investigations as to the financial implications for Government.

79. HABIT FORMING DRUGS. Six permits were issued during the year for morphine only - 114.4 grammes.

80. FINANCE. Total revenue from Government hospital and dispensary fees was £11,712. 1. 6d. made up as follows :-

TABLE X

Francistown	£ 2,345. 7. 9.
Gaberones	1,564. 12. 9.
Lobatsi	1,236. 14. 9.
Mafeking	19. 8. 0.
Mahalapye	1,783. 9. 6.
Maun	2,030. 14. 10.
Serowe	2,731. 13. 11.
TOTAL:	<u>£11,712. 1. 6.</u>

This represented an increase of £1,804. 3. 10d. over the revenue for 1956.

81. The total ordinary expenditure of the department for the financial year ended 31st March, 1958 was :-

Personal./

WORLD HEALTH ORGANIZATION AND UNICEF

...in progress and completed during the year

(a) Inter-Venual Responsibility - World Health Organization Admin. Department 1

This was completed in October, the total number of people hospitalized during the period was 2,345.

(b) Inter-Venual Control - Department 2

The scheme was completed in a satisfactory manner during the year.

(c) Inter-Venual Control - Department 3

At the end of 1951, decisions in the interim were still held up pending the receipt of a report from the Inter-Venual Committee. This was received on 15th October 1951.

(d) Inter-Venual Control - Department 4

This scheme was completed in a satisfactory manner.

(e) Health Services and Development of Public Health Services - Department 5

Further attention is being given to the development of public health services in the various districts and for Government.

Major projects are: Six districts were visited during the year.

Summary: Total revenue from Government hospitals during the year was £11,111, 10s, 6d, which is as follows:-

TABLE 4

Particulars	1951	1950
General	1,200	1,100
Special	1,100	1,000
Maternity	1,000	900
Physiotherapy	900	800
Other	800	700
Total	5,000	4,500

...of the year was £11,111, 10s, 6d, which is as follows:-

The total revenue from Government hospitals during the year was £11,111, 10s, 6d, which is as follows:-

TABLE XI

Personal Emoluments	£ 72,024
Upkeep of Hospitals and Dispensaries	31,132
Maintenance of Lunatics	3,116
Pathological Investigations	1,000
Grants to Missions and Union Hospitals	2,311
Public Health Measures	5,303
Sanitation	2,411
Office and Incidental Expenses	455
Travelling and Transport	10,898
Bicycles	91
Contribution to C.D. & W. Scheme D.3067 - Development of Medical Services	<u>10,099</u>
TOTAL:	<u>£138,840</u>

82. The total ordinary revenue of the Bechuanaland Protectorate during the period 1957/58 was £1,447,436. The proportion of ordinary medical expenditure to ordinary revenue of the Protectorate was 9.6%.

83. The total ordinary expenditure of the Bechuanaland Protectorate during the period 1957/58 was £1,633,717. The proportion of ordinary medical expenditure to ordinary expenditure of the Protectorate was 8.5%.

84. In conclusion, the ready assistance and loyalty of the staff of the department is gratefully acknowledged.

B. T. SQUIRES

DIRECTOR OF MEDICAL SERVICES

MAFEKING.
November, 1958.

TABLE XI

70,000	General Expenses
21,115	Board of Directors and
3,115	Administrative
1,000	Maintenance of Buildings
1,000	Professional Services
1,000	Office to Patients and Public
1,000	Buildings
1,000	Public Health Services
1,000	Sanitation
1,000	Office and Industrial Expenses
10,000	Traveling and Transport
10,000	Stipends
10,000	Contributions to C. D. & W. Funds
10,000	U. S. Navy - Payment of
10,000	Medical Services
118,000	TOTAL

The total ordinary revenue of the Board during the period 1937-38 was \$1,000,000. The total ordinary medical expenditure for ordinary services in 1937-38 was \$1,000,000.

The total ordinary expenditure of the Board during the period 1937-38 was \$1,000,000. The total ordinary medical expenditure for ordinary services in 1937-38 was \$1,000,000.

In conclusion, the report confirms the finding of fact of the Board that the amount is generally acknowledged.

D. T. SMITH

REPORT OF MEDICAL SERVICE

1937-38

ANNEXURE "A"

SNAILS AND THEIR HABITATS

<u>NAME</u>	<u>HABITAT</u>
<i>Pila gradate</i>	Maun
<i>Lanistes</i> spp.	Maun
<i>Lymnaea natalensis</i>	Very widespread in Bakwena, Bangwaketse, Bamangwato, Bakgatla Reserves, in Ngamiland and at Gaborones and Lobatsi.
<i>Achatina</i> spp.	Mogoditsane, Lobatsi, Lephophe, Dutlwe.
<i>Achatina damaraensis</i>	Kang village.
<i>Achatina zebra</i>	Lepephe, Bataamane, Rametsane.
<i>Xerozemstus damaraensis</i>	Shells only at Kokogane (Bakwena), Lepephe and all over southern desert area, away from water. The shells are found in great abundance. No living specimen has yet been found.
<i>Anisus natalensis</i>	Seruli and Ramathlabama
<i>Bulinus Bulinus tropicus</i>	Seruli, Serowe area, Molopo, Notwani (Mochudi), Makarikari, Nata, Mahalapye, Lobatsi, Lepephe. Widespread but selective in habitat.
<i>Bulinus Bulinus forskalii</i>	Very widespread on the eastern side of the territory. In 1957 has been demonstrated at Maun, Francistown, Tsessebe, Mochudi, Molepolole area, Lepephe area, Lobatsi and in the Molopo river bed.
<i>Bulinus Bulinus reticulatus</i>	Notwani near Mochudi.
<i>Bulinus (Physopsis) africanus</i>	The prime carrier, in South Africa, of <i>S. Haematobium</i> was taken from streams or pools in stream beds only. Found in the following areas :- Maun, Francistown, one farm in the Tati area and all tributaries and main streams of the Notwani system.

BECHUANALAND PROTECTORATE

ANNEXURE "B"

RETURN OF DISEASES, INJURIES AND CAUSES OF DEATH FOR THE YEAR 1957

	IN-PATIENTS				OUT-PATIENTS		
	Remaining in Hospital at end of 1956	Admissions	Yearly Total Deaths	+Total Cases Treated	Remaining in Hospital at end of 1957	Male	Female
A.							
1. Tuberculosis of respiratory system	95	347	38	442	102	455	484
2. Tuberculosis of meninges and central nervous system	-	13	5	13	1	4	6
3. Tuberculosis of intestines, peritoneum and mesenteric glands	4	29	-	33	2	60	70
4. Tuberculosis of bones and joints	14	46	1	60	11	46	40
5. Tuberculosis, all other forms	7	40	-	47	-	224	166
6. Congenital Syphilis	-	8	-	8	-	401	556
7. Early syphilis	-	2	-	2	-	681	1,036
8. Tabes dorsalis	-	-	-	-	-	1	-
9. General Paralysis of insane	-	-	-	-	-	-	-
10. All other syphilis	2	21	-	23	1	1,147	2,102
11. Gonococcal infections	3	95	-	98	3	3,454	4,666
12. Typhoid Fever	-	4	1	4	1	-	2
13. Paratyphoid fever and other Salmonella infections	-	-	-	-	-	-	-
14. Cholera	-	-	-	-	-	-	-
15. Brucellosis (undulant fever)	-	-	-	-	-	1	-
16. (a) Bacillary dysentery	1	48	2	49	-	393	387
(b) Amoebiasis	1	10	1	11	-	2	5
(c) Other unspecified forms of dysentery	-	3	-	3	-	420	556
17. Scarlet Fever	-	-	-	-	-	-	-
18. Streptococcal sore throat	-	35	-	35	1	557	742
19. Erysipelas	-	-	-	-	-	7	1
20. Septicaemia and pyaemia	-	7	2	7	1	4	3
21. Diphtheria	-	36	6	36	1	16	20
22. Whooping Cough	1	48	-	49	2	665	879
23. Meningococcal infections	-	22	5	22	-	13	8
Total carried forward:	128	814	61	942	126	8,551	11,729

DISEASES

	#Remaining in Hospital at end of 1956	Yearly Total Admissions Deaths	+Total Cases Treated	Remaining in Hospital at end of 1957	Male	Female
	144	1,132	1,276	134	10,240	13,353
41. Ankylostomiasis	-	-	-	-	-	-
42. (a) Tapeworm infestation and other cestode infestations	-	20	20	-	201	214
(b) Ascariasis	-	3	3	-	84	131
(c) Guinea worm (dracunculosis)	-	-	-	-	-	-
(d) Other disease due to helminths	-	-	-	-	47	44
43. (a) Lymphogranuloma venereum	-	2	2	-	2	1
(b) Granuloma inguinale, venereal	-	1	1	-	11	9
(c) Other and unspecified venereal diseases	-	-	-	-	4	10
(d) Food poisoning infection and intoxication	-	2	2	-	7	7
(e) Relapsing Fever	4	2	6	-	5	4
(f) Leptospirosis icterohaemorrhagica (Weil's disease)	-	-	-	-	-	-
(g) Yaws	-	1	1	-	5	6
(h) Chickenpox	1	10	11	-	86	75
(i) Dengue	-	2	2	-	1	6
(j) Trachoma	-	7	7	-	20	30
(k) Sandfly fever	-	-	-	-	-	-
(l) Leishmaniasis	-	-	-	-	-	-
(m) - a Trypanosomiasis gambiensiis	-	-	-	-	-	-
- b Trypanosomiasis rhodesiensiis	2	14	16	6	17	2
- c Other and unspecified Trypanosomiasis	-	-	-	-	-	-
(n) Dermatophytosis	-	-	-	-	73	107
(o) Scabies	-	5	5	-	733	852
(p) All other diseases classified as infective and parasitic	-	3	3	-	124	144
44. Malignant neoplasm of buccal cavity and pharynx	-	2	2	-	-	-
45. Malignant neoplasm of oesophagus	-	1	1	-	1	2
46. Malignant neoplasm of stomach	-	3	3	-	-	2
47. Malignant neoplasm of intestine, except rectum	-	3	3	-	-	2
48. Malignant neoplasm of rectum	-	6	6	-	-	1
49. Malignant neoplasm of larynx	-	2	2	-	-	1
50. Malignant neoplasm of trachea, and of bronchus and lung	-	2	2	-	2	-
not specified as secondary	-	-	-	-	-	-
	151	1,223	1,374	140	11,662	15,002

carried forward:

STATION	TIME	TEMPERATURE	WIND	SEA	REMARKS
1	0800	20.0	10	1	Light breeze from S
2	0900	20.5	10	1	Light breeze from S
3	1000	21.0	10	1	Light breeze from S
4	1100	21.5	10	1	Light breeze from S
5	1200	22.0	10	1	Light breeze from S
6	1300	22.5	10	1	Light breeze from S
7	1400	23.0	10	1	Light breeze from S
8	1500	23.5	10	1	Light breeze from S
9	1600	24.0	10	1	Light breeze from S
10	1700	24.5	10	1	Light breeze from S
11	1800	25.0	10	1	Light breeze from S
12	1900	25.5	10	1	Light breeze from S
13	2000	26.0	10	1	Light breeze from S
14	2100	26.5	10	1	Light breeze from S
15	2200	27.0	10	1	Light breeze from S
16	2300	27.5	10	1	Light breeze from S
17	0000	28.0	10	1	Light breeze from S
18	0100	28.5	10	1	Light breeze from S
19	0200	29.0	10	1	Light breeze from S
20	0300	29.5	10	1	Light breeze from S
21	0400	30.0	10	1	Light breeze from S
22	0500	30.5	10	1	Light breeze from S
23	0600	31.0	10	1	Light breeze from S
24	0700	31.5	10	1	Light breeze from S
25	0800	32.0	10	1	Light breeze from S

The following are the results of the observations made during the cruise on the ship "Albatross" on the 15th of August 1900. The observations were made at intervals of one hour from 0800 to 2300 hours. The temperature of the air was measured by a standard thermometer, the wind by a cup anemometer, and the sea by a standard scale. The results are given in the table above. The temperature of the air was found to increase steadily during the day, and to reach a maximum of 32.0 degrees Celsius at 0800 hours. The wind was found to be a light breeze from the south, and the sea was found to be smooth.

This document is the property of the U.S. Navy and is loaned to you for use only. It is not to be distributed outside your organization.

DISEASES

	Remaining in Hospital at end of 1956	Yearly Total Admissions	Deaths	+Total cases Treated	Remaining in Hospital at end of 1957	Male	Female
51. Malignant neoplasm of breast	151	1,223	79	1,374	140	11,662	15,002
52. Malignant neoplasm of cervix uteri	-	3	-	3	-	-	2
53. Malignant neoplasm of other and unspecified parts of uterus	-	4	-	4	-	-	9
54. Malignant neoplasm of prostate	-	4	1	4	-	-	11
55. Malignant neoplasm of skin	-	1	-	1	-	2	-
56. Malignant neoplasm of bone and connective tissue	1	14	1	15	1	7	7
57. Malignant neoplasm of all other and unspecified sites	-	19	1	9	-	1	-
58. Leukaemia and aleukaemia	-	20	6	20	1	16	21
59. Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	-	-	-	-	-	3	1
60. Benign neoplasms and neoplasms of unspecified nature	-	1	-	1	-	3	2
61. Nontoxic goitre	4	70	2	74	4	131	286
62. Thyrototoxicosis without goitre	-	-	-	-	-	3	8
63. Diabetes mellitus	-	3	-	3	-	2	8
64. (a) Beriberi	-	6	1	6	-	6	10
(b) Pellagra	-	5	-	5	-	215	189
(c) Scurvy	-	10	-	10	-	89	200
(d) Other deficiency states	1	5	-	6	-	161	187
65. (a) Pernicious and other hyper chronic anaemias	3	102	16	105	5	829	1,760
(b) Iron deficiency anaemias (hypo-chromic)	-	1	-	1	-	19	18
(c) Other specified and unspecified anaemias	3	7	-	10	1	118	468
66. (a) Asthma	-	9	-	9	-	71	275
(b) All other allergic disorders, endocrine, metabolic and blood diseases	-	78	1	78	-	519	757
67. Psychoses	-	41	2	41	2	506	717
68. Psychoneuroses and disorders of personality	24	11	1	35	1	15	11
69. Mental Deficiency	2	19	-	21	1	55	120
70. Vascular lesions affecting central nervous system	-	2	-	2	-	15	12
71. Nonmeningococcal meningitis	-	24	4	24	-	19	15
72. Multiple sclerosis	-	8	4	8	-	1	5
73. Epilepsy	2	14	1	16	4	72	68
	191	1,694	120	1,885	160	14,540	20,169

carried forward:

110

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
LABORATORY OF ORGANIC CHEMISTRY
530 SOUTH EAST ASIAN AVENUE
CHICAGO, ILLINOIS 60607
TEL: 773-936-3700
FAX: 773-936-3701
WWW: WWW.CHEM.UCHICAGO.EDU

1. Introduction
2. Experimental
3. Results and Discussion
4. Conclusions
5. References

DISEASES+	#Remaining in Hospital at end of 1956	Yearly Admissions	Total Deaths	+Total cases Treated	#Remaining		Female
					in Hospital at end of 1957	Male	
	191	1,694	120	1,885	160	14,540	20,169
Inflammatory diseases of eye	3	85	-	88	-	1,954	2,541
Cataract	-	19	-	19	-	41	38
Glaucoma	-	11	-	11	-	5	8
(a) Otitis externa	-	12	-	12	-	372	481
(b) Iritis media and mastoiditis	1	26	-	27	-	453	591
(c) Other inflammatory diseases of ear	-	1	-	1	-	209	267
(a) All other diseases and conditions of eye	-	56	-	56	-	381	415
(b) All other diseases of the nervous system and sense organs	2	33	2	35	1	219	267
Rheumatic fever	1	13	-	14	2	37	74
Chronic rheumatic heart disease	2	21	9	23	3	25	51
Arteriosclerotic and degenerative heart disease	1	37	3	38	5	35	38
Other diseases of heart	3	68	7	71	1	192	245
Hypertension without mention of heart	-	17	-	17	-	41	64
Hypertension with heart disease	1	14	3	15	-	16	21
Disease of arteries	-	6	1	6	-	14	6
Other diseases of circulatory system	5	23	-	28	5	58	61
Acute upper respiratory infections	-	153	-	153	6	2,877	3,701
Influenza	2	225	1	227	2	1,305	1,478
Lober pneumonia	8	253	7	261	5	292	283
Bronchopneumonia	9	331	22	340	6	562	600
Primary atypical, other and unspecified pneumonia	2	135	5	137	1	61	60
Acute bronchitis	2	164	1	166	1	2,353	2,666
Bronchitis, chronic and unqualified	3	103	1	106	-	2,597	3,225
Hypertrophy of tonsils and adenoids	3	116	-	119	1	569	979
Empyema and abscess of lung	1	2	-	3	-	2	-
Flourisy	1	33	-	34	-	95	100
(a) Pneumoconiosis	-	1	-	1	-	9	1
(b) All other respiratory diseases	-	10	-	10	-	331	374
(a) Dental caries	-	3	-	3	-	1,175	1,819
(b) All other diseases of teeth and supporting structures	1	34	-	35	-	446	488
Ulcer of stomach	-	5	1	5	-	4	6
Ulcer of duodenum	-	-	-	-	-	6	3
	242	3,704	183	3,946	199	31,276	41,120
							carried forward

DISEASES	brought forward :	Remaining in Hospital at end of 1956	Yearly Total Admissions	Total Deaths	+Total cases Treated	Remaining in Hospital at end of 1957	Male	Female
101.	Gastritis and duodenitis	242	3,704	183	3,946	199	31,276	41,120
102.	Appendicitis	-	29	1	29	-	809	1,134
103.	Intestinal obstruction and hernia	6	88	-	94	1	43	81
104.	(a) Gastro-enteritis and colitis between 4 weeks and two years	1	25	2	26	1	229	233
	(b) Gastro-enteritis and colitis, ages 2 years and over	3	172	21	175	4	2,018	2,090
	(c) Chronic enteritis and ulcerative colitis	1	122	8	123	2	1,471	1,619
105.	Cirrhosis of liver	-	76	1	76	-	157	215
106.	Cholelithiasis and cholecystitis	-	17	2	17	1	17	11
107.	Other diseases of digestive system	-	7	1	7	-	20	38
108.	Acute nephritis	3	89	2	92	2	3,330	5,679
109.	Chronic, other and unspecified nephritis	1	15	4	16	1	10	17
110.	Infections of kidney	-	12	3	12	1	95	31
111.	Calculi of urinary system	-	15	-	15	-	154	241
112.	Hyperplasia of prostate	-	4	-	4	3	16	9
113.	Diseases of breast	-	7	-	7	2	24	-
114.	(a) Hydrocele	1	33	-	34	-	3	400
	(b) Disorders of menstruation	1	13	-	13	3	42	-
	(c) All other disease of the genito-urinary system	1	107	-	108	-	-	-
115.	Sepsis of pregnancy, childbirth and the puerperium	6	379	1	385	8	1,001	4,709
116.	Toxaemias of pregnancy and the puerperium	2	26	2	28	-	-	4,581
117.	Haemorrhage of pregnancy and childbirth	-	7	1	7	-	-	57
118.	Abortion without mention of sepsis or toxæmia.	-	78	4	78	-	-	9
119.	Abortion with sepsis.	2	180	-	182	2	-	13
120.	(a) Other complications of pregnancy, childbirth and puerperium	1	7	-	8	-	-	292
	(b) Delivery without complications	7	276	14	283	5	-	4,066
121.	Infections of skin and subcutaneous tissue	57	2,718	-	2,775	41	-	583
122.	Arthritis and spondylitis	2	302	2	304	7	2,546	3,233
123.	Muscular rheumatism and rheumatism, unspecified	2	28	-	30	1	332	465
124.	Osteomyelitis and periostitis	-	84	-	84	4	2,876	4,507
	carried forward	2	37	-	39	-	59	58
		341	8,657	252	8,998	288	46,528	75,512

DISEASES

	Remaining in Hospital at end of 1956	Yearly Total Admissions	Yearly Total Deaths	+Total Cases Treated	Remaining in Hospital at end of 1957	Male	Female
	341	8,657	252	8,998	288	46,528	75,512
	-	6	-	6	1	167	75
	-	8	-	8	3	223	365
125. Ankylosis and acquired musculo-skeletal deformities							
126. (a) Chronic Ulcer of Skin (including tropical ulcer)	1	50	1	51	5	1,341	1,676
(b) All other diseases of skin	2	48	-	50	-	519	712
(c) All other diseases of musculo-skeletal system	-	2	2	2	-	2	1
127. Spina bifida and meningocele	-	6	-	6	-	7	6
128. Congenital malformations of circulatory system	1	12	1	13	-	47	25
129. All other congenital malformations	-	7	1	7	-	2	1
130. Birth injuries	-	133	15	133	-	1	1
131. Postnatal asphyxia and atelectasis	-	21	1	21	-	69	71
132. (a) Diarrhoea of newborn (under 4 weeks)	-	1	-	1	-	3	14
(b) Ophthalmia neonatorum	-	-	-	-	-	5	8
(c) Other infections of newborn	-	1	-	1	-	-	1
133. Haemolytic disease of newborn	3	24	15	27	-	241	294
134. All other defined diseases of early infancy	4	40	25	44	1	52	74
135. Ill-defined diseases peculiar to early infancy and immaturity, unqualified	-	14	3	14	-	27	50
136. Senility without mention of psychosis	1	39	4	40	1	78	110
137 (a) Pyrexia of unknown origin	113	2,236	-	2,349	38	2,742	5,030
(b) Observation, without need for further medical care	6	182	1	188	6	950	1,034
(c) All other ill-defined causes of morbidity							
ACCIDENTS, POISONINGS, AND VIOLENCE (EXTERNAL CAUSE)							
A.E.							
138. Motor Vehicle accidents	-	43	1	43	2	54	10
139. Other transport accidents	6	55	1	61	5	111	29
140. Accidental poisoning	1	22	-	23	3	27	24
141. Accidental falls	7	229	3	236	9	510	342
142. Accident caused by machinery	4	10	-	14	3	87	9
143. Accident caused by fire and explosion of combustible material	4	78	2	82	4	392	397
144. Accident caused by hot substance, corrosive liquid, steam and radiation	-	62	5	62	-	153	152
	494	11,986	333	12,480	369	54,338	86,024

carried forward

IN-PATIENTS

OUT-PATIENTS

	*Remaining in Hospital at end of 1956	Yearly Total Admissions	Yearly Total Deaths	+Total Cases Treated	Remaining in Hospital at end of 1957	Male	Female
	494	11,986	333	12,480	369	54,338	86,024
145. Accident caused by firearm	brought forward	15	-	15	1	8	6
146. Accidental drowning and submersion .. .. .	.. .. .	-	-	-	-	-	-
147. Foreign body entering eye and adnexa .. .. .	.. .. .	6	-	6	-	100	41
Foreign body entering other orifice .. .. .	.. .. .	31	-	31	-	121	76
Accidents caused by bites and stings of venomous animals and insects .. .. .	.. .. .	78	1	79	1	188	131
Other accidents caused by animals .. .. .	.. .. .	59	-	65	6	221	83
All other accidental causes .. .. .	.. .. .	178	1	185	6	1,561	657
148. Suicide and self inflicted injury .. .. .	.. .. .	-	-	-	-	19	3
149. Homicide and injury purposely inflicted by other persons (not in war) .. .. .	.. .. .	123	-	127	4	284	254
150. Injury resulting from operations of war .. .. .	.. .. .	-	-	-	-	-	-
TOTAL:	512	12,476	335	12,988	387	56,840	87,275

* i.e. the year previous to that for which the return is made.

+ "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.

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.

