

Annual medical and sanitary report / Swaziland.

Contributors

Swaziland. Medical Department.

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SWAZILAND



**ANNUAL MEDICAL & SANITARY
REPORT**

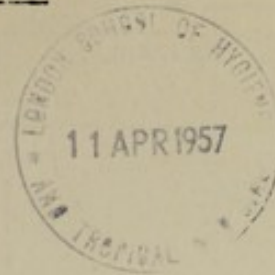
FOR THE YEAR 1956



S W A Z I L A N D

ANNUAL MEDICAL AND SANITARY REPORT

FOR THE YEAR 1956.



I. ADMINISTRATION.

(a) Staff.

EUROPEAN

- Director of Medical Services.
 1 Malaria Medical Officer,
 5 Medical Officers,
 1 Medical Officer (Health),
 1 District Surgeon (Part-time)
 2 Pharmacist/Storekeepers
 1 Matron
 13 Nursing Sisters
 1 Radiographer
 2 Health Inspectors
 1 Clerk
 1 Lady Clerk
 1 Laboratory Assistant
 2 Handymen (one post vacant)

AFRICAN.

- 2 Medical Officers (one post vacant)
 1 Senior Hospital Assistant
 3 Hospital Assistants,
 2 Dispensers
 1 Pupil Dispenser
 68 Nurses
 2 Out-patient Attendants
 3 Clerks
 1 Laboratory Assistant
 2 Ambulance Drivers
 1 Wardmaster
 14 Ward Attendants
 11 Orderlies
 2 Nurse Aides
 5 Cooks
 3 Assistant Cooks
 1 Night Watchman
 4 Hospital Groundsmen
 13 Laundresses
 2 Seamstresses
 1 Office Messenger
 1 Senior Malaria Assistant
 1 Health Office Clerk
 1 Lorry Driver

Appointments and Changes in European Staff.

Name	Office or Rank.	Date of		
		Appointment	Resignation	Termination of Appointment.
Dr. M.J.Welman	Medical Officer		1. 1.56	
Miss P.M.Reardon	Nursing Sister		6. 2.56	
Miss J.Mansfield	Nursing Sister		29.2.56	
Miss E.M.Bailey	Matron	1. 3.56		
Dr.T.J. Malherbe	Medical Officer			1. 3.56 Transfer to Kenya

(continued overleaf)

STATE OF NEW YORK
OFFICE OF THE COMPTROLLER
INVESTIGATION

()

- 1. State of New York
- 2. Albany
- 3. New York City
- 4. Buffalo
- 5. Rochester
- 6. Syracuse
- 7. Binghamton
- 8. Utica
- 9. Oswego
- 10. Cortland
- 11. Hamilton
- 12. Warren
- 13. Rensselaer
- 14. Saratoga
- 15. Schenectady
- 16. Schoharie
- 17. Warren
- 18. Hamilton
- 19. Warren
- 20. Hamilton

REPORT

- 1. Albany
- 2. New York City
- 3. Buffalo
- 4. Rochester
- 5. Syracuse
- 6. Binghamton
- 7. Utica
- 8. Oswego
- 9. Cortland
- 10. Hamilton
- 11. Warren
- 12. Rensselaer
- 13. Saratoga
- 14. Schenectady
- 15. Schoharie
- 16. Warren
- 17. Hamilton
- 18. Warren
- 19. Hamilton
- 20. Hamilton

Summary of Findings

Item	Amount	Date	Location	Remarks
1	100.00	1/1/19	Albany	Initial deposit
2	50.00	2/1/19	New York City	Transfer to office
3	50.00	2/1/19	New York City	Transfer to office

Appointments and Changes in European Staff (continued)

Name	Office or Rank	Date of		
		Appointment	Resignation	Termination of Appointment
Mr. W. Palliser	Handyman			1.4.56 Transferred to P.W.D.
Mr. N.J.J. Swart	Health Inspector	12.5.56		
Miss M. Maynard	Nursing Sister		12.5.56	
Dr. R.D. Gauldie	Medical Officer (Health)	29.5.56		
Miss M. Moffat	Nursing Sister		2.6.56	
Miss O. Horder	Nursing Sister		27.6.56	
Miss J.M. van der Meulen	Nursing Sister	1.7.56		
Dr. M.S. Compton	Medical Officer	17.7.56		
Dr. E.R.D. Eastman Nagle	Medical Officer (Health)			22.7.56
Miss A.S. McCorkindale	Nursing Sister			Retirement 1.8.56
Miss A. McKillop	Nursing Sister	1.9.56		
Mrs. D.V. Seeton	Nursing Sister	15.5.56	3.9.56	
Mr. R.C. Fazackerley	Pharmacist-Storekeeper			18.9.56
Miss M.K. Irvine	Nursing Sister			21.10.56 Transferred to Kenya.
Miss M. Smith	Pharmacist/Storekeeper	30.10.56		
Miss S. Todd	Nursing Sister	1.11.56		
Miss S.J. Borgartz	Nursing Sister	1.11.56	31.12.56	
Miss J. Bredell	Laboratory Assistant			On leave pending resignation with effect from 17.11.56

Reliefs.

Name	Office or Rank	From	TO
Dr. D. Drew	Medical Officer	1.1.56	10.3.56
		5.4.56	7.4.56
		13.4.56	14.4.56
		4.5.56	
		9.7.56	11.7.56
		16.7.56	17.7.56
		10.9.56	12.9.56
		26.11.56	30.11.56
		7.12.56	12.12.56
		18.12.56	22.12.56
		27.12.56	28.12.56
		6.1.56	14.1.56
		3.2.56	31.7.56
6.2.56	27.2.56		
3.4.56	30.4.56		
12.3.56	25.3.56		
11.7.56	14.7.56		
20.5.56			
21.5.56	22.5.56		
30.12.56	31.12.56		
1.8.56	7.10.56		

(continued overleaf)

Agreements and George 1 Superior Court (continued)

Name	Office or Rank	Agreement	Date
Mr. J. J. Davis	Health	12.8.36	12.8.36
Miss M. Reynolds	Medical Officer	12.8.36	12.8.36
Dr. E. H. Collins	(Health)	1.3.37	1.3.37
Miss M. White	Nursing Sister	1.3.37	1.3.37
Miss G. Roberts	Nursing Sister	1.3.37	1.3.37
Miss J. M. van der Merwe	Nursing Sister	1.3.37	1.3.37
Dr. M. E. Campbell	Medical Officer	1.3.37	1.3.37
Dr. A. S. van der Merwe	(Health)	1.3.37	1.3.37
Miss A. S. van der Merwe	Nursing Sister	1.3.37	1.3.37
Miss A. W. Kellie	Nursing Sister	1.3.37	1.3.37
Mr. P. V. Smit	Nursing Sister	1.3.37	1.3.37
Mr. R. G. van der Merwe	Nursing Sister	1.3.37	1.3.37
Miss M. J. van der Merwe	Nursing Sister	1.3.37	1.3.37
Miss J. Smith	Nursing Sister	1.3.37	1.3.37
Miss E. Smith	Nursing Sister	1.3.37	1.3.37
Miss E. J. Morgan	Nursing Sister	1.3.37	1.3.37
Miss J. Smith	Nursing Sister	1.3.37	1.3.37

(continued overleaf)

Bills

Name	Office or Rank	Date	Amount
Dr. D. Davis	Medical Officer	1.3.37	10.00.00
		2.3.37	7.00.00
		3.3.37	10.00.00
		4.3.37	12.00.00
		5.3.37	15.00.00
		6.3.37	18.00.00
		7.3.37	20.00.00
		8.3.37	22.00.00
		9.3.37	25.00.00
		10.3.37	28.00.00
		11.3.37	30.00.00
		12.3.37	32.00.00
		13.3.37	35.00.00
		14.3.37	38.00.00
		15.3.37	40.00.00
		16.3.37	42.00.00
		17.3.37	45.00.00
		18.3.37	48.00.00
		19.3.37	50.00.00
		20.3.37	52.00.00
		21.3.37	55.00.00
		22.3.37	58.00.00
		23.3.37	60.00.00
		24.3.37	62.00.00
		25.3.37	65.00.00
		26.3.37	68.00.00
		27.3.37	70.00.00
		28.3.37	72.00.00
		29.3.37	75.00.00
		30.3.37	78.00.00
		31.3.37	80.00.00
		32.3.37	82.00.00
		33.3.37	85.00.00
		34.3.37	88.00.00
		35.3.37	90.00.00
		36.3.37	92.00.00
		37.3.37	95.00.00
		38.3.37	98.00.00
		39.3.37	100.00.00

Reliefs (continued)

Name	Office or Rank	From	To
Mrs. R. Heilgendorff	Nursing Sister	12.9.56 5.11.56	30.9.56 2.12.56
Mrs. D.V.Seeton	Nursing Sister	8.10.56 1.12.56	11.10.56 16.12.56
Mrs. B. Parker	Lady Clerk	4.12.56	31.12.56

Distribution of European Medical and Nursing Staff, etc.,
on 31st December 1956.

Name.	Rank	Station
Dr. J.C.J. Callanan, O.B.E.	Director of Medical Services	Mbabane
Dr. B. D. Whitworth	Medical Officer	Mbabane
Dr. L.E.D.F. Joubert	Medical Officer	Mbabane
Dr. M.S. Compton	Medical Officer	Mbabane
Miss E. M. Bailey	Matron	Mbabane
Mrs. J. Scogings	Nursing Sister	Mbabane
Miss J.M. van der Meulen	Nursing Sister	Mbabane
Miss S. Todd	Nursing Sister	Mbabane
Miss M. Smith	Pharmacist/Storekeeper	Mbabane
Miss R. J. O'Shea	Radiographer	Mbabane
Mr. W. Palliser (P.W.D.)	Handyman	Mbabane
Mrs. H. Perkins	Nursing Sister	Mankaiana
Dr. O. Arnheim	Medical Officer	Hlatikulu
Dr. H. Flack	Medical Officer	Hlatikulu
Mr. J.L. van der Vyver	Pharmacist/Storekeeper	Hlatikulu
Miss J. A. Wilson	Nursing Sister in Charge	Hlatikulu
Miss M. McKillop	Nursing Sister	Hlatikulu
Miss D. E. Burns	Nursing Sister	Hlatikulu
Miss M.A. von Wissell	Nursing Sister	Goedgegun
Miss A. Martin	Nursing Sister	Hluti
Dr. O. Mastbaum	Malaria Medical Officer	Bremersdorp
Dr. R. D. Gauldie	Medical Officer (Health)	Bremersdorp
Mr. G.J. van Eeden	Health Inspector	Bremersdorp
Mr. N.J.J. Swart	Health Inspector	Mbabane
Miss J. Bredell	Laboratory Assistant	On leave pending resignation
Miss C. Liell-Cock	Nursing Sister	On leave

(b) LEGISLATION AFFECTING THE MEDICAL DEPARTMENT ENACTED
DURING THE YEAR.

- (i) Proclamation No. 2 - The Swaziland Opium and Habit-forming Drugs (Amendment) Proclamation.
- (ii) Proclamation No. 17 - The Swaziland Immigration Proclamation 1956.
- (iii) Proclamation No. 33 - The Swaziland Medical, Dental and Pharmacy (Amendment) Proclamation, 1956.

(continued)

Year	Office or Rank	Year	Year
1911	Surgeon Major	1912	1913
1914	Surgeon Major	1915	1916
1917	Surgeon Major	1918	1919
1920	Surgeon Major	1921	1922

Table 2 (continued)

Name	Rank	Station
Mr. J. A. ...	Surgeon Major	...
Mr. J. B. ...	Surgeon Major	...
Mr. J. C. ...	Surgeon Major	...
Mr. J. D. ...	Surgeon Major	...
Mr. J. E. ...	Surgeon Major	...
Mr. J. F. ...	Surgeon Major	...
Mr. J. G. ...	Surgeon Major	...
Mr. J. H. ...	Surgeon Major	...
Mr. J. I. ...	Surgeon Major	...
Mr. J. K. ...	Surgeon Major	...
Mr. J. L. ...	Surgeon Major	...
Mr. J. M. ...	Surgeon Major	...
Mr. J. N. ...	Surgeon Major	...
Mr. J. O. ...	Surgeon Major	...
Mr. J. P. ...	Surgeon Major	...
Mr. J. Q. ...	Surgeon Major	...
Mr. J. R. ...	Surgeon Major	...
Mr. J. S. ...	Surgeon Major	...
Mr. J. T. ...	Surgeon Major	...
Mr. J. U. ...	Surgeon Major	...
Mr. J. V. ...	Surgeon Major	...
Mr. J. W. ...	Surgeon Major	...
Mr. J. X. ...	Surgeon Major	...
Mr. J. Y. ...	Surgeon Major	...
Mr. J. Z. ...	Surgeon Major	...

Table 3 (continued)

- (1) ...
- (2) ...
- (3) ...

- (iv) Proclamation No. 52 - The Swaziland Inquests (Amendment) Proclamation, 1956.
- (v) High Commissioner's Notice No. 15 - The Swaziland Immigration Regulations 1956.
- (vi) High Commissioner's Notice No. 110 - Amendment of Mbabane Township Regulations.
- (vii) High Commissioner's Notice No. 111 - Amendment of Bremersdorp Township Regulations.
- (viii) High Commissioner's Notice No. 112 - Amendment of Hlatikulu Township Regulations.
- (ix) High Commissioner's Notice No. 112 - Amendment of Goedgegun Township Regulations.
- (x) High Commissioner's Notice No. 114 - Amendment of Stegi Township Regulations.

(c) FINANCIAL.

Revenue.

£

Hospital, Health Centre and other fees

Expenditure.

Personal Emoluments
Travelling Expenses
Allowances and Fees
Maintenance of Patients and purchase of medicines
Laboratory Services, S.A. Institute for Medical Research,
Maintenance of Lepers,
Maintenance of Lunatics,
Specialist Treatment for Indigents in Union Hospitals
Hospital Equipment
Uniforms, African Staff
Vaccinations
Drug Replacement
Subsidies for Medical Services:-
Church of the Nazarene Mission of South Africa £6,410,
Red Cross £75, Roman Catholic Mission £100, Our Lady
of Sorrows School £150, Mahamba Mission £1,340, Catholic
Mission Stegi £1,180, St. John's, Baragwanath £100
Anti-Malaria Measures
High Commission Territories Nursing Council, Travelling
and other expenses,
Upkeep of grounds
Upkeep and Operation of X-ray Plants
Anti-Malaria Drugs for Sale
Transport of Stores
Transport of Silicosis and Leper Patients
Bilharzia Control Measures,
Upkeep of Vehicles and Electric Light Plant
Purchase of Equipment for Pigg's Peak Hospital
and Hlatikulu Hospital Extensions
Contribution to C.D. & W. Schemes:-
Scheme Anti-Malaria Campaign & Public Health Measures
Scheme Leper Hospital

Total Expenditure on Medical and Sanitary Services.

Total Revenue of the Territory

The relationship of Medical Expenditure (excluding Colonial
Development and Welfare Fund Expenditure) to the total
Revenue of the Territory.

NOTE: Re: Section I (c) FINANCIAL

(continued)

- (iv) Provision for the ... of the ... (continued)
- (v) ...
- (vi) ...
- (vii) ...
- (viii) ...
- (ix) ...
- (x) ...

(b) Expenses

General

General, ... and other fees

Particulars

General expenses	
Traveling expenses	
Allowances and fees	
Maintenance of ... and purchase of ...	
Laboratory expenses, and ... for ...	
Salaries of ...	
Maintenance of ...	
Special ... for ...	
Hospital ...	
Welfare ... staff	
Venue ...	
... expenses	
... for ...	
... of the ...	
... and ...	
... of ...	
... and ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	
... of ...	

Total amount ...

Total amount of the ...

The ... of ...

Total ...

The financial figures which are not available at the time of publication will be forwarded at a later date.

II. PUBLIC HEALTH.

(I) General.

(i) Dr. F.J.C. Cambournac, Director, Regional Office for Africa, (W.H.O.) and Professor Pampana visited Swaziland in July, and the former warmly congratulated the Department on the outstanding success which had been achieved in the field of malaria control, and stated that our programme might well be taken as a model for other territories.

(ii) Dr. C.S. Darke, M.D., M.R.C.P., M.R.C.S., Consulting Physician to City General Hospital, Sheffield, paid a welcome visit to the territory in September as a member of the Panel of Medical Visitors whose object it is to keep medical staffs in touch with developments in medical thought and practice.

(iii) Dr. Aziz, Professor of Tropical Medicine at the American University of Beirut, visited the territory in October, and evinced great interest in the progress made in disease control, notably malaria and bilharziasis.

(iv) Dr. Ordman, Superintendent, Allergy Laboratories, South African Institute for Medical Research, carried out a short investigation in September as part of a wider and more general study of the occurrence of bronchial asthma and vasomotor rhinitis in Southern Africa and its relation to climatic influences. This investigation was considered desirable because reports from time to time had indicated that respiratory allergy was unduly common in certain parts of the territory. The following are some of the impressions of physicians, patients and others:-

- a. Asthma sufferers in Swaziland benefit on going to the Highveld or to the Coast.
- b. Asthma sufferers do badly in Swaziland, e.g. patients from overseas who may not have had an attack since their departure thence and during their travel through the Union of South Africa will generally develop an attack on arrival in Swaziland.
- c. People from Johannesburg and Reef in transit through Swaziland frequently develop severe asthma necessitating medical aid when staying over at Bremersdorp. Asthma may similarly be precipitated at Usutu Hot Springs.
- d. A physician with experience in the United Kingdom and in Assam believes that asthma and vasomotor rhinitis are relatively more common in Mbabane.
- e. A physician with experience in Nigeria and in Gambia is of opinion that asthma is relatively more common in the Africans of Swaziland.
- f. Mbabane is situated in the "allergic belt".
- g. The following patient-reports are noted:
 1. A sufferer from bronchial asthma in Mbabane obtains immediate relief at Locniel or other Highveld towns near Swaziland.
 2. A patient quite well in Basutoland and in Mafeking develops vasomotor rhinitis whilst travelling from Mbabane to Bremersdorp.
 3. A patient with asthma in Bremersdorp remains well in Mbabane.
 4. A patient quite well in Johannesburg develops asthma in Pigg's Peak.

11. FINANCIAL STATEMENTS

(i) General

(1) The financial statements, including the balance sheet, profit and loss account, and other financial statements, are prepared in accordance with the provisions of the Companies Act, 1947, and the Companies (Accounts) Regulations, 1962, and are true and correct to the best of the knowledge and belief of the directors.

(2) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(3) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(4) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(5) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(6) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(7) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(8) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(9) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(10) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(11) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(12) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

(13) The financial statements are prepared on the basis of the accounting records maintained by the company, which are considered to be reliable and accurate.

It was noted that the following cases of bronchial asthma had been reported from the Mbabane and Hlatikulu Hospitals during the decade 1946-55:-

Europeans.

In-patients - 18	}	226
Out-patients - 208		

Africans.

In-patients - 146	}	928
Out-patients - 782		

These figures show that in the case of the two hospitals mentioned 23 European and 92 Africans were seen annually, but in view of the wide distribution of the population in the territory, and the reluctance of Africans generally to travel long distances for medical aid, it is reasonable to suppose that the figures available are not a true reflection of the incidence of Asthma. During the course of the investigation, which included botanical, meteorological and geological enquiries, 36 sufferers from respiratory allergy, mainly bronchial asthma, were studied clinically, and when necessary submitted to skin testing. The findings are being studied in relation to the wider problem of climate, and asthma in Southern Africa, and it has not, as yet, been possible for Dr. Ordman to come to any conclusions with regard to the factors which may be operating in the occurrence of respiratory allergy in Swaziland, or even in connection with its alleged high local incidence. The department is deeply grateful to Dr. Ordman for the interest which he had taken in this matter, and it is hoped that his visit will encourage local practitioners to take a special note of cases of asthma and vasomotor rhinitis, both in European and Africans, especially in association with possible geographical and climatological factors, in order that a larger number of cases may in future become available for analysis.

(v) In January Dr. W. G. Davidson, Medical Officer, Swaziland Irrigation Scheme, reported three cases of Non-Venereal Treponematosis, and is of the opinion that the disease, which he had previously observed in 1954, is not uncommon in the native areas adjoining the C.D.C. Property.

Rabies.

The mass immunization of dogs has continued throughout the year and 4528 animals have been dealt with. The campaign will continue during 1957, when it is expected a total of some 11,000 will be reached.

II. Communicable Diseases.

(i) Malaria. During the 1955/56 transmission season an overall total of 102,762 huts were sprayed with residual insecticides. Of this number 27,028 received a second treatment, and only 2,452 were sprayed on three occasions during the season. 102,762 huts represents a decrease of over 40,000 huts sprayed in comparison with 1954/55, and the reduction is attributable to the fact that imagocidal control was discontinued for the first time since 1950 in a large area in the middleveld, and that the number of spray-treatments per hut was less frequent than hitherto in some bushveld areas.

The residual insecticide employed was again Benzenehexachloride in the form of a 50% wettable powder with 10% gama content, the surface concentration aimed at being 25 mgm per square foot. In addition to this routine measure, an experiment with Dieldrin, using a 50% wettable powder in a surface concentration of 35 mgm was repeated in two large areas in the bushveld, the huts receiving one treatment only at the commencement of the Malaria season.

(cOntinued)

A comparison of malaria transmission in areas treated with Dieldrin and B.H.C. revealed no significant difference, the results of blood examinations being as follows:-

	Dieldrin.	B.H.C.
No. examined	1081	2779
Parasite positive	9	19
Parasite rate	0.83%	0.7%

The malaria position in the territory was assessed by blood surveys as in previous years, and the findings are demonstrated in the following tables:-

Area	No. examined.
Bushveld areas	4,388
Middleveld areas	407
Irrigation Schemes	471
Area under chemoprophylaxis	205.
Extra-territorial areas	360
TOTAL	5,837

Results of Blood Surveys in Bushveld Areas.

Age Group	No. examined	Positive	Parasite Rate
1 - 12 months	1,322	0	0.0%
1 - 5 years	2,248	15	0.7%
6 - 16 years	818	17	2.1%
TOTAL			0.7%

Results of Blood Surveys on Irrigation Areas.

Age Group	No. examined	Positive	Parasite Rate
1 - 12 months	112	0	0.0%
1 - 5 years	244	9	3.6%
6 - 16 years	115	6	5.0%
TOTAL			3.1%

No positive cases were discovered in the middleveld. Although the total parasite rate on Irrigation Schemes was considerably higher than that in other parts of the bushveld, it is of interest to note that for the first time in the history of the territory, the infant rate was nil throughout the season.

It is questionable whether all the infections in older children were actually acquired on the Irrigation projects, and it is probable that some were obtained during visits to Portuguese territory.

The following table gives the cases of malaria treated by the Malaria Control Unit:-

A comparison of the results of the 1954 and 1955 surveys is shown in the following table. The results of the 1954 survey are given in the first column and the results of the 1955 survey in the second column.

Year	Percentage	Number
1954	100	100
1955	100	100

The following table shows the results of the 1954 and 1955 surveys. The results of the 1954 survey are given in the first column and the results of the 1955 survey in the second column.

Year	Percentage	Number
1954	100	100
1955	100	100

Results of 1954 Survey in Various Areas

Area	Percentage	Number
1 - 10 years	100	100
1 - 5 years	100	100
2 - 10 years	100	100
TOTAL	100	100

Results of 1955 Survey in Various Areas

Area	Percentage	Number
1 - 10 years	100	100
1 - 5 years	100	100
2 - 10 years	100	100
TOTAL	100	100

It is noted that the results of the 1954 and 1955 surveys are very similar. The results of the 1954 survey are given in the first column and the results of the 1955 survey in the second column.

The following table shows the results of the 1954 and 1955 surveys. The results of the 1954 survey are given in the first column and the results of the 1955 survey in the second column.

The following table shows the results of the 1954 and 1955 surveys. The results of the 1954 survey are given in the first column and the results of the 1955 survey in the second column.

1956.	Field Staff	Laboratory
January	3	0
February	3	0
March	8	0
April	12	0
May	6	0
June	1	0
July	0	0
August	2	0
September	2	0
October	7	0
November	6	0
December	2	1
Total	52	1
1955	105	0
1954	65	0
1953	335	2
1952	8	0
1951	181	7
1950	798	9

15 cases of Parasitaxmia were observed at the Swaziland Irrigation Scheme between January and June.

All but two of the parasite positive cases treated at Irrigation Schemes subsequent to June, and 6 of the total of 19 cases were immigrants from Portuguese East Africa.

A minor experiment in Chemoprophylaxis was carried out in a small area of 30 huts at the southern tip of Swaziland, where residual spraying had proved ineffective owing to geographical factors. This strip of land is separated from Mozambique territory and Maputaland by the Usutu River, and its inhabitants constantly visit areas in the adjoining territory in which no control is exercised. A remarkable reduction in malaria incidence was achieved through the exhibition of small dose (1 tablet of 25 mg) of "Daraprim" (B.W.& Co.) at monthly intervals. The investigation is to be continued during the 1956/57 transmission season with a view to ascertaining whether it is possible to eradicate malaria under the existing circumstances by the use of pyrimethamine.

In view of the progress which has been made towards attaining total elimination of malaria in Swaziland, routine malaria control is being curtailed in many bushveld areas during the coming season. In areas which have hitherto been sprayed, surveillance teams are operating, and the position with regard to vector breeding and malaria incidence will be carefully observed throughout the period. Along the Eastern and Southern borders, a belt of approximately 20 miles wide, including the Irrigation Schemes, is continuing to be sprayed with residual insecticides (B.H.C.).

The parasite rates during the non-transmission season of 1956 in the bushveld, middleveld, the pyrimethamine area, and the irrigation schemes, were 0.25%, 0.0%, 3.9% and 3.8% respectively.

(ii) Smallpox. No case of smallpox was notified, but 45,301 were vaccinated during the first three months of the year, in the following areas:-

Month.	Native Area	Place	Primary Vaccination.	Re-vaccinated	Total Vaccinated
January	20	Lushikishini	219	390	609
	20	Lushikishini	344	222	566
	21	Mashobeni	12	45	57
	Eur.	Gege	267	804	1071
	"	Seyendle	133	515	648
	17	Bahwini	71	85	156
	"	Bahwini	193	144	337
	19	Mahlangatsha	61	93	154
	"	Mahlangatsha	235	442	677
	17	Badeni	343	724	1067
	"	Badeni	447	640	1087
	Eur.	Mankaiana	323	494	817
	16	Ncabaneni	223	354	577
	"	Kandinda	412	357	769
"	Kandinda	317	250	567	
February	6	Dwalile	71	123	194
	"	Dwalile	99	152	251
	"	Malandela	371	376	747
	8	Dlangeni	431	657	1088
	Eur.	Msunduza	570	1289	1859
	"	Mbabane	426	631	1057
	"	Sidwashini	219	541	760
	7	Enkaba	470	997	1467
9	Motshane	565	982	1547	
March	Eur.	Havelock Mine	1374	2061	3435
	"	Pigg's Peak Area	5027	10218	15245
	10	Tshaneni	543	792	1335
	10	Sipocoseni	530	707	1237
	Eur.	Mhlambanyati	637	1450	2087
	16	Mawelawela	488	505	993
	Eur.	Usutu Mission	263	301	564
11	Lobamba	774	1502	2276	
	TOTAL		16458	28843	45301

Early in November a case of Alastrim was diagnosed in the Hlatikulu area and 77 close contacts were vaccinated.

Staff changes and the difficulty in obtaining the services of reliable vaccinators have hampered the progress of the campaign, but arrangements have been made to re-vaccinate in the Hlatikulu District in 1957. Instructions regarding the routine vaccination of Police, Prisoners, and Medical Department Staff have been reiterated.

(iii) Schistosomiasis.

(Hospital Cases : In-patients 80
Out-patients 187)

298 cases were dealt with in the main District Hospitals during 1956, there being a decrease of 27.5% as compared with the previous year, and in fact the lowest figure on record. The number of cases treated during the last ten years are given below, and it will be observed that there has been a diminution in the incidence of this disease since 1954:-

Month	Day	Place	Time	Remarks
January	1	London	10:00	Arrived
	2	London	10:00	Departed
	3	London	10:00	Arrived
	4	London	10:00	Departed
	5	London	10:00	Arrived
	6	London	10:00	Departed
	7	London	10:00	Arrived
	8	London	10:00	Departed
	9	London	10:00	Arrived
	10	London	10:00	Departed
February	1	London	10:00	Arrived
	2	London	10:00	Departed
	3	London	10:00	Arrived
	4	London	10:00	Departed
	5	London	10:00	Arrived
	6	London	10:00	Departed
	7	London	10:00	Arrived
	8	London	10:00	Departed
	9	London	10:00	Arrived
	10	London	10:00	Departed
March	1	London	10:00	Arrived
	2	London	10:00	Departed
	3	London	10:00	Arrived
	4	London	10:00	Departed
	5	London	10:00	Arrived
	6	London	10:00	Departed
	7	London	10:00	Arrived
	8	London	10:00	Departed
	9	London	10:00	Arrived
	10	London	10:00	Departed
TOTAL				

The above was sent with the copy of the report to the
 Director of the Bureau of the Census, Washington, D. C.
 on the 10th day of March, 1937.

(11)

The above was sent with the copy of the report to the
 Director of the Bureau of the Census, Washington, D. C.
 on the 10th day of March, 1937.

1955	414
1954	719
1953	606
1952	650
1951	604
1950	642
1949	424
1948	530
1947	354
1946	470

The case distribution as between districts was as follows, the 1955 incidence being shown in parenthesis:-

Mbabane-Mankaiana-Pigg's Peak District	38.4%	(37.0%)
Hlatikulu District	35.6%	(40.7%)
Manzini-Stegi District	25.8%	(22.1%)

Bilharziasis Control in the Nzimnene Catchment area was continued throughout the year, and all water courses and dams within the zone were treated with Copper Sulphate at intervals of approximately eight weeks. Each sulphation was preceded by the usual clearance of vegetation, and the cutting of drains in certain areas, and accompanied by a systematic snail survey.

After sulphation the snail survey was repeated and all collections were recorded (vide Table on page 11), physopsis and biomphalaria snails being tested for infectivity. The following observations were made:-

- (a) There was a marked decrease in the snail population during the first six months of the year, and during the winter months of June and July, the number of snails reached a very low level.
- (b) There was a steep increase in snail density in August, when 90% of the snails captured were very young, and none were found to shed cercariae. As sulphation progressed towards the end of the year the number of snails again declined considerably.
- (c) The infectivity rate was extremely low throughout the year, though in January 44 out of 46 snails collected at the end of the Bremersdorp Town Canal, were found to shed cercariae. As this portion of the canal passes through a cattle-grazing area, which is frequented by few human beings, schistosoma bovis infection may have been responsible for the findings.
- (d) None of the biomphalaris snails were found to be infected.

URINARY SURVEY : NZIMNENE CATCHMENT AREA : JULY 1956.

Area	No. of children examined	No. Infected	Percentage Infected.
Mzimmene	169	47	27.8
Impelave	49	10	20.4
Logoba	202	37	18.3
Lwandle	86	12	13.9
Moneni	76	11	14.4
Madonsa	45	8	17.7
Maliaduma	79	17	21.5
Total	706	142	20.1

These figures divided into sexes and age groups gave the following results:-

1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940

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

The total distribution of the 1955 population is shown in the following table:

Area	Population	% of Total
Urban	1,200,000	45.0
Suburban	1,000,000	37.5
Rural	500,000	17.5
Total	2,700,000	100.0

The following table shows the distribution of the population in the various districts of the country in 1955. The population of each district is given in thousands, and the percentage of the total population is given in parentheses.

(a) There was a marked increase in the total population during the year, and the rate of increase was higher in the urban areas than in the rural areas. The population of the urban areas increased by 15% during the year, while the population of the rural areas increased by 10%.

(b) There was a marked increase in the total population during the year, and the rate of increase was higher in the urban areas than in the rural areas. The population of the urban areas increased by 15% during the year, while the population of the rural areas increased by 10%.

(c) The population of the urban areas increased by 15% during the year, while the population of the rural areas increased by 10%.

(d) The population of the urban areas increased by 15% during the year, while the population of the rural areas increased by 10%.

(e) The population of the urban areas increased by 15% during the year, while the population of the rural areas increased by 10%.

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The following table shows the distribution of the population in the various districts of the country in 1955. The population of each district is given in thousands, and the percentage of the total population is given in parentheses.

	TABLE I.				TABLE II.				TABLE III.				TABLE IV.				TABLE V.																				
	Before sulphation January '56		After sulphation March '56		Before sulphation May 1956		After sulphation June 1956		Before sulphation July 1956		After sulphation July 1956		Before sulphation AUGUST '56		After sulphation Septem. '56.		Before sulphation Novem. '56.		After sulphation Decem. '56.																		
	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected (shedding cercariae)	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected (shedding cercariae)	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected	Physopsis Limnae	Bicompilaria Balinus forskali Physopsis infected																	
Mzimene River : above weir	6	18		Nil																																	
" " to Madonsa																																					
" " to Brickfield									6				64	1	Nil		22		Nil																		
" " to Jabavu																																					
" " Showgrounds									1	35	Nil	1																									
" " to Abattoir																																					
" " below Abattoir																4	6	5		13																	
Magola Stream																8	4																				
Mahlabatini upper stream																4	6	Nil	2	4	Nil																
" lower stream	8	35	Nil	19	1	22	1									5	8	Nil																			
Hlabamboka upper stream	1	74	Nil						20		4		286		15			82		49																	
" lower stream																																					
Madonsa upper stream																																					
" lower stream	10		Nil	8	3	Nil	6	Nil					8	12	Nil			7	6	Nil																	
" Fraser tributary																																					
Jabavu streams	22	108	Nil	22		12							1	3	Nil	49		26	34	Nil																	
Town Canal	46	143	44			7	1	2	2	Nil			15		2	15																					
Williams farm furrows																																					
" " dams	14	8	Nil	4	12	Nil	9						30							3																	
S.D. Stream above bridge	1	21	Nil								2																										
" " below bridge																																					
R.O. Farm furrow	2	25	1	Nil				10	12																												
Pendray's farm furrows																																					
Manzini stream																																					
Ghobaghoba stream	16	6	Nil	4	Nil	6				11	Nil		11	Nil				9	Nil																		
Vet. camp upper stream	7	7	1			8				2	12	Nil																									
" " lower stream																																					
Club Stream	6	3		1	4	10	Nil						11	Nil																							
Mgubudhla stream	3	16	Nil			2	2	Nil	4	33	Nil		46	21	Nil			16	Nil	2	Nil																
" Murphy's furrow																																					
Ncome stream																																					
Mawutane (Trib. to Mzinene)																																					
TOTALS	202	627	71	45	53	84	10	3	50	69	14	2	3	4	13	21	57	Nil	5	161	1017	44	1	Nil	9	27	10	35	Nil	82	208	8	Nil	10	138	8	Nil

Age Group	MALES			FEMALES		
	No. Examined	No. Infected	Percentage Infected.	No. Examined.	No. Infected	Percentage Infected.
2 - 10 years	181	36	20	138	22	16
11- 20 "	48	31	64.6	81	31	38.2
21- 30 "	15	2	13.3	74	11	14.8
30 & over	54	5	9.2	115	4	3.5

The following results were obtained during the course of the investigation into the incidence and distribution of Schistosomiasis in the territory:-

Month	Place	No. examined	No. infected		Total
			S. mansoni	S. haematobin	
U February	Kraal near Madonsa Stream N.A.11	46	-	6	13%
U March	Schools (x)				
	Little Flower	154	-	73	47%
	Central	58	-	19	33%
	Nazerene	73	-	31	43%
	Methodist	2	-	1	50%
	St. Michael's	4	-	0	0%
	Zombodi	77	-	24	31%
	Lozita	21	-	13	62%
UBS	Matapha	57	-	36	63%
UBS	Maqudulwini	30	-	1	3.3%
UBS	Edwaleni	60	-	34	57%

- (x) - on retesting after treatment with "Nilodin" B.D.& Co.)
- U - Urine Examination
- B - Rectal Biopsy
- S - Faeces

SURVEY OF SNAILS AT NGONINI ESTATE, PIGG'S PEAK DISTRICT
(JUNE, 1956)

Species of Physopsis and Biomphalaria were found at seven scattered points and the following results were obtained:-

Snail	No. examined.	No. Positive	% Positive
Physopsis	85	3	3.5%
Biomphalaria	338	0	0.0%
Limnae	73	0	0.0%

The survey will be repeated in the summer months of 1957, when it is hoped control measures can be instituted in collaboration with the management of the Estate.

SNAIL SURVEY AT MALKERNS IRRIGATION SCHEME (JUNE-JULY 1956)

The incidence of snails in the Malkerns area was determined by means of a survey of all watercourses throughout the irrigation project. All Physopsis snails found were examined for infectivity. Of a total of 1079 collected, 138 (13%) were found to be infected, and some 90% of the snails were from the Tung Oils Farm at the end of one of the canals. The survey will be repeated during the summer months of 1957.

Year	1900	1901	1902	1903	1904	1905
...

The following results were obtained from the analysis of the ...

Year	1900	1901	1902	1903	1904	1905
...

(1) ... (2) ... (3) ... (4) ...

TABLE OF ...

...

Year	1900	1901	1902	1903	1904	1905
...

The above will be ...

TABLE OF ...

...

SNAIL IDENTIFICATION.

The Council of Scientific and Industrial Research requested our co-operation in establishing an identification system for fresh water snails in Southern Africa. In this connection eight batches of snails were forwarded to the Department of Zoology of the Potchefstroom University and the provisional identification included the following species:-

- PLANORBIS (GYRAULUS) COSTULATUS
- CLEOPATRA MORRELLII (PREST)
- BULIUS TROPICUS
- BULINUS VERREAUXII
- PHYSOPSIS GLOBOSUS
- BULINUS (PYRGOPHYSA) FORSKALLI

Further collections will be forwarded for identification as they become available.

SNAIL SURVEY, STEGI (JUNE 1956)

Locality.	Physopsis	Biom-phalaria	Number Infected	Percentage Infected
1. Abattoir Dam	126	248	Nil	Nil
2. Todds Dam (a)	26	1	"	"
" " (b)	-	-	-	-
3. Magugu Stream (Town Water Supply)	3	Nil	Nil	Nil
4. Forbes Dam	4	7	"	"
5. Nazerene Dam	Nil	Nil	"	"
6. Carmichael's Dam	"	"	"	"
7. Siboteleni Dam	69	"	"	"
8. Dam near N.R.C.	Nil	"	"	"
9. Government Dam Stegi Hill	"	"	"	"
10. Magatana Stream	"	"	"	"
11. Mgulantamo Stream	"	"	"	"
12. Dam in Stegi Park	"	"	"	"
13. Dam in Native Area on Lourenco Marques Road	"	"	"	"

As these findings appeared to be most unusual in an area where the incidence of Urinary Bilharziasis is constantly reported as being high, a repeat Survey was undertaken in November, 1956, with the following results.

Locality.	Physopsis	Biom-phalaria	Number. Examined.	Number Shedding Cercariae.	Percentage.
Abattoir Dam	230	- 151	230 151	6 (Human) Nil	3 Nil.
Magatana Dam and Stream.	21	- Nil	21 Nil	3 (Bovine) Nil	15 Nil

All other Dams and Streams were Negative for Snails.

Infected Snails shedding Human cercariae were found only in one area, viz. the Abattoir Dam, and from investigation it would appear that very few children swim in this dam. It is, therefore, difficult to understand why about one third of the children in the Schools suffer from the disease (see following table). Further

The amount of \$40,000.00 is being advanced to the Government of the District of Columbia for the purpose of purchasing the necessary equipment for the operation of the Government of the District of Columbia. The amount of \$40,000.00 is being advanced to the Government of the District of Columbia for the purpose of purchasing the necessary equipment for the operation of the Government of the District of Columbia.

THE DISTRICT OF COLUMBIA
 COMMISSIONER OF THE DISTRICT OF COLUMBIA
 GEORGE W. WASHINGTON
 WASHINGTON, D. C.

Further information will be furnished upon request.

TABLE OF CONTENTS

Page	Chapter	Section	Page	Section
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
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99	99	99	99	99
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The following information is being furnished to the Government of the District of Columbia for the purpose of purchasing the necessary equipment for the operation of the Government of the District of Columbia.

Page	Chapter	Section	Page	Section
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
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95	95	95	95	95
96	96	96	96	96
97	97	97	97	97
98	98	98	98	98
99	99	99	99	99
100	100	100	100	100

All other information is being furnished to the Government of the District of Columbia for the purpose of purchasing the necessary equipment for the operation of the Government of the District of Columbia.

investigations will be undertaken with the object of finding the source of infection.

URINARY SURVEY, STEGI (NOVEMBER 1956)

School	No. of children examined.	Number Infected	Percentage Infected
Nazerene Mission School	112	35	31%
Good Shepherd Mission School	112	33	29.4%
Ebenezer Mission School	112	22	19.6%
	336	90	27%

Further surveys will be conducted at a later date.

SCHISTOSOMA INFECTION AMONGST CATTLE.

During the period March - December 1956, a number of cattle slaughtered at the Bremersdorp Abattoir were examined for Schistosoma infection, the worms being detected and removed from the mesenteric veins of the animal.

The object of this survey was to determine the infectivity rate of cattle in the bushveld areas as compared with those which were reared in the surrounding areas of Bremersdorp which is covered by our pilot Bilharzia control scheme.

The information obtained up to date has, however, not been very helpful in determining the effectiveness of our control because the area covered is too small in relation to the movement of cattle. Furthermore animals are constantly changing hands and are moved by speculators to numerous sale yards, before they come to be slaughtered.

This survey has, however, revealed that 72% of a total of the cattle slaughtered at Bremersdorp were infected with Schistosoma.

The following table indicates the distribution of animals examined:-

Place of Origin	Positive	Negative
Bremersdorp	36	12
Tulwane	41	19
Croydon	114	16
Pendray's Farm	10	5
Bennett's Farm (Mpofo)	14	Nil
Tung Oils Farm	9	Nil
Gundwim	3	Nil
Sherwood Ranch	3	1
Sipofaneni	22	3
McNabbs Farm	11	1
Scott's Farm	Nil	1
Red Tiger Ranch	1	3
Mliba Ranch	2	Nil
Mpaka	3	Nil
Usutu Sale Yard	2	1
Matapa	1	Nil
St. Josephs	1	Nil
	3	Nil
Totals	276 (72%)	62

- 11 -

Investigation will be conducted with the object of tracing the source of leakage.

TABLE NO. 1

Year	Number of cases	Number of persons
1934	10	10
1935	10	10
1936	10	10
1937	10	10
1938	10	10
1939	10	10
1940	10	10
1941	10	10
1942	10	10
1943	10	10
1944	10	10
1945	10	10
1946	10	10
1947	10	10
1948	10	10
1949	10	10
1950	10	10
1951	10	10
1952	10	10
1953	10	10
1954	10	10
1955	10	10
1956	10	10
1957	10	10
1958	10	10
1959	10	10
1960	10	10
1961	10	10
1962	10	10
1963	10	10
1964	10	10
1965	10	10
1966	10	10
1967	10	10
1968	10	10
1969	10	10
1970	10	10
1971	10	10
1972	10	10
1973	10	10
1974	10	10
1975	10	10
1976	10	10
1977	10	10
1978	10	10
1979	10	10
1980	10	10
1981	10	10
1982	10	10
1983	10	10
1984	10	10
1985	10	10
1986	10	10
1987	10	10
1988	10	10
1989	10	10
1990	10	10
1991	10	10
1992	10	10
1993	10	10
1994	10	10
1995	10	10
1996	10	10
1997	10	10
1998	10	10
1999	10	10
2000	10	10

Further details will be furnished as a later date.

TABLE NO. 2

During the period 1934-1939, a number of cases of leakage of the Government's secret were reported for investigation. It was found that the leakage was due to the negligence of the staff of the office.

The object of this report is to determine the identity of the staff of the office who were responsible for the leakage of the Government's secret. It is found that the leakage was due to the negligence of the staff of the office.

The information obtained in the course of the investigation is as follows: The leakage was due to the negligence of the staff of the office. It is found that the leakage was due to the negligence of the staff of the office.

This report has, however, revealed that the leakage was due to the negligence of the staff of the office.

The following table indicates the distribution of leakage:

Year	Number of cases	Number of persons
1934	10	10
1935	10	10
1936	10	10
1937	10	10
1938	10	10
1939	10	10
1940	10	10
1941	10	10
1942	10	10
1943	10	10
1944	10	10
1945	10	10
1946	10	10
1947	10	10
1948	10	10
1949	10	10
1950	10	10
1951	10	10
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1972	10	10
1973	10	10
1974	10	10
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1980	10	10
1981	10	10
1982	10	10
1983	10	10
1984	10	10
1985	10	10
1986	10	10
1987	10	10
1988	10	10
1989	10	10
1990	10	10
1991	10	10
1992	10	10
1993	10	10
1994	10	10
1995	10	10
1996	10	10
1997	10	10
1998	10	10
1999	10	10
2000	10	10

(iv) Tuberculosis (Pulmonary).

Hospital Cases : 212 In-patients.

266 Out-patients.

478

478 cases were dealt with at the main hospitals in the territory as compared with the numbers shown below in respect of previous years:-

1955	:	444
1954	:	401
1953	:	376
1952	:	304
1951	:	304
1950	:	396
1949	:	281
1948	:	253
1947	:	196
1946	:	300

In addition to the foregoing, 68 new cases were treated at the Mahamba Methodist Hospital, and 10 (20 Out-patients were dealt with at the Good Shepherd Mission Hospital at Stegi.

The case distribution as between the main District groups was as follows:-

Manzini-Stegi District	62.4%
Mbabane, Mankaiana, Pigg's Peak District	26.7%
Hlatikulu District	10.7%

The percentage of tuberculosis admissions on total admissions at four hospitals in the territory is given in the following table:-

Hospital.	Total Admissions.	Pulmonary	Non Pulmonary	Total Tuberculosis admissions.	% of Tuberculosis admissions on total admissions.			
					1953	1954	1955	1956
Mbabane	3546	80	49	129	2.6	2.4	3.1	3.6
Hlatikulu	1701	33	19	49	2.3	3.0	4.6	2.0
Mankaiana	1785	15	13	28	0.4	0.4	1.2	1.5
Raleigh Fitkin Memorial Hospital	2647	99	20	119	4.8	5.6	8.6	4.4

A twelve-bedded Tuberculosis Block, with separate staff quarters, at Hlatikulu Hospital, was completed in March, and the construction of a similar unit at Mbabane is expected to commence in March 1957.

A W.H.O. Tuberculosis Assessment Team under the leadership of Dr. E. H. Kjolbye commenced work in the territory in October, and its investigations will be completed by the end of February 1957.

The free issue of P.A.S. and I.N.H. to Medical Missions from Government stocks for the treatment of necessitous cases was carried out on a greatly increased scale during 1956.

(v) Dysentery.

(Hospital Cases : In-patients 244
Out-patients 375)

The incidence of diseases in this group was identical with that of 1955, which was some 14% greater than in 1954, the year in which the prevalence of these diseases was the lowest on record.

Hospital Cases: 117 Hospitalized
286 Discharged

The above table gives a summary of the cases reported in the territory as compared with the number shown below in regard to previous years:-

1955	144
1954	151
1953	147
1952	154
1951	151
1950	150
1949	151
1948	151
1947	151
1946	151

In addition to the foregoing, 57 new cases were treated at the Leishman Hospital, and 100-100 patients were admitted at the Civil Hospital Medical Department at St. John.

The case distribution in various parts of the Territory is as follows:-

107	Leishman District
107	Leishman District
107	Leishman District
107	Leishman District

The percentage of hospitalized patients in each of the four hospitals in the Territory is given in the following table:-

Hospital	Total Patients	Hospitalized	Percentage	
			1955	1954
Leishman Hospital	144	50	34.7	32.6
Leishman Hospital	151	19	12.6	12.6
Leishman Hospital	147	13	8.8	8.8
Civil Hospital	154	97	62.9	62.9

A tentative estimate of the number of cases which are reported at Leishman Hospital, and which are reported at the Civil Hospital at St. John is reported in the following table:-

A tentative estimate of the number of cases which are reported at Leishman Hospital, and which are reported at the Civil Hospital at St. John is reported in the following table:-

The low incidence of cases in 1955 and 1954 is due to the fact that Government stock for the Territory was depleted during 1954, resulting in a greatly reduced number of cases during 1955.

Hospital Cases: 117 Hospitalized
286 Discharged

The incidence of disease in this Territory was reported in 1955, which was some 10 percent less than in 1954. The year in which the incidence of cases was reported was the lowest in 1955.

The relative prevalence of the disease in its various forms was as follows, the figures for the previous year being shown in brackets:-

Amoebic Dysentery	68.9%	(40.2%)
Bacillary Dysentery	30.6%	(59.4%)
Type Undifferentated	0.3%	(0.2%)

The proportion of cases notified from the various districts is given below:-

Mbabane-Mankaiiana-Pigg's Peak Districts	44.0
Manzini-Stegi District	43.9
Hlatikulu District	11.9

The continued low incidence of dysentery in Southern Swaziland is still inexplicable.

(vi) Gastro-enteritis and Colitis.

(Hospital cases (a) Between 4 weeks & 2 years	290 In-patients
	1430 Out-patients
(b) Age 2 years and over	73 In-patients
	1077 Out-patients
(c) Chronic Enteritis and ulcerative colitis	0 In-patient
	0 Out-patient

The increase in the prevalence of these diseases which was noted in 1955 continued to progress, the incidence being 31.7% greater than in the preceding year. The recrudescence may, as previously stated, be due to the development of resistance by flies to residual spraying.

The frequency which these diseases were encountered in the various districts is indicated below:-

	<u>1956</u>	<u>1955</u>	<u>1954</u>	<u>1953</u>	<u>1952</u>
Manzini-Stegi District	28.4%	26.7%	21.9%	23.9%	47.8%
Mbabane-Pigg's Peak-Mankaiiana District	33.3%	39.2%	50.1%	35.7%	27.9%
Hlatikulu District	38.1%	34.0%	27.9%	40.3%	24.1%

(vii) Venereal Diseases.

The incidence of Syphilis, assessed on the basis of cases attending for treatment at medical stations throughout the entire territory, declined by 16.3% as compared with 1955, which had already shown a decrease of 20% on the previous year. The present year's figure is the lowest recorded since 1946. There has been no increase in the prevalence of Gonorrhoea which has maintained the level attained in 1955. Venereal diseases in general have declined by 26.2% as compared with 1955, but this is mainly attributable to the increasing use of "one shot" treatment with P.A.M., in treponematosi.

The number of fresh cases treated during the last eleven years is shown in the following table:-

The relative frequency of the disease in the various years was as follows: the highest for the previous year being 1955.

Number of patients
Number of deaths
Type of treatment

The percentage of cases notified from the various districts is given below:

Northamptonshire 10.0
Northants 10.0
Northants 10.0

The number of patients of groups in various districts is given below:

(vi) General Statistics and Results

- (1) Total cases (a) between 1950 and 1955 100 patients
- (2) In-patients 100 patients
- (3) Out-patients 100 patients
- (4) In 1955 and 1956 100 patients
- (5) Deaths 100 patients
- (6) Recoveries 100 patients

The incidence in the previous 12 months of this disease which was treated in 1955 compared to previous years, the incidence being 10.0 patients per 100 in the preceding year. The treatment was as previously stated to be the development of patients in 1955 to include 100 patients.

The frequency with which these patients were hospitalized in the various districts is indicated below:

Northamptonshire	10.0
Northants	10.0
Northants	10.0

(vii) General Discussion

The incidence of Syphilis, assessed on the basis of cases attending for treatment at medical stations throughout the entire territory, declined by 10.0% as compared with 1955, which had already shown a decrease of 10.0% on the previous year. The present year's figure is the lowest recorded since 1955. There has been no increase in the percentage of patients who are admitted to hospital in 1955. General diseases in general have declined by 10.0% as compared with 1955, but this is mainly attributable to the increasing use of "one shot" treatment with I.P.P. in venereal diseases.

The number of fresh cases treated during the last eleven years is shown in the following table:

Year	Syphilis	Gonorrhoea	Other Venereal Diseases	Total
1946	3041	649	16	3076
1947	2988	936	18	3942
1948	3212	1043	19	4274
1949	4449	1296	31	5776
1950	4140	1761	25	5926
1951	4608	1934	-	6542
1952	4349	2096	19	6464
1953	3908	1973	17	4898
1954	4980	1884	15	5988
1955	3270	2420	-	5670
1956	2736	2407	3	5146

The variations in the incidence of Venereal Diseases in various parts of the territory are shown below:-

	Syphilis		Gonorrhoea	
	Increase	Decrease	Increase	Decrease
Mbabane	-	29.6%	40.0%	-
Mankaiana	-	20.0%	3.5%	-
Mbabane-Pigg's Peak District	12.6%	-	95.1%	-
Hlatikulu Hospital	-	16.9%	-	12.7%
Goedgegun	-	33.7%	69.9%	-
Bremersdorp	-	8.9%	-	2.7%
Manzini-Stegi District (General)	-	27.3%	7.1%	-
Stegi (Nazerene Health Centre)	10.7%	-	23.6%	-
Stegi (District Surgeon)	-	45.1%	-	83.6%
Mahamba Area	-	38.9%	180.7%	-

The distribution of Venereal Diseases as between districts and institutions throughout the territory, is shown in the Table on page 18.

(viii) Typhoid and Paratyphoid Fever.

Sixty six cases, with no deaths, were reported from the Mbabane-Pigg's Peak-Mankaiana (44 cases), Manzini-Stegi (16 cases), and Hlatikulu Districts (6 cases), as compared with 60 cases with two deaths in 1955 and 187 cases during the preceding year. As in previous years the disease distribution was sporadic.

(ix) Diphtheria.

There were 10 cases, with 2 deaths, as compared with 10 cases and 4 deaths in 1955. 4 cases were reported from the Mbabane area, 3 from Manzini and 2 from the Hlatikulu area.

(x) Whooping Cough.

The incidence of pertussis was 33.5% less than in 1955, and its case distribution was as shown below:-

Year	Population	Number of cases	Rate per 1000
1946	1000	10	10.0
1947	1000	10	10.0
1948	1000	10	10.0
1949	1000	10	10.0
1950	1000	10	10.0
1951	1000	10	10.0
1952	1000	10	10.0
1953	1000	10	10.0
1954	1000	10	10.0
1955	1000	10	10.0
1956	1000	10	10.0

The variations in the incidence of venereal diseases in various parts of the territory are shown below:-

Location	Number of cases	Rate per 1000
Yakutsk	10	10.0
Verkhnyaya Tura	10	10.0
Stret (District Center)	10	10.0
Stret (District Center)	10	10.0
Verkhnyaya Tura	10	10.0
Yakutsk	10	10.0

The distribution of venereal diseases in various districts and locations throughout the territory, is shown in the table on page 12.

(11) Incidence of Venereal Diseases

During the year, with the exception of Yakutsk, where the incidence of venereal diseases was 10.0 per 1000, the incidence in other districts was 10.0 per 1000. The incidence in the districts of Verkhnyaya Tura, Stret, and Yakutsk was 10.0 per 1000. The incidence in the districts of Verkhnyaya Tura, Stret, and Yakutsk was 10.0 per 1000.

(12) Incidence of Venereal Diseases

There were 10 cases of venereal diseases in the territory during the year. The incidence was 10.0 per 1000. The incidence was 10.0 per 1000.

(13) Incidence of Venereal Diseases

The incidence of venereal diseases in the territory was 10.0 per 1000. The incidence was 10.0 per 1000.

	Mbabane Hospital.	Mankaiana Cottage Hospital.	Other Health Centres Mbabane-Pigg's Peak-Mankaiana Districts (Northern District)	Hlatikulu Hospital	Health Centres Hlatikulu (Southern District)	Arthur Matthews Methodist Hospital, Mhamba	Raleigh Pitkin Memorial Hospital, Bremersdorp.	Health Centres Manzini-Stegi (Central District)	District Surgeon, Stegi.	Lesters Health Centre	Lubuli-Goliel	Swaziland Irrigation Scheme (C.D.C) (January-February only)	Nomahasha	Big Bend	Total
I. SYPHILIS.															
(A) Early Syphilis	21	33	-	82	-	-	87	-	-	-	-	-	-	-	223
(i) Primary	191	70	-	89	-	-	89	-	-	-	-	-	-	-	439
(ii) Secondary	244	86	-	19	-	-	3	-	-	-	-	-	-	-	352
(iii) Early Latent (Asymptomatic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(i) Skin, mucosal, bone muscle, joint	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(B) Late Syphilis	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(i) Cardiovascular	16	-	-	8	-	-	2	-	-	-	-	-	-	-	50
(ii) Neurosyphilis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26
(iv) Late Latent (Asymptomatic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(C) Congenital	17	22	-	15	-	-	11	-	-	-	-	-	-	-	65
(i) Early (under 2 years of age)	8	2	-	-	-	-	-	-	-	-	-	-	-	-	10
(ii) Late (over 2 years of age)	-	-	293	-	569	105	-	369	146	27	45	7	3	7	1571
(D) Undifferentiated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	547	213	293	213	569	105	192	369	146	27	45	7	3	7	2736
II. GONORRHOEA.															
(i) Acute	532	154	240	134	532	292	82	277	31	9	61	9	2	5	2360
(ii) Chronic	-	19	-	-	-	-	28	-	-	-	-	-	-	-	47
TOTAL	532	173	240	134	532	292	110	277	31	9	61	9	2	5	2407
III. OTHER VENEREAL DISEASES.															
	-	-	-	-	-	-	3	-	-	-	-	-	-	-	3
IV. RE-ATTENDANCES.															
Syphilis	2716	1366	1441	364	1076	734	1212	1495	462	23	47	15	-	-	10951
Gonorrhoea	243	282	72	284	422	-	116	142	14	4	27	9	-	-	1615
Other Venereal Diseases	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2
TOTAL RE-ATTENDANCES	2959	1648	1523	648	1498	734	1330	1637	476	27	74	14	-	-	12568

Date	Particulars	Amount
1912	Jan 1	
	Jan 2	
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	Dec 29	
	Dec 30	
	Dec 31	

District.	No. of cases	Deaths.
Mbabane-Pigg's Peak-Mankaiana District	143	-
Manzini District	53	-
Hlatikulu District	56	-
Havelock Mine, (Pigg's Peak District)	-	-
TOTAL	252	-

(xi) Acute Poliomyelitis.

Only three cases of poliomyelitis were notified, as compared with 13 in 1955. Vaccine sufficient for the first inoculation of 518 children under the age of 16 years was provided by the Poliomyelitis Research Foundation Laboratories in consignments issued in September (120 doses) and October (398 doses), and further supplies are expected to be available for the second inoculation early in 1957.

(xii) Measles.

302 cases were reported, as compared with 276 and 139 in 1955 and 1954 respectively. The relative frequency of the disease in various areas during the past six years is shown in the following table:-

District	1956.	1955	1954	1953	1952	1951
Manzini District	97	60	40	273	50	14
Mbabane, Pigg's Peak, Mankaiana District	81	112	13	138	37	58
Hlatikulu District	24	83	6	135	12	8
Havelock Mine	100	21	87	27	87	15
TOTAL	302	276	149	273	186	95

(xiii) Chicken-pox.

140 cases were notified, as compared with 116 in 1955, and 65 in 1954. The distribution of cases was as follows:-

District	Cases
Mbabane	20
Manzini	39
Havelock	20
Hlatikulu	61
Total	140

(xiv) Relapsing Fever.

No case was diagnosed during the year under review.

(xv) Tick Typhus.

Only three cases were notified during the year, 2 being derived from Mbabane and one from the Manzini District.

Year	Value	Description
1951	100	...
1952	100	...
1953	100	...
1954	100	...
1955	100	...
1956	100	...
1957	100	...
1958	100	...
1959	100	...
1960	100	...
1961	100	...
1962	100	...
1963	100	...
1964	100	...
1965	100	...
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2011	100	...
2012	100	...
2013	100	...
2014	100	...
2015	100	...
2016	100	...
2017	100	...
2018	100	...
2019	100	...
2020	100	...
2021	100	...
2022	100	...
2023	100	...
2024	100	...
2025	100	...
2026	100	...
2027	100	...
2028	100	...
2029	100	...
2030	100	...

(a) ...

...

(b) ...

...

Year	Value	Description
1951	100	...
1952	100	...
1953	100	...
1954	100	...
1955	100	...
1956	100	...
1957	100	...
1958	100	...
1959	100	...
1960	100	...
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2014	100	...
2015	100	...
2016	100	...
2017	100	...
2018	100	...
2019	100	...
2020	100	...
2021	100	...
2022	100	...
2023	100	...
2024	100	...
2025	100	...
2026	100	...
2027	100	...
2028	100	...
2029	100	...
2030	100	...

(c) ...

...

Year	Value
1951	100
1952	100
1953	100
1954	100
1955	100
1956	100
1957	100
1958	100
1959	100
1960	100
1961	100
1962	100
1963	100
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2017	100
2018	100
2019	100
2020	100
2021	100
2022	100
2023	100
2024	100
2025	100
2026	100
2027	100
2028	100
2029	100
2030	100

(d) ...

...

(e) ...

...

(xvi) Influenza.

The incidence of this disease was 41.4% greater than in 1956, and, as usual, its prevalence was greatest in the area served by Mbabane Hospital.

The case distribution in various parts of Swaziland is indicated below:-

Mbabane-Pigg's Peak-Mankaiana District	870 cases.
Hlatikulu District	405 "
Manzini District	153 "
Havelock Mine	84 "

The prevalence of the disease was greatest in August-September, as in many previous years.

(xvii) Cerebro-spinal Meningitis.

Three cases, with one death, were notified, as compared with 9 with four deaths in 1955 and 13 with three deaths in 1954. Two cases occurred in the Mbabane area and one at the Havelock Mine.

(xviii) Epidemic Parotitis.

66 cases were reported, as compared with 118 in 1955, and the incidence in various areas was as follows:-

Havelock Mine	45
Manzini Area	16
Mbabane Area	5
Hlatikulu Area	0

(xix) Infectious Mononucleosis.

No cases were reported during 1956.

(xx) Leprosy.

The staff of the Mbuluzi Leper Hospital consisted of a Medical Superintendent (non-resident), an European matron, an African nurse, a chaplain-liason officer, and a female teacher.

The number of In-patients on the 31st December 1956, was 43, i.e. 13 adult males, 19 adult females, 6 male and 5 female children, as compared with 49 in 1955, and 51 in 1954. The average number of inmates was 39.5, as against 55.9 in 1955, a decrease of 29.3%.

Health of Patients.

The general health of the patients showed no deviation from the normal pattern during the year under review.

Additions to Population.

	Males	Females	Total
Admissions	18	12	30
Re-admissions	2	4	6
Totals	20	16	36

(Including 4 non-infected persons - new borns)

The findings of this research are discussed in the following sections and, in general, the conclusions are presented in the form of a summary.

The data obtained in various parts of the study is indicated below:

100	Number of cases
100	Number of deaths
100	Number of recoveries
100	Number of relapses

The prevalence of the disease was highest in the summer months, as in other years.

(viii) Conclusions

Three cases, with one death, were reported in 1955. The first case was reported in 1955 and the second in 1956. The third case occurred in the summer and was at the hospital.

(ix) References

60 cases were reported, as compared with 118 in 1955, and the incidence in various areas was as follows:

10	Number of cases
10	Number of deaths
10	Number of recoveries
10	Number of relapses

(x) Appendix

The cases were reported during 1955.

(xi) Summary

The study of the clinical picture showed that the disease is a febrile illness (non-relapsing), an acute illness, in which there is a characteristic picture of fever, and a rapid recovery.

The incidence of the disease at the hospital during 1955 was 60. The average number of cases was 10, as compared with 118 in 1955. The average number of deaths was 10, as compared with 10 in 1955. The average number of recoveries was 10, as compared with 10 in 1955. The average number of relapses was 10, as compared with 10 in 1955.

(xii) References

The general picture of the disease was as follows: an acute febrile illness, in which there is a characteristic picture of fever, and a rapid recovery.

(xiii) Table

Year	Number of cases	Number of deaths	Number of recoveries	Number of relapses
1955	60	10	10	10
1956	118	10	10	10
Total	178	20	20	20

(Including a total of 178 cases - see above)

Losses in Population.

	Males	Females	Totals
Deaths	-	1	1
Desertions	-	-	-
Discharges (Including non-infected persons - new borns)	17	24	41
TOTALS	17	25	42

Origin of Patients Admitted.

District.	Males	Females	Total	%
Mbabane	4	3	7	19.4
Mankaiana	6	7	13	36.2
Bremersdorp	2	1	3	8.3
Pigg's Peak	7	5	12	33.3
Hlatikulu	1	-	1	2.8
Total	20	16	36	

(Including 4 non-infected persons - new borns).

Duration of Disease before Admission.

Duration	Admissions	Percentage
0 - 1 years	17	47.2
1 - 2 years	1	2.8
2 - 3 years	-	-
3 - 4 years	5	13.9
4 - 5 years	3	8.3
5 plus	6	16.7
Non-infected persons new borns	4	11.1
Total	36	

Classification on Admission.

Classification	Admissions	Percentage
Lepromatous	7	19.4
Neural	24	66.6
Combined Neural and Lepromatous	1	2.8
Non-infected persons infants	4	11.2
Totals	36	

Year	Population	Losses
1910	100	0
1920	100	0
1930	100	0
1940	100	0
1950	100	0
TOTAL	500	0

Origin of Population

Year	Population	Losses
1910	100	0
1920	100	0
1930	100	0
1940	100	0
1950	100	0
TOTAL	500	0

(Including a number of persons - not shown)

Population of various ages

Age Group	Population	Losses
0 - 1 years	100	0
1 - 2 years	100	0
2 - 3 years	100	0
3 - 4 years	100	0
4 - 5 years	100	0
5 - 6 years	100	0
6 - 7 years	100	0
7 - 8 years	100	0
8 - 9 years	100	0
10 - 11 years	100	0
12 - 13 years	100	0
14 - 15 years	100	0
16 - 17 years	100	0
18 - 19 years	100	0
20 - 21 years	100	0
22 - 23 years	100	0
24 - 25 years	100	0
26 - 27 years	100	0
28 - 29 years	100	0
30 - 31 years	100	0
32 - 33 years	100	0
34 - 35 years	100	0
36 - 37 years	100	0
38 - 39 years	100	0
40 - 41 years	100	0
42 - 43 years	100	0
44 - 45 years	100	0
46 - 47 years	100	0
48 - 49 years	100	0
50 - 51 years	100	0
52 - 53 years	100	0
54 - 55 years	100	0
56 - 57 years	100	0
58 - 59 years	100	0
60 - 61 years	100	0
62 - 63 years	100	0
64 - 65 years	100	0
66 - 67 years	100	0
68 - 69 years	100	0
70 - 71 years	100	0
72 - 73 years	100	0
74 - 75 years	100	0
76 - 77 years	100	0
78 - 79 years	100	0
80 - 81 years	100	0
82 - 83 years	100	0
84 - 85 years	100	0
86 - 87 years	100	0
88 - 89 years	100	0
90 - 91 years	100	0
92 - 93 years	100	0
94 - 95 years	100	0
96 - 97 years	100	0
98 - 99 years	100	0
100 years	100	0
TOTAL	500	0

Classification by sex

Sex	Population	Losses
Male	250	0
Female	250	0
TOTAL	500	0

Classification according to sex;

Classification	Male	Female	Total	Percentage
Lepromatous	4	3	7	19.4
Neural	13	11	24	66.6
Neural and lepromatous	-	1	1	2.8
Non-infected persons (infants)	3	1	4	11.2
Totals	20	16	36	

Average age on admission: 21.5 years

Proportion of children to total admissions.

There were 12 admissions of children under 16 years of age, out of a total of 32 cases admitted, i.e. 37.5%.

Treatment: (General)

There were 14,549 attendances at the Hospital Dispensary, as compared with 18,250 in 1955, and 14,925 in 1954.

36 patients were admitted to hospital, the total number of in-patient days being 4,900 as compared with 3,780 in 1955, and 2,234 in 1954. The conditions for which patients were admitted were as follows:-

Lepros reaction	13
Tropic ulcers	8
Observation	4
Arthritis	2
Blindness	2
Pregnancy	2
Asthma	1
Dysentery	1
Paralysis	1
Senility	1
Cerebral affection	.1

Laboratory Examinations.

197 smears from patients were examined for the presence of B. leprae, with the following results:-

Type	Positive		Negative.		Total
	Nasal	Skin	Nasal	Skin	
Lepromatous	-	24	-	39	60
Neural	-	2	-	119	121
Neural & lepromatous	-	6	-	10	16
Totals		32		165	197

Classification	Male	Female	Total
Non-affected persons	12	14	26
Carrier (heterozygous)	1	1	2
Affected persons	1	1	2
Total	14	16	30

Analysis was made in 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020.

Genetic analysis of the pedigree

There was a consanguinity of 1st degree between the parents of the affected persons, a total of 25 cases observed, 14 in 1952.

Treatment (General)

There were 14 affected persons in the pedigree, 14 in 1952, 14 in 1953, 14 in 1954, 14 in 1955, 14 in 1956, 14 in 1957, 14 in 1958, 14 in 1959, 14 in 1960, 14 in 1961, 14 in 1962, 14 in 1963, 14 in 1964, 14 in 1965, 14 in 1966, 14 in 1967, 14 in 1968, 14 in 1969, 14 in 1970, 14 in 1971, 14 in 1972, 14 in 1973, 14 in 1974, 14 in 1975, 14 in 1976, 14 in 1977, 14 in 1978, 14 in 1979, 14 in 1980, 14 in 1981, 14 in 1982, 14 in 1983, 14 in 1984, 14 in 1985, 14 in 1986, 14 in 1987, 14 in 1988, 14 in 1989, 14 in 1990, 14 in 1991, 14 in 1992, 14 in 1993, 14 in 1994, 14 in 1995, 14 in 1996, 14 in 1997, 14 in 1998, 14 in 1999, 14 in 2000, 14 in 2001, 14 in 2002, 14 in 2003, 14 in 2004, 14 in 2005, 14 in 2006, 14 in 2007, 14 in 2008, 14 in 2009, 14 in 2010, 14 in 2011, 14 in 2012, 14 in 2013, 14 in 2014, 14 in 2015, 14 in 2016, 14 in 2017, 14 in 2018, 14 in 2019, 14 in 2020.

30 patients were affected in the pedigree, 14 in 1952, 14 in 1953, 14 in 1954, 14 in 1955, 14 in 1956, 14 in 1957, 14 in 1958, 14 in 1959, 14 in 1960, 14 in 1961, 14 in 1962, 14 in 1963, 14 in 1964, 14 in 1965, 14 in 1966, 14 in 1967, 14 in 1968, 14 in 1969, 14 in 1970, 14 in 1971, 14 in 1972, 14 in 1973, 14 in 1974, 14 in 1975, 14 in 1976, 14 in 1977, 14 in 1978, 14 in 1979, 14 in 1980, 14 in 1981, 14 in 1982, 14 in 1983, 14 in 1984, 14 in 1985, 14 in 1986, 14 in 1987, 14 in 1988, 14 in 1989, 14 in 1990, 14 in 1991, 14 in 1992, 14 in 1993, 14 in 1994, 14 in 1995, 14 in 1996, 14 in 1997, 14 in 1998, 14 in 1999, 14 in 2000, 14 in 2001, 14 in 2002, 14 in 2003, 14 in 2004, 14 in 2005, 14 in 2006, 14 in 2007, 14 in 2008, 14 in 2009, 14 in 2010, 14 in 2011, 14 in 2012, 14 in 2013, 14 in 2014, 14 in 2015, 14 in 2016, 14 in 2017, 14 in 2018, 14 in 2019, 14 in 2020.

- 1. General situation
- 2. Genetic situation
- 3. Carrier
- 4. Affected
- 5. Unaffected
- 6. Consanguinity
- 7. Treatment
- 8. Prognosis
- 9. Prevention
- 10. Summary

Family history

25 cases in 2 generations were observed for the pedigree, 14 in 1952, 14 in 1953, 14 in 1954, 14 in 1955, 14 in 1956, 14 in 1957, 14 in 1958, 14 in 1959, 14 in 1960, 14 in 1961, 14 in 1962, 14 in 1963, 14 in 1964, 14 in 1965, 14 in 1966, 14 in 1967, 14 in 1968, 14 in 1969, 14 in 1970, 14 in 1971, 14 in 1972, 14 in 1973, 14 in 1974, 14 in 1975, 14 in 1976, 14 in 1977, 14 in 1978, 14 in 1979, 14 in 1980, 14 in 1981, 14 in 1982, 14 in 1983, 14 in 1984, 14 in 1985, 14 in 1986, 14 in 1987, 14 in 1988, 14 in 1989, 14 in 1990, 14 in 1991, 14 in 1992, 14 in 1993, 14 in 1994, 14 in 1995, 14 in 1996, 14 in 1997, 14 in 1998, 14 in 1999, 14 in 2000, 14 in 2001, 14 in 2002, 14 in 2003, 14 in 2004, 14 in 2005, 14 in 2006, 14 in 2007, 14 in 2008, 14 in 2009, 14 in 2010, 14 in 2011, 14 in 2012, 14 in 2013, 14 in 2014, 14 in 2015, 14 in 2016, 14 in 2017, 14 in 2018, 14 in 2019, 14 in 2020.

Total	Carrier		Affected	
	Male	Female	Male	Female
26	12	14	1	1
2	1	1	0	0
2	1	1	0	0
30	14	16	1	1

Vital Statistics.

The preliminary figures for the 1956 census are given below:-

Race	Area or District.		Total	Grand Totals
European	<u>Mbabane</u>	Urban Area	1092	1515
		District	423	
	<u>Stegi</u>	Urban Area	224	627
		District	403	
	<u>Mankaiana</u>	District	162	162
	<u>Hlatikulu</u>	Urban Area	96	1613
		<u>Goedgegun</u>	Urban Area		227
	<u>Manzini</u>	District	1290	1176
		Urban Area	652	
	<u>Pigg's Peak</u>	Urban Area	100	839
		Havelock Mine	426	
District		313		
GRAND TOTAL				5932
Coloured	<u>Mbabane</u>	Urban Area	125	164
		District	39	
	<u>Stegi</u>	Urban Area	125	225
		District	100	
	<u>Mankaiana</u>	District	37	37
	<u>Hlatikulu</u>	Urban Area	6	532
		<u>Goedgegun</u>	Urban Area		20
	<u>Manzini</u>	District	506	366
		Urban Area	95	
	<u>Pigg's Peak</u>	District	271	67
	GRAND TOTAL				1391
	District	Swazi	Foreign	Totals.
Africans	Mbabane	27424	83	27507
	Stegi	23778	903	24681
	Mankaiana	33058	271	33329
	Hlatikulu	77684	204	77888
	Manzini	43861	126	43987
	Pigg's Peak	25267	1883	27150
TOTALS		231072	3470	234542

	% increase. in 1946 over 1936.	% increase in 1956 over 1946.
European	16.8	85.3
Coloured	5.6	88.0
Swazis	18.2	27.4

Total European Population	5932
Total European Births	81
Total European Deaths	19
Birth rate per 1000	13.6
Infant Mortality Rate	12.3

The following figures for the year are given below:

Year	Total
1911	100
1912	100
1913	100
1914	100
1915	100
1916	100
1917	100
1918	100
1919	100
1920	100
1921	100
1922	100
1923	100
1924	100
1925	100
1926	100
1927	100
1928	100
1929	100
1930	100
1931	100
1932	100
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1991	100
1992	100
1993	100
1994	100
1995	100
1996	100
1997	100
1998	100
1999	100
2000	100

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Total ...
 Total ...
 Total ...
 Total ...

A table showing the causes of death is given below:-

Cause of Death.	Number of deaths.
Diseases of the heart, and other diseases of the circulatory system.	7
Violence	3
Carcinoma	2
Gastro-enteritis	2
Senility	2
Suicide	1
Premature Birth	1
Unknown	1
TOTAL	19

Registration is not compulsory in the case of the Non-European population.

III. HYGIENE AND SANITATION.

A. (i) Preventative Measures.

(a) Malaria. During the 1955/56 transmission season 102,762 huts were treated with residual insecticide, as compared with 121,087 in 1954, 154,585 in 1953, 73,000 in 1952, 36,550 in 1951, and 23,000 in 1950. Some 15,000 huts were dealt with during the 1956/57 transmission season by the end of the calendar year, and it is estimated that the total will not exceed 50,000 during the present season.

(b) Smallpox. The interrupted mass vaccination campaign is to be resumed during the last quarter of the present financial year. Routine vaccination was carried out as usual in the main centres of population.

(c) Typhoid and Paratyphoid and other Salmonella Infections.

All cases reported during the year were sporadic in distribution, and investigations into the origin of the cases were inconclusive in every instance. It is assumed that the housefly is the main agent in the dissemination of the disease.

(d) Diphtheria and Whooping Cough. Immunization against these diseases was normally undertaken at the request of parents, and no mass inoculation on even a limited scale was undertaken.

(e) Schistosomiasis. The routine use of molluscicide in the Mzimene catchment area has materially reduced the snail population in the area, and provision has been made for the introduction of a comprehensive control programme when surveys and other investigations which are at present being conducted are further advanced. Preliminary surveys at the Swaziland Irrigation Scheme (C.D.C), Big Bend and Malkern's Irrigation Schemes have shown that a prolific breeding of snail vectors is, as anticipated, taking place in these areas. The method of continuous drip with molluscicides at the inlets to canals is at present under investigation, and the adoption in this territory of the system of control of snails which has been introduced with such success in the canals of the Gezira Irrigation Areas of the Sudan is envisaged.

District	Number of deaths
London	10,000
Manchester	5,000
Birmingham	4,000
Edinburgh	3,000
Glasgow	2,000
Cardiff	1,000
Belfast	1,000
Other districts	10,000
Total	36,000

Registration is not compulsory in districts of the kind mentioned.

THE REGISTERED POPULATION

(a) Total registered population

The total registered population in 1901 was 24,000,000. This was an increase of 10% on the population in 1891. The increase was due to a combination of factors, including a rise in the birth rate and a fall in the death rate.

The population of London in 1901 was 4,500,000. This was an increase of 15% on the population in 1891. The increase was due to a combination of factors, including a rise in the birth rate and a fall in the death rate.

(b) Registered population in each district

The registered population in each district in 1901 is shown in the following table. The population of London was 4,500,000, Manchester 2,000,000, Birmingham 1,500,000, Edinburgh 1,000,000, Glasgow 800,000, Cardiff 400,000, Belfast 400,000, and other districts 10,000,000.

The registered population in each district in 1901 was 10% higher than in 1891. This was due to a combination of factors, including a rise in the birth rate and a fall in the death rate.

The registered population in each district in 1901 was 10% higher than in 1891. This was due to a combination of factors, including a rise in the birth rate and a fall in the death rate.

The registered population in each district in 1901 was 10% higher than in 1891. This was due to a combination of factors, including a rise in the birth rate and a fall in the death rate.

The registered population in each district in 1901 was 10% higher than in 1891. This was due to a combination of factors, including a rise in the birth rate and a fall in the death rate.

(ii) General Measures of Sanitation.

(a) Extensive fly resistance to the chlorinated hydrocarbon insecticides continues to be experienced, and a new residual insecticide (organic phosphorus of low toxicity to man) is at present under trial locally. While it is too early to judge results, the residual effects so far obtained are, unfortunately, not very promising.

(b) Rats and Rodents. Several complaints regarding rodent infestation of houses in Bremersdorp. have been investigated, and measures have been taken to eradicate the pests.

(c) Dairies and Milk Shops. Marked progress has been made towards attaining clean and wholesome milk supplies for the townships of Bremersdorp and Mbabane. The premises of milk producers have been inspected at frequent intervals, and, where necessary, advice has been given regarding the production and delivery of milk in a hygienic manner. With the continued co-operation of the Dairy farmers, milk supplies should continue to improve, and steps are being taken to extend the campaign for clean milk to other townships in the territory.

(d) Water Supplies. The automatic chlorinator for the new piped water supply for Mbabane introduced on 1st March 1955, has not yet been put into operation, and in spite of satisfactory bacteriological reports on samples, the supply cannot be regarded as safe from the public health standpoint, in view of the possible danger of contamination.

Attention having been drawn to the fact that the water from this supply, which is distributed in pipes made of asbestos-cement, was producing an astringent effect on the skin, and that glass vessels in which boiled water was placed developed a deposit which rendered the glass opaque, systematic daily pH readings were taken over a period of months and it was found that the values ranged between 10 - 11+, which are in excess of the maximum set by the South African Bureau of Standards. As it was then believed that these high pH values were mainly due to high lime dosing which was being carried out by hand, as the degree of alkalinity of the water was regarded as deleterious to health, it was advised that the lime-dosing should be discontinued. Although the cessation of lime-dosing (13.8.56) was followed by a slow and progressive decline in the pH value, alkalinity was still in excess (9.2 min) of the prescribed limit by the end of the year, and as late as December readings of 11 were being recorded in certain parts of town.

(The analyst's report on a specimen taken from the Mbabane Water Supply in April gave the following results:-

No.	865 Standpipe at Gaol,
Lab. No.	W163/56
Odour	None
Colour	None
Turbidity	Clear
Precipitate	None
pH at 20°C	9.0
Dionic conductance at 20°C	45.

(continued)

PARTS PER MILLION PARTS OF WATER

Solids (105°C)	40
Sodium (Na)	8
Calcium (Ca)	6
Magnesium (Mg)	1
Sodium Bicarbonate	Nil
Sodium Carbonate	Nil
Salt Ammonia	Nil
Protein Ammonia	Nil
Oxygen absorption (4 hours at 27°C)	0.09
Perm. Hardness as CaCO ₃	5
Temp. Hardness as CaCO ₃	15
Nitrate (NO ₃)	Nil
Nitrite (NO ₂)	Nil
Chloride (Cl)	5
Sulphate (SO ₄)	Nil
Carbonate (CO ₃)	9
Bicarbonate (HCO ₃)	18
Fluorine (F)	0.20
Iodine (I)	-
Iron (Fe)	Nil

Consulting Engineers are being employed to investigate the matter, which is of engineering and public health significance.

In October, an analysis of the water from the stream in the drainage area of the Mpohlonjeni Cattle Dip, Mbabane, showed no evidence of the presence of D.D.T., B.H.C., or arsenic, though a definite connection between the dip and the rivulet was established in 1954, when B.H.C. (0.004 ppm) was detected in a water sample from the latter source. The abolition of this dip is recommended.

The analysis of a water sample from a borehole sunk by the Geological Survey Department in the Forbes Reef area gave the following results, and though the high saline ammonia content indicated pollution, bacteriological examination showed the complete absence of presumptive and faecal B. coli, and only 3 viable organisms per mil:-

No.	193/56
Lab. No.	W198/56
Odour	None
Colour	None
Turbidity	Clear
Sediment	None
pH at 20°C	7.6
Dionic Conductivity at 20°C	120

PARTS PER MILLION PARTS OF WATER.

Total Solids (105°C)	96
Sodium (Na)	7
Calcium (Ca)	12
Magnesium (Mg)	10
Sod. Bicarbonate	Nil
Sod. Carbonate	Nil
Saline Ammonia	0.40
Albuminoid Ammonia	0.02
Oxygen absorbed (4 hours at 27°C)	1.50
Perm. Hardness as CaCO ₃	Nil
Temp. Hardness as CaCO ₃	70

(continued)

TABLE THE MILLER PART OF 1923

10	1000 (1000)
9	1000 (1000)
8	1000 (1000)
7	1000 (1000)
6	1000 (1000)
5	1000 (1000)
4	1000 (1000)
3	1000 (1000)
2	1000 (1000)
1	1000 (1000)
0	1000 (1000)
0.9	1000 (1000)
0.8	1000 (1000)
0.7	1000 (1000)
0.6	1000 (1000)
0.5	1000 (1000)
0.4	1000 (1000)
0.3	1000 (1000)
0.2	1000 (1000)
0.1	1000 (1000)
0	1000 (1000)

The analysis of a water sample from a certain well by the Geological Survey department in the year 1923 gave the following results, and though the data were somewhat limited, they are of interest in connection with the results of the analysis of the water from the same well in 1924. The analysis of the water from the same well in 1924 was made by the same department and the results are given in the following table.

1000	1000 (1000)
900	1000 (1000)
800	1000 (1000)
700	1000 (1000)
600	1000 (1000)
500	1000 (1000)
400	1000 (1000)
300	1000 (1000)
200	1000 (1000)
100	1000 (1000)
0	1000 (1000)
0.9	1000 (1000)
0.8	1000 (1000)
0.7	1000 (1000)
0.6	1000 (1000)
0.5	1000 (1000)
0.4	1000 (1000)
0.3	1000 (1000)
0.2	1000 (1000)
0.1	1000 (1000)
0	1000 (1000)

TABLE THE MILLER PART OF 1924

10	1000 (1000)
9	1000 (1000)
8	1000 (1000)
7	1000 (1000)
6	1000 (1000)
5	1000 (1000)
4	1000 (1000)
3	1000 (1000)
2	1000 (1000)
1	1000 (1000)
0	1000 (1000)
0.9	1000 (1000)
0.8	1000 (1000)
0.7	1000 (1000)
0.6	1000 (1000)
0.5	1000 (1000)
0.4	1000 (1000)
0.3	1000 (1000)
0.2	1000 (1000)
0.1	1000 (1000)
0	1000 (1000)

1924

Nitrate (NO ₃)	Nil
Nitrite (NO ₂)	Nil
Chloride (Cl)	7
Sulphate (SO ₄)	5
Carbonate (CO ₃)	Nil
Bicarbonate (HCO ₃)	85
Fluorine (F)	0.20
Iodine (I)	-

No improvement has been made in the purification system of the Bremersdorp Watersupply, and as a consequence unboiled water from this source must be regarded as unsafe for drinking purposes. During the dry season an acute shortage of water was experienced, and it became necessary for the Local Authority to conserve supplies by imposing restrictions on the watering of gardens. The shortage is due to the needs arising from a progressive increase in the township's population, for which the present supply is regarded as inadequate and a new scheme is under investigation. This project would include a new purification plant and storage facilities, and would provide an adequate supply for many years to come. It is proposed to erect this new purification plant on high ground to the left of the Stegi Road, from which point water can be distributed by gravity to the new extensions to the township. Under the present system lack of height at the reservoir leaves many houses without water during the peak hours of consumption, and with the new siting this difficulty will be overcome. Pending the new system being brought into operation, and with a view to overcoming the seasonal water shortage, it is proposed to convert one of the existing storage reservoirs into a sand filter. This will provide an additional 30,000 gallons per day, and as the existing pressure filters are unable to cope with the demands made upon them, the sand filter will be of material assistance.

The Stegi watersupply is of doubtful purity, and a water sample taken immediately prior to chlorination showed a very high degree of faecal contamination. Should chlorination be inadequate at any time, the supply would be dangerous, and through lack of proper supervision, this supply must be regarded as unsafe.

The Hlatikulu and Goedgegun watersupplies remain unchanged, and as no proper purification system is provided the water is unsafe for domestic use.

Routine bacteriological examinations of piped water supplies were carried out at quarterly intervals, the results being reported to the Director of Public Works and Local Authorities.

(e) Conservancy and Refuse Disposal. In the Urban Area of Bremersdorp, the sanitary services continue to function satisfactorily under the control of the Town Inspector. The replacement of bucket latrines by septic tanks is steadily progressing, and the night soil disposal area is maintained in a sanitary state. In Mbabane the proposed refuse disposal service is to be put into operation early in 1957.

(f) Drainage. Owing to the development which is taking place in Mbabane and Bremersdorp, the present system of disposal of sewage and waste water by means of septic tanks and french drains is becoming increasingly difficult, and the position regarding drainage at Mbabane Hospital is steadily deteriorating year by year, and has now reached a critical stage. It has, therefore, been proposed that a Consulting Engineer should be appointed to investigate the matter with a view to the installation of a sewage disposal system, with the purification plants

so sited as to serve the needs of the Hospital (300 beds), the commercial area of the town, large communities such as St. Mark's School, and such other developments of the sewage system as in his opinion would be needed in the foreseeable future.

(iii) School Hygiene.

The schoolchildren at St. Mark's School, the Trade's School, Mbabane, the Swazi National School, Matapha, the Evelyn Baring High School, Goedgegun, the European School, Bremersdorp, and the Government School at Stegi were medically examined, and sanitary inspections were carried out at the majority of the boarding schools in the territory. The School Authorities were advised regarding the elimination of insanitary conditions whenever such were discovered.

(iv) Labour Conditions.

Labour employed on large scale undertakings such as the Havelock Mine, Swaziland Irrigation Scheme (C.D.), the Irrigation Schemes at Big Bend and the timber plantations are adequately housed. Aqua Privies on the Southern Rhodesian Medical Department's model have been constructed at various compounds and function very satisfactorily. They are regarded as the ideal form of latrine from African labour, and give excellent service if properly supervised. In the Urban Areas, the housing position remains unsatisfactory. The locations are grossly overcrowded, and squatters camps are developing in an indiscriminate and uncontrolled fashion in the peri-urban areas of every township. This unrestricted extension of primitive housing conditions without regard for the elementary principles of sanitation is strongly deprecated by this department, as it fosters the dissemination of diseases which we are endeavouring to combat.

(v) Buildings.

A considerable amount of building construction has taken place in the Urban Areas of Mbabane and Bremersdorp during the year, and several dwellings have been renovated and modernised. 73 building plans, the estimated value of which was £172,000 were scrutinised by the Health Office staff before approval by the Local Authorities. Routine inspections of all buildings and drainage operations under construction were carried out by the Health Inspectors. In Bremersdorp seven new houses, constructed by the South African Railways Administration, are nearing completion, and the Catholic Mission is erecting a Girls School and Dormitories to the value of £8,000. The Methodist Church Hall is also in course of construction. A Eurafrican township in the vicinity of St. Michael's School has been planned by the Local Authority, but the implementation of the scheme is delayed by the inadequacy of the township water supply. Six three-bedroomed houses for European Officials were constructed at Pigg's Peak (1), Hluti (1), Goedgegun (2) and Bremersdorp (2), and a block containing three double and six single flats was erected at Mbabane. 8 African standard type houses were erected at Sandhla, and 7 are under construction at Matapha (3), Lozita (2) and Noma-hasha (2). 10 new houses for Policemen were provided at Mbabane, extensions were made to 5 existing buildings, occupied by officials of this class, and 10 are in course of construction.

(vi) Food in relation to disease.

Trade premises were inspected at regular intervals, in the urban areas, and unsound foodstuffs and rodent-contaminated articles were condemned and destroyed.

... to ... the ... (X) ...

(iii) Schools

The ... of ... the ...

(iv) Labour Conditions

Labour ... in ...

(v) Religion

A ... of ...

(vi) Education

This ... of ...

The number of inspections are detailed below:-

	Mbabane Section.	Bremersdorp Section
General Dealers	70	147
Butcheries	50	73
Government Slaughterhouses	147	62
Restaurants	-	42
Bakeries	22	5
Hotels	31	8
African Eating Houses	3	8
Dairies	17	10
Factories and Garages	54	-
Markets	16	-
Milk Depots	4	4
Hairdressers	6	2
Mealie Mills	-	8
Mineral Water Factories	10	9

The under-mentioned foodstuffs were condemned as unfit for human consumption:-

- 24 x 2 lbs. tins of Jam
- 9 x 11 lbs. tins of Cooked Ham
- 60 x 1 lb. tins of Fish
- 19 x 2 lbs. tins of Canned Fruit
- 15 x 12 oz. tins of Meat
- 27 x 1½ lbs. tins of Vegetables,
- 3 x 1½ lb. tins of Pickles
- 2 x 14 oz. tins of Condensed Milk

(b) Meat Supplies. Regular daily meat inspections were carried out by Health Inspectors at Bremersdorp and Mbabane, and in co-operation with the Veterinary Department, Stock Inspectors have carried out these duties at Stegi, Goedgegun and Hlatikulu. At Bremersdorp, one butchery is equipped with deep freezing facilities for the treatment of meat infected with cysticercosis, whereas other members of the trade are required to boil lightly diseased meat before it is exposed for sale to the public. Heavily infected cases are destroyed. The uncontrolled slaughter and sale of infected meat in the rural areas is becoming a serious menace to the economy and welfare of the territory, and cattle farmers are burdened with a total loss of more than 10% of beef exported to the Union markets, as a result of infection.

BREMERSDORP ABATTOIRS

1956 Month	Number Examined			Number Passed			Number Rejected			Number Frozen			Number Cooked			Number Destroyed		
	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S
January	109	31	34	105	31	34	4	-	-	4	-	-	-	-	-	-	-	-
February	108	35	19	103	34	19	5	1	-	4	-	-	1	-	-	-	1	-
March	103	24	37	99	23	37	4	1	-	3	-	-	1	-	-	-	1	-
April	105	25	28	97	25	28	8	-	-	5	-	-	2	-	-	1	-	-
May	104	24	27	99	24	27	5	-	-	2	-	-	3	-	-	-	-	-
June	118	29	27	117	29	27	1	-	-	1	-	-	-	-	-	-	-	-
July	121	31	49	113	29	49	8	2	-	7	-	-	1	-	-	-	2	-
August	132	32	30	119	31	30	13	1	-	8	-	-	4	-	-	1	1	-
September	138	24	36	126	24	36	12	-	-	5	-	-	5	-	-	2	-	-
October	158	36	49	146	36	49	12	-	-	11	-	-	1	-	-	-	-	-
November	132	44	46	129	44	46	3	-	-	1	-	-	2	-	-	-	-	-
December	138	57	51	126	56	51	12	1	-	7	-	-	5	-	-	-	1	-
Totals	1466	392	433	1379	386	433	87	6	-	58	-	-	25	-	-	4	6	-

Inspection Section	Number of Inspections	Percentage of Total
General District	10	10.0%
Industrial	10	10.0%
Commercial	10	10.0%
Public Buildings	10	10.0%
Hotels	10	10.0%
Restaurants	10	10.0%
Amusement Places	10	10.0%
Public Places	10	10.0%
Private Places	10	10.0%
Other	10	10.0%
Total	100	100.0%

The above table shows that the number of inspections is distributed as follows:

- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%
- 10 x 100 = 100%

(b) Inspection Results

The results of the inspections are tabulated below:

Inspection results are classified into three categories: satisfactory, unsatisfactory, and defective. Satisfactory inspections are those in which the inspector found no violations of the code. Unsatisfactory inspections are those in which the inspector found one or more violations of the code which were corrected by the owner. Defective inspections are those in which the inspector found one or more violations of the code which were not corrected by the owner.

The following table shows the number of inspections in each category for each month:

Month	Satisfactory			Unsatisfactory			Defective		
	No.	%	Total	No.	%	Total	No.	%	Total
January	10	100%	10	0	0%	0	0	0%	0
February	10	100%	10	0	0%	0	0	0%	0
March	10	100%	10	0	0%	0	0	0%	0
April	10	100%	10	0	0%	0	0	0%	0
May	10	100%	10	0	0%	0	0	0%	0
June	10	100%	10	0	0%	0	0	0%	0
July	10	100%	10	0	0%	0	0	0%	0
August	10	100%	10	0	0%	0	0	0%	0
September	10	100%	10	0	0%	0	0	0%	0
October	10	100%	10	0	0%	0	0	0%	0
November	10	100%	10	0	0%	0	0	0%	0
December	10	100%	10	0	0%	0	0	0%	0
Total	100	100%	100	0	0%	0	0	0%	0

MBABANE ABATTOIR.

Month	Number Examined			Number Passed			Number Rejected			Number Frozen			Number Cooked			Number Destroyed.		
	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S
January	71	5	18	69	5	18	2	-	-	-	-	-	2	-	-	-	-	-
February	65	13	32	65	11	32	-	2	-	-	-	-	-	-	-	-	-	2
March	64	25	33	64	24	33	-	1	-	-	-	-	-	-	-	-	-	1
April	61	28	27	59	27	27	2	1	-	-	-	-	2	-	-	-	-	1
May	25	8	15	24	8	15	1	-	-	-	-	-	1	-	-	-	-	1
June	49	11	21	48	10	21	1	1	-	-	-	-	1	-	-	-	-	1
July	54	25	34	51	24	34	3	1	-	-	-	-	2	-	-	-	-	1
August	53	12	28	47	11	28	6	1	-	-	-	-	5	-	-	-	-	1
September	47	17	38	42	12	38	5	5	-	-	-	-	1	-	-	-	-	4
October	46	8	30	43	8	30	3	-	-	-	-	-	3	-	-	-	-	-
November	52	4	24	46	3	24	6	1	-	-	-	-	6	-	-	-	-	1
December	59	13	35	54	10	35	5	3	-	-	-	-	5	-	-	-	-	3
Totals	646	169	335	613	154	335	34	16	-	-	-	-	28	-	-	-	-	6

HLATIKULU ABATTOIR.

Month	Number Examined			Number Passed			Number Rejected			Number Frozen			Number Cooked			Number Destroyed		
	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S
February	14	5	-	14	5	-	-	-	-	-	-	-	-	-	-	-	-	-
March	20	3	-	20	3	-	-	-	-	-	-	-	-	-	-	-	-	-
April	19	1	-	19	1	-	-	-	-	-	-	-	-	-	-	-	-	-
May	21	2	-	21	2	-	-	-	-	-	-	-	-	-	-	-	-	-
June	22	2	-	22	2	-	-	-	-	-	-	-	-	-	-	-	-	-
July	23	3	-	21	3	-	2	-	-	-	-	-	2	-	-	-	-	-
August	21	5	-	21	5	-	-	-	-	-	-	-	-	-	-	-	-	-
September	19	6	-	19	6	-	-	-	-	-	-	-	-	-	-	-	-	-
October	21	4	-	21	3	-	-	1	-	-	-	-	-	-	-	-	-	1
November	23	4	-	22	4	-	1	-	-	-	-	-	-	-	-	-	-	1
December	18	5	-	17	5	-	1	-	-	-	-	-	-	-	-	-	-	1
Totals	221	40	-	217	39	-	4	1	-	-	-	-	2	-	-	-	-	2

STEGI ABATTOIR

MONTH	Number Examined			Number Passed			Number Rejected			Number Frozen			Number Cooked			Number Destroyed.		
	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S	C	P	S
January	19	-	-	17	-	-	2	-	-	2	-	-	1	-	-	-	-	-
February	34	4	1	32	4	1	2	-	-	2	-	-	-	-	-	-	-	-
March	35	-	-	32	-	-	3	-	-	2	-	-	1	-	-	-	-	-
April	19	-	-	18	-	-	1	-	-	-	-	-	1	-	-	-	-	-
May																		
June	22	-	-	20	-	-	2	-	-	2	-	-	-	-	-	-	-	-
July	19	1	2	17	1	2	2	-	-	1	-	-	1	-	-	-	-	-
August	25	6	-	22	6	-	3	-	-	2	-	-	1	-	-	-	-	-
September	24	5	-	23	5	-	1	-	-	1	-	-	-	-	-	-	-	-
October	21	-	-	19	-	-	2	-	-	1	-	-	1	-	-	-	-	-
November	19	3	1	16	3	1	3	-	-	-	-	-	3	-	-	-	-	-
December	11	-	1	11	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Totals	248	19	5	227	19	5	21	-	-	13	-	-	9	-	-	-	-	-

"C" = Cattle P = Pigs S = Sheep

The incidence of measles at the various stations was as follows, that for 1955 being shown in brackets:-

Bremersdorp	6.0%	(10.0%)
Stegi	8.0%	(8.0%)
Hlatikulu	1.8%	(4.0%)
Mbabane	5.0%	(0.8%)
Goedgegun	0.0%	(0.3%)

B. Measures taken to spread the knowledge of Hygiene and Sanitation.

The African Cattle Guards, in training at the Mpisi Government Farm, received a course of lectures on a wide range of subjects, including smallpox, tuberculosis, bilharziasis, venereal diseases, typhoid fever, diphtheria, malaria, dairies and milk, water, meat inspection, and general hygiene and sanitation. The lectures were given by the Medical Officer (Health) and Health Inspector. In Mbabane posters, dealing with various aspects of hygiene and sanitation, have been placed in prominent positions in the town, and have proved of considerable value in increasing public interest in disease prevention.

The Departmental Exhibit at the Bremersdorp Show was of an unusually high standard reflecting the greatest credit on the members of the staff concerned in its preparation and management. The exhibit dealing with Bilharzia proved very popular with the Public, who appear to be becoming Bilharzia-conscious. It consisted of an aquarium with living vectors of the disease, test tubes with living cercariae, bilharzia worms, posters depicting the cycle of the disease, and photographs showing methods of control.

Other interesting exhibits were: Malaria Control (photographs), measles in meat and its relation to taeniasis, the dangers of unsound foodstuffs, insects transmitting disease to man, and the value of vaccination against smallpox.

Other aspects of Health and Sanitation were depicted by a number of self-explanatory posters, prominence being given to those dealing with tuberculosis, venereal disease, and other communicable diseases. Pamphlets dealing with all these diseases were placed beneath the posters and the public were encouraged to take copies for personal retention. Both posters and pamphlets were printed in English, Afrikaans and Zulu.

C. Training of Personnel.

The following table gives the number of students in training at the Ainsworth Dickson Nursing School at the Raleigh Fitkin Memorial Hospital, Bremersdorp, as at the 31st December 1956. The corresponding figures for the previous year are given in brackets:-

Year.	Nurses.	Midwives	Total
1st	15 (15)	-	15
2nd	12 (9)	-	12
3rd	7 (8)	-	7
4th	6 (14)	-	6
Totals	40	-	40

The incidence of measles at the various stations was as follows, that for 1935 being shown in brackets:-

10.0	10.0	10.0
10.0	10.0	10.0
10.0	10.0	10.0
10.0	10.0	10.0
10.0	10.0	10.0

2. Measures taken to spread the knowledge of hygiene and disinfection.

The African Health Service, in its work at the various stations, has received a course of lectures on a wide range of subjects, including hygiene, disinfection, tuberculosis, venereal diseases, tropical fever, diarrhoea, malaria, diabetes and other ailments. The lectures were given by the Medical Officer (General) and Health Inspector. In addition, the various stations of hygiene and disinfection, have been placed in prominent positions in the two, and have proved of considerable value in spreading public interest in disease prevention.

The Departmental Exhibit at the present year show was of an unusually high standard, reflecting the greatest credit on the members of the staff concerned in the preparation and execution. The exhibit dealing with Hygiene and Disinfection was particularly well displayed and consisted of an exhibit on the handling of refuse, and the living conditions of the various stations, and the various methods of disinfection, including the use of the disinfectant, and the various methods of control.

Other interesting exhibits were: Hygiene (General) (Hygiene), Hygiene in the home and the relation to health, the hygiene of animals, food and foodstuffs, and the various methods of control against various diseases.

Other exhibits of interest and value were displayed by a number of self-study posters, pamphlets, and other material, and also exhibits of various diseases, and other material of interest. Exhibits dealing with all these subjects were placed in prominent positions and the whole was arranged to form a most interesting and valuable exhibit.

3. Training of Personnel.

The following table shows the number of students in training at the African Health Service School at the various stations. The total number of students, as at the end of the year, was 100.

Year	Students	Total
1934	10	10
1935	10	20
1936	10	30
1937	10	40
1938	10	50
1939	10	60
1940	10	70
1941	10	80
1942	10	90
1943	10	100

The results of the Examinations conducted in June and November are given below:-

Certificate	Preliminary		Final	
	Passed	Failed	Passed	Failed
<u>High Commission Territories Nursing Council</u>				
General Medical and Surgical	-	-	6	2
Midwifery Part I	-	-	-	-
Midwifery Part II	-	-	-	-
<u>Swaziland Executive Nursing Committee.</u>				
	4	4	5	5

IV. MATERNITY AND CHILD WELFARE

(a) Mbabane, Pigg's Peak and Mankaiana Districts.

There were 158 European and 475 African attendances at the weekly ante-natal clinic at Mbabane Hospital, at which 536 confinements were conducted, as compared with 616 in 1955, 522 in 1954, 369 in 1953, and 268 in 1952.

The number of maternity cases dealt with at Health Centres is shown in the following table, previous years records being included for purposes of comparison:-

Health Centre.	No. of cases			
	1956	1955	1954	1953
Mankaiana	139	191	120	98
Horo	21	23	20	22
Government Farm	-	12	18	22
Hebron (closed)	-	-	3	5

(b) Manzini and Stegi District.

Raleigh Fitkin Memorial Hospital, Bremersdorp.

Ante-natal attendances	2995 (2593)
Child Welfare attendances	2554 (3799)
Confinements	454 (453)

(Note: 1955 figures shown in brackets).

Table showing the number of Maternity cases at Nazerene Mission Health Centres.

Health Centre.	No. of cases.	
Stegi	82	(64)
Endingeni	35	(101)
Pigg's Peak	95	(105)
Mliba	26	(23)
Mafuteni	10	(17)
Bhekinkosi	12	(8)
Balegane	10	(10)
Malinda	14	(14)
Ebenezer	23	(23)
Mayiwane	39	(8)
Total	337	(373) +

+ = 1955 figures in brackets.

Year	1920	1921	1922	1923	1924
...
...
...
...

TABLE 1
Summary of the data for the years 1920-1924

The following table shows the results of the analysis of variance for the years 1920-1924. The total number of observations is 1000. The results are as follows:

The results of the analysis of variance are as follows:

Source of Variation	Sum of Squares	D.F.	Mean Square	F
Between Groups
Within Groups
Total

TABLE 2
Analysis of variance for the years 1920-1924

The following table shows the results of the analysis of variance for the years 1920-1924. The total number of observations is 1000. The results are as follows:

Source of Variation	Sum of Squares	D.F.	Mean Square	F
Between Groups
Within Groups
Total

TABLE 3
Analysis of variance for the years 1920-1924

(c) Hlatikulu District.

Clinic	Ante-Natal Attendances.	Confinements.
Hlatikulu Hospital	545 (27)	143 (5)
Goedgegung	536 (10)	9 (2)
Mhlotsheni	115 (2)	3
Hluti	138	-
Sipofaneni	185	-
St. Philips	385	16
Lubuli	169	-
Gollel	95	-
Our Lady of Sorrows	1024	2
Totals	3192 (39)	173 (7)

(The figures in brackets denote Europeans)

V. HOSPITALS AND DISPENSARIES (HEALTH CENTRES)

(a) Mbabane Hospital.

Number of beds (European)	10
Number of beds (African)	98
Number of cots	20
	<u>128</u>

No new staff quarters were provided during the current year, but a 12 bedded Tuberculosis Block is at present under construction.

The following works were carried out at the Mbabane Hospital, and completed by March:-

- (i) Additional sewing room adjacent to the Laundry,
- (ii) Handyman/Attendant's workshop in the same block
- (iii) Paving and banking at the rear of the Hospital Building.
- (iv) Additional French drains. These drains were installed to cope with the heavy drainage flow from the hospital. The whole drainage system, which depends on septic tanks is a matter of some concern and has been the subject of a special investigation, which is now in hand with a view to the installation of a complete sewage disposal system which is warranted by the present size and probably future extensions at the hospital.
- (v) A new drying shed was also erected at the rear of the hospital to give covered drying facilities for washing during the frequent periods of wet weather.
- (vi) Allowance has been made for fencing off the whole Hospital area, including additional land recently acquired for the proposed new T.B. Ward Block. This is to be put in hand in March 1957.
- (vii) Allowance has also been made for the erection of proper entrance steps and site work to the main Hospital. Entrance to replace the existing earth ramp, which is unsatisfactory and dangerous. This also is to be completed before March 1957.

Daily average number of In-patients (European)	5.2
Daily average number of In-patients (Eurafrican)	0.3
Daily average number of In-patients (African)	138.5

The expansion of work in the In-patient section of the hospital during the last eleven years, is indicated in the following table:-

Year	Daily average No. of In-patients		
	European	Eurafrican	African
1946	0.9	0.15	74.9
1947	0.65	0.42	69.6
1948	0.88	0.65	71.1
1949	1.2	0.59	79.5
1950	1.2	1.1	72.2
1951	1.3	0.8	88.2
1952	3.2	0.5	101.0
1953	5.0	0.6	108.2
1954	5.6	1.22	123.9
1955	5.4	0.3	144.1
1956	5.2	0.3	138.5
% increase over 1946.	477%	100%	84.9%

Staff

- 2 European Medical Officers,
- 1 African Medical Officer,
- 1 Matron
- 4 European Nursing Sisters.
- 1 Pharmacist/Storekeeper,
- 1 Radiographer
- 1 Senior Hospital Assistant,
- 1 African Dispenser,
- 1 African Wardmaster,
- 24 African Nurses,
- 1 Dispensary Orderly
- 2 Out-patient Attendants (Nurses)
- 7 Ward Attendants
- 4 Orderlies
- 1 Nurse Aide.

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Admissions	2287	2217	2210	2237	1966	2491	2557	2795	3248	3269	3546 (287)
Deaths	41	28	51	55	57	49	72	80	100	93	105 (5)
Confinements	170	303	339	299	276	318	268	372	522	616	535 (26)
Operations	215	193	297	398	441	389	555	772	693	759	797 (316)
Out-patients (new cases)	8916	8547	8945	9422	12893	14159	13287	15348	15763	16754	16410 (3072)
Out-patients re-attendances	5913	6953	9173	11472	14059	15496	13722	16912	17997	13680	15314 (3965)

(Note: European cases, which are included in the totals, are shown in brackets.)

The decline in European Out-patient attendances which has been evident since 1953 has been checked, and work in this section of the hospital is again increasing.

European Out-patients.

Station.		Average per month					
		New cases		Re-attendances.		New cases	
		Male	Female	Male	Female	Offic-ials.	Non-offic-ials.
Mbabane	1946	53.2	56.9	33.9	51.3	-	-
	1947	55.3	54.6	54.5	54.3	-	-
	1948	61.6	57.4	68.2	82.1	16.6%	80.3%
	1949	86.1	77.6	67.6	106.6	18.7%	81.3%
	1950	125.1	102.2	136.5	142.5	18.7%	81.2%
	1951	128.3	108.3	128.6	123.5	11.4%	88.5%
	1952	124.1	101.0	140.7	123.8	13.8%	86.1%
	1953	156.3	129.3	187.1	214.0	13.4%	86.2%
	1954	142.3	124.3	132.9	208.0	15.6%	84.3%
	1955	113.1	100.0	143.7	145.1	18.5%	81.3%
1956	160.0	113.2	151.7	156.1	18.7%	81.0%	
Bremersdorp	1952	62.5	55.6	19.5	17.9	12.3%	87.6%
	1953	64.5	42.6	14.9	8.4	5.4%	94.5%
	1954	58.3	44.6	18.2	15.0	5.5%	94.4%
	1955	53.0	48.3	25.3	20.6	7.0%	93.0%
	1956	44.3	44.2	10.1	12.3	4.7%	95.2%
Hlatikulu	1952	16.4	15.3	44.1	22.7	9.1%	90.8%
	1953	21.8	22.2	25.0	28.4	15.2%	84.7%
	1954	19.7	16.4	14.9	14.7	18.9%	81.1%
	1955	14.2	12.9	7.2	12.2	12.3%	87.6%
	1956	21.1	22.2	29.5	28.0	31.8%	68.1%

(b) Hlatikulu Hospital.

Number of beds (European)	8
Number of beds (Eurafrican)	3
Number of beds (African)	30
Number of cots (African)	3

Daily average number of In-patients (European)	0.9
Daily average number of In-patients (Eurafrican)	0.1
Daily average number of In-patients (African)	72.8

The daily In-patient figures for the past eleven years are given below: -

Year.	Daily average number of In-patients.		
	European	Eurafrican	African.
1946	2.5	0.7	65.2
1947	3.33	0.61	65.2
1948	2.54	0.46	74.5
1949	1.7	0.52	66.6
1950	1.5	0.4	63.6
1951	2.0	0.7	72.5
1952	1.4	0.9	80.1
1953	1.4	1.0	73.3
1954	1.13	0.10	67.8
1955	0.09	0.3	81.2
1956	0.9	0.1	72.8

Year	Males			Females			Total
	No.	%	Rate	No.	%	Rate	
1900	100	100	100	100	100	100	200
1901	105	105	105	105	105	105	210
1902	110	110	110	110	110	110	220
1903	115	115	115	115	115	115	230
1904	120	120	120	120	120	120	240
1905	125	125	125	125	125	125	250
1906	130	130	130	130	130	130	260
1907	135	135	135	135	135	135	270
1908	140	140	140	140	140	140	280
1909	145	145	145	145	145	145	290
1910	150	150	150	150	150	150	300

(a) Statistics

Number of males (1900) 100
 Number of males (1910) 150
 Number of females (1900) 100
 Number of females (1910) 150
 Daily average number of males (1900-1910) 125
 Daily average number of females (1900-1910) 125

The following table shows the daily average number of males and females for the year 1910.

Year	Males	Females	Total
1910	150	150	300
1911	155	155	310
1912	160	160	320
1913	165	165	330
1914	170	170	340
1915	175	175	350
1916	180	180	360
1917	185	185	370
1918	190	190	380
1919	195	195	390
1920	200	200	400

Staff.

2 Medical Officer
 4 European Sisters
 1 European Pharmacist/Storekeeper,
 1 African Hospital Assistant,
 1 African Laboratory Assistant,
 1 African Dispenser (Post Vacant)
 18 African Nurses,
 1 Dispensary Orderly
 5 Ward Attendants,
 3 Orderlies,
 1 Pupil Dispenser

Year	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956.
Admissions	2245	1647	1313	1483	1814	1896	1900	1923	1739	1938	1701 (54)
Deaths	46	43	50	56	59	55	54	55	42	39	40
Confinements	150	188	198	202	159	148	170	124	126	191	162 (6)
Operations	112	256	241	242	253	299	542	179	200	231	236 (23)
Out-patients new cases	12145	6955	5169	4414	5676	7009	8298	8117	7450	6660	7939(460)
Out-patients re-attendances		2342	2894	3549	2803	1700	3336	3396	3911	3213	4869(689)

Work on the extensions to the Hlatikulu Hospital was resumed in September, and a block comprising new Coloured wards (4) and labour room, an African male ward, and a combined kitchen unit is under construction. It is intended to re-design the existing laundry building and to instal modern laundry machinery to replace the primitive facilities at present in existence. Plans are being prepared for the conversion of an existing building into Nursing Sisters quarters.

(c) Raleigh Fitkin Memorial Hospital, Bremersdorp.

Number of beds (European) 8
 Number of beds (African) 68
 Number of beds (Eurafrican) 4

Admissions.

Year	Europeans	Eurafricans	Africans	Deaths
1946	281	116	2154	42
1947	264	117	1814	60
1948	232	92	2082	82
1949	201	80	1823	83
1950	228	92	2305	110
1951	274	64	2760	95
1952	197	66	2852	84
1953	260	83	2975	91
1954	171	51	2754	103
1955	157	42	2464	81
1956	166	41	2647	100
Increase/Decrease over 1946	- 40.9%	- 56.0%	+ 22.8%	

Daily average number of In-patients (European) 4.1
 Daily average number of In-patients (Eurafrican) 2.4
 Daily average number of In-patients (African) 132.5

Out-patients.

Year.	New Cases.	Re-attendances.	Totals
1946	5540	5500	11040
1947	5283	4680	9963
1948	9253	8314	17567
1949	9404	8620	18024
1950	10853	9853	20706
1951	11688	9700	21388
1952	11383	9134	20517
1953	9999	10746	20745
1954	8416	8616	17032
1955	9856	8201	18057
1956	13625	8613	22238

Staff.

- 1 Medical Superintendent,
- 3 Medical Officers,
- 1 Radiographer (part time)
- 11 Nursing Sisters
- 1 Housekeeper,
- 1 Secretary
- 1 Bookkeeper
- 17 African Nurses,
- 1 African Midwife,
- 40 Probationer Nurses,
- 3 Male Clerks,
- 1 Telephonist,
- 1 Dispensary Assistant,
- 1 Laboratory Assistant and messenger
- 20 Maids,
- 2 Seamstresses
- 13 Laundresses,
- 2 Groundsmen
- 1 Messenger
- 2 Repairmen
- 1 Maintenance man.

(d) Havelock Mine Hospital.

The figures relating to members of the General Native Population treated at the Mine Hospital are shown in the following table:-

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Admissions	141	113	81	189	175	68	89	124	65	309	45
Out-patients (New cases)	333	47	79	79	88	559	546	613	470	87	139
Re-attendances	2285	128	147	395	124	535	1239	779	460	72	386
Daily average no. of In- patients.	3.3	.34	2.7	4.18	5.0	1.35	1.9	2.3	1.4	6.3	1.18

- 7 -

Daily average number of patients (Inpatient) 1945
 Daily average number of outpatients (Outpatient) 1945
 Daily average number of hospitalizations (Hospitalization) 1945

Outpatient

Year	Outpatient	Inpatient	Hospitalization
1945	1000	1000	1000
1946	1050	1050	1050
1947	1100	1100	1100
1948	1150	1150	1150
1949	1200	1200	1200
1950	1250	1250	1250
1951	1300	1300	1300
1952	1350	1350	1350
1953	1400	1400	1400
1954	1450	1450	1450
1955	1500	1500	1500
1956	1550	1550	1550
1957	1600	1600	1600
1958	1650	1650	1650
1959	1700	1700	1700
1960	1750	1750	1750

1960

- 1 Medical Department
- 3 Medical Outpatient
- 1 Radiology (out)
- 11 Nursing Station
- 1 Pharmacy
- 1 Laboratory
- 1 Pathology
- 17 X-ray
- 1 X-ray
- 10 Pathology
- 3 X-ray
- 1 Pathology
- 1 Pathology
- 1 Pathology
- 20 X-ray
- 2 Pathology
- 13 Pathology
- 2 Pathology
- 1 Pathology
- 2 Pathology
- 1 Pathology

(b) Outpatient

The figures relative to number of the Hospital Inpatient and Outpatient are shown in the following table:

Year	Outpatient	Inpatient	Hospitalization
1945	1000	1000	1000
1946	1050	1050	1050
1947	1100	1100	1100
1948	1150	1150	1150
1949	1200	1200	1200
1950	1250	1250	1250
1951	1300	1300	1300
1952	1350	1350	1350
1953	1400	1400	1400
1954	1450	1450	1450
1955	1500	1500	1500
1956	1550	1550	1550
1957	1600	1600	1600
1958	1650	1650	1650
1959	1700	1700	1700
1960	1750	1750	1750

(e) Mahamba Methodist Hospital.

The figures relating to the work carried out at this institution during the past four years are shown below:-

	Europeans				Africans			
	1953	1954	1955	1956	1953	1954	1955	1956
Admissions	26	27	68	38	384	565	735	764
In-patient days	117	209	381	164	2786	4267	9394	10574
Confinements	2	12	25	7	18	38	57	40
Deaths	1	1	3	2	13	39	40	6
Operations (major)	1	2	12	3	7	21	39	20
(minor)	22	16	36	19	25	161	264	167
Out-patients (new cases)	118	368	446	53	1340	3450	2476	1904
Out-patients (re-attendances)	179	846	1215	790	2379	2622	4027	2701
Malaria Cases	-	3	5	-	18	4	5	-
Bilharziasis	-	1	13	1	23	18	13	12
Tuberculosis	1	-	-	-	5	65	75	68

(f) Swaziland Irrigation Scheme (C.D.C) (January/February only)

	Europeans		Africans		Totals
	E	GNP	E	GNP	
Admissions	4	1	22	4	31
In-patient days	41	4	136	23	204
Confinements	-	-	5	-	5
Deaths	-	-	3	-	3
Out-patients (New cases)	37	13	556	228	634
Out-patients (Re-attendances)	36	6	736	178	956
Operations	-	2	10	14	26
Malaria	-	-	1	-	1
Schistosomiasis	-	-	8	8	16

(Note: "E" = Employees and dependants,
"GNP" = Non-employees.)

(g) Dispensaries (Health Centres)

The number of cases treated at Dispensaries in various parts of the territory is given in the following table:-

(a) Medical Services

The figures relating to the work carried out at this Institute during the past four years are shown below:-

Category	1957				1958				1959				1960			
	Jan	Feb	Mar	Total	Jan	Feb	Mar	Total	Jan	Feb	Mar	Total	Jan	Feb	Mar	Total
Out-patients (no. cases)	117	125	132	374	120	128	135	383	125	132	140	397	130	138	145	413
Out-patients (no. visits)	117	125	132	374	120	128	135	383	125	132	140	397	130	138	145	413
Patients (no. cases)	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Patients (no. visits)	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Medical Officers	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Medical Assistants	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Pharmacists	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3

(b) Medical Services (Specialist Services)

Category	1957				1958				1959				1960			
	Jan	Feb	Mar	Total	Jan	Feb	Mar	Total	Jan	Feb	Mar	Total	Jan	Feb	Mar	Total
Out-patients (no. cases)	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Out-patients (no. visits)	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Patients (no. cases)	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Patients (no. visits)	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Medical Officers	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Medical Assistants	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3
Pharmacists	1	1	1	3	1	1	1	3	1	1	1	3	1	1	1	3

(Note: 1. Specialist Services are provided by the Institute.)

(c) Pharmaceutical Services

The number of orders received by the Institute in various parts of the country is shown in the following table:-

Dispensary.	In-patients	Out-patients.			
		New Cases		Re-attendances	
		E	N.E.	E	N.E.
Horo	-	7	4157	-	2245
(a) Hebron	-	-	-	-	-
Government Farm	-	-	2157	-	489
Goedgegun	-	353	3923	409	4910
Mhlotsheni	-	36	2835	4	1063
Hluti	-	120	2325	106	1865
Lesters	-	-	1572	-	355
Sipofaneni	-	24	1779	18	621
St. Philips	-	-	2796	-	727
Our Lady of Sorrows	-	42	7596	12	510
Lubuli-Gollel	-	46	2114	10	548
Totals	-	628	31254	559	13333
Mankaiana Cottage Hospital (x)	1785	19	7312	34	3803

("E" = Europeans, "N.E." = Non-Europeans, "x" = figures additional to those shown in the Return of Diseases for Government Hospitals, Appendix I)

((a) closed owing to shortage of staff)

The number of cases treated at Health Centres during the past eleven years are shown in the following tables:-

(i) Health Centres (General.) x (see footnote)

Year	New Out-patients	Re-attendances	Total attendances	Confinements
1946	15201	4288	19428	68
1947	14109	8151	22260	47
1948	15347	14235	29482	34
1949	16893	12110	29003	38
1950	19285	13864	33199	34
1951	22214	17787	40001	67
1952	22353	12962	35315 (x)	43
1953	23767	6659	30426 (x)	56
1954	25926	9632	35558 (x)	62
1955	27609	12145	39754 (x)	62
1956	31882	13892	45774 (x)	62

(Note: "x" = Mahamba figures (5448) not included)

(ii) Mankaiana Cottage Hospital (16 beds)

Year.	Admissions.	Out-patients				Total attendanc.	Confinements.
		New Cases		Re-attendances.			
		E	N.E.	E.	N.E.		
1946	957	25	7244	10	3135	10414	122
1947	734	36	5693	19	3999	9747	100
1948	762	43	6727	47	2853	9670	94
1949	736	38	7289	59	3030	10416	114
1950	797	29	7147	54	3966	11196	110
1951	829	61	6287	83	3400	9831	95
1952	835	56	6119	98	3225	9498	98
1953	960	28	7347	30	3609	11014	98
1954	927	34	6518	70	3795	10417	120
1955	1469	40	6968	28	3446	10482	191
1956	1785	19	7312	34	3803	11168	139

x = 1956 has been a peak year in out-patients attendances at Health Centres at which the volume of work has increased by 130.5% since 1946.

The number of admissions has exceeded all previous records and was 86.5% greater than in 1946.

The average number of in-patients at the hospital was 28.9%, as compared with 24.2 in 1955, 28.9 in 1954, 30.7 in 1953 and 30.0 in 1952.

(iii) Cases treated at Nazerene Mission Health Centres.

Health Centre.	Out-patients			
	New Cases.		Re-attendances	
	E	N.E.	E	N.E.
Stegi x	50	4174	181	3506
Endingeni x	2	3628	-	991
Pigg's Peak x	48	2479	13	1247
Mliba x	-	889	-	944
Mafuteni	-	317	-	886
Bhekinkosi (i)	-	990	-	490
Balegane	-	612	-	836
Malinda	-	750	-	514
Ebenezer (Pilgrim Holiness Church)	-	1451	-	318
Mayiwane	-	973	-	2082
Totals	100	16263	194	11814

("x" = subsidized by Government
(i) = closed for 1 month (October))

(iv) Good Shepherd Hospital, Stegi.

The work of this hospital, which has been hampered by the absence of a second Medical Officer for the whole of 1956, is summarized in the following table:-

	In-patients	Out-patients			
		New Cases		Re-attendances	
		M	F	M	F
European Officials	-	85	49	34	30
European General Population	29	219	237	89	61
African Officials	16	274	149	62	29
General African Population	457	997	1667	320	502
Eurafricans	13	139	133	65	45
Totals for 1956	515	1714	2235	570	667
Totals for 1955	530	3949		1237	
Totals for 1954	594	5472		1108	
Totals for 1953	594	6720		1162	
Totals for 1952	27	5963		1073	
Total for 1951	-	5255		1653	
Total for 1951	-	4084		4923	

The District Surgeon paid 27 visits to Nomahasha and 47 to Big Bend, during which the cases listed below received treatment:-

The number of patients treated at the hospital was 22,372 in 1957, compared with 22,100 in 1956, 21,700 in 1955, 21,500 in 1954 and 21,300 in 1953. The average number of patients at the hospital was 22,372 in 1957, compared with 22,100 in 1956, 21,700 in 1955, 21,500 in 1954 and 21,300 in 1953.

(iii) Cases treated at Hospital (including cases treated at Health Centre)

Year	Hospital		Health Centre	
	No. of Patients	% of Total	No. of Patients	% of Total
1957	22,372	100	0	0
1956	22,100	100	0	0
1955	21,700	100	0	0
1954	21,500	100	0	0
1953	21,300	100	0	0
Totals	107,972	100	0	0

(*) - included by Government
 (1) - included local health centres

(iv) Total Hospital (including cases treated at Health Centre)

The work of this hospital, which has been reviewed by the Director of a General Hospital for the State of 1957, is summarized in the following table:

Year	In-patients		Out-patients		Total
	No.	% of Total	No.	% of Total	
1957	12,372	55	10,000	45	22,372
1956	12,100	55	10,000	45	22,100
1955	11,700	54	10,000	46	21,700
1954	11,500	53	10,000	47	21,500
1953	11,300	53	10,000	47	21,300
Totals for 1956	50,972	55	41,972	45	92,944
Totals for 1955	49,700	55	41,300	45	91,000
Totals for 1954	48,500	54	40,500	47	89,000
Totals for 1953	47,300	53	39,700	47	87,000
Totals for 1952	46,100	53	38,900	47	85,000
Totals for 1951	44,900	53	37,400	47	82,300

The Director of General Hospital is pleased to acknowledge the assistance rendered during the year listed below received from:

	Europeans				Africans			
	Nomahasha		Big Bend		Nomahasha		Big Bend	
	M	F	M	F	M	F	M	F
Out-patients, new cases	-	7	26	35	253	1097	431	513
Out-patients, re-attendances	-		6		339		299	
Syphilis	-		-		3		7	
Gonorrhoea	-		-		2		3	
Syphilis, re-attendances	-		-		-		-	
Gonorrhoea, re-attendances	-		-		-		-	
Fresh cases of malaria	-		-		15		19	
New cases of Schistosomiasis	-		-		4		3	
New cases of tuberculosis	-		-		5		3	

2362 new out-patients and 634 re-attendances were seen on the visits to these centres as compared with 2619 and 637 respectively in 1955.

VI. PRISONS.

The prisons at Mbabane, Bremersdorp and Hlatikulu were inspected by Medical Officers each week, and the general health of prisoners has been satisfactory at all stations throughout the territory. Certain improvements to gool buildings have been carried out at Hlatikulu and Mbabane, where water-borne latrine systems have been installed.

VII. SCIENTIFIC.

Figures relating to the laboratory work carried out at the main medical centres in the territory are given in the following table:-

	Public Health Laboratory Bremersdorp	Mbabane Hospital	Hlatikulu Hospital	Raleigh Fitkin Memorial Hospital
Blood films	7847	345	176	65
Total blood count	139	-	160	-
Throat swab cultures (C. diphtheriae)	48	-	-	-
Bacteriological Smears		3485	566	9
Faeces		824	799	120
Urines	171	4066	1859	4830
Sputa		737	1374	635
Seriological Tests for Syphilis	7479	-	-	-
Identification of Adult Mosquitos	205	-	-	-
Identification of mosquito larvae	910	-	-	-
Identification of snails	1255	-	-	-
Biochemical tests	-	-	-	-
Blood, stool & urine cultures	168	-	-	-
Agglutination tests	265	-	-	-
Cerebrospinal fluid	-	-	-	-
Sedimentation Rates	-	-	869	-
Unspecified	-	-	53	-
Totals 1956	18478	9457	6186	5659

(continued)

Disease	1955			1956		
	No. of cases	% of total	Rate per 1000	No. of cases	% of total	Rate per 1000
Scarlet fever	10	0.2	0.2	15	0.3	0.3
Diphtheria	5	0.1	0.1	8	0.15	0.15
Whooping cough	12	0.25	0.25	18	0.35	0.35
Measles	20	0.4	0.4	25	0.5	0.5
Mumps	15	0.3	0.3	20	0.4	0.4
Polio	3	0.06	0.06	5	0.1	0.1
Other	100	2.0	2.0	120	2.4	2.4
Total	500	10.0	10.0	500	10.0	10.0

Figures relating to the laboratory work carried out at the main general hospital in the territory are given in the following table.

The outbreak of scarlet fever, diphtheria and whooping cough by Medical Officers each year, and the general health of the community has been satisfactory at all times throughout the country. Certain diseases such as poliomyelitis have been reported in the district and in some cases have been fatal.

Figures relating to the laboratory work carried out at the main general hospital in the territory are given in the following table.

Disease	1955		1956	
	No. of cases	% of total	No. of cases	% of total
Scarlet fever	10	0.2	15	0.3
Diphtheria	5	0.1	8	0.15
Whooping cough	12	0.25	18	0.35
Measles	20	0.4	25	0.5
Mumps	15	0.3	20	0.4
Polio	3	0.06	5	0.1
Other	100	2.0	120	2.4
Total	500	10.0	500	10.0

	Public Health Laboratory Bremersdorp	Mbabane Hospital	Hlatikulu Hospital	Raleigh Fitkin Memorial Hospital
Totals for 1956	18478	9457	6186	5659
Totals for 1955	16513	6851	7339	4224
Totals for 1954	14909	7220	5920	4592
Totals for 1953	17538	8441	5660	4151
Totals for 1952	11293	7215	3189	3475
Totals for 1951	14077	5867	2066	4760
Totals for 1950	14770	4279	1746	5981
Totals for 1949	13688	3619	1220	4919
Totals for 1948	15641	2865	1813	4912
Totals for 1947	16428	2015	1427	3903

All routine laboratory work, other than that directly connected with Malaria and Bilharziasis control was suspended with effect from the 1st December 1956, owing to shortage of staff and the work was temporarily referred to the South African Institute for Medical Research.

VIII. (a) MEDICO-LEGAL WORK, ETC.

	Mbabane, Pigg's Peak & Mankaiana District.	Hlatikulu District	Manzini & Stegi District.	Total
Post mortem Examinations	23	20	44	87
Examinations for Assault etc.	101	178	208	487
Examination for Tax Exemption	65	99	60	224

(b) RADIOLOGICAL EXAMINATIONS.

	Mbabane Hospital.		Hlatikulu Hospital.		Raleigh Fitkin Memorial Hospital		Total	
	E	A	E	A	E	A	E	A
Screenings	29	52	6	77	1	5	36	134
Radiographs	794	1339	36	426	98	1036	938	2791
Totals	823	1391	42	503	99	1041	974	2925

I wish to express my sincere appreciation of the loyal and efficient manner in which the members of the staff of the department carried out their duties during the year.

J. C. J. CALLANAN

DIRECTOR OF MEDICAL SERVICES.

Year	Medical Expenditures	Pharmaceutical Expenditures	Medical Services Expenditures	Total Expenditures
1957	1,000	1,000	1,000	3,000
1958	1,100	1,100	1,100	3,300
1959	1,200	1,200	1,200	3,600
1960	1,300	1,300	1,300	3,900
1961	1,400	1,400	1,400	4,200
1962	1,500	1,500	1,500	4,500
1963	1,600	1,600	1,600	4,800
1964	1,700	1,700	1,700	5,100
1965	1,800	1,800	1,800	5,400
1966	1,900	1,900	1,900	5,700
1967	2,000	2,000	2,000	6,000

All routine laboratory work, other than that which is directly connected with diagnosis and treatment of patients, was suspended on 10/1/67 from the 1st December 1967, owing to shortage of staff and the fact that responsibility is retained by the Public Health Service for medical laboratory work.

VIII (a) MEDICAL SERVICES

Year	Medical Services Expenditures	Pharmaceutical Expenditures	Medical Expenditures	Total Expenditures
1957	1,000	1,000	1,000	3,000
1958	1,100	1,100	1,100	3,300
1959	1,200	1,200	1,200	3,600
1960	1,300	1,300	1,300	3,900
1961	1,400	1,400	1,400	4,200
1962	1,500	1,500	1,500	4,500
1963	1,600	1,600	1,600	4,800
1964	1,700	1,700	1,700	5,100
1965	1,800	1,800	1,800	5,400
1966	1,900	1,900	1,900	5,700
1967	2,000	2,000	2,000	6,000

(b) LABORATORY EXPENDITURES

Year	Medical Expenditures	Pharmaceutical Expenditures	Medical Services Expenditures	Total Expenditures
1957	1,000	1,000	1,000	3,000
1958	1,100	1,100	1,100	3,300
1959	1,200	1,200	1,200	3,600
1960	1,300	1,300	1,300	3,900
1961	1,400	1,400	1,400	4,200
1962	1,500	1,500	1,500	4,500
1963	1,600	1,600	1,600	4,800
1964	1,700	1,700	1,700	5,100
1965	1,800	1,800	1,800	5,400
1966	1,900	1,900	1,900	5,700
1967	2,000	2,000	2,000	6,000

I am to express my sincere appreciation to the staff and officials of the various departments who have assisted me in the preparation of this report and their efforts during the year.

J. J. GILBERT
 Director of Medical Services

PUBLIC HEALTH LABORATORY, BREMERSDORP.A. STAFF.

During November Miss J. Bredell, B.Sc., resigned her post as Laboratory Assistant. Up to the time of writing, it has not been possible to fill the vacancy. In accordance the routine section of the Public Health Laboratory had to be closed down temporarily.

The Malaria Medical Officer attended a Malaria Conference in Pretoria in July. The conference was convened by the Union Health Department and delegates from the Union of South Africa, the Protectorates and Portuguese East and West Africa attended the conference.

In November the Malaria Medical Officer was invited by the World Health Organisation to preside over an inter-territorial Malaria conference in Nairobi. Malariologists and Entomologists from the East African Territories, Rhodesias, Belgian Congo, Madagascar, Mauritius, Mozambique, Somaliland, Ethiopia and the Union of South Africa as well as representatives of the World Health Organisation attended the meeting.

B. MALARIA CONTROL.

GENERAL. Rainfall in inches, as recorded at the Bremersdorp meteorological station is shown in Table I. For comparison, average figures over the last five years are also listed:-

TABLE I : MONTHLY RAINFALL AT BREMERSDORP.

	<u>1956.</u>	<u>Average</u> <u>(over last 5 years)</u>
January	1.05	6.1
February	8.98	5.47
March	5.35	3.89
April	0.19	2.20
May	1.98	1.44
June	0.49	0.53
July	0.59	0.39
August	0.06	1.31
September	3.10	1.05
October	3.98	3.82
November	3.24	5.89
December	4.01	5.52
	<u>33.02</u>	<u>37.63</u>

Transmission Season 1955/56

During the course of the transmission season, 1956, an overall total of 102,762 huts have been treated with residual insecticides; of this total 27,038 received a second treatment and 2,452 only were sprayed 3 times during the season. This number of 102,762 represents a decrease of over 40,000 huts sprayed in comparison to the previous year and is explained by the fact that imaginal control was discontinued for the first time in a large middleveld area and further by reducing the number of spray treatments in some of the bushveld areas.

The residual insecticide used was again B.H.C. 50% wettable powder

The Director of the Public Health Laboratory has been invited to attend the meeting of the World Health Organization in Geneva, Switzerland, on 15th September 1955.

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TABLE 1: MONTHLY BALANCE OF EXPENDITURE

Month	1955	1954
January	1.05	1.05
February	1.05	1.05
March	1.05	1.05
April	1.05	1.05
May	1.05	1.05
June	1.05	1.05
July	1.05	1.05
August	1.05	1.05
September	1.05	1.05
October	1.05	1.05
November	1.05	1.05
December	1.05	1.05
Total	12.60	12.60

Financial Statement

The financial statement for the year 1955 shows a total expenditure of 12.60 units, which is in line with the budget of 12.60 units for the year.

The financial statement for the year 1955 shows a total expenditure of 12.60 units, which is in line with the budget of 12.60 units for the year.

with 10% gamma content. The surface concentration aimed at was 25 mgm per square foot.

Apart from this routine measure, a second large scale experiment with Dieldrin using a 50% wettable powder with a surface concentration of 40 mgm per square foot was carried out in 2 bushveld areas. The huts in these areas received one treatment at the beginning of the season only, i.e. in December 1955/January 1956.

The experience gained in this experiment and the results achieved were discussed in detail in a publication "A Comparison Between the Use of Dieldrin and B.H.C. in the Control of Rural Malaria in Swaziland".

No statistically significant difference of malaria transmission in areas treated with Dieldrin and those treated with B.H.C. was noticed. The results of blood examination amongst children in the two areas were as follows:-

	<u>Dieldrin</u>	<u>B.H.C.</u>
No. of examinations	1,081	2,779
No. of parasite-positive cases	9	19
Parasite rate	0.83%	0.7%

The malaria position in the territory during the transmission season was assessed by blood surveys as in previous years, and are demonstrated in the three following tables:-

TABLE II : NUMBER OF CASES EXAMINED DURING TRANSMISSION SEASON.

Bushveld Areas	4,388
Middleveld Areas	607
Irrigation Schemes	471
Area under Drug Prophylaxis	205
Surveys outside the territory	366
Total	<u>6,037</u>

TABLE III : RESULT OF BLOOD SURVEYS IN BUSHVELD AREAS.

Age groups.	Cases examined	Positive	Parasite Rate
1 - 12 months	1,322	0	0.0%
1 - 5 years	2,248	15	0.7%
6 - 16 years	818	17	2.1%
Total parasite rate in all children.			0.7%

TABLE IV : RESULT OF BLOOD SURVEYS ON IRRIGATION SCHEMES.

Age groups	Cases examined	Positive	Parasite Rate.
1 -12 months	112	0	0.0%
1 - 5 years	244	9	3.6%
6 - 16 years	115	6	5.0%
Total parasite rate in all children			3.1%

Middleveld Areas including those where control was discontinued.

In all middleveld areas no parasite positive cases were discovered.

From the foregoing figures it is evident that malaria transmission had not only been completely discontinued in all bushveld areas but also children parasite-rates have been below 1% during the season.

Although the total parasite-rate on Irrigation Schemes was found to be still significantly higher than that in the non-irrigated bushveld areas it is of great interest to note that for the first time the infant-rate was zero throughout the season.

Moreover, it has to be stated that it is somewhat doubtful whether all the parasite-positive cases observed in older children had actually acquired their infections on the Irrigation Schemes and not at least some of them on their frequent visits to uncontrolled areas in Portuguese East Africa.

In future special arrangements will be made to trace all parasite positive cases on these Irrigation Schemes in order to obtain a reliable history. The same procedure is adopted in all rural areas.

MALARIA VECTOR POSITION.

(a) A. funestus funestus:

This vector has apparently completely disappeared from Swaziland. No specimen of this species either in its larval or adult stage was recovered from any area.

(b) A. gambiae.

This vector was present in the larval stage in some breeding places of the bushveld although the numbers recovered were small. It was almost impossible to find adult A. gambiae inside human habitations and in many hundreds of check-spraying by day and night only three females and two males were found during the transmission season.

DRUG PROPHYLAXIS.

In 1956 an attempt was made to control malaria with pyrimethamine. The experiment was carried out on a group of Africans (approximately 100) living in some 30 huts at Abercorn Drift on the banks of the Usutu River. This area directly adjoins uncontrolled areas of Portuguese East Africa and Maputoland. On account of the geographical position and owing to the fact that the inhabitants frequently cross the river and spend some considerable time in the neighbouring territories, exposing themselves to malaria infection, hut spraying with residual insecticide was never very successful.

All parasite-positive cases received one initial dose of 0.3 gr. chloroquine (base), children under 5 years receiving half this dosage. Thereafter all children and adults received 25 mg pyrimethamine (half dosage for children under 5) once a month.

The results achieved were remarkable since parasite rates declined from 46.8% in the pre-control survey (beginning of 1956) to 2.2% in June, when infant parasite rate reached zero. This is all the more interesting as the attendance of the population was not at all regular, the dosage administered very low, the people living in an hyperendemic area and the reduction obtained in a very short time.

This experiment is still in progress and will be continued

From the foregoing it appears that the Commission has not yet received any information as to whether the Government has any plans to issue a statement on this subject.

Although the Commission is not yet in a position to issue a statement on this subject, it is of course interested in the progress of the investigation and will continue to follow the matter closely.

Very truly yours,
The Commission

In future reports of the Commission, it is requested that you continue to keep it advised of any developments in this matter.

SECTION 1

(a) General

This section is devoted to a general description of the Commission's activities during the year.

(b) Investigation

This section contains a detailed account of the Commission's investigation of the case of the ...

SECTION 2

This section contains a detailed account of the Commission's investigation of the case of the ...

All information received by the Commission during the year is set forth in this section.

The Commission is of course interested in the progress of the investigation and will continue to follow the matter closely.

This document is filed in accordance with the provisions of the Act.

throughout the transmission season 1956/57 with the alteration of increasing the drug administration to twice a month.

It is hoped that all the people will thus receive at least one dose of pyrimethamine during one month.

DISCONTINUATION OF MALARIA CONTROL.

For the first time since the inception of Malaria Control in Swaziland, residual spraying was discontinued in one middleveld area, where total interruption of transmission was attained over the past two years. 7,000 huts with a population of about 10,000 were thus excluded from routine control. As pointed out previously no case of malaria occurred in this area and no adult A. gambiae were recovered from human habitations.

It is intended to curtail malaria control still further during the coming season and approximately two thirds of hitherto sprayed areas including many hyperendemic bushveld areas will be excluded from routine control. As the decision of discontinuation of rural control depends not only on the malaria position inside Swaziland, but to a large extent on the position in the so far uncontrolled areas of neighbouring territories, it is felt safer to continue spraying along the eastern border to a depth of about 15 - 20 miles inside Swaziland, thus creating a "cordon sanitaire" and including the two main Irrigation Schemes in the eastern part of the bushveld.

An extensive "surveillance" scheme has been organised in all areas where imagicidal measures have been discontinued, and teams are constantly travelling through these areas, taking bloods by random sampling, test spraying huts for the presence of adult mosquitos and collecting larvae from breeding places.

Every parasite positive case discovered during these operations is being traced and a history obtained with the object of assessing the origin of the infection. Immediate treatment is then given, using Chloroquine in doses of 600 mg (base), half the dosage to children below 5 years of age.

The importance of this procedure is obvious and although it tends to increase laboratory work considerably, it is the only method to assess the malaria position in a given area with a reasonable degree of accuracy.

MALARIA POSITION DURING THE NON-TRANSMISSION SEASON
(JULY-NOVEMBER 1956)

During the off-season a total of 1,364 bloodslides were examined. The following table (No. V) gives an analysis of the results.

TABLE V : RESULT OF BLOODSLIDE EXAMINATION DURING THE
NON-TRANSMISSION SEASON

	Number Examined.	Number Positive	Percentage
A. Bushveld Areas	738	2	0.25%
B. Middleveld Areas	183	0	0.0%
C. Pyrimethamine experiment	127	5	3.9%
D. Irrigation Schemes	316	12	3.8%

The sudden increase of parasite positive cases (5 out of 127) amongst the people receiving Pyrimethamine may be explained by the fact that for technical reasons the issue of the drug had to be discontinued during July and August.

For the first time since the inauguration of the National Health Service in 1948, the Government has announced a new scheme for the control of venereal diseases.

It is hoped that all the people will have received at least one dose of penicillin during the year.

CONTROL OF VENEREAL DISEASES

For the first time since the inauguration of the National Health Service in 1948, the Government has announced a new scheme for the control of venereal diseases. The scheme is based on the principle of early diagnosis and treatment. It is hoped that all the people will have received at least one dose of penicillin during the year.

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CONTROL OF VENEREAL DISEASES

It is hoped that all the people will have received at least one dose of penicillin during the year.

CONTROL OF VENEREAL DISEASES

Year	Number of cases	Number of deaths	Number of hospitalizations
1948	10,000	500	2,000
1949	12,000	600	2,500
1950	15,000	750	3,000
1951	18,000	900	3,500

The scheme is based on the principle of early diagnosis and treatment. It is hoped that all the people will have received at least one dose of penicillin during the year.

On the Irrigation Schemes 12 parasite positive cases were discovered amongst 316 children examined.

It is interesting to note that 5 of the positive cases could definitely be traced to visits to or new arrivals from Portuguese East Africa. All the parasite carriers received treatment.

TRANSMISSION SEASON 1956/57

As in previous years spraying operations started in areas along the eastern border in mid-November and by the end of December the majority of these huts numbering approximately 15,000 had received the first treatment with B.H.C.

Only 1 parasite positive case was discovered in December amongst over 500 examined. This case was found at the southern Irrigation Scheme.

PUBLICATION.

During 1956 the following paper was presented: "Past and Present Position of Malaria in Swaziland", which is at present in print and will appear in the Journal of Tropical Medicine.

C. LABORATORY.

Although owing to shortage of staff the Laboratory had to be closed as from 1st December, the total number of specimens examined during the eleven months was 8,270 against 7,655 in 1955, thus exceeding last year's total by over 600.

The following table gives detailed statistics of the examinations performed in the laboratory during 1956. Figures for 1955 are also listed for comparison.

TABLE VI : LABORATORY STATISTICS.

(i) General Examinations.	1956.	1955.
Serological tests for Syphilis	7,479	6,954
Agglutination tests Widal, Brucellosis etc.	265	236
Cultures - Blood, Stool and Urine	168	165
Cultures for Diphtheria	48	58
Blood Counts	139	124
Microscopic Examination of Stools, Urines and Sputa	171	118
Totals	8,270	7,655
(ii) Malaria and Bilharzia.		
Bloodslides - field and survey	7,703	6,367
Hospitals	144	166
Entomological Identifications		
Adult Mosquitos	205	365
Mosquito Larvae	910	810
Snails	1,255	1,150
Totals	10,217	8,858

Serological Tests for Syphilis

Of the total of 7,479 specimens for testing, 272 were haemolysed or otherwise unsuitable for examination.

Of the remaining 7,207 positive and doubtful reactions were as follows:-

Positives	1364	-	18.9%
Doubtful	272	-	3.7%

The percentages of positive and doubtful are somewhat lower than in previous years, the percentages in 1955 being 24.1% and 5.9% respectively.

Enteric Group of Fevers,

242 specimens for Widal tests were submitted, almost the same (227) as in the previous year. Analysis of positive reactions (diagnostic titre) is as follows:-

	<u>1956.</u>	<u>1955.</u>
B. Typhosus H and O	54	55
B. para typhosus A	0	0
B. para typhosus B	1	0
B. para typhosus C	3	4

In addition 168 specimens were received for culture; 21 of these yielded a growth of B. typhosus and 2 yielded a growth of B. para typhosus C.

These figures are almost identical as those recorded in the previous year.

Weil Felix and Brucellosis Tests.

No positive reactions were recorded.

Of the remaining 1,200 positive and doubtful reactions were as follows:

Positive 1,100 - 91.7%
Doubtful 100 - 8.3%

The percentage of positive and doubtful are somewhat lower than in previous years. The percentage in 1925 being 95.1% and 4.9% respectively.

Subgroup of Types

Six specimens for 1924 tests were selected, almost the same (50%) as in the previous year. Analysis of positive reactions (diagnostic value) is as follows:

1924	1925	
25	26	1. Type 1 and 2
0	0	2. Type 3
0	1	3. Type 4
0	0	4. Type 5

In addition 118 reactions were received for culture: 51 of those yielded a growth of *S. typhimurium* and 67 yielded a growth of *S. typhimurium*.

These figures are almost identical as those recorded in the previous year.

1925 Tests and Interpretations

10 positive reactions were recorded.

GOVERNMENT HOSPITALS.

APPENDIX I.

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1956.

Intermediate List No.	Detailed List No.	Group Cases	Cases remaining in hospital from previous year.		Total Admissions		Total Deaths.		Total Cases Treated.		Remaining in hospital at end of year.		Out-patients.	
			E	A	E	A	E	A	E	A	E	A	E	A
A 1	001-008	Tuberculosis of respiratory system	-	10	-	122	-	5	-	123	-	9	-	83
A 2	C10	Tuberculosis of meninges and central nervous system	-	-	-	-	-	-	-	-	-	-	-	-
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands	-	-	-	9	-	1	-	9	-	-	-	-
A 4	012,013	Tuberculosis of bones and joints	-	4	-	28	-	-	-	30	-	2	-	6
A 5	014-019	Tuberculosis, all other forms	-	1	-	33	-	-	-	31	-	3	-	45
A 6	020	Congenital syphilis	-	1	-	14	-	1	-	13	-	2	-	55
A 7	021	Early syphilis	-	-	-	25	-	1	-	25	-	-	-	295
A 8	024	Tabes dorsalis	-	-	-	-	-	-	-	-	-	-	-	-
A 9	025	General Paralysis of insane	-	-	-	-	-	-	-	-	-	-	-	-
A 10	022,023,026-029	All other syphilis	-	3	-	22	-	-	-	25	-	-	-	233
A 11	030-035	Bonococcal infection	-	3	-	41	-	-	-	44	-	-	-	726
A 12	040	Typhoid fever	-	1	-	42	-	1	-	36	-	7	-	7
A 13	041,042	Paratyphoid fever and other Salmonella infections	-	-	-	-	-	-	-	-	-	-	-	-
A 14	043	Chlorera	-	-	-	-	-	-	-	-	-	-	-	-
A 15	044	Brucellosis (undulant fever)	-	-	-	-	-	-	-	-	-	-	-	-
A 16 (a)	045	Bacillary dysentery	-	1	3	66	-	-	-	66	3	1	-	198

Year	Month	Day	Time	Location	Event	Remarks	Amount	Balance	Signature
1900	Jan	1	10:00	...	...	...	...	...	...
1900	Jan	2	11:00	...	...	...	...	...	...
1900	Jan	3	12:00	...	...	...	...	...	...
1900	Jan	4	13:00	...	...	...	...	...	...
1900	Jan	5	14:00	...	...	...	...	...	...
1900	Jan	6	15:00	...	...	...	...	...	...
1900	Jan	7	16:00	...	...	...	...	...	...
1900	Jan	8	17:00	...	...	...	...	...	...
1900	Jan	9	18:00	...	...	...	...	...	...
1900	Jan	10	19:00	...	...	...	...	...	...
1900	Jan	11	20:00	...	...	...	...	...	...
1900	Jan	12	21:00	...	...	...	...	...	...
1900	Jan	13	22:00	...	...	...	...	...	...
1900	Jan	14	23:00	...	...	...	...	...	...
1900	Jan	15	24:00	...	...	...	...	...	...
1900	Jan	16	25:00	...	...	...	...	...	...
1900	Jan	17	26:00	...	...	...	...	...	...
1900	Jan	18	27:00	...	...	...	...	...	...
1900	Jan	19	28:00	...	...	...	...	...	...
1900	Jan	20	29:00	...	...	...	...	...	...
1900	Jan	21	30:00	...	...	...	...	...	...
1900	Jan	22	31:00	...	...	...	...	...	...
1900	Jan	23	32:00	...	...	...	...	...	...
1900	Jan	24	33:00	...	...	...	...	...	...
1900	Jan	25	34:00	...	...	...	...	...	...
1900	Jan	26	35:00	...	...	...	...	...	...
1900	Jan	27	36:00
1900	Jan	28	37:00
1900	Jan	29	38:00
1900	Jan	30	39:00
1900	Jan	31	40:00

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Year	Month	Day	Time	Location	Activity	Remarks
1917	Jan	1	10:00
1917	Jan	2	10:00
1917	Jan	3	10:00	...	...	...
1917	Jan	4	10:00	...	...	...
1917	Jan	5	10:00	...	...	...
1917	Jan	6	10:00	...	...	...
1917	Jan	7	10:00	...	...	...
1917	Jan	8	10:00	...	...	...
1917	Jan	9	10:00	...	...	...
1917	Jan	10	10:00	...	...	...
1917	Jan	11	10:00	...	...	...
1917	Jan	12	10:00	...	...	...
1917	Jan	13	10:00	...	...	...
1917	Jan	14	10:00	...	...	...
1917	Jan	15	10:00	...	...	...
1917	Jan	16	10:00	...	...	...
1917	Jan	17	10:00	...	...	...
1917	Jan	18	10:00	...	...	...
1917	Jan	19	10:00	...	...	...
1917	Jan	20	10:00	...	...	...
1917	Jan	21	10:00	...	...	...
1917	Jan	22	10:00	...	...	...
1917	Jan	23	10:00	...	...	...
1917	Jan	24	10:00	...	...	...
1917	Jan	25	10:00	...	...	...
1917	Jan	26	10:00	...	...	...
1917	Jan	27	10:00	...	...	...
1917	Jan	28	10:00	...	...	...
1917	Jan	29	10:00	...	...	...
1917	Jan	30	10:00	...	...	...
1917	Jan	31	10:00	...	...	...

Intermediate List No.	Detailed List No.	Groups Causes	Cases re- maining in hospital from previous year.		Total Admissions		Total Deaths		Total Cases Treated		Remaining in hospital at end of year.		Out- patients.	
			E	A	E	A	E	A	E	A	E	A	E	A
A 54	177	Malignant neoplasm of prostate	-	-	-	-	-	-	-	-	-	-	-	-
A 55	190-191	Malignant neoplasm of skin	-	-	-	2	-	-	-	-	-	-	-	1
A 56	196, 197	Malignant neoplasm of bone and connective tissue	-	-	-	6	2	-	-	-	-	-	-	-
A 57	155-160 164, 165, 175, 176, 178-181, 192-195, 198, 199	Malignant neoplasm of all other and unspecified sites	-	-	-	10	2	-	-	-	-	-	-	7
A 58	204	Leukaemia and aleukaemia	-	-	-	-	-	-	-	-	-	-	-	-
A 59	200-203 205	Lymphosarcoma and other neoplasm of lymphatic and haematopoietic system	-	-	-	-	-	-	-	-	-	-	-	-
A 60	210-239	Benign neoplasms and neoplasms of unspecified nature	-	1	-	81	1	-	-	-	81	1	-	33
A 61	250, 251	Nontoxic goitre	-	-	2	3	-	-	2	3	-	-	-	33
A 62	252	Thyrototoxicosis with or without goitre	-	-	-	4	-	-	-	4	-	-	7	15
A 63	260	Daibetes mellitus	-	-	-	1	-	-	-	1	-	-	1	-
A 64 (a)	280	Beriberi	-	-	-	2	-	-	-	2	-	-	-	-
(b)	281	Pellagra	-	1	-	28	-	-	-	25	-	4	1	107
(c)	282	Scurvy	-	-	-	-	-	-	-	-	-	-	-	2
(d)	283-286	Other deficiency states	-	6	-	143	-	-	-	-	-	-	-	174
A 65 (a)	290	Pernicious and other hyperchromic anaemias	-	-	-	1	-	-	-	1	-	-	-	-

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year.		Total Admissions.		Total Deaths		Total Cases Treated.		Remaining in hospital at end of year.		Out-patients	
			E	A	E	A	E	A	E	A	E	A	E	A
A 65 (b)	291	Iron deficiency anaemia (Hypochromic)	-	-	-	1	-	-	-	-	-	1	3	32
(c)	292,293	Other specified and unspecified anaemias	-	-	-	8	1	-	-	-	-	-	18	16
A 66 (a)	241	Asthma	-	1	2	31	-	-	2	32	-	-	38	58
(b)	240, 242, 245, 253, 254, 270-277, 287, 289, 294-299	All other allergic disorders endocrine, metabolic and blood diseases	-	-	1	5	1	-	1	5	-	-	54	48
A 67	300,309	Psychoses	-	-	-	3	-	-	-	3	-	-	1	-
A 68	310,324, 326	Psychoneuroses and disorders of personality	-	-	7	4	1	-	7	4	-	-	69	99
A 69	325	Mental deficiency	-	-	-	4	1	-	-	4	-	-	-	8
A 70	330-334	Vascular lesions affecting central nervous system	-	-	-	5	1	-	-	4	-	1	1	4
A 71	340	Non-meningococcal meningitis	-	-	-	2	1	-	-	2	-	-	1	1
A 72	345	Multiple sclerosis	-	-	-	-	-	-	-	-	-	-	-	-
A 73	353	Epilepsy	-	1	-	10	-	-	-	11	-	-	3	20
A 74	370-379	Inflammatory disease of eye	-	2	2	126	-	-	2	127	-	1	68	558
A 75	385	Cataract	-	-	-	6	-	-	-	6	-	-	-	11
A 76	387	Glaucoma	-	-	-	-	-	-	-	-	-	-	-	-
A 77 (a)	390	Otitis externa	-	-	11	8	-	-	11	8	-	-	60	83
(b)	391-393	Otitis media and mastoiditis	-	-	-	33	-	-	-	33	-	-	66	271

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year		Total Admissions		Total Deaths		Total Cases Treated		Remaining in hospital at end of year.		Out-patients.	
			E	A	E	A	E	A	E	A	E	A	E	A
A 78 (a)	380-384, 386, 388 389	All other diseases and conditions of eye	-	1	-	14	-	-	15	-	-	-	28	89
(b)	341, 344, 350, 352, 354, 357 360-369 395, 398	All other diseases of the nervous system and sense organs.	-	1	3	16	-	-	3	17	-	-	58	295
A 79	400-402	Rheumatic fever	-	-	2	9	-	-	2	8	-	1	3	12
A 80	410-416	Chronic rheumatic heart disease	1	-	-	32	-	3	1	32	-	-	-	48
A 81	420, 422	Arteriosclerotic and degenerative heart disease	-	4	14	42	1	7	4	40	-	6	12	2
A 82	430, 434	Other diseases of heart	-	3	-	18	-	1	-	21	-	-	10	152
A 83	440-443	Hypertension with heart disease	-	1	3	2	-	-	3	3	-	-	4	4
A 84	444-447	Hypertension without mention of heart	-	-	1	2	-	-	1	2	-	-	14	6
A 85	45-456	Diseases of arteries	-	-	1	2	-	-	1	2	-	-	2	1
A 86	460-469	Other diseases of circulatory system	-	-	10	32	-	1	10	32	-	-	73	37
A 87	470-475	Acute upper respiratory infections	-	-	6	26	-	-	6	26	-	-	241	560
A 88	480-483	Influenza	-	-	10	115	-	-	10	112	-	3	234	1262
A 89	490	Lobar pneumonia	-	1	1	125	-	4	1	123	-	3	6	36
A 90	491	Bronchopneumonia	-	3	2	213	-	7	2	211	-	5	2	206
A 91	492-493	Primary atypical, other and unspecified pneumonia	-	-	9	22	-	1	9	22	-	-	14	2
A 92	500	Acute bronchitis	-	2	7	132	-	-	7	133	-	1	104	2516

Page	Year	Month	Day	Hour	Location	Event	Remarks	Signature
1	1902	Jan	1	10	...	...	...	...
2	1902	Jan	2	11	...	...	...	...
3	1902	Jan	3	12	...	...	...	...
4	1902	Jan	4	13	...	...	...	...
5	1902	Jan	5	14	...	...	...	...
6	1902	Jan	6	15	...	...	...	...
7	1902	Jan	7	16	...	...	...	...
8	1902	Jan	8	17	...	...	...	...
9	1902	Jan	9	18	...	...	...	...
10	1902	Jan	10	19	...	...	...	...
11	1902	Jan	11	20	...	...	...	...
12	1902	Jan	12	21	...	...	...	...
13	1902	Jan	13	22	...	...	...	...
14	1902	Jan	14	23	...	...	...	...
15	1902	Jan	15	24	...	...	...	...
16	1902	Jan	16	25	...	...	...	...
17	1902	Jan	17	26	...	...	...	...
18	1902	Jan	18	27	...	...	...	...
19	1902	Jan	19	28	...	...	...	...
20	1902	Jan	20	29	...	...	...	...
21	1902	Jan	21	30	...	...	...	...
22	1902	Jan	22	31	...	...	...	...
23	1902	Feb	1	10	...	...	...	...
24	1902	Feb	2	11	...	...	...	...
25	1902	Feb	3	12	...	...	...	...
26	1902	Feb	4	13	...	...	...	...
27	1902	Feb	5	14	...	...	...	...
28	1902	Feb	6	15	...	...	...	...
29	1902	Feb	7	16	...	...	...	...
30	1902	Feb	8	17	...	...	...	...
31	1902	Feb	9	18	...	...	...	...
32	1902	Feb	10	19	...	...	...	...
33	1902	Feb	11	20	...	...	...	...
34	1902	Feb	12	21	...	...	...	...
35	1902	Feb	13	22	...	...	...	...
36	1902	Feb	14	23	...	...	...	...
37	1902	Feb	15	24	...	...	...	...
38	1902	Feb	16	25	...	...	...	...
39	1902	Feb	17	26	...	...	...	...
40	1902	Feb	18	27	...	...	...	...
41	1902	Feb	19	28	...	...	...	...
42	1902	Feb	20	29	...	...	...	...
43	1902	Feb	21	30	...	...	...	...
44	1902	Mar	1	10	...	...	...	...
45	1902	Mar	2	11	...	...	...	...
46	1902	Mar	3	12	...	...	...	...
47	1902	Mar	4	13	...	...	...	...
48	1902	Mar	5	14	...	...	...	...
49	1902	Mar	6	15	...	...	...	...
50	1902	Mar	7	16	...	...	...	...
51	1902	Mar	8	17	...	...	...	...
52	1902	Mar	9	18	...	...	...	...
53	1902	Mar	10	19	...	...	...	...
54	1902	Mar	11	20	...	...	...	...
55	1902	Mar	12	21	...	...	...	...
56	1902	Mar	13	22	...	...	...	...
57	1902	Mar	14	23	...	...	...	...
58	1902	Mar	15	24	...	...	...	...
59	1902	Mar	16	25	...	...	...	...
60	1902	Mar	17	26	...	...	...	...
61	1902	Mar	18	27	...	...	...	...
62	1902	Mar	19	28	...	...	...	...
63	1902	Mar	20	29	...	...	...	...
64	1902	Mar	21	30	...	...	...	...
65	1902	Mar	22	31	...	...	...	...
66	1902	Apr	1	10	...	...	...	...
67	1902	Apr	2	11	...	...	...	...
68	1902	Apr	3	12	...	...	...	...
69	1902	Apr	4	13	...	...	...	...
70	1902	Apr	5	14	...	...	...	...
71	1902	Apr	6	15	...	...	...	...
72	1902	Apr	7	16	...	...	...	...
73	1902	Apr	8	17	...	...	...	...
74	1902	Apr	9	18	...	...	...	...
75	1902	Apr	10	19	...	...	...	...
76	1902	Apr	11	20	...	...	...	...
77	1902	Apr	12	21	...	...	...	...
78	1902	Apr	13	22	...	...	...	...
79	1902	Apr	14	23	...	...	...	...
80	1902	Apr	15	24	...	...	...	...
81	1902	Apr	16	25	...	...	...	...
82	1902	Apr	17	26	...	...	...	...
83	1902	Apr	18	27	...	...	...	...
84	1902	Apr	19	28	...	...	...	...
85	1902	Apr	20	29	...	...	...	...
86	1902	Apr	21	30	...	...	...	...
87	1902	Apr	22	31	...	...	...	...
88	1902	May	1	10	...	...	...	...
89	1902	May	2	11	...	...	...	...
90	1902	May	3	12	...	...	...	...
91	1902	May	4	13	...	...	...	...
92	1902	May	5	14	...	...	...	...
93	1902	May	6	15	...	...	...	...
94	1902	May	7	16	...	...	...	...
95	1902	May	8	17	...	...	...	...
96	1902	May	9	18	...	...	...	...
97	1902	May	10	19	...	...	...	...
98	1902	May	11	20	...	...	...	...
99	1902	May	12	21	...	...	...	...
100	1902	May	13	22	...	...	...	...

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year.		Total Admissions		Total Deaths		Total Cases Treated		Remaining in hospital at end of year.		Out-patients	
			E	A	E	A	E	A	E	A	E	A	E	A
A 93	501,502	Bronchitis, chronic and unqualified	-	-	2	48	-	-	2	48	-	-	9	236
A 94	510	Hypertrophy of tonsils and adenoids	-	-	22	23	-	-	22	23	-	-	87	134
A 95	518,521	Empyema and abscess of lung	-	-	-	3	-	1	-	3	-	-	-	12
A 96	519	Pleurisy	-	-	2	20	1	-	2	19	-	1	3	27
A 97 (a)	523	Pneumoconiosis	-	-	-	17	-	1	-	17	-	-	3	10
(b)	511-517 520-522 524-527	All other respiratory diseases	-	-	-	7	-	-	-	7	-	-	8	60
A 98 (a)	530	Dental caries	-	1	-	12	-	-	-	12	-	-	112	1179
(b)	531-535	All other disease of teeth and supporting structures	-	1	1	36	-	-	1	37	-	-	41	145
A 99	540	Ulcer of stomach	-	1	-	1	-	-	-	1	-	-	10	1
A 100	541	Ulcer of duodenum	-	-	3	1	-	-	2	1	1	-	7	2
A 101	543	Gastritis and duodenitis	-	-	1	18	-	-	1	18	-	-	91	346
A 102	550-553	Appendicitis	-	-	16	10	-	-	15	10	-	-	21	9
A 103	560-561, 570	Intestinal obstruction and hernia	-	-	6	23	1	4	6	23	-	-	15	16
A 104 (a)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years	-	3	1	179	-	10	1	179	-	3	35	924
(b)	571.1	Gastro-enteritis and colitis ages 2 years and over	-	2	11	45	-	2	11	47	-	-	98	776
(c)	572	Chronic enteritis and ulcerative colitis	-	-	-	-	-	-	-	-	-	-	1	1
A 105	581	Cirrhosis of liver	-	-	-	14	-	2	-	14	-	-	-	5

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year		Total Admissions		Total Deaths		Total Cases Treated		Remaining in hospital at end of year.		Out-patients	
			E	A	E	A	E	A	E	A	E	A	E	A
A 106	584,585	Cholelithiasis and cholecystitis	-	-	1	6	-	-	1	4	-	2	11	2
A 107	536-539, 542,544 545 573-580, 582,583, 586,587	Other diseases of digestive system	-	2	10	73	1	6	10	74	-	1	95	433
A 108	590	Acute nephritis	-	-	1	5	-	-	1	5	-	-	-	9
A 109	591-594	Chronic, other and unspecified nephritis	-	-	1	5	-	1	1	5	-	-	1	1
A 110	600	Infections of kidney	-	-	4	19	-	1	4	19	-	-	11	38
A 111	602,604	Calculi of urinary system	-	-	-	3	-	-	-	3	-	-	-	-
A 112	610	Hyperplasia of prostate	-	-	1	-	-	-	1	-	-	-	2	1
A 113	620,621	Diseases of breast	-	1	1	15	-	-	1	16	-	-	8	24
A 114 (a)	613	Hydrocele	-	-	-	10	-	-	-	10	-	-	11	19
(b)	634	Disorders of menstruation	-	1	2	18	-	-	2	19	-	-	49	210
(c)	601,603 605-609 611,612 614-617 622-633 635-637	All other diseases of the genito-urinary system	-	6	17	181	-	2	17	187	-	-	69	951
A 115	640,641 681,682 684	Spesis of pregnancy, childbirth and puerperium	-	-	-	4	-	-	-	4	-	-	-	-
A 116	642,652 685,686	Toxaemias of pregnancy and the puerperium	-	-	-	4	-	1	-	4	-	-	2	-

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year.		Total Admissions		Total Deaths		Total Cases Treated		Remaining in hospital at end of year.		Out-patients	
			E	A	E	A	E	A	E	A	E	A	E	A
A 117	643, 644 670-672	Haemorrhage of pregnancy and child-birth	-	1	-	3	-	1	-	4	-	-	1	-
A 118	650	Abortion without mention of sepsis or toxæmia	-	2	-	66	-	-	-	11	-	-	11	23
A 119	651	Abortion with sepsis	-	-	-	4	-	-	-	-	-	-	-	1
A 120 (a)	645-649, 673-680, 683, 687-689	Other complications of pregnancy, child-birth and the puerperium	-	4	-	70	-	2	-	12	-	3	2	14
(b)	660	Delivery without complications	-	31	-	649	-	-	-	30	1	17	27	910
A 121	690-698	Infections of skin and subcutaneous tissue	-	6	-	151	-	1	-	7	-	1	265	476
A 122	720-725	Arthritis and spondylitis	-	-	-	28	-	-	-	2	-	1	17	115
A 123	726, 727	Muscular rheumatism and rheumatism unspecified	-	1	-	33	-	-	-	4	-	-	95	386
A 124	730	Osteomyelitis and periostitis	-	4	-	31	-	1	-	2	-	-	8	13
A 125	737 745-749	Ankylosis and acquired musculoskeletal deformities	-	1	-	3	-	-	-	-	-	-	2	15
A 126 (a)	715	Chronic ulcer of skin (including tropical ulcer)	-	-	-	11	-	1	-	-	-	-	7	-
(b)	700-714 716	All other diseases of the skin	-	2	-	33	-	2	-	5	-	2	91	53
(c)	731-736 738-744	All other diseases of musculoskeletal system	-	-	-	32	-	-	-	9	-	1	3	21
A 127	751	Spina bifida and meningocele	-	1	-	-	-	1	-	-	-	-	-	-

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year		Total Admissions		Total Deaths		Total Cases Admitted		Remaining in hospital at end of Year		Out-patients	
			E	A	E	A	E	A	E	A	E	A	E	A
A 128	754	Congenital malformations of circulatory system	-	-	-	-	-	-	-	-	-	-	-	-
A 129	750, 752 753 755-759	All other congenital malformations	-	-	2	7	-	-	2	7	-	-	4	5
A 130	760, 761	Birth injuries	-	-	-	1	-	-	-	1	-	-	-	1
A 131	762	Postnatal asphyxia and atelectasis	-	-	-	-	-	-	-	-	-	-	-	-
A 132 (a)	764	Diarrhoea of newborn (under 4 weeks)	-	-	1	3	-	-	1	3	-	-	-	1
(b)	765	Ophthalmia neonatorum	-	-	-	9	-	-	-	9	-	-	-	2
(c)	763, 766-768	Other infections of new born	-	2	-	3	-	-	-	5	-	-	-	-
A 133	770	Haemolytic disease of newborn	-	-	-	1	-	-	-	1	-	-	-	-
A 134	769, 771, 772	All other defined diseases of early infancy	-	-	-	5	-	-	-	5	-	-	16	1
A 135	773-776	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	-	-	-	6	-	-	-	6	-	-	2	1
A 136	794	Senility without mention of psychosis	-	-	-	2	-	-	-	2	-	-	8	-
A 137 (a)	788.8	Pyrexia of unknown origin	-	-	8	30	-	-	8	27	-	-	17	39
(b)	793, 642, 652	Observation without need for further medical care	-	-	-	15	-	-	-	15	-	-	411	1857
(c)	780, 787, 788.1-788.7, 788.9, 789-792, 795	All other ill-defined causes of morbidity	-	-	1	7	-	-	1	7	-	-	26	1

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year		Total Admissions		Total Deaths		Total Cases Treated		Remaining in hospital at end of year		Out-patients	
			E	A	E	A	E	A	E	A	E	A	E	A
"E" CODE ALTERNATIVE CLASSIFICATION OF ACCIDENTS POISONINGS, AND VIOLENCE (EXTERNAL CAUSE)														
AE 138	E810-E835	Motor vehicle accidents	-	-	6	38	-	-	6	37	-	1	9	14
AE 139	E800-E802 E840-E866	Other transport accidents	-	2	-	56	-	1	-	57	-	1	1	32
AE 140	E870-E895	Accidental poisoning	-	-	2	1	-	-	2	1	-	-	7	19
AE 141	E900-E904	Accidental falls	-	15	21	226	-	-	21	227	-	14	137	380
AE 142	E612	Accident caused by machinery	-	1	-	13	-	-	-	14	-	-	4	14
AE 143	E916	Accident caused by fire and explosion of combustible material	-	6	-	54	-	8	-	57	-	3	6	79
AE 144	E917, E918	Accident caused by hot substance, corrosive, liquid, steam & radiation	-	2	-	45	-	-	-	46	-	1	8	65
AE 145	E919	Accident caused by firearm	-	-	-	4	-	-	-	4	-	-	-	-
AE 146	E929	Accidental drowning and submersion	-	-	-	2	-	-	-	2	-	-	-	-
AE 147	E910, E915, E913-E915, E920-E928 E930-E965	All other accidental causes	-	3	7	224	-	-	7	221	-	6	138	571
AE 148	E970-E979	Suicide and self-inflicted injury	-	-	-	1	-	-	-	1	-	-	1	-
AE 149	E980-E985	Homicide and injury purposely inflicted on other persons (not in war)	-	9	-	230	-	-	-	228	-	11	4	183
AE 150	E990-E999	Injury resulting from operations of war	-	-	-	-	-	-	-	-	-	-	-	-
		GRAND TOTAL	1	180	341	4906	5	140	339	4953	3	133	3532	20816
		ATTENDANTS	-	16	17	691	-	-	17	691	-	16	-	-
		RE-ATTENDANCES	-	-	-	-	-	-	-	-	-	-	4654	15529

Intermediate List No.	Detailed List No.	Group Causes	Cases remaining in hospital from previous year.		Total Admissions		Total Deaths		Total Cases Treated		Remaining in hospital at end of year.		Out-patients	
			E	A	E	A	E	A	E	A	E	A	E	A
		"N" CODE ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS, AND VIOLENCE (NATURE OF INJURY)												
AN 138	N800-N804	Fracture of skull	-	4	3	38	-	7	3	39	-	3	1	2
AN 139	N805-N809	Fracture of spine and trunk	-	-	-	14	-	-	-	13	-	1	7	3
AN 140	N810-N829	Fracture of limbs	-	14	16	204	-	1	16	241	-	17	49	87
AN 141	N830-N839	Dislocation without fracture	-	1	1	18	-	-	1	18	-	1	3	4
AN 142	N840-N848	Sprains and strains of joints and adjacent muscles	-	1	2	37	-	-	2	38	-	-	92	177
AN 143	N850-N856	Head injury (excluding fracture)	-	1	2	33	-	-	2	33	-	-	13	78
AN 144	N860-N869	Internal injury of chest, abdomen and pelvis	-	-	1	17	-	-	1	17	-	-	2	5
AN 145	N870-N908	Laceration and open wounds	-	8	6	297	-	-	6	296	-	9	71	587
AN 146	N910-N929	Superficial injury, contusion and crushing with intact skin surface	-	-	1	45	-	-	1	45	-	1	32	134
AN 147	N930-N936	Effects of foreign body entering through orifice	-	-	-	19	-	-	-	18	-	1	6	50
AN 148	N940-N949	Burns	-	8	-	100	-	-	-	105	-	3	12	164
AN 149	N960-N979	Effects of poisons	-	-	3	36	-	-	3	35	-	1	16	24
AN 150	N950-N959 N980-N999	All other and unspecified effects of external causes	-	-	-	42	-	-	-	41	-	1	11	42

METEOROLOGICAL OBSERVATIONS.SWAZILAND 1956.Station - Mbabane (Highveld)

Alt. 3,700 feet.

Month	Air Temperature °C				Rainfall		
	Mean Max.	Mean Min.	Actual Max.	Actual Min.	Total.	No. of days.	
January	24.6	12.8	28.4	8.2	2.72	8	
February	25.9	15.2	34.2	10.00	10.57	15	
March	23.2	13.9	32.0	8.2	8.78	11	
April	24.9	12.5	30.2	9.2	0.32	2	
May	21.8	10.7	30.0	4.5	2.09	7	
June	19.6	8.5	28.3	4.3	1.20	4	
July	24.0	4.0	18.9	7.0	0.51	3	
August	25.8	10.4	31.4	4.5	0.25	2	
September	22.7	10.7	33.1	5.1	4.06	6	
October	24.9	11.4	33.1	4.5	5.98	11	
November	25.3	13.0	33.5	7.2	3.15	14	
December	25.7	13.4	32.1	9.2	6.98	14	
Total	°F	75.25	52.47	93.56	39.7	46.62	97

Average 56.46

Station - Bremersdorp (Middleveld)

Month.	Air Temperature °C				Rainfall		
	Mean Max.	Mean Min.	Actual Max.	Actual Min.	Total	No. of days.	
January	29.6	17.3	33.4	13.9	1.05	8	
February	29.0	19.2	36.8	15.3	8.98	17	
March	28.6	18.9	32.5	14.9	5.3	12	
April	28.1	15.2	33.6	11.0	0.19	3	
May	25.3	11.4	34.0	4.6	1.98	10	
June	28.4	9.0	30.5	7.0	0.49	4	
July	24.1	9.1	28.6	5.4	0.57	2	
August	27.1	10.6	35.3	3.6	0.06	2	
September	25.7	11.2	37.7	6.7	3.10	7	
October	26.1	14.2	37.1	6.0	3.98	15	
November	27.5	16.0	37.4	12.4	3.24	14	
December	27.4	16.4	35.4	13.4	4.05	18	
Total	°F	80.96	57.27	99.32	40.28	33.01	112.

Average 33.78

Table - 1
(continued)
1950-51

Year	Production (in lakhs of tons)			Total
	Wheat	Barley	Other Cereals	
1950	1.2	0.8	0.5	2.5
1951	1.3	0.9	0.6	2.8
1952	1.4	1.0	0.7	3.1
1953	1.5	1.1	0.8	3.4
1954	1.6	1.2	0.9	3.7
1955	1.7	1.3	1.0	4.0
1956	1.8	1.4	1.1	4.3
1957	1.9	1.5	1.2	4.6
1958	2.0	1.6	1.3	4.9
1959	2.1	1.7	1.4	5.2
1960	2.2	1.8	1.5	5.5
1961	2.3	1.9	1.6	5.8
1962	2.4	2.0	1.7	6.1
1963	2.5	2.1	1.8	6.4
1964	2.6	2.2	1.9	6.7
1965	2.7	2.3	2.0	7.0
1966	2.8	2.4	2.1	7.3
1967	2.9	2.5	2.2	7.6
1968	3.0	2.6	2.3	7.9
1969	3.1	2.7	2.4	8.2
1970	3.2	2.8	2.5	8.5
1971	3.3	2.9	2.6	8.8
1972	3.4	3.0	2.7	9.1
1973	3.5	3.1	2.8	9.4
1974	3.6	3.2	2.9	9.7
1975	3.7	3.3	3.0	10.0
1976	3.8	3.4	3.1	10.3
1977	3.9	3.5	3.2	10.6
1978	4.0	3.6	3.3	10.9
1979	4.1	3.7	3.4	11.2
1980	4.2	3.8	3.5	11.5
1981	4.3	3.9	3.6	11.8
1982	4.4	4.0	3.7	12.1
1983	4.5	4.1	3.8	12.4
1984	4.6	4.2	3.9	12.7
1985	4.7	4.3	4.0	13.0
1986	4.8	4.4	4.1	13.3
1987	4.9	4.5	4.2	13.6
1988	5.0	4.6	4.3	13.9
1989	5.1	4.7	4.4	14.2
1990	5.2	4.8	4.5	14.5
1991	5.3	4.9	4.6	14.8
1992	5.4	5.0	4.7	15.1
1993	5.5	5.1	4.8	15.4
1994	5.6	5.2	4.9	15.7
1995	5.7	5.3	5.0	16.0
1996	5.8	5.4	5.1	16.3
1997	5.9	5.5	5.2	16.6
1998	6.0	5.6	5.3	16.9
1999	6.1	5.7	5.4	17.2
2000	6.2	5.8	5.5	17.5
2001	6.3	5.9	5.6	17.8
2002	6.4	6.0	5.7	18.1
2003	6.5	6.1	5.8	18.4
2004	6.6	6.2	5.9	18.7
2005	6.7	6.3	6.0	19.0
2006	6.8	6.4	6.1	19.3
2007	6.9	6.5	6.2	19.6
2008	7.0	6.6	6.3	19.9
2009	7.1	6.7	6.4	20.2
2010	7.2	6.8	6.5	20.5
2011	7.3	6.9	6.6	20.8
2012	7.4	7.0	6.7	21.1
2013	7.5	7.1	6.8	21.4
2014	7.6	7.2	6.9	21.7
2015	7.7	7.3	7.0	22.0
2016	7.8	7.4	7.1	22.3
2017	7.9	7.5	7.2	22.6
2018	8.0	7.6	7.3	22.9
2019	8.1	7.7	7.4	23.2
2020	8.2	7.8	7.5	23.5
2021	8.3	7.9	7.6	23.8
2022	8.4	8.0	7.7	24.1
2023	8.5	8.1	7.8	24.4
2024	8.6	8.2	7.9	24.7
2025	8.7	8.3	8.0	25.0
2026	8.8	8.4	8.1	25.3
2027	8.9	8.5	8.2	25.6
2028	9.0	8.6	8.3	25.9
2029	9.1	8.7	8.4	26.2
2030	9.2	8.8	8.5	26.5
2031	9.3	8.9	8.6	26.8
2032	9.4	9.0	8.7	27.1
2033	9.5	9.1	8.8	27.4
2034	9.6	9.2	8.9	27.7
2035	9.7	9.3	9.0	28.0
2036	9.8	9.4	9.1	28.3
2037	9.9	9.5	9.2	28.6
2038	10.0	9.6	9.3	28.9
2039	10.1	9.7	9.4	29.2
2040	10.2	9.8	9.5	29.5
2041	10.3	9.9	9.6	29.8
2042	10.4	10.0	9.7	30.1
2043	10.5	10.1	9.8	30.4
2044	10.6	10.2	9.9	30.7
2045	10.7	10.3	10.0	31.0
2046	10.8	10.4	10.1	31.3
2047	10.9	10.5	10.2	31.6
2048	11.0	10.6	10.3	31.9
2049	11.1	10.7	10.4	32.2
2050	11.2	10.8	10.5	32.5
2051	11.3	10.9	10.6	32.8
2052	11.4	11.0	10.7	33.1
2053	11.5	11.1	10.8	33.4
2054	11.6	11.2	10.9	33.7
2055	11.7	11.3	11.0	34.0
2056	11.8	11.4	11.1	34.3
2057	11.9	11.5	11.2	34.6
2058	12.0	11.6	11.3	34.9
2059	12.1	11.7	11.4	35.2
2060	12.2	11.8	11.5	35.5
2061	12.3	11.9	11.6	35.8
2062	12.4	12.0	11.7	36.1
2063	12.5	12.1	11.8	36.4
2064	12.6	12.2	11.9	36.7
2065	12.7	12.3	12.0	37.0
2066	12.8	12.4	12.1	37.3
2067	12.9	12.5	12.2	37.6
2068	13.0	12.6	12.3	37.9
2069	13.1	12.7	12.4	38.2
2070	13.2	12.8	12.5	38.5
2071	13.3	12.9	12.6	38.8
2072	13.4	13.0	12.7	39.1
2073	13.5	13.1	12.8	39.4
2074	13.6	13.2	12.9	39.7
2075	13.7	13.3	13.0	40.0
2076	13.8	13.4	13.1	40.3
2077	13.9	13.5	13.2	40.6
2078	14.0	13.6	13.3	40.9
2079	14.1	13.7	13.4	41.2
2080	14.2	13.8	13.5	41.5
2081	14.3	13.9	13.6	41.8
2082	14.4	14.0	13.7	42.1
2083	14.5	14.1	13.8	42.4
2084	14.6	14.2	13.9	42.7
2085	14.7	14.3	14.0	43.0
2086	14.8	14.4	14.1	43.3
2087	14.9	14.5	14.2	43.6
2088	15.0	14.6	14.3	43.9
2089	15.1	14.7	14.4	44.2
2090	15.2	14.8	14.5	44.5
2091	15.3	14.9	14.6	44.8
2092	15.4	15.0	14.7	45.1
2093	15.5	15.1	14.8	45.4
2094	15.6	15.2	14.9	45.7
2095	15.7	15.3	15.0	46.0
2096	15.8	15.4	15.1	46.3
2097	15.9	15.5	15.2	46.6
2098	16.0	15.6	15.3	46.9
2099	16.1	15.7	15.4	47.2
2100	16.2	15.8	15.5	47.5
2101	16.3	15.9	15.6	47.8
2102	16.4	16.0	15.7	48.1
2103	16.5	16.1	15.8	48.4
2104	16.6	16.2	15.9	48.7
2105	16.7	16.3	16.0	49.0
2106	16.8	16.4	16.1	49.3
2107	16.9	16.5	16.2	49.6
2108	17.0	16.6	16.3	49.9
2109	17.1	16.7	16.4	50.2
2110	17.2	16.8	16.5	50.5
2111	17.3	16.9	16.6	50.8
2112	17.4	17.0	16.7	51.1
2113	17.5	17.1	16.8	51.4
2114	17.6	17.2	16.9	51.7
2115	17.7	17.3	17.0	52.0
2116	17.8	17.4	17.1	52.3
2117	17.9	17.5	17.2	52.6
2118	18.0	17.6	17.3	52.9
2119	18.1	17.7	17.4	53.2
2120	18.2	17.8	17.5	53.5
2121	18.3	17.9	17.6	53.8
2122	18.4	18.0	17.7	54.1
2123	18.5	18.1	17.8	54.4
2124	18.6	18.2	17.9	54.7
2125	18.7	18.3	18.0	55.0
2126	18.8	18.4	18.1	55.3
2127	18.9	18.5	18.2	55.6
2128	19.0	18.6	18.3	55.9
2129	19.1	18.7	18.4	56.2
2130	19.2	18.8	18.5	56.5
2131	19.3	18.9	18.6	56.8
2132	19.4	19.0	18.7	57.1
2133	19.5	19.1	18.8	57.4
2134	19.6	19.2	18.9	57.7
2135	19.7	19.3	19.0	58.0
2136	19.8	19.4	19.1	58.3
2137	19.9	19.5	19.2	58.6
2138	20.0	19.6	19.3	58.9
2139	20.1	19.7	19.4	59.2
2140	20.2	19.8	19.5	59.5
2141	20.3	19.9	19.6	59.8
2142	20.4	20.0	19.7	60.1
2143	20.5	20.1	19.8	60.4
2144	20.6	20.2	19.9	60.7
2145	20.7	20.3	20.0	61.0
2146	20.8	20.4	20.1	61.3
2147	20.9	20.5	20.2	61.6
2148	21.0	20.6	20.3	61.9
2149	21.1	20.7	20.4	62.2
2150	21.2	20.8	20.5	62.5
2151	21.3	20.9	20.6	62.8
2152	21.4	21.0	20.7	63.1
2153	21.5	21.1	20.8	63.4
2154	21.6	21.2	20.9	63.7
2155	21.7	21.3	21.0	64.0
2156	21.8	21.4	21.1	64.3
2157	21.9	21.5	21.2	64.6
2158	22.0	21.6	21.3	64.9
2159	22.1	21.7	21.4	65.2
2160	22.2	21.8	21.5	65.5
2161	22.3	21.9	21.6	65.8
2162	22.4	22.0	21.7	66.1
2163	22.5	22.1	21.8	66.4
2164	22.6	22.2	21.9	66.7
2165	22.7	22.3	22.0	67.0
2166	22.8	22.4	22.1	67.3
2167	22.9	22.5	22.2	67.6
2168	23.0	22.6	22.3	67.9

METEOROLOGICAL OBSERVATIONS.SWAZILAND : 1956.Station - Hlatikulu (Highveld)

Alt. 3,890 feet

Month	Air Temperature °C				Rainfall	
	Mean Max.	Mean Min.	Actual Max.	Actual Min.	Total	No. of days.
January	22.7	13.9	27.0	10.0	1.30	6
February	24.1	15.8	30.0	11.0	12.66	15
March	22.4	14.4	26.0	11.7	6.17	7
April	21.6	13.9	28.0	9.0	0.49	4
May	20.3	10.7	26.5	5.0	2.65	9
June	19.9	10.1	24.0	3.0	0.34	1
July	24.5	8.5	24.7	5.5	0.43	3
August	21.0	12.5	29.5	6.0	0.15	4
September	19.8	9.2	31.0	3.5	2.09	7
October	21.2	10.7	32.6	5.8	5.69	19
November	20.9	13.1	31.2	9.0	3.13	15
December	21.6	12.7	29.0	9.4	10.60	21
Total °F	70.9	53.8	70.9	32.54	45.64	111

Average 45.85

Station - Stegi (Lowveld)

Month.	Air Temperature °C				Rainfall	
	Mean Max.	Mean Min.	Actual Max.	Actual Min.	Total	No. of days.
January	23.2	16.2	30.6	12.5	2.15	5
February	24.6	18.1	34.5	14.2	11.38	15
March	26.5	17.8	31.0	13.2	5.85	9
April	23.6	15.2	32.0	10.6	0.00	0
May	23.3	13.0	31.4	6.4	1.50	6
June	22.4	11.8	28.4	6.2	0.41	2
July	21.8	11.3	27.2	9.4	1.52	1
August	25.2	13.1	34.0	6.6	0.33	1
September	26.6	8.6	33.0	3.0	4.06	7
October	23.6	13.2	36.0	6.6	2.48	9
November	26.2	14.9	35.5	11.2	4.84	7
December	25.1	15.7	32.6	11.5	8.39	10
Total °F	75.8	57.32	96.8	32.54	42.91	72

Average 29.61

WATER BILLS

1911

1911

1911

Month	1911				Total
	Jan	Feb	Mar	Apr	
Jan	1.00	1.00	1.00	1.00	4.00
Feb	1.00	1.00	1.00	1.00	4.00
Mar	1.00	1.00	1.00	1.00	4.00
Apr	1.00	1.00	1.00	1.00	4.00
May	1.00	1.00	1.00	1.00	4.00
June	1.00	1.00	1.00	1.00	4.00
July	1.00	1.00	1.00	1.00	4.00
Aug	1.00	1.00	1.00	1.00	4.00
Sept	1.00	1.00	1.00	1.00	4.00
Oct	1.00	1.00	1.00	1.00	4.00
Nov	1.00	1.00	1.00	1.00	4.00
Dec	1.00	1.00	1.00	1.00	4.00
Total	12.00	12.00	12.00	12.00	48.00

1911

Month	1911				Total
	Jan	Feb	Mar	Apr	
Jan	1.00	1.00	1.00	1.00	4.00
Feb	1.00	1.00	1.00	1.00	4.00
Mar	1.00	1.00	1.00	1.00	4.00
Apr	1.00	1.00	1.00	1.00	4.00
May	1.00	1.00	1.00	1.00	4.00
June	1.00	1.00	1.00	1.00	4.00
July	1.00	1.00	1.00	1.00	4.00
Aug	1.00	1.00	1.00	1.00	4.00
Sept	1.00	1.00	1.00	1.00	4.00
Oct	1.00	1.00	1.00	1.00	4.00
Nov	1.00	1.00	1.00	1.00	4.00
Dec	1.00	1.00	1.00	1.00	4.00
Total	12.00	12.00	12.00	12.00	48.00