# Report on the public health / Southern Rhodesia.

# Contributors

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# SOUTHERN RHODESIA.

# REPORT

ON

# The Public Health

FOR THE YEAR 1924.

Presented to the Legislative Hesembly, 1925.

Salisbury, Rhodesia: Printed by the Government Printer.

[C.S.R. 16-1925.]

1925.



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The Reports of the District Medical Officers and Compound Inspectors have not been printed.

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## SOUTHERN RHODESIA.

Report on the Public Health for the Year 1924.

# presented to the Legislative Assembly, 1925.

# PART I.

## CHAPTER I.—ADMINISTRATION.

The Public Health and Hospitals Department is in the Division and under the control of the Minister holding the portfolio of Colonial Secretary.

The Authorised Establishment consists of :--Medical Director, Government Bacteriologist, Medical Inspector of Schools, 5 Government Medical Officers (Grade 1), 4 Government Medical Officers (Grade 2), 15 Government Medical Officers (Grade 3), 1 aided Medical Officer, 1 chief clerk, 1 senior clerk, 1 Grade III. clerk, 5 lady clerks, 2 inspectors of compounds; senior matron, 7 matrons, 7 nurse-matrons, 29 qualified nurses, 25 probationers, 1 district nurse; Assistant Superintendent, Ingutsheni Mental Hospital; Assistant Superintendent, Morgenster Leper Settlement; 6 hospital secretaries and dispensers; 7 male attendants, Mental Hospital; 1 female attendant, Mental Hospital; 2 laboratory assistants.

Supplementary Auxiliary Staffs.—Six part-time hospital secretaries, 4 part-time secretaries to hospital advisory committees, 1 hospital orderly, 2 needlewomen.

The miscellaneous coloured and native staffs attached to the various institutions are as follows :--Four Indian cooks, 4 Indian laundrymen, 3 ward maids, 165 natives.

	European Staff		
Total	Coloured Staff	 	176
Total	Staff	 	315

It is with deep regret I have to record the death during the year of Dr. W. M. Eaton, O.B.E., the Assistant Medical Director. The late Dr. Eaton first joined the Government service in February, 1899, as District Surgeon, Hartley. Of late years he had held the post of Assistant Medical Director, being stationed at Bulawayo, where he also held the appointment of Medical Superintendent of the Memorial Hospital and Medical Superintendent of the Ingutsheni Mental Hospital. Dr. Eaton had completed 25 years' service and would shortly have retired on pension. The late medical officer was a loyal and highly efficient servant of the Government, and the loss of such an able officer will be greatly deplored by all. The vacancy caused by Dr. Eaton's death has not yet been filled.

I also regret to record the death of Dr. S. Gurney, medical missionary, attached to the American Mission at Mrewa. Dr. Gurney was an aided medical officer, in that he was paid remuneration by the Government, in return for which he undertook all Government medical work in the Mtoko and Mrewa districts, and his services were also available for settlers under the special conditions laid down. The late Dr. Gurney was a man who could ill be spared. He at all times gave willing help to this Department in any direction where his medical knowledge and skill could be of use and was required, and his work as medical missionary at the various missions to which he was attached will long remain as a monument of life-long devotion to the welfare of suffering humanity. The American Mission authorities hope to be able to appoint a successor to the late Dr. Gurney at Mrewa, and when such appointment has eventuated it is hoped to renew the arrangement whereby such medical officer will be available for Government and public medical work at that centre.

During the year serious indisposition leave was granted to one medical officer, while vacation leave of absence was granted to four medical officers, one hospital secretary, one lady clerk, three Mental Hospital attendants and seven members of the nursing staff.

Dr. D. J. O'Keefe, Government medical officer, Mazoe, was retired on pension from 4th September, 1924, but he is continuing to hold his present post in a temporary capacity till the question of establishing a new Government station in a more central part of the Mazoe Valley has been finally decided. The payment of a pension to Dr. O'Keefe will remain in abeyance meanwhile. Dr. H. C. Titterton left the service in May, and Dr. Maurice Pearson was appointed to fill the vacancy.

The compound inspection staff still consists of three inspectors, though at the present time the staff has been depleted by one inspector having returned to duty in the Native Department in an emergency. It is intended to re-arrange these duties in the future so that two inspectors will suffice.

Eighty applications for appointment to the Southern Rhodesia nursing service were received from qualified nurses; nine were engaged. Five qualified nurses resigned during the year. Fifty-five applications were received for appointment as probationers, of whom thirteen were appointed. Four probationers resigned before completion of training, while an application has been received for an appointment three years hence, and a former member of the nursing staff now resident in Ceylon has written trying to arrange for her sister to be trained in the Salisbury Hospital. These appointments are now filled from the list of applicants resident in Southern Rhodesia.

Seven probationers successfully passed the Colonial Medical Council's examination for trained nurses during 1924. In this connection it is worthy of mention that since June, 1920, with one exception, probationers trained at the Salisbury Hospital have gained either a first or a second place in these examinations.

At the request of the London Tropical School of Medicine, I proceeded to England in September to discuss with the committee of the newly established Imperial Institute of Hygiene and Tropical Medicine the question of the establishment of a field branch of the London School in Southern Rhodesia. The outcome of the discussions which took place may be considered highly satisfactory. The Government of Southern Rhodesia will contribute £1,000 a year towards the scheme; it will also provide laboratory accommodation and equipment, and defray the cost of all materials in Rhodesia. The Government of Southern Rhodesia will also defray the cost of the journey of one research worker on one occasion to and from England, and the arrangement in the first instance will be for a period of three years. Workers sent by the school to the field branch will be given definite subjects and lines of research, which will be laid down for them by the director of the school in consultation with the Medical Director. A programme of work has been decided upon which will not be altered in any way unless with the joint agreement of the school authorities and this Department. The workers and the research work will in every particular be under the control of the director of the school, but the Medical Director will act as adviser to and be the local representative of the school. The research work to be undertaken in the first instance will be the continuation of Dr. J. G. Thomson's investigations into the causation and prevention of blackwater fever, and the question of the prevention of malaria in general, with which it is hoped to combine an entomological survey of the mosquitoes of the Colony. The appointment of Dr. Ross, Lecturer on Bacteriology at the Leeds University, as first Research Fellow has just been announced, and he is expected to arrive about the middle of April.

Much prominence has been given to this subject in the Press, and it is generally conceded that Southern Rhodesia is to be congratulated upon the fact that our capital has been chosen as the centre for the establishment of the first field station established by the London School of Hygiene and Tropical Medicine in any dominion of the Empire.

*Financial.*—The following figures show the expenditure under the Public Health and Hospital Votes under the respective headings for the year 1924, as compared with 1923 and 1922 :—

### Public Health (Expenditure).

	1924. £	1923. £	1922. £
Staff, salaries	24,745	26,059	26,184
Travelling expenses, Medical Director and staff, Government medical offi- cers, Bacteriologist, compound in- spectors, and rail and port charges	3,673	3,694	3,832
Treatment, maintenance and transport of lunatics, lepers and sick paupers, re- pression of infectious and contagious diseases, upkeep of lazarettos, pur- chase of vaccine lymph and quinine	8,600	7,241	8,843
Public Health Laboratory an	d other C	harges.	
Expenditure	400	329	395
Administration of Foods and Drugs Ordinance	191	256	261
	£37,609	£37,579	£39.515

I done Heaten (He	venue).		
	1924. £	1923. £	1922. £
Bacteriological fees	362	199	259
Sales of quinine	1,547	2,219	1,303
	£1,909	£2,418	£1,562
Hospitals, Native Dispensaries and	Asylums	(Expenditu	ure).
	1924. £	1923. £	1922. £
Salaries Travelling expenses on appointment, duty	15,962	16,350	15,835
or leave, rail and port charges	1,440	855	1,308
Provisions and medical comforts	6,566		5,510
Fuel, light and water	2,892	2,856	2,694
Furniture, equipment, repairs and	2,002	2,000	2,001
clothing	3,664	3,704	3,797
Drugs, disinfectants and surgical appli-	0,001	0,101	0,101
ances	4,426	3,683	3,715
Laundry	1,130	1,040	605
Sanitary fees	455	482	348
Produce, etc	7,764	8,101	9,207
Miscellaneous	387	514	554
Grants-in-aid to hostels, hospitals and			
district nursing	6,347	5,636	5,845
	£51,033	£49,523	£49,418

# Public Health (Revenue).

Hospitals, Native Dispensaries and Asylums (Revenue).

	1924.	1923.	1922.
	£	£	£
Fees collected from paying patients	13,326	15,055	13,812

The gross expenditure on Government hospitals, including Ingutsheni Mental Hospital, during 1924 amounted to £43,810, as compared with £43,229 in 1923, showing an increase of £581 on the previous year.

The revenue collected amounted to  $\pounds 13,326$ , as compared with  $\pounds 15,055$  collected in 1923, showing a decrease of  $\pounds 1,729$ . This decrease is difficult to explain. The collection of hospital accounts is a matter which receives constant and careful attention, and I am satisfied there is little scope for improvement in the machinery of collecting revenue in this direction. The less satisfactory position may to some extent be due to a more stringent financial position generally during the period under review.

The gross earnings from paying patients amounted to £16,431, as compared with £16,603 for the previous year, this also showing a decrease of £172, while the total number of patients maintained was 5,594, as compared with 5,302 in 1923, an increase of 292.

In addition to the earnings from paying patients, the loss of revenue represented by the free treatment of paupers, police, gaol officials and others who were entitled to free medical attendance in Government hospitals, and for the cost of whom no inter-departmental charges are made, amounted to  $\pounds 10,011$  15s., and if Ingutsheni Mental Hospital is included, this figure is increased to  $\pounds 19,142$  10s., as compared with  $\pounds 16,141$  for the previous year.

Complete statistics regarding the number of beds, daily average of patients treated, the revenue and expenditure, the average cost per patient per diem, the number of free patients, the number of units treated, the cost to hospital votes of treatment and maintenance, worked out on the gross expenditure basis, and the loss of revenue represented thereby at the various institutions, will be found in Part III.

### CHAPTER II.—WORK OF THE DEPARTMENT.

(1) Mines and Works.—(a) Inspections.—Towards the end of the year the compound inspector at Bulawayo was transferred back to the Native Department, and it has been decided to re-arrange the work so that if possible only two inspectors shall be required in future, with headquarters at Bulawayo and Salisbury respectively, thus bringing them into line with the inspectors of mines.

No report has been received from the inspector of compounds for Bulawayo for the period of the year in which he was acting, and I am, therefore, unable this year to show the total mileage covered or the mines visited. Inspections were, however, kept up till the advent of the heavy rains, which, owing to the impassable state of the roads, seriously curtailed their tours.

The reports of the compound inspectors on the whole indicated that the condition of native mine labourers was satisfactory. There were no prosecutions during the year under the Mines and Works Regulations or under the Native Labour Regulations, whilst complaints as regards non-payment of wages numbered only 18, as compared with 29 in 1923. There were six prosecutions with a like number of convictions on these counts; eight paid in full before prosecution, whilst four are being given time and are gradually paying off the arrears due.

These cases of non-payment of wages hardly fall within the scope of the duties of the compound inspectors, and are only undertaken by them as a convenience. They should by rights be dealt with directly by the Police, or the Native Commissioner of the district. One of the great difficulties in bringing these cases, and preventing the exploitation of the native for the benefit of the man who is gambling on what his prospect will produce, is to get the natives concerned to lodge a complaint, and the intervention of the compound inspector to explain their legal position to the natives has been helpful.

The diet regulations have been complied with in most instances to the best of the ability of the mines concerned. Owing to the abnormally low rainfall, however, difficulty has been experienced in many districts in supplying the ration of fresh vegetables which is required under the regulations, and the substitution of citrus fruits in lieu thereof has proved on the whole unsatisfactory, not on account of any shortage, but due wholly to faults in packing and costs of transport. These matters are now being taken up with the growers and the railway authorities respectively.

The inspector of compounds, Salisbury, has drawn attention to the fact that the amount of beans grown in the country is quite inadequate to supply the needs of the larger mines alone and that the prices ruling are altogether prohibitive, and it may be necessary to consider the withdrawal of this commodity from the compulsory scale of rations, which are fixed by regulation, and substitute some alternative.

(b) Health on Mines.—The number of employers rendering labour returns is as follows :—

				1923.	1924.
Mashonaland	 	 	 	159	222
Matabeleland	 	 	 	174	218

The average size of the properties is indicated by the following table :---

Mines employing 2,000 natives and over	 3
Mines employing 1,500 natives and over	 3
Mines employing 1,000 natives and over	 4
Mines employing 500 natives and over	 4
Mines employing 400 natives and over	 1
Mines employing 300 natives and over	 2
Mines employing 200 natives and over	 11
Mines employing 100 natives and over	 46
Mines employing 50 natives and over	 71
Mines employing 25 natives and over	 83
Mines employing under 25 natives	 241
Total	 469

The following table shows the number of cases of sickness, number of deaths, death rate per cent., sickness incidence per thousand per annum employed, and death rate per thousand per annum, amongst natives employed on mines in Southern Rhodesia for the year 1924 :—

Name of disease.		Total sick.	Total deaths.	Case mortality per centum.	Sickness incidence rate per mille per annum employed.	Death rate per mille per annun employed
Malaria		4,818	16	.83	116.70	.39
Seurvy		242	12	4.96	5.86	.29
Syphilis		280	10	3.57	6.78	.24
Pneumonia		1,791	330	18.43	43.38	7.97
Phthisis		· 101	24	23.76	2.45	.58
Other diseases of the che	st	- 2,445	39	1.59	59.22	.94
Dysentery		205	15	7.32	4.97	.36
Diarrhœa		406	2	.49	9.83	.05
Other intestinal diseases		282	25	8.87	6.83	.66
Heart disease		57	31	54.39	1 38	.75
Debility		344 .	14	4.07	8.33	.34
Influenza		1,664	42	2.52	40.34	1.02
Other diseases		3,793	105	2.77	91.15	2.54
Minor ailments		8,689			210.59	
Accidents		460	89	19.35	11.12	2.16
Totals		25,577	754	2.95	619.51	18.26

Number employed, 41,286.

The following table gives the mortality and causes of death amongst the various groups of natives employed on mines during 1924 :--- SOUTHERN RHODESIA.

# MORTALITY ON MINES.

Annual Territorial Summary showing Mortality amongst Natives for year ended 31st December, 1924.

Territorial classification								DE	EATHS									Death	Death rate per mille per annum.	nille per a	Annum.	
Territories.	Average employed.		-1	.si		.si	diseases chest.	pery.		Innitestinal .se	.osaseib	-A.	.aza	.seaneeib	.sta:		Disease.	ase.	Acci	Accident.	All e	All causes.
		iralal&	Soury	lidqv8	Tnear	Phthis	of the	Dysen	Diarrh	Other disease	Heart	Debili	ıənµuI	Other	Accide	alatoT	1924.	1923.	1924.	1923.	1924.	1923.
Southern Rhodesia	11,133	10	:	61	40	60	4	:	:	ю	00	00	00	6	18	95	6.92	7.97	1.62	2.60	8.53	10.56
P.E. Africa	4,069	1	1	1	19	-1	3.	8	:	9	1	67	9	9	11	67	13.77	12.36	2.70	3.15	16.47	15.51
Northern Rhodesia	10,967	20	10	00	96	6	1L	9	1	1-	6	1	11	39	17	226	19.06	15.06	1.55	2.27	20.61	18.17
Nyasaland	14,649	20	9	4	173	°10	15	9	I	4	17	00	22	46	41.	356	21.50	16.20	2.80	3.01	24.30	19.21
Other sources	554	:	:	:	61	:	:	:	:	:	1	:	:	10	61	10	14.44	10.08	3.61	6.05	18.05	16.13
			i w													1						
Totals	41,372	16	12	10	330	24	39	15	61	25	31	14	42	105	89	754	16.07	13.29	2.15	2.77	18.22	16.05

Nore.--The figure 41,372 is the average of the actual number of natives employed on the last day of each month, and not the daily average.

Month.	Average No. of natives employed.	No. of deaths from disease.	Death rate per 1,000 per mensem from disease.	No. of deaths from accident.	Death rate per 1,000 per mensem from accident.	Total No. of deaths.	Death rate per 1,000 per mensem from all causes.
January	37,477	32	.85	11	.29	43	1.15
February	37,916	37	.98	4	.11	41	1.08
March	38,627	34	.88	4	.10	38	.99
April	38,874	34	.87	8	.21	42	1.08
May	39,318	27	.69	- 9	.23	36	.92
June	40,170	39	.97	12	.30	51	1.27
July	41,612	57	1.37	10	.24	67	1.61
August	41,349	53	1.28	5	.12	58	1.40
September	40,948	69	1.69	<b>*</b> 3	.07	72	1.76
October	40,073	99	2.47	11	.27	110	2.74
November	39,984	116	2.90	7	.18	123	3.08
December	39,320	68	1.73	5	.13	73	. 1.86

# Comparative Statement of Mortality amongst Natives Employed on Mines in Southern Rhodesia, January to December, 1924.

# Totals and Averages.

Year			Per annum.		Per annum.		Per annum.
1924*	 41,286	665	16.11	89	2.16	754	18.26
1923	 37,482	504	13.44	105	2.80	609	16.25
1922	 35,718	681	19.07	86	2.40	767	21.47
1921	 37,605	689	18.30	94	2.50	783	20.82
1920	 37,669	599	15.90	75	1.99	674	17.90
1919	 30,296	507	16.73	, 90	2.97	597	19.71
1918	 32,766	3,629	110.76	88	2.69	3,717	113.44
1917	 38,861	700	18.01	149	3.83	849	21.85
1916	 40,420	911	22.48	172	4.24	1,083	26.73
1915	 37,928	832	21.94	159	4.19	991	26 13
1914	 36,100	897	24.85	135	3.74	1,032	28.59
1913	 33,543	783	23.49	158	4.71	946	28.20
1912	 34,494	1,073	31.11	163	4.73	1,236	35.83
1911	 37,909	1,085	28.62	164	4.33	i,249	32.95

\* Includes late returns.

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	Natives.	Europeans.
Bulawayo	12,681	449
Gwelo	9,528	445
Victoria	2,794	53
Total for Matabeleland	25,003	947
Salisbury	7,688	309
Hartley	6,772	287
Umtali	1,823	91
Total for Mashonaland	16,283	687
Total for Southern Rhodesia	41,286	1,634

Average Number Employed on Mines in Southern Rhodesia during 1924, including late Returns.

The sickness and mortality rate amongst native mine labourers increased during the year, and it is interesting to note that the higher rate of sickness was ascribable to diseases which are associated with a short rainy season and a low rainfall, these being pneumonia and other diseases of the chest, scurvy, dysentery and other intestinal diseases.

The pneumonia rate was no doubt raised by a wave of epidemic influenza which appeared during the last quarter of the year and attacked natives employed on many of the larger mines, notably the Cam and Motor, Shamva, and Shabani Asbestos Mines. The mortality rate from diseases was raised in consequence, being 16.11 per thousand, as compared with 13.44 per thousand in 1923. On the other hand, the sickness rate from malaria was decreased. The average sickness and mortality rate still continues highest amongst labourers recruited from Nyasaland and the next highest amongst natives from Northern Rhodesia, and lowest amongst indigenous labour. It is somewhat significant, however, that amongst 41,372 native labourers employed on mines in Southern Rhodesia, only 11,133 are recruited in Southern Rhodesia.

(2) Public Health Laboratory.—The report of the Government Bacteriologist, which is to be found in Part II. of this report, shows a steady increase of the routine work of the laboratory.

Dr. J. G. Thomson, of the London Tropical School of Medicine, who was engaged in special research work into the ætiology of blackwater fever, returned to England in September, 1923, and it was not found possible to replace him. Following on the new arrangement that has been entered into between this Government and the London School of Hygiene and Tropical Medicine, the latter will in future keep one or more research workers in Rhodesia. Dr. G. R. Ross, M.B., Ch.B., D.P.H., Ph.D., Lecturer on Bacteriology at Leeds University, has been selected as the first Research Fellow.

During Dr. Orpen's absence on leave no research work was carried out in the laboratory, the staff in his absence being employed in routine work only. The gross earnings of the laboratory amounted to  $\pounds 862$ , as compared with  $\pounds 726$  in 1923.

(3) Medical Inspection of Schools.—The Medical Inspector of Schools was transferred to this Department from the Education Department towards the end of the year, as it was considered that his work could be better correlated and developed under the Health Department. Dr. Gatchell's report, which has been separately printed and circulated, is somewhat abbreviated this year on account of his absence on six months' leave. It, however, contains much food for thought, and should be carefully studied both by teachers and parents.

One of the most pressing needs of the school children is that of dental attention, which is receiving the serious consideration of the Government, and it is anticipated that provision will be made for this during the coming year.

(4) *Propaganda*.—Pamphlets prepared by the Department relating to malaria and blackwater, their causation and prevention, were in accordance with custom widely distributed, and arrangements were entered into with the Rhodesia Agricultural Union for a series of lectures by the district medical officers to farmers' associations on malaria and its prevention.

The following scientific papers were published by members of the staff :---

- "Researches on Blackwater Fever in Southern Rhodesia," by J. G. Thomson, M.A., M.B., Ch.B., Director of Protozoology, School of Tropical Medicine, London, and Research Commissioner on Blackwater Fever in Southern Rhodesia, 1922 and 1923. This was published in London by the School of Tropical Medicine. It is a very complete history of Dr. Thomson's investigations in Rhodesia, and brings our knowledge of blackwater fever a big step forward.
- "A Note on the Connection between Contagious Abortion and Undulant (Malta) Fever in Rhodesia," by L. J. J. Orpen, M.B., B.Ch., D.P.H. (Oxford), Government Bacteriologist, Southern Rhodesia. Published in the South African Medical Record.
- "The Use of Saturated Organisms (Saturation Test) in Diagnosis," by L. J. J. Orpen, M.B., B.Ch., D.P.H. (Oxford), Government Bacteriologist, Southern Rhodesia. To be shortly published in the South A frican Medical Record.
- "The Ætiology of Blackwater Fever," by W. M. Hewetson, M.B., D.P.H., Government Medical Officer, Sinoia, Southern Rhodesia. Published in the *Journal of Tropical Medicine and Hygiene*.
- "Some Observations on Blackwater Fever," by E. P. Carmody, M.B.E., M.R.C.S. (Eng.), L.R.C.P. (Lond.). Published in the British Medical Journal.
- "Blackwater Fever," by O. E. Jackson, M.B., Bac. Surg. (Irel.). Published in the South African Medical Record.
- "Chronic or Suppressed Malaria," by V. C. W. Vickers, M.R.C.S. (Eng.), L.R.C.P. (Lond.). Published in the South African Medical Record.

(5) Public Health Legislation.—(a) Public Health Act.—This Act, which consolidates and extends the public health legislation, was passed at the first session of the Legislative Assembly and became law on 1st January, 1925. Considerable discussion took place on the vaccination clauses, and amendments allowing for conscientious objectors were introduced, but apart from this the Bill passed the House in practically the form in which it was presented. With the added powers now given to the Government and to local authorities, it is hoped that considerable strides will be made in matters which have long been awaiting attention. Regulations under this Act are now in course of preparation, and for a start will embrace vaccination, notification of infectious diseases, prevention of malaria and eradication of mosquitoes in towns, villages, mining camps and other communities, and the segregation and treatment of venereal diseases in natives.

(b) Southern Rhodesia Opium and Habit-forming Drugs Regulations.—A special report on the working of these regulations will be found in Part II. Certain clauses have been added to the regulations, allowing the keeping of limited stocks of opium by farmers and stock breeders for the treatment of sick animals, under permit issued and controlled by the Chief Veterinary Surgeon.

(c) Sale of Foods and Drugs Amendment Ordinance.—Regulations under this Ordinance, fixing standards for milk, butter and cheese, have been prepared, and are now under consideration, and it is anticipated that regulations dealing with these important commodities will be issued at an early date, as local authorities are pressing for their early introduction.

No whole-time Government analyst under the Foods and Drugs Act has yet been appointed, but it has been arranged, as a temporary measure, that this work will be undertaken by the chemical laboratory of the Agricultural Department.

(d) Natives Registration Ordinance, 1901, Amendment Ordinance, 1918.—This allows of the periodical medical examination of natives in employment in towns, but the regulations under this Ordinance still only apply to Salisbury, where, however, they have worked most satisfactorily, with undoubted benefit to the local authority concerned and to the public at large. Bulawayo is now adopting these regulations, and it is hoped that other municipalities will follow suit at an early date.

The following table, which has been supplied by the Medical Officer of Health for Salisbury, shows the number of natives examined and the diseases discovered and treated. THE MUNICIPALITY OF SALISBURY.

Infectious Cases dealt with at the Lazaretto during 1924.

Disease.	January.	January. February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	November, December.	Total.	Case incidence per 1,000 per annum examined.
Syphilis	10	∞	8	4 .	7	5	60	5	~~~~	10	9	a	72	5.93
Gonorrhœa	1	00	1	1	67	1	63	53	1	5	1	1	17	1.40
Leprosy	Ľ	I	1	1	1	1	١	1	I	1	1	I	63	.16
Chicken-pox	67	1	61	I	1	-	I	1	1	1	I	I	6	.74
Itch	12	10	10	8	61	1	61	6	61	6	20	4	73	6.01
Filth	1	1	61	I	1	1	I	I	1	I	1	I	9	.49
Chronic Ulcers	1	1	1	I	I	I	1	1	1	1	1	1	1	.08
Boils	I	33	1	1	1	1	I	1	1	1	I	1	7	.58
Gonorrhœa Warts	1	1	1	1	1	1	I	1	1	1	1	1	61	.16
Ringworm	I	I	1	I	I	I	1	I	1	I	1	Γ	67	.16
Observation	I	1	1	1	1	1	1	1	1	1	I	63	1-	.58
Ulcers	I	-/	I	1	I	1	I	I		1	1	I	61	.16
Measles	1	1	1	1	1	1	1	1	1	67	1	1	4	33
Filth and Sores	1	1	1	I	1	1	1	1	I	.1	1	1	1	.08
		Total r	natives ex	Total natives examined during the year, 12,136.	uring the	year, 12,1;	36.	Fi	Five operations were performed	ons were	performed			

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### CHAPTER III.-VITAL STATISTICS.

The estimated European population at the end of June, 1924, was 37,519.

*Marriages.*—I am unable to make any reference to the marriage rate, as the registration of marriages is not dealt with by this Department.

*Births.*—There were 874 European births registered during the year, 446 being males and 428 females, giving a birth rate of 23.29 per cent., the lowest birth rate on record since 1920.

In addition the following births amongst Indians, coloured and natives were returned to the Registrar of Births :---

Indian	54
Coloured	38
Chinese	• 1
Native	4
	-
Total	97

There were 15 plural births, of which 11 were European, two Indian, one coloured and one native.

The illegitimate births recorded numbered 33, being classified as follows :---

European	. 21
Coloured	. 10
Native	

In previous reports I have included a return showing the nationality of parents of the children born. This return is not included in this report, for the reason that the compilation of reliable statistics has been rendered difficult by the action of the informants, who either as nationalised British subjects or as residents of a British Colony now give their nationality as "British," instead of showing the country of their birth. Under these circumstances I have thought it desirable that this particular return should be discontinued.

Deaths.—Europeans.—There were 310 deaths recorded in 1924, as compared with 363 in 1923; of these, 188 were males and 122 females. The crude death rate was 8.26 per thousand of the population, which, corrected to the age and sex distribution in England and Wales, gives a corrected death rate of 10.03 per thousand. The mortality rate is therefore low, and compares favourably with the recorded death rates since the last census of the population, which was held in 1921.

1921 crude death rate	9.52 per thousand
1922 crude death rate	8.98 per thousand
1923 crude death rate	10.02 per thousand
1924 crude death rate	8.26 per thousand

Infantile Mortality.—There were 65 deaths amongst children under one year of age, giving an infantile mortality rate of 74.49 per thousand births. This is a slight decrease from last year, but is still far too high. Fourteen deaths from broncho-pneumonia and pneumonia is considerably above the average, and may to some extent be explained by the widespread epidemic of measles and whooping cough which occurred. Malaria as a cause of infantile mortality was, I am glad to say, reduced considerably, only three deaths from this cause being recorded, as compared with 12 in 1923.

The following table shows the causes of infantile mortality in the last four years :---

Causes of Death in Children under (				
Diseases.	1921.	1922.	1923.	1924.
Malaria	5		11	3
Blackwater		1	1	
Whooping cough		1	1	5
Diphtheria and croup	1			
Influenza	3	1	6	2
Dysentery		1	2	1
Erysipelas	1			
Other general diseases		1		2
Simple meningitis	3	2		2
Epilepsy	1			
Convulsions of infants	3	5	6	1
Diseases of the larynx	2		1	
Acute bronchitis	2	1	3	
Broncho-pneumonia	4	3		2
Pneumonia	3	5	6	7
Diarrhœa and enteritis	4	4	7	7
Other accidents of labour	1	-		'
	1			
Hernia, intestinal obstruction		1	1	1
Acute abscess		1		
Congenital malformations	1	1	2	1
Other diseases of the skin and annexa			1	
Congenital debility, icterus and sclerema	16	20	20	26
Other causes peculiar to early infancy	1	3	1	
Cause of death not specified or ill-defined	6	3	2	
Cerebro-spinal fever				1
Gangrene				1
Totals	57	54	70	65

Causes of Death in Children under One Year of Age.

# CHAPTER IV.-PUBLIC HEALTH.

Infectious, Communicable and Preventable Diseases.

Notifiable Diseases.—The following table summarises the weekly bulletins as issued by the Public Health Department :—

Di		Number	of cases.	Number o	of deaths.	
Disease.		European.	Native.	European.	Native.	Remarks.
Chicken-pox		103	388			Many cases reported from Bulawayo and district; numbers no recorded
Cerebro-spinal		1			2	
meningitis	•••	1	3		2 (	Management of the second second second
Diphtheria Encephalitis		1				for the second manager
Iethargica		1				
Enteric fever		24	6	2	2	
Erysipelas		4				
German measles		38	1			
Influenza		87	155	1	30	Many cases reported from Lonely Min- district; numbers no recorded
Measles		27	1			Many cases reported from Zaka district numbers not re corded
Mumps Puerperal		34	1			
septicæmia		3				
Ringworm		1				
Scarlet fever		4				One suspected case re ported from Umvum
Scarlatina		1				
Small-pox			2			
Trypanosomiasis		1	1			
Whooping cough		106	11			

# Table showing Infectious Diseases reported to the Public Health Department during 1924.

Malaria.—The rise and fall in the incidence of malaria in relation to the character of the rainy season is well exemplified if we compare the year 1923 with that of 1924. In the former year we had a wet season, when the rains were above the average in the total amount of rain which fell, and late rains extended well into April and May. In 1924, on the other hand, the total rainfall was much below the average, and in the latter part of the rainy season it amounted to a drought in most districts. In 1923 we recorded a marked increase in the number of cases of malaria admitted to hospitals in the Colony, whilst in 1924 the admission rate on this account was much below the average, being 953 and 413 respectively.

The following table shows the admissions to all hospitals on account of malaria for the last four years, and the admission rate per thousand of the estimated population.

		Male	arıa.		
	Admissions	Admission rate per 1,000 of	Deaths	Ra	infall.
Year.	to hospital.	the population.	registered.	Season.	Average.
1921	821	24.12	24	20.21	29.96
1922	500	14.35	12	21.22	16.11
1923	953	26.32	49	22.23	39.16
1924	413	11.11	13	23.24	16.69
		Black	water.		
1921	53	1.58	23	20.21	29.96
1922	49	1.41	24	21.22	16.11
1923	63	1.74	36	22.23	39.16
1924	20	0.53	11	23.24	16.69

Though the malarial incidence showed such a marked decrease, I am afraid it can almost entirely be ascribed to the climatic conditions which existed, though no doubt individuals are more and more becoming alive to the necessity for the protection of themselves and their families. There has been no cessation in the educational and propaganda work which has now been for many years one of the chief instruments for combating its prevalence in rural areas. This year special lectures by the district medical officers to the various farmers' associations have been arranged and have apparently been much appreciated. The Public Health Act now allows of regulations being framed for the control of malaria and the eradication of mosquitoes, and regulations dealing with this have been prepared and will shortly come into force. These, however, can only in actual practice be applied to townships, villages, mining camps and other communities, and in the country districts the adoption of the simple precautions which are so necessary for his health must largely depend on the common sense of the individual. He at any rate cannot complain that he has not been fully advised.

Blackwater Fever.—The following table shows the admissions to hospitals and the mortality rate for the last 11 years on account of this serious sequel to malarial infection :—

Year.			No. of cases of blackwater admitted to hospital.	No. of deaths in hospital	Mortality rate per cent.
1914	 	 	 53	. 13	24.53
1915	 	 	 62	16	25.81
1916	 	 	 35	6	17.14
1917	 	 	 48	13	27.08
1918	 	 	 36	11	30.56
1919	 	 	 37	7	18.92
1920	 	 	 75	10	13.33
1921	 	 	 53	6	11.32
1922	 	 	 49	14	28.57
1923	 	 	 64	14	21.88
1924	 	 	 20	1	5.00
			532	111	20.86

As in malaria, the admissions to hospitals show a marked diminution for 1924, being only 20 cases with one death, as compared to 64 cases with 14 deaths in 1923.

The system of notification of blackwater fever to this office is now very complete, and in 1924 there were 39 cases notified with 11 deaths, giving a mortality rate of 28.2 per cent. In 1923 there were 122 cases notified with 40 deaths, with a mortality rate of 32.79 per cent. Here, as in the case of malaria, the short rainy season and period of drought in February, March and April were largely responsible for the diminution of blackwater fever in rural areas, and I am afraid that this satisfactory return cannot be accepted as a proof that this disease is in any way diminishing. The result of Dr. Thomson's researches has brought the study of the ætiology of blackwater fever a stage further, and it may now be accepted that in blackwater fever we are not dealing with a disease sui generis, but that it is a sequel of malaria, and generally, if not always, is associated with the particular form of malarial parasite known as the malignant tertian; but why hæmolysis should occur in some cases of malaria and not in others, and what is the particular force which determines this cataclysm, are still unknown. Further research is required into this fatal and distressing disease, which is one of para-



Chart showing number of cases of Malaria and Blackwater Fever, with Rainfall, in Rhodesia during the years 1923 and 1924.

Rainfall -

-



mount importance to the beneficial settlement of the more malarious parts of not only this Colony, but the whole continent of Africa, and the attention of the recently appointed branch of the London School of Tropical Medicine in Rhodesia will, in the first instance, be directed to this subject.

Quinine.—The importation of quinine by the Government and its distribution to the public through the agencies of post offices, stores, etc., has been continued throughout the year, and is now widely taken advantage of. Some 8,954 bottles of 100 tablets each, representing 895,400 5-grain tablets of quinine, were distributed by this Department during the year, and were sold to the public at 4s. 6d. per bottle.

The indigenous native is gradually becoming alive to the value of this drug, and the demand for quinine by natives is gradually increasing. In order to meet this, it is proposed to sell small tubes, each containing five 5-grain tablets of quinine, to the natives at 3d. a tube, and the Chief Native Commissioner anticipates that this will be widely taken advantage of.

*Pneumonia.*—There was a general increase in the incidence and mortality rate from pneumonia both amongst Europeans and natives, and especially affecting natives employed in mining. In many instances this was secondary to influenzal infection, being specially marked in the last quarter of the year. It is a noticeable fact, however, that whilst the incidence of malaria and blackwater increases in seasons of high rainfall, pneumonia, dysentery and scurvy tend to be highest in years following low rainfalls, and this year several of the Government medical officers in their annual reports have drawn attention to the abnormal amount of pneumonia this year.

Dysentery.—As in previous years of drought or low rainfall, there was an increase in dysenteries and diarrheal diseases admitted to hospitals. In opposition to pneumonia, which in this Colony is essentially an industrial disease, dysentery affects the native in his kraal more than in service, children being more prone to infection than adults. In the majority of the cases seen it was bacillary in type.

Influenza.—Following on the great epidemic of influenza in 1918, this country, as in England, has been subjected to mild recurrent epidemics which affect Europeans and natives alike, but the mortality is higher amongst the latter, owing to secondary pneumonia. These waves of recurring influenza were more prevalent in the latter part of the year, that is, towards the end of the dry season. There were 91 Europeans and 332 natives admitted to hospitals on this account during the year, with 30 native and no European deaths. In 1923 the admissions on this account were 63 and 131 respectively. Amongst natives employed on mines there were 1,664 cases recorded, with 42 deaths, as compared with 1,341 cases in 1923, with 29 deaths.

Small-pox.—Two cases of small-pox were recorded during the year, both in natives. This is the lowest return on record. There were no deaths.

Vaccination.—36,193 vaccinations amongst the native population were carried out last year. Owing to the prevalence of small-pox in the Portuguese territories adjacent to our borders, a system has been inaugurated this year of vaccinating at the port of entry all alien natives entering this Colony in search of work, 16,552 of these natives being vaccinated immediately on entering the country during last year. This should help to limit the number and extent of the epidemics of this disease, which in the past have been of almost annual occurrence, and which have frequently been traced to outbreaks in bordering countries.

The average of unvaccinated children attending schools is reported by the Medical Inspector of Schools to be 17.11 per cent. of the children examined. A large number of these are the children of parents who do not realise the importance of this in early childhood or who are resident in country districts far from a doctor. Arrangements are now made for children to be vaccinated either by the Medical Inspector of Schools when on his visit of inspection or in town schools by the schools medical officer, and in the districts by the district medical officer, who annually travels round the schools of his district for the purpose.

The clauses in the Public Health Act dealing with vaccination came in for a considerable amount of discussion when this Bill was before the Legislative Assembly, and resulted in the Government introducing additional clauses providing for the conscientious objector. It is not, however, anticipated that this will be widely taken advantage of.

Trypanosomiasis.—Two cases of sleeping sickness were reported, one a European and one a native. The European was on a shooting trip ostensibly in the Mafungabusi area, but in spite of being warned he penetrated into the Sebungwe area in the neighbourhood of the Sipoli Vlei, where several cases of sleeping sickness have occurred in previous years. He became infected and was removed to Bulawayo, where he was treated with Bayer 205 and discharged ostensibly cured. He has since left the Colony, and up to now no further record of his state of health has been procurable. The native case was working in the Mafungabusi area, and prior to that came from Loangwa Valley, Northern Rhodesia, and the source of his infection is obscure. The Mafungabusi native district has been under suspicion for some time, and Dr. A. J. Mackenzie, the senior Government medical officer at Gatooma, carried out an exhaustive examination of all the natives in this area, but with negative results, and it is just possible that this was a latent case, infection having been contracted prior to entry into Southern Rhodesia. He was sent to Salisbury and given a course of Bayer 205, which benefited him at first to the extent that he appeared to all intents and purposes cured, but his symptoms somewhat suddenly relapsed, and he eventually died of the disease early in 1925.

*Enteric Fever.*—This disease shows a gratifying tendency towards decrease, and in spite of the fact that the sanitary services of most of our towns are of a somewhat primitive character, typhoid fever cannot be said to be a disease of outstanding importance, whilst it is noticeably absent in the native races, except those which are brought into close contact with European civilisation.

The admissions to hospital and deaths from this cause for the last five years are as follows :—

Year.	Admissions.	Deaths.
1920	74	14
1921		9
1922	46	4
1923		11
1924		7
*	276	45

Malta Fever.—This not being a notifiable disease, we have no record of the actual number of cases occurring, but admissions to hospitals continue to increase, there being 16 admissions in 1924, as compared with 12 in 1923. It is noticeable that natives appear to be practically immune, no case in a native having yet been recorded.

Research into the causal agent and its relation to contagious abortion in cattle is being continued, but was suspended during Dr. Orpen's absence on leave.

*Tuberculosis.*—This malady tends to show a slight but steady increase, the following table giving the deaths registered from all forms of tuberculosis in the last eleven years :—

		No. of deaths.
 	 	57
 	 	58
 	 	52
 	 	74
 	 	83
 		00
		0.0
 		103
 		0.
		=0
 	 	01
		861
···· ···· ····		· · · · · · · · · · · · · · · · · · ·

There were 152 admissions to hospitals in 1924, as compared with 142 in 1923, of which 20 were Europeans and 132 natives.

The deaths were 94, as compared with 73 in 1923 and 87 in 1922. They were classified as follows :—

Disease.	1922.	1923.	1924.
Tuberculosis of the lungs	73	63	85
Tubercular meningitis	4	3	1
Abdominal tuberculosis	2	5	2
Pott's disease	3		2
Tuberculosis, other organs	4		1
Disseminated tuberculosis	1		2
White swellings		1	
Acute miliary tuberculosis		1	1

The increase in phthis is largely confined to native male adults in employment, and so far as Europeans are concerned shows a tendency to decrease, this being assisted by the strict surveillance of immigrants and the exclusion of persons suffering from this disease in an active form.

Helminthic Diseases.—Bilharzia.—The Government Bacteriologist reports 63 examinations of urine for this disease, with 22 positives. Some research amongst the snails implicated as vectors has also been done, and results will be found in the report of the Public Health Laboratory.

The Medical Inspector of Schools reports 17 cases amongst the children he examined last year, which is over and above the 71 cases previously discovered by him. He rightly draws attention to the carelessness of parents in this respect. Bilharziasis is a serious disease, affecting the general health and nutrition of the child and seriously handicapping the prospects of life, and cannot be too carefully avoided. When discovered, the disease should be treated in the earliest stages.

The following table shows the admissions to hospitals on account of helminthic diseases :---

Disease.	Europeans.	· Natives.	Totals.
Tæmia solium	4	2	6
Tæmia saginata		2	2
Hydatids		1	1
Bilharzia	10	10	20

Tropical Ulcers.—The occurrence of tropical ulcers in natives shows no tendency to decrease, and adds appreciably to the sickness rate on mines, besides being a source of considerable economic loss to the industry. Dr. F. H. Ellis, in his report on the Salisbury Hospital, draws attention to the successful treatment of these ulcers by the application of the leaves of the stramonium plant, which is a common weed on the veld.

Venereal Disease .- Government medical officers, Native Commissioners and missionaries continually report the prevalence of venereal disease amongst the native population, this being more extensive in some districts than in others, but unfortunately we are not able at present to collect sufficiently reliable figures which might indicate whether venereal diseases are increasing or not amongst the native population. On the mines the recorded cases show a slight increase in relation to the number employed, being .67 per cent. in 1924, as compared with .59 per cent. in 1923; but, apart from this, there is no reason to believe that the ratio is markedly altering. Provision for the segregation and treatment of these cases is, however, urgently required, and the additional powers now given to the Government and local authorities under the recently promulgated Public Health Act will materially assist in allowing for this. Certain proposals regarding the establishment of venereal clinics in selected areas are, in fact, now receiving the consideration of the Government.

*Plague.*—Though bubonic plague has so far not appeared in Southern Rhodesia, its continued spread through the agency of veld rodents in the Union of South Africa cannot but be a source of considerable anxiety. Should the epidemic amongst the wild rodents continue to spread, it is difficult to see how we are to effectively protect our own borders.

In July of last year I visited the plague infested area of the Free State and Transvaal for the express purpose of studying the conditions prevailing and consulting with the Union Public Health authorities, and the result of these enquiries was embodied in a memorandum which was submitted to Ministers.

Every precaution against the introduction of plague, either by persons or rodents, by rail, is being taken, and recommendations for the reduction of the rat population in towns and villages were published for general information.

Diseases Peculiar to Natives.—In the annual report for last year I drew attention to certain diseases of unknown origin which were peculiar to natives and which required further investigation, and I specially mentioned splenic abscesses, endemic cirrhosis of the liver and chronic lymphangitis of the lower extremities; whilst Dr. Ellis reports this year a case of onyalia in a native—a rare disease of unknown origin, which up to now has only been reported from Portuguese West Africa.

I regret that it has not yet been possible to institute any enquiries into these diseases, but hope that steps will be taken in the near future to extend our knowledge of the ætiology of these diseases, especially with regard to the condition of chronic lymphangitis of the legs, which is extremely common and is the cause of a large amount of invalidism amongst our native employees on mines and other works.

## CHAPTER V.—HOSPITALS AND ASYLUMS.

There were 6,824 admissions to general hospitals in Southern Rhodesia in 1924, as compared with 6,325 in 1923. Of these, 2,833 were Europeans and 3,991 were coloured and natives. European admissions decreased by 477, while native and coloured admissions increased by 976.

European admissions reached their highest in the month of May and their lowest in the month of July, being approximately similar to observations made in former years, while native admissions were highest in October and November and lowest in July.

Memorial Hospital, Bulawayo.—Negotiations bearing on the future of this institution have been in progress for some time, and it has now been finally decided that as from the 1st of April, 1925, the hospital will be taken over by the Government, which will from that date be responsible for its administration and upkeep. The hospital board will continue, but as an advisory committee only, in accordance with the practice at other hospitals. Fees charged to patients will be reduced to the Government scale, and the medical superintendent will be a Government medical officer, who will reside on the premises, and the institution will be absorbed in the hospital system of the Colony.

The total number of white patients admitted to the Memorial Hospital during the year was 731, as compared with 925 in 1923, and 1,003 natives, as compared with 682 in 1923. Three hundred and forty-seven European (174 major and 173 minor) and 82 native (32 major and 50 minor) operations were performed during the year.

Salisbury Hospital.—There were 2,122 cases admitted during the year, of whom 1,093 were Europeans and 1,029 were natives and coloured, as compared with 1,072 Europeans and 808 coloured and natives in 1923. The figure 2,122 constitutes a record, and shows a substantial increase in the work done at this institution. The operations performed were 553 European (201 major and 352 minor) and 97 native (28 major and 69 minor).

The only constructional work done during the year was the erection of an isolation block. The provision of accommodation for cases of infectious disease developing after a patient's admission to hospital has been long required, and the building in question has already proved its usefulness. The water supply of the hospital has further been supplemented by the erection of an electric pump at the borehole well, which is working satisfactorily, and it is anticipated will effect a substantial saving in expenditure.

Additional accommodation for Europeans is becoming a matter of urgency, the congestion in the women's ward being really serious at times, whilst it is very desirable that further separate accommodation for children should be provided. The erection of an additional wing to this building would meet all immediate requirements, and it is hoped that this extension will be provided in the near future.

On two occasions during the year articles appeared in a Salisbury weekly paper attacking the hospital and its management. The subject matter of the articles in question received very full and impartial investigation, and the result of the enquiries elicited the information that the complaints stated to exist were not well founded, and the hospital advisory committee, who were also asked to enquire into the matter, expressed the opinion that the Salisbury Hospital is an exceedingly well-arranged institution, that the members have sought opinions from patients and made efforts to find any real source of dissatisfaction without result. The committee have particularly asked that this expression of satisfaction with the management, as evidenced by the committee's own investigations and the opinions of patients, be embodied in this report.

Umtali Hospital.—There were 593 admissions, of whom 308 were Europeans and 285 were natives, as against 463 Europeans and 137 natives for the previous year. The senior Government medical officer, Umtali, remarks that the decrease in the number of Europeans was due to the smaller number of malarial cases which followed the short rainfall, and that the increase in the number of native patients was due to the greater number seeking admission owing to a recognition of the benefit of European treatment in hospitals. Twenty-eight operations were performed, 20 being Europeans and 8 natives.

Certain structural alterations were undertaken, whereby the old nurses' home was converted into wards for women, and the house formerly occupied by the doctor was altered and added to to form a nurses' home. This re-arrangement has temporarily relieved the pressing need of more accommodation for female patients, but it cannot be denied that the present hospital buildings are no longer suited to present-day requirements, and their continued use can only be justified till funds can be provided for the erection of a new hospital suited to the needs and importance of the situation. Increased accommodation for natives is also urgently required, but it would be unwise to incur the expense of adding to the present buildings.

It has been suggested that the present hospital buildings might continue to be utilised as a hospital for Indians, coloured and natives, a portion of the existing European block being set aside for the former, but the establishment of two separate hospitals would entail a higher expenditure than if both hospitals were administered as one institution in the same grounds, and I am of opinion that the advantages to be gained thereby would counterbalance the initial expenditure which would be saved if it were decided to continue to use the present hospital buildings for natives when the new hospital for Europeans is erected. A site for a new hospital has been provisionally selected.

*Gwelo Hospital.*—Seven hundred and thirty-five patients were admitted during the year, of whom 167 were Europeans and 565 were natives, as against 218 Europeans and 400 natives for the previous year. The operations performed numbered 38 European (16 major and 22 minor) and 128 native (19 major and 109 minor).

The number of natives treated in this hospital is in excess of the accommodation available, and additional native ward accommodation is an urgent necessity. The sanitary system of this hospital is also unsatisfactory. These matters are, however, receiving close attention, and it is hoped that the work of erecting additional native wards, as the nucleus of a new native hospital to be erected in the grounds of the present hospital buildings, will be put in hand at an early date. It is also hoped that an improved and more up-to-date sanitary system will be devised in the near future.

Fort Victoria Hospital.—The admissions were much the same as in the previous year, there being 104 Europeans and 109 natives, as compared with 98 Europeans and 110 natives in 1923. European operations numbered 14 (6 major and 8 minor), and operations in native cases totalled 4 (3 major and 1 minor). The Government medical officer, Fort Victoria, also reports that there were 764 out-patient cases, many natives attending for the dressing of injuries received, usually in beer drinks. The work of building the new hospital at Fort Victoria has not yet been commenced, but it is expected this work will be put in hand early in the new year.

Gwanda Hospital.—The admissions to this hospital numbered 42 whites and 156 natives, as compared with 36 Europeans and 124 natives in 1923. Three European (minor) and 9 native (3 major and 6 minor) operations were performed.

*Enkeldoorn Hospital.*—Fifty-two patients were admitted during the year, of whom 13 were white and 39 were natives, as compared with 32 whites and 24 natives for the previous year. Nine minor operations (5 white and 4 native) were performed.

Gatooma Hospital.—It has been decided by the Government that a new general hospital be erected at Gatooma, and this work will probably be commenced early in the new year. A site has been selected bordering the township, and the European and native hospitals will exist as one institution. The removal of the native hospital from the centre of the township will dispose of a constant source of grievance on the part of the townspeople, and the establishment of both hospitals as one institution will tend to economy in administration and to efficiency. No accommodation for maternity cases will be provided in the new hospital, and this has led the inhabitants of Gatooma to advance a plea that accommodation for such cases be provided in the new hospital when it is erected. The local committee has been informed, however, that the policy of the Government in the past has been to assist local effort in maintaining maternity homes by the payment of a substantial grant-in-aid, and it is difficult to find a reason why Gatooma should be on a different footing to Salisbury, Gwelo, Umtali, Fort Victoria, Hartley and Selukwe in this respect. During the year 222 patients were admitted to the European hospital and 472 patients were admitted to the native hospital, as compared with 262 Europeans and 414 natives for the previous year. No operations were performed on Europeans, while 13 major and 56 minor operations were performed on natives. In the maternity wards attached to the present hospital there were 19 confinements during the year.

Shamva Hospital.—Eighty white patients were admitted and 176 natives, as compared with 125 whites and 202 natives for the previous year. Fifteen minor operations were performed on Europeans and 6 major and 25 minor operations were performed on natives. The new hospital is not yet erected, but it is expected that this work will be put in hand at an early date.

Sinoia Hospital.—It has been decided to erect a new hospital at Sinoia, and this work will probably commence early in the new year. The present hospital buildings will remain and will be used as the nurses' home. The white admissions numbered 67 and the native admissions 103, as against 73 and 82 respectively for the previous year. The smaller number of European patients is attributed to a falling off in the number of admissions on account of malaria. Two operations on Europeans were performed. Five cases were admitted to the maternity ward.

Belingwe Hospital.—This small cottage hospital, which is under the care of the Government medical officer, Filabusi, who visits at regular intervals, continues to supply a want of that district. Sixty patients were admitted during the year, of whom 6 were Europeans and 54 were natives, as compared with 6 and 32 respectively for the previous year.

The residents of Shabani have asked that a Government hospital be erected at Shabani. It is obvious that, with a Government hospital established at Belingwe, there would be no justification for a second Government hospital in the same district, only 20 miles distant, and that, if the Government erected a hospital at Shabani, the institution at Belingwe should be closed. Urgent reasons have, however, been advanced why the Belingwe hospital should not be moved, and I am inclined to agree with this view. It is to be borne in mind that the populace at Shabani consists for the most part of persons employed by the groups of mines working there, and on the mines concerned rests the responsibility of providing adequate arrangements for the nursing and treatment of their employees when sick. This view has been communicated to the people concerned, who have been informed that, if they will combine and erect a hospital at Shabani, the Government will assist by contributing a grant-in-aid, and there the matter rests for the time being.

Morgenster Leper Settlement.—The number of lepers at the settlement as at the 31st December, 1923, was 128 (86 males and 42 females), 124 being adults and 4 being children. During 1924 there were 78 new cases admitted (55 males and 23 females). One male was discharged, 9 escaped (8 males and 1 female), and 4 were allowed out on probation (1 male and 3 females). Fifteen lepers died, of whom 8 were males and 7 were females. The daily average treated numbered approximately 55, and the daily average maintained was 165. The number of lepers in the settlement on the 31st December, 1924, was 177 (123 males and 54 females). The superintendent's report says that the behaviour of the lepers has been good.

Under the provisions of the Leprosy Repression Ordinance the leper asylum is visited at least once in each year by a board of officers appointed by the Government. The board reported that when they inspected the settlement conditions were satisfactory, but recommended that certain of the lepers who were in need of constant medical supervision should be transferred to the Ndanga native dispensary, where they suggested separate ward accommodation for such cases should be provided. The board also suggested that arrangements should be made for the removal and care of children born of leprous parents. It has not yet been possible to do anything in regard to the transfer of lepers to Ndanga, and the latter suggestion is receiving attention. The present site of the leper settlement is not altogether suitable, and it has been decided to remove the settlement to a new site, and an area, being part of what is known as the Nyanda block, situated some 14 miles south-east of Fort Victoria. has been selected. This site will be more convenient in every respect, besides allowing ample room for expansion, and has the great advantage of being outside the native reserve and not hedged in with kraals. Survey and building operations will take time, but it is hoped that the removal of the settlement to its new home will be accomplished before the end of next year.

Ingutsheni Mental Hospital.—In his report for the year, which will be found printed in Part II. of this report, the medical superintendent again draws attention to the overcrowding and the urgent need of additional accommodation. Accommodation also is still required for European female patients. In this connection I can only endorse the views expressed by the medical superintendent, and hope that the necessary funds to provide for these real and urgent requirements will be forthcoming, so that the work of providing the necessary buildings may not be longer delayed. The superintendent has for some time past urged the necessity of employing only trained mental nurses as attendants. The assistant superintendent and the two senior attendants are qualified men; two further certificated men are shortly to be engaged in England, and it is intended that the unqualified men at present employed shall gradually be replaced by trained men, so that the whole of the nursing staff shall consist solely of attendants qualified by training and examination in the nursing and care of the insane.

Statistics relating to the principal diseases treated in Government hospitals during the year will be found in the appendix to this report.

> A. M. FLEMING, Medical Director.

## PART II.

## pasteur Institute and public bealth Laboratory.

# REPORT FOR THE YEAR 1924.

Staff.—The permanent staff consists of the Bacteriologist, senior assistant, junior assistant, and two native laboratory boys, while it is hoped that an Analytical Chemist and perhaps an Entomologist will also be appointed. For purposes of research special investigators are sent out from the London School of Tropical Medicine, and this year it is hoped that a Bio-Chemist and an Entomologist will be sent out. The services of Dr. Ross have been secured so far for 1925.

### Pasteur Institute.

The fresh strain of rabbits proved quite satisfactory, and there has been no sickness among them or the guinea-pigs.

One patient (coloured) from Portuguese East Africa was treated here; a course of treatment was sent to a patient in Nyasaland, and five courses of treatment were sent to Livingstone. We have had no patients from Southern Rhodesia since 1913.

Our new methods, both of preparing and of sending out virus for treatment, have proved very satisfactory in every way. The virus is kept as a glycerine emulsion which can be used for passage inoculations or for treatment at any moment, while courses of treatment, ready for use, are posted to doctors whenever required, so that patients can be treated at their own homes instead of having to come to Salisbury for several weeks.

### Public Health Laboratory.

#### I.—ANALYSIS OF WORK DONE.

A. *Research.*—No research investigator could be sent out from the London School of Tropical Medicine last year to continue the research work on blackwater fever. Dr. Ross is expected to arrive in March of this year to carry on this work.

Owing to the absence of the senior assistant during the first part of the year and of the Bacteriologist during the second half, no continuous research could be maintained by ourselves, but such work as was possible was done on malaria, bilharzia and the diagnosis of Malta and entericlike fevers, which will be described later under these headings.

B. Routine.—The work increases steadily, 1,714 examinations having been made in 1924, as opposed to 1,457 in 1923 and 807 in 1922.

Outside districts are making increased use of the laboratory, as is shown in the following table :---

0 41 DL L .	1923.		1924.
Southern Rhodesia—			
Salisbury	1,352		1,487
Nineteen other towns	99	21 towns	227
Northern Rhodesia	3		
Portuguese East Africa	3		

These figures for places outside Salisbury, though improved, are not yet satisfactory. Many specimens cannot travel through the post, of course, but there is no reason why outside doctors should not make more use, through this laboratory, of modern methods of diagnosis and treatment.

The following table shows the methods employed :		
Protoniological and Destancelogical	1923.	1924.
Bacteriological and Protozoological-		
Microscopical examinations	577	705
Agglutination tests	147	237
Preparation of vaccines	67	75
Decomplementising serum	$51 \\ 52$	
Sigma re-action Cultural examinations	201	145
Examinations of water supplies	201	37
Antiseptic co-efficients	26	
Biologic tests	1	
_		
Helminthological—		
Microscopical examinations	76	84
Entomological-		
Identification of insects	1	2
Miscellaneous-		
Preparation of rat specimens		88
Pathological-		
Microscopical examinations	113	151
Sections of tumours, etc	25	61
Chemical—	20	01
	33	26
Tests	35 47	20
Quantitative estimations Biologic tests		
Medico-Legal—		
Microscopical or chemical tests	28	11
Biologic tests	2	3
	1,456	1,714

### II.-REMARKS ON DISEASES, ETC., DEALT WITH.

A. Blackwater Fever.—Unfortunately no research investigator could be sent out from England, and our own experiments on hæmolysis could not be continued for the reasons already given, but a fresh start will now be made both by our new research investigator and by ourselves.

B. Malaria.—Three hundred and sixty-two examinations were made, with 38 positive results (33 malignant tertian distributed throughout the year, 2 benign tertian in June and August, and 3 quartan in January and December). It will be seen how often a single blood smear was negative, although many of the above cases were probably malarial (but with parasites too scanty to show up in a single smear). In negative cases a differential count is made, or further smears examined till a result is obtained, but it is obvious that some improvement on the singlesmear method is desirable.
For purposes of research a series of malarial slides was examined, but the present differential count could not be improved upon. To report the presence of actual parasites is the ideal to be aimed at, and we intend to do further work this year on methods of concentrating the parasites, so that more positive results will be obtained.

C. Undulant (Malta) Fever.—One hundred and forty-two agglutination tests were made, with 26 positive results (of which several were only weakly positive and were reported as "doubtful"), as opposed to 19 positives last year. The disease seems fairly stationary.

As normal people and those suffering from other diseases often give a weak positive test, the question of diagnosis is of importance. Our method of blood culture is of help in this respect, and under research a new test was worked out which it is hoped will enable us to say definitely whether a patient has the disease or not. Some cultures of our strains were handed to Mr. Bevan for experimental purposes, but he was, unfortunately, unable to carry out the projected inoculations.

D. Infection with Alcaligenes Fæcalis.—As this organism is related to Alcaligenes melitensis and A. abortus of Malta fever, for purposes of research a series of 98 (suspected Malta fever) cases were specially tested against this organism as well, to see whether infection with it occurs in Rhodesia. Of the 98 cases, 5 gave positive results, 6 gave results too doubtful to call positive, and the rest were negative. Comparing the results with those obtained in the same cases against melitensis and abortus, we get the following table :—

	-	Results with									
Group.	Melitensis.	Abortus.	Fæcalis.	Number o cases.							
1	+ +	-	-	2							
2	+	+	-	9							
3	+	+	+ .	2							
4	+	-	+	1							
5	-	-	+	2							
6	-	-	-	82							
			Total	98							

Groups 1 and 2 were undoubted Malta fever. Groups 3 and 4 gave much stronger results in titre for both *melitensis* and *abortus* than for *facalis*, and were therefore accepted as cases of Malta fever, but the results show how closely the three organisms are connected. Group 5 can be accepted as cases of infection with *facalis*, especially as they were also negative for typhoid and para-typhoid as well. Group 6 were negative for all three organisms. Some of them were cases of enteric.

E. Enteric (Typhoid) and Para-Typhoid Fevers.—Eighty-eight agglutination tests gave 17 positive results for typhoid and 1 positive for para-typhoid. Some blood cultures were also made. Other organisms causing similar disease are kept in stock, and are tested against when necessary.

Blood and stool cultures are not asked for as frequently as is advisable, as they often give a result in the first week of the diseases (while the agglutination test is still negative), and thus give earlier and consequently more valuable information.

F. Fevers of Doubtful Causation.—It will be seen that, out of a large number of cases examined for malaria, Malta and enteric fevers, only a few gave positive results. Most of the negative cases were probably malarial, as a negative for enteric or Malta fever can usually be accepted as such, while a negative for malaria is not so reliable; but there remain a certain number of cases in which the diagnosis is doubtful, and these are of the following types :—

(1) Cases giving a negative agglutination test for typhoid, paratyphoid and Malta fevers. This generally means of course that the patient has not got these diseases, but some other infection which has next to be ascertained; but in a few cases of typhoid and Malta the agglutination test is negative, either because the infection is so slight that no re-action (giving agglutination) takes place, or the infection is so severe that the patient is overwhelmed and no re-action can be produced. In such cases we have to repeat the test or do cultures, but this means delay in diagnosis. It is clear that, by means of research, we should aim at some test or improvements that will give an earlier and correct diagnosis, and this point is being worked upon.

(2) Cases which are doubtfully (because weakly) positive to the test, and yet are not suffering from the disease at all. Normal people, cases of pyrexia, previous inoculation, previous disease or similar disease may all give a positive test, and so cause doubt in diagnosis. Further tests usually clear the matter up, but this again means delay. Research is again necessary for improvement of diagnostic methods, and it is hoped that our new test, described in the next paragraph, will prove of value in this direction.

(3) Cases which give a positive agglutination, say, for both typhoid and para-typhoid, or both typhoid and Malta fevers. As double infections are rare, these cases are usually ones of single infection which happen to agglutinate the other organism because it is similar, or some of the causes mentioned in the second paragraph may be at work. It is often difficult to say which is the infecting organism, and it may require several tests to decide this, which all means delay. Under research, therefore, we devised last year a new test, called the saturation test, which gives promising results and will be further tested and reported on this year. It is briefly as follows :—If an organism be saturated with a heated allied (but not its own) agglutinating serum, it will be found that it can now no longer be agglutinated by the allied serum, but can still be agglutinated by its own serum. Thus a case of, say, typhoid will by this test give a positive for typhoid only, and cannot give a positive for any other disease.

I have gone rather fully into the above points to make it clear how important the question of early and accurate diagnosis is in such common and important diseases as are mentioned above. There is a tendency to regard research as only called for in a few, perhaps rare or striking diseases, but it is obvious that it is equally important in such common diseases as malaria, enteric and Malta fevers, for nothing is more important than that both doctor and patient should know the diagnosis as early as possible.

G. Dysentery (Bacillary and Protozoal).—Only two examinations were made for bacilli, although these are a common cause; Morgan's bacillus (an occasional cause) was found in one. Forty-four examinations were made for amœbæ, with 9 positive results.

H. *Pneumonia and Pneumococcal Infections.*—Pneumonia is now, apparently, well under control, owing to preventive inoculation and other measures, and no serious outbreak required investigation. The pneumococcus is, however, a common invader of the lungs and throat in other conditions, for which reason we usually have to include it in our vaccines for respiratory diseases.

I. Influenza.—No large epidemic has called for study. The filtrable virus (*B. pneumosintes*) is being studied, chiefly in America. A similar filtrable virus, belonging to the same group, occurs in horse-sickness, and has been studied by Lister at Johannesburg. Similar organisms occur in the Pasteurelloses (hæmorrhagic septicæmias) of animals, and it is probable that all the above diseases, with perhaps pneumonic plague, are closely connected. This would explain the severity and hæmorrhagic character of pandemic influenza. It is interesting to note that pneumonic plague, like influenza, is infective through the sputum chiefly, unlike bubonic plague, which is conveyed by fleas.

J. *Plague.*—Three examinations were made for the presence of *B. pestis*, with negative results. Eighty-eight rats of different kinds were sent to us for preparation as specimens of the different plague-bearing rats.

K. *Tuberculosis.*—Eighty examinations, with 17 positives, as opposed to 74 examinations, with 16 positives, in 1923. Most of these were lung cases. The disease seems fairly stationary in this Colony, though increase of population (through importation of outside cases) may cause some increase.

L. Leprosy.—Four negative examinations, as opposed to 3 positives in 1923.

M. Diphtheria.—Ten examinations, with 2 positives, as opposed to 56 examinations, with 18 positives, in 1923. A few positives are really chance infections, and not actually cases of the disease. The Salisbury Municipality are to be congratulated on taking steps, through their medical officer of health, towards giving the Schick test a trial, as it should prove of value in stamping out epidemics or in preventing their occurrence.

N. Syphilis.—Seventy examinations, chiefly Sigma tests, were made, with 22 positives. Where the Wasserman re-action is required we undertake to decomplementise and post the serum to Johannesburg, but we ourselves prefer the Sigma test, as equally reliable, simpler and perhaps more delicate. It is gratifying to note that the local doctors apparently agree with this opinion, for in 1924 there were 5 Wassermans and 67 Sigmas asked for, as opposed to 51 Wassermans and 52 Sigmas in 1923. We have asked doctors to try the Luetin test as well, as this is of value where the usual tests are negative, and I am glad to hear that this is being done. O. Gonorrhæa.—Fifty-one examinations, with 18 positives and 2 suspicious results. The symptoms are quite often due to other organisms, such as straphylococci, streptococci and even diphtheroid bacilli.

P. Schistosomiasis (Bilharzia).—Sixty-three examinations, with 21 positives for S. hæmatobium and 1 positive for S. mansoni. The disease does not seem to have increased at all since last year. Under research some snails from the Mazoe Dam were examined; of 8 Limnææ 3 were found infected with liver fluke of cattle, and of 3 Planorbis 1 showed cercariæ of immature growth. Physopsis is the usual carrier of S. hæmatobium and Limnææ only occasionally so, while Planorbis carries S. mansoni. Research into methods of combating the disease, such as by destruction of snails, is necessary. The latest methods of treatment are giving good results. There seems to be little danger in swimming baths, if properly protected by settling and filtration.

Q. *Diabetes.*—Urine is tested in connection with the Insulin treatment, and other necessary tests such as the blood-sugar test are made when required.

**R**. *Trypanosomiasis.*—Thirty-four examinations were made of a few patients, and 2 were found infected—one a European at the Lonely Mine, the other a native in Salisbury.

S. Water Supplies.—Thirty-seven examinations, as opposed to 9 in 1923, were made of the local water supplies from dam, wells, boreholes, municipal park and tobacco experiment station. It will be seen that the Salisbury Municipality, by frequent tests, ensure that a pure supply is given to the public.

T. Pathology.—One hundred and fifty-one examinations of deposits, etc., and 61 sections of tumours, etc., were made; 17 malignant growths, 5 non-malignant, 20 inflammatory conditions, 3 cysts, 1 hydatid, and 1 syphilitic condition were found.

U. Chemical.—Twenty chemical tests and 14 quantitative estimations were made.

V. Medico-Legal.—Eleven microscopical or chemical tests and 3 biologic tests were made with blood stains, etc., in police cases.

#### III.-STATEMENT OF FEES EARNED.

The fees classed below as "Government" represent work done for patients in hospital, police, paupers and natives. "Private" represents work done for private patients outside hospital.

Pasteur Institute-

rasteur institute-	19	23.		195	24.	
Private			0	£13	8	0
Total	£32	8	0	£13	8	0
Public Health Laboratory-						
Private	£272	18	9	£379	17	6
Government			6	469	13	0
Total	£694	7	3	£809	10	6
Combined Totals-						
Private	£305	6	9	£393	5	6
Government			6	469	13	0
Total	£726	15	3	£862	18	6

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# L. J. JOHN ORPEN,

Government Bacteriologist.

#### Annual Report of the Medical Superintendent, Ingutsbeni Mental Bospital.

I have the honour to present my report for the year ended 31st December, 1924.

On 1st January there were 174 patients on the register. During the year 70 were admitted, 22 were discharged, 2 were transferred to the Union, and 16 died. Two hundred and forty-four cases were treated, that is, 40 male Europeans, 171 male natives and 33 female natives. There remained in residence on the 31st December, 1924, 204 patients, *i.e.*, 30 Europeans, 142 male natives and 32 female natives.

The 70 cases admitted included 4 re-admissions, 3 Europeans and 1 native. Of the discharges, excluding transfers, 21 were discharged recovered and 1 relieved. The recovery rate per centum, calculated on the number of admissions, was 31.42, as against 30.76 for the previous year. The death rate, calculated on the number treated, was 6.55, as against 12.94 in 1923.

Of the two cases transferred, one, a male native, was sent to Pretoria. He belonged to the Transvaal and had been detained in this hospital as a criminal lunatic since March, 1917. Having incidentally mentioned this alien, I may refer to the increasing number of alien natives admitted. They add considerably to the inconvenience of overcrowding here, as well as being costly to maintain. The other case transferred to the Union was a male European who was acutely hallucinated and had developed homicidal tendencies. As there are no means of treating recalcitrant cases separately, it became necessary to remove him to Valkenberg, where, I am glad to state, he made a good recovery.

Seclusion and restraint were employed in the case of four Europeans and one native for periods ranging from five to thirty-eight hours on seven occasions. The reason for restraint was for violence to patients and staff. Seclusion was used to avoid struggling with patients suffering from maniacal excitement.

The general health was satisfactory. In August and September there was an outbreak of influenza, but it was of a mild form and only one death (a male native) resulted. Chicken-pox was introduced by a native visitor, but it was confined to the native female division, where almost all the inmates were infected.

Additional accommodation has been long promised, and is, I understand, shortly to be commenced. All through the year we had to contend with unexampled overcrowding, and in order to obtain relief we had to convert a store into sleeping quarters for natives. Further accommodation is urgently required, and this can only be obtained by an early start with the building programme. A feature of overcrowding is that direct admissions have to be received into dormitories. Patients frequently come in who are excited and violent, and who, for other reasons also, should be placed in single rooms; but, owing to the deficiency of this kind of accommodation, they have to be placed in dormitories, where they disturb the other patients and often cause and receive injuries.

Instances of complaints from relatives of female European mental patients regarding delay in arranging transfer from their homes to a hospital in the Union have been brought to my notice, and I sincerely hope that accommodation for this class will be provided before the end of the current year.

Farming and garden operations are being extended yearly, the main drawback to constant supplies being shortage of water during the dry season. In common with other parts, the maize crop was a failure, but cotton, which was tried as an experiment, did rather well, and besides proving useful and congenial employment for native patients, the yield was encouraging; consequently a larger area has been put under cotton this season. The value of last year's crop has not yet been ascertained, but it should be about £100 net.

In order to keep this institution in good working order it may be necessary to obtain one or two men with training in mental nursing. We have already benefited by bringing two senior men from England. The men available locally are usually well on towards middle life; they have been, in many instances, earning big wages, and it is found that they are inclined to grumble at the irksomeness of the work and other conditions inseparable from institution life.

Revenue from paying patients and sales amounted to £1,039 4s. 7d., *i.e.*, maintenance fees £941 1s., sales £98 3s. 7d. Supplies from the garden and farm for the use of the hospital amounted in value to £753 3s. 10d. There were outstanding from maintenance fees and sales £233 9s. 3d. on the 31st December, 1924.

The total expenditure for the year, including value of produce supplied from farm and garden, was £5,977 5s. 8d. This works out at £31 10s. per patient per annum, as against £40 4s. 7d. for the previous year. The cost of maintenance, calculated on the gross expenditure, is 1s.  $8\frac{1}{2}$ d.; and the cost per patient per diem, excluding produce, is 1s. 6d. The net cost to the Government, after deducting revenue from hospital vote of expenditure, is 1s.  $2\frac{1}{2}$ d. per caput per diem. The amount per head shows an economical working, and is in part, at all events, due to the increase in the number of patients, and that there were supplies of mealie meal from the previous year's crop to meet requirements for nine months.

I cannot conclude this report without placing on record the deep sense of the loss which we have sustained in the death of Dr. W. M. Eaton, who was for so many years the superintendent of this hospital. He took the deepest interest in all that concerned the welfare of both patients and staff, and in the general development of the institution which he had charge of since its foundation.

A. W. FORRESTER,

Medical Superintendent.

#### lbabit=forming Drugs.

Two alterations in the "Southern Rhodesia Opium and Habitforming Drugs Regulations Proclamation, 1923," were made during the year.

Mention was made in the report for 1923 of the difficulty encountered in administering the regulations in so far as they related to habitforming drugs required for veterinary purposes. This difficulty has now been overcome by the introduction of the following clauses as additional paragraphs to section 5, sub-section (2) of the aforesaid Proclamation.

"1. Any farmer or owner of live stock desiring to purchase from time to time tincture of opium (laudanum), for the prevention or treatment of disease in stock, may apply in writing to the Chief Veterinary Surgeon or any Government veterinary surgeon for a permit therefor, stating the quantity required, the approximate number of the various classes of stock kept and the person from whom it is proposed to purchase the drug.

2. The Chief Veterinary Surgeon or any Government veterinary surgeon may at his discretion, and after any enquiries which he may deem necessary, issue a permit accordingly.

- 3. Every such permit shall be subject to the following :--
  - (a) the drug may be purchased only from the person specified in the permit and in quantity not exceeding 20 ounces at any one time;
  - (b) the permit must be produced on the occasion of each purchase; the person from whom the purchase is made shall enter thereon the quantity supplied and the date of supply;
  - (c) the holder of the permit shall not have in his possession more than 20 ounces of tincture of opium (laudanum) at any one time;
  - (d) the container, in addition to any other label required by law, shall be labelled 'for animal treatment only,' and shall be kept under lock and key by the owner or some responsible person acting on his behalf, and the contents shall be used for administration to animals;
  - (e) the permit shall remain in force and effect up to the end of the calendar year in which it is issued, but not longer; every applicant for a renewal shall return, with his application, the permit previously issued;
  - (f) the Chief Veterinary Surgeon may cancel or withdraw any such permit at any time, and on being notified of such cancellation or withdrawal the holder shall forthwith return the permit to the Chief Veterinary Surgeon;
  - (g) the holder of the permit shall produce the same for inspection, together with any tincture of opium in his possession, on the request of any person authorised thereto in writing by the Chief Veterinary Surgeon, or to any police officer of or above the rank of sergeant.

4. Copies of all such permits shall be rendered to the Chief Veterinary Surgeon, and a return of the same shall be rendered annually to the Medical Director, showing the number of permits issued, with the names of the persons to whom such permits have been granted, the district in which each such person resides and the amount of tincture of opium (laudanum) allowed to be purchased in each case."

The second alteration referred to section 5 of the regulations published under Government Notice No. 422 of 21st September, 1923, whereunder the list of preparations enumerated in Schedule "D" were excluded from the Proclamation and regulations. The preparations referred to were not similarly excluded elsewhere, and to bring the regulations into line with the legal provision existing elsewhere the following words were added to section 5 above referred to by Government Notice No. 476 of the 29th of August, 1924 :— "except as regards the importation into or exportation from Southern Rhodesia of such preparations." The absence of this provision was an obvious defect in the regulation as it existed formerly, and the amendment puts the matter in order.

Import certificates issued during the year numbered 41 and export certificates numbered 8.

Permits were issued to import the following habit-forming drugs :--

Comina hydrochlarida	15,005	omine
Cocaine hydrochloride		· · · · · · · · · · · · · · · · · · ·
Morphine	12,569	grains
Morphine sulphate	7,152	grains
Heroin hydrochloride	5,377	grains
Codein phosphate	960	grains
Morphine hydrochloride	5,134	grains
Cocaine	42	grains
Cocaine salicylate	30	grains
- Opium	750	grains
Extract of opium	150	grains
Powdered opium	2	lbs.
Gall. and opium ointment	7	lbs.
Extract of Indian hemp	960	grains
Hemp seed		ewt.

The export permits issued covered the following :--

Liquor opii sedativa	20	ounces
	240	grains
Morphine		grains
Cocaine hydrochloride	16	grains
Morphine hydrochloride		grains
Cocaine		grains
Atropine		grains
Scopolamine hydrochloride	1	1/5 grains

The permits issued by the Veterinary Department under the provisions of Government Notice No. 368 of 27th June, 1924, numbered 11, and the total quantity of tincture of opium authorised to be purchased under the permits so granted was 132 ounces.

Seizures during the Year.—About one-sixteenth of an ounce of opium and an opium smoking outfit were seized at the Chinese resting house at Bulawayo. It was impossible, however, to prove ownership; no criminal action resulted therefore, and the articles seized were destroyed.

# PART III.

# TABLE 1.

EUROPEAN BIRTHS, 1924.

•

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Salisbury	21	23	20	22	21	19	15	28	18	21	22	28	258
Bulawayo	24	21	17	23	31	28	19	26	17	21	19	16	262
Umtali	8	8	9	9	1	3	10	6	6	3	10	6	79
Gwelo	3	1	2	4	4	5	5	5	5	6	4	9	53
Fort Victoria	1	8	6	4	3	2	2	3		5	3		37
Gatooma	3	6	4	6	5	6	5	4	1	4	7	4	55
Gwanda			2		2		2	1	1				8
Selukwe	1		1	1			1	3	1	3	1		15
Charter		2	3	2	2	3	4	3	5	2	4	4	34
Melsetter	1	2		2	4	4		1	1	3	2	2	25
Umvuma	1	2		1	4		4		2	5	2		21
Hartley					1	3	1	1	1		1		8
Que Que	4	2	2	3	3	5				4	1	1	20
Totals	67	75	66	77	81	78	68	81	58	77	76	70	874

# TABLE 2.

EUROPEAN DEATHS, 1924.

	Age perio	ds.	Males.	Females.	Totals.
0—1			 39	26	65
1—5			 10	8	18
5—15			 11	. 6	17
15 - 25			 7	13	20
25-35			 19	14	.33
35-45			 16	9	25
45-55			 34	18	52
55 - 65			 30	6	36
65-75		'	 12	14	26
75—85 ai	nd over		 7	8	15
Age unk	nown		 3		3
А	ll ages		 188	122	310

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Salisbury	9	18	13	10	6	9	8	9	5	10	111	13	121
Bulawayo	9		10	6	9	6	11	8	7	14	4	5	89
Umtali	1		4	2		2		4	1	1	3		18
Gwelo	1	2		1	1	2	2	4	3	3	2	2	23
Fort Victoria	1	2		3	1	3	2	2	1		1	1	13
Gatooma		1			2	1		1		3			8
Gwanda			1				1	1					:
Selukwe								1	1		2		
Charter	1				1			2	1	1	2		1
Melsetter					2	1			2				
Umvuma	1		1			1	2	1	1		1		1
Hartley				1		1							
Que Que					1	1		1		1			
Totals	23	23	29	23	23	27	26	34	22	33	26	21	31

# TABLE 3. EUROPEAN DEATHS, 1924.

# TABLE 4. EUROPEAN BIRTHS AND DEATHS, 1924.

							Ages	of the	dying.				
Month.	Births.	Deaths.	0-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65-75	75-85 and over	Age un- known
January	67	23	4		1	1	2	3	2	3	4	2	1
February	75	23	7	2		1	2	3	3	3	1	1	
March	66	29	3	3	1	2	5	3	6	3	2	1	
April	77	23	3		4	3	1	3	5	2	.1		1
May	81	23	3			1	3	2	7	2	4	1	
June	78	27	6	2	2	2	3	1	3	3	5		
July	68	26	8			3	1	1	5	6		2	
August	81	34	8	2	1	3	5	1	7	4	2	1	
September	58	22	7	1		1	3	1	3	4	2		
October	77	33	7	3	2		5	4	4	3	1	3	1
November	76	26	5	2	3	1	1	2	5	3	2	2	
December	70	21	4	3.	3	2	2	1	2		2	2	
Totals	874*	310	65	18	17	20	33	25	52	36	26	15	3
Per cent.	of tota	ı	20.97	5.81	5.48	6.45	10.65	8.06	16.77	11.61	8.39	4.84	.97

26.77 per cent, of total European deaths.

\* Illegitimate births 2.40 per cent. of total European births.

## TABLE 5.

Name of hospital.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Salisbury	93	89	95	104	90	86	67	93	93	106	85	92	1,093
Bulawayo	70	38	66	63	54	78	51	54	58	70	66	63	731
Umtali	23	23	28	33	28	16	24	19	22	26	31	35	308
Gwelo	14	13	8	16	10	14	14	14	12	17	18	17	167
Fort Victoria	9	11	8	16	9	14	3	2	9	9	9	5	104
Gatooma	14	15	32	18	25	11	18	13	23	22	14	17	222
Enkeldoorn	3	2	4			1				2	1		13
Gwanda	3	3	1	3	6	2	3	3	3	6	5	4	42
Sinoia	4	6	5	9	5	4	10	4	3	4	5	8	67
Shamva	6	8	12	14	8	3	7	4	4	4	9	1	80
Belingwe	1				1			2			1	-1	6
Totals	240	208	259	276	236	229	197	208	227	266	244	243	2,833

# TABLE SHOWING EUROPEAN ADMISSIONS TO HOSPITALS DURING 1924.

#### TABLE 6.

# TABLE SHOWING NATIVE ADMISSIONS TO HOSPITALS DURING 1924.

Name of hospital.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Salisbury	78	81	87	86	77	71	77	86	114	94	96	82	1,029
Bulawayo	72	51	51	68	84	54	70	61	98	148	149	97	1,003
Umtali	14	: 15	12	15	28	15	18	24	32	20	38	54	285
Gwelo	55	45	44	48	38	36	23	31	43	91	61	50	565
Fort Victoria	10	8	7	16	4	12	9	8	8	9	9	9	109
Gatooma	37	28	44	31	41	37	- 33	46	47	40	52	36	472
Enkeldoorn	5	2	2	1	4	3	3	4	4	1	1	9	39
Gwanda	8	9	11	7	13	11	10	.9	13	25	17	23	156
Sinoia	4	14	8	7	8	13	11	7	6	11	.2	9	103
Shamva	15	15	16	19	20	20	9	17	16	7	10	12.	176
Belingwe	9	3	3	10	2	2	2	4 .	5	2	5	7	54
Totals	307	271	285	308	319	274	265	297	386	448	443	388	3,991

#### TABLE 7.

Table showing monthly admissions to hospitals during 1924 from malaria, blackwater fever, dysentery, pneumonia, typhoid fever and scurvy.

Disease	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Malaria -	35	44	62	78	49	20	18	20	13	23	-20	31	413
Blackwater fever	2	1	2	3	8	1	2			1			20
Dysentery .	2	2	3		2	1	1	2	4	10	3	5	35
Pneumonia -	4	2	1	6	8	5	9	10	11	3	1	2	62
Typhoid .	13	7	3	1	1	1			6	6	3	1	42
Seurvy .													

EUROPEANS.

#### NATIVES.

Malaria -	30	32	24	44	28	31	12	10	15	35	20	19	300
Blackwater			1		1				1				3
Dysentery -		3	1	4	3	2	6	4	8	5	3	6	45
Pneumonia -	21	20	14	21	21	31	21	33	58	54	55	32	381
Typhoid .			2		1					4		1	8
Scurvy -	11	6		6	3	7		6	12	18	28	19	116

#### TABLE 8.

# Cases, with mortality rate per cent., admitted to hospitals during 1924, as compared with 1923.

			1923			1924	
Name of hospital		Cases	Deaths	Mortality rate per cent.	Cases	Deaths	Mortality rate per cent.
Salisbury	 White Native	1,072 808	32 70	2.99 8.66	$1,093 \\ 1,029$	49 139	4.48
Umtali	 White	463 137	14	3.02 9.49	308 285	9 11	2.92
Gwelo	 White	218	5 41	2.29 10.25	167 565	10 62	6.00 10.97
Fort Victoria	 White Native	98 110	4	4.08 9.09	104 109	5	4.81 10.09
Gwanda	 White Native	36 124	1 9	2.78 7.26	42 156	1 22	2.38 14,10
Enkeldoorn	 White Native	32 24	3	9.37 4.17	13 39	- "ï	2.56
Gatooma	 White Native	262 414	14 75	5.34 18.12	222 472	79	3.15 16.74
Bulawayo	 White Native	925 682	36 59	3.89 8.65	731 1,003	24 85	3.28 8.47
Shamva	 White Native	125 202	6 26	4.80 12.87	80 176	2 34	2.50 19.32
Sinoia	 White Native	73 82	2 13	2.74 15.85		- 15	3.00 14.56
Belingwe	 White Native	6 32	2	6,25	6 54	3	5.56
Totals	 White Native	3,310 3,015	117	3.53	2,833 3,991	109 462	3.85

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#### TABLE 9.

		1			1923.			1924.	
Name hospi				Cases.	Deaths.	Mortality rate per cent.	Cases.	Deaths.	Mortality rate per cent
Salisbury			White	175	-	-	113	4 2	3.54
			Native	129	-		104	2	1.92
Umtali	•		White Native	292	1	0.34	110	1	3.45
Gwelo		1000	White	27 71	2	3.70 2.82	29 17	1	
GWEIO		-	Native	53	5	9,43	44		_
Fort Victoria			White	21	-	3.40	26	1	3.85
Fore victoria	*		Native	9			10	-	0.00
Gwanda	-		White	10			4	1.1.1	
OF WELLIGE	-		Native	11		_	7	1000	-
Enkeldoorn			White	6	1	16.67	_		
			Native	2	_		1		
Gatooma			White	106	3	2.83	44	1	2.27
			Native	30	35	16.67	11		
Bulawayo	-	- 1	White	170	6	3.53	54	-	-
			Native	56	2	3.57	59	1	1.69
Shamva			White	70	-	-	32	1	3.12
			Native	28	1	3.57	17	1	5.88
Sinoia	-		White	28	1	3.57	11		- 1
			Native	6		-	11	-	
Belingwe	-		White	4	-	-	27	-	-
			Native	8	-	-	7	-	
Totals		. 1	White	953	14	1.47	413	7	1.69
			Native	359	14	3.90	300	5	1.67

# Cases, with mortality rate per cent., of malarial fever admitted to hospitals in 1924, as compared with 1923.

# TABLE 10.

Cases, with mortality rate per cent., of hæmoglobinuric fever (blackwater) admitted to hospitals in 1924, as compared with 1923.

-					1923.			1924.	
Nam hosp				Cases.	Deaths.	Mortality rate per cent.	Cases.	Deaths.	Mortality rate per cent.
Salisbury		.	White Native	12	5	41.67	32		50.00
Umtali			White	15	5	33.33	4	-	
Gwelo	•		White Native	1	_	=	-	=	=
Fort Victor	ia	•	White Native	4	=	=	2	1	50.00
Gwanda	•	-	White Native	1	=	Ξ	=	=	=
Enkeldoorn	•		White Native	1	1	100.00	-		=
Gatooma	•		White Native	10	=	=	2	=	=
Bulawayo Shamva		-	White Native White	6 	1 - 2	16.67 	5	=	=
Sinoia			Native	12	-	10.07		=	Ξ
Belingwe			Native		=	=	î	1	100.00
			Native	-	-	-	-	-	-
Totals			White Native	63 1	14	22.22	20 3	1 2	5.00

1. nr m 11	
TABLE 11	

				1	1923.			1924.	
Name hospit				Cases.	Deaths.	Mortality rate per cent.	Cases.	Deaths.	Mortality rate per cent
Salisbury			White Native	5 82		26.83	16 . 141	4 45	25.00
Umtali	•	•	White Native	52 7 6	-	20.83	141	40 3 1	28.37 27.27 14.29
Gwelo	•	•	White Native	2		57.14	10 63	1	10.00 27.00
Fort Victoria			White Native	28		52.50	1 4	2	50.00
Gwanda	•	•	White Native		2	66.67	14	7	50.00
Enkeldoorn	-	1	White Native	4	1 -	25.00	1	=	
Gatooma	•	-	White Native White	3 42 17	13	30.95	13 74	1 24	7.54 32.43 50.00
Bulawayo Shamva	•	-	Native White	24	10	11.76 41.67 50.00		3 10	25.64
Sinoia			Native	9	7	77.78	18 2	8	44.44
Belingwe			Native	6	2	33.33	12	3	25.00
		,	Native	2	-	-	8	-	-,
Tota	uls	-	White Native	43 196	5	11.63 35.20	62 381	- 12 - 117	19.35 30.71

### Cases, with mortality rate per cent., of pneumonia admitted to hospitals during 1924, as compared with 1923.

# TABLE 12.

Cases, with mortality rate per cent., of dysentery admitted to hospitals during 1924, as compared with 1923.

					1923.			1924.	
Nam hospi				Cases.	Deaths.	Mortality rate per cent.	Cases.	Deaths.	Mortality rate per cent.
Salisbury		.	White	6	-	_	21	-	-
			Native	7	3	42.68	10	2	20.00
Umtali			White	7 2 4	1	50.00	1	-	
			Native	4	1	25.00	2	-	
Gwelo			White	1	-		-	-	-
			Native	7	2	28.57	4	1	25.00
Fort Victori	a		White	6			3	-	-
			Native	1				-	-
Gwanda			White		-		3		
			Native	-	-		4		
Enkeldoorn			White	-	-	- 1	-		1
			Native	-			-	- 1	-
Gatooma	-	- 1	White	2		1.000	1		
			Native	1 4	2	50.00	1	-	1
Bulawayo			White	6	1	16.67	2		
			Native	6	1	16.67		-	-
Shamva			White	2	-		2	-	in the second
			Native	9	1	11.11	16	3	18.75
Sinoia	-		White	4	-	-	2	- 1	
			Native	2	1	50.00	4	1	25.00
Belingwe			White	-	-		-		-
			Native	1	-	-	4	-	-
Tot	als		White	29	2	6.90	35	-	-
		100	Native	41	11	26.83	45	7	15.56

713	12.5			1.00	100
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	1.8		1.0.00		1.0.0

					1923.			1924.	
Nam hosp				Cases.	Deaths.	Mortality rate per cent.	Cases.	Deaths.	Mortality rate per c ent
Salisbury			White	73	1	14.29	7	1	14.29
**			Native	3	1	33.33	3		
Umtali	-	-	White Native				1		-
Gwelo		1.2.1	White	5			9		
Gwelo		-	Native		-	_	4	1	11.11 25.00
Fort Victori			White	-	1	100.00	2	1	and the second se
rore victori	16	-	Native	-	-	100.00	_		_
Swanda			White	1	_				-
A WALLAR			Native	-	_				-
Enkeldoorn			White	-			1		1
CHREIMOOTH			Native	_	_				_
Jatooma	10		White	7	2	28.57	3	2	66.67
ALCO OTHER		100	Native	and the second second		_	_	_	
Bulawayo	-		White	26	3	11.52	18	2	11.11
ounnujo			Native	7	3	42.86	1	-	
Shamva		- 1	White	i			î		
		100	Native	1		- 1	_	-	
Sinoia	-	-	White		-	_	_		
			Native		-	-	_	-	
Belingwe	-	-	White	-			-	- '	
			Native		-	-	-	-	-
Totals		.	White	51	7	13.73	42	6	14.29
		1000	Native	10	7 4	40.00	8	1	12.50

## Cases, with mortality rate per cent., of typhoid fever admitted to hospitals in 1924, as compared with 1923.

#### TABLE 14.

Cases, with mortality rate per cent., of scurvy admitted to hospitals in 1924, as compared with 1923.

	ntali - velo - ort Victoria vanda -				1923.			1924.	
				Cases.	Deaths.	Mortality rate per cent.	Cases.	Deaths.	Mortality rate per cent.
Salisbury	-	-	White	_	-	-	_	-	
			Native	-		-	14	1	7.14
Umtali	-	-	White Native	1		_	-		
Gwelo		.	White	-	_	_	_	-	_
GWEID			Native	21	1	4.76	7	3	42.86
Fort Victori	ia.	.	White	-	-		-	_	14.00
1010 110101			Native		-	_	_		
Gwanda	-	-	White		-	-	-		
			Native	1		_	17	1	5.88
Enkeldoorn	-	-	White		- 1	-	_	-	
			Native	-	-	-	-	- 1	- 1
Gatooma	-	-	White				-	-	-
			Native	28	3	10.71	20	- 1	
Bulawayo	-	-	White		-	-		-	-
_			Native	8	2	25.00	57	5	8.70
Shamva	-	-	White		-	-	-	-	
			Native	-	-	-	-		
Sinoia	-	-	White	-		-	-	-	
			Native	3	-	-	-		-
Belingwe	-		White Native	1	=	= .	1	-	=
Totals			White	_	-	_	_		-
			Native	63	6	9.52	116	10	8.62

# TABLE 15.-RETURN OF DEATHS REGISTERED DURING THE YEAR 1924.

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-	101	M	9 -	• • •	-		111		:	= +	: 10	8
	Name of disease.		Brought forward	56. Alcoholism (acute or chronic)	II. Diseases of the Nervous System and of the Organs of Special Sense.	<ul> <li>60. Encephalitis</li> <li>61. Simple meningitis</li> <li>61. Simple meningitis</li> <li>61. Cerebro-spinal fever</li> <li>63. Other diseases of the spinal cord</li> <li>64. Cerebral harmorthage-apoplexy</li> <li>66. Paralysis without specified cause</li> <li>68. Other forms of mental alienation</li> <li>69. Epilepsy</li> <li>71. Convulsions of infants</li> <li>74. Other diseases of the ears</li> <li>75. Diseases of the ears</li> </ul>	111. Discases of the Circulatory System. 77. Pericarditis	Angina pectoris Diseases of the arteries, athero aneurism, etc Embolism and thrombosis	<ol> <li>Internorriage; other diseases of the circulatory system</li> <li>IV. Diseases of the Respiratory System.</li> </ol>	<ol> <li>Diseases of the nasal fosces</li> <li>Acute bronchitis</li> <li>Chronic bronchitis</li> <li>D. Chronic bronchitis</li> <li>Bronhopneumonia</li> <li>Pheumonia</li> <li>D. Asthma</li> <li>Miners' phthisis</li> </ol>	V. Discases of the Digestive System. 101. Diseases of the cesophagus 104. Diarrhora and enteritis (under two years)	Carried forward

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	0-1	54	16	111111	:	11	111	:	11111	111		: :	_	_
-	-	M	- 50	::-:::	i	::		:	11111	- : :		1 1		_
	Name of disease.		Brought forward	<ul> <li>105. Diarrhosa and enteritis (two years and over)</li> <li>108. Appendicitis and typhilits</li> <li>109. Hernia, intestinal obstruction</li> <li>113. Cirrhosis of the liver</li> <li>114. Diseases of the spleen</li> <li>117. Simple peritonitis (non-puerperal)</li> <li>VI. Non-Venered Diseases of the Genito-Urineary System and Ameza.</li> </ul>	119. Acute nephritis	Diseases of the bladder	Non-venerous anseases of the genital organs Other diseases of the uterus Cysts and other tumours of the		VII. The Fuerperal State. 134. Accidents of pregnancy	142. Gangrene 144. Acute abscess	IX. Diseases of the Bones and of the Organs of Locomotion.	146. Discases of the bones (tuberculosis excepted)	Carried forward	

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NATIVES	0 ver 5 years	M	392	:	:	t=	:	• :•	- 01	01 <u>0</u> - 0	- : 01	436
N	ler ars	54	14	1	-	:	: : :					16
	Under 5 years	М	10	1	4	1		111			: : **	17
	ds.	14	101	1	10	60	- : :		111	:- : :	: 9	122
	Totals.	M	142	01	11	ю	* :*	:	1 1 01	01 01 - 1	01 00	188
	own	54	:	:	:	:	:::	:::			11 1	:
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	Name of disease.		Brought forward	X. Malformations. 150. Congenital malformations (still-births not included) XI. Early Inforcey.	151. Congenital debility, icterus and	XII. Old Age. 154. Senility	XIII. External Causes. 155. Suicide by poison 157. Suicide by hanging and strangulation 159. Suicide by firearms		100 mm	<ul> <li>175. Traumatism by other crushing (vehicles, railways, landslides, etc.)</li> <li>185. Fractures (cause not specified)</li> <li>186. Other external violence</li> <li>186a. Execution</li> </ul>	XIV. III.defined Diseases. 187. III.defined organic disease 188. Sudden death 189. Cause of death not specified or ill- defined	Totals

#### 47

# TABLE 16.

# CLASSIFICATION OF DEATHS (EUROPEANS), 1924.

Deaths classified according to the international classification of causes of sickness and death.

			sicknes	ss and	l death					
Classi										No. of
cation N				Diseas	e.					Deaths.
13	Typhoid fever		***	***			***			8
4	Relapsing fever Malaria								***	113
4a	Blackwater fever					***				11
8	Whooping cough							***		8
10	Influenza		***	***	***	***	·	***	***	11
14 20	Dysentery	and contion	***	4.9.4	***	***			***	67
28	Tuberculosis of the			***						14
29	Acute miliary tube									1
35	Disseminated tuber	culosis								1
39	Cancer and other								***	1
40 41	Cancer and other	and the second sec			and the second		tostinos	and some	•••	4
42	Cancer and other Cancer and other							rectum		1
43	Cancer and other									3
44	Cancer and other	malignant	tumours	of the	skin					1
45	Cancer and other				er organ			not spec	ified	7
46 47	Other tumours (tu									1
48	Acute articular rhe Chronic rheumatism	and the second se	***				***			1
50	Diabetes									ĩ
53	Leuchæmia									1
54	Anæmia, chlorosis		***				***	***		1
55 56	Other general dise: Alcoholism		***	444		***	***	***	***	33
60	Encephalitis									2
61	Simple meningitis									3
61c	Cerebro-spinal feve	r								1
64	Cerebral hæmorrhag									14
66 68	Paralysis without s Other forms of mer			***				***		12
69	Epilepsy									2
71	Convulsions of infa									2
74	Other diseases of t		system	**.*		***				1
76	Diseases of the ear	rs	***	***			***	***	***	3
77 78	Pericarditis Acute endocarditis	***	***				••••	***	***	1 2
79	Organic diseases of	f the hear	t						***	14
80	Angina pectoris									4
85	Hæmorrhage; other		of the ci	irculato	ry systen	n			***	1
86	Diseases of the name			***		***			***	1
89 90	Acute bronchitis Chronic bronchitis	***	***	***		***	***	•••		4
91	Broncho-pneumonia									6
92	Pneumonia									20
93	Pleurisy		***						***	1
96	Asthma	***	***		***	***				2
98a 101	Miners' phthisis Diseases of the œs	onhagus	***	***	***	***	+++	***		1
104	Diarrhœa and enter	and the second s	r two ye	ars)						7
105	Diarrhœa and enter	a set of the			***					1
108	Appendicitis and ty		***		***				***	4
109	Hernia, intestinal of									2
113 115	Cirrhosis of the li Other diseases of									1
116	Diseases of the spl									î
117	Simple peritonitis (									4
119	Acute nephritis				***				***	4
122	Other diseases of t	and the second se								1
130 132	Other diseases of 1 Salpingitis and oth		of the	female	genital	organs			***	1
134	Accidents of pregna					on Barro	***		***	î
135	Puerperal hæmorrh									1
136	Other accidents of	labour	***					***	+++	1
137	Puerperal septicæm	11in	***	***		***	***		***	5
142 146	Gangrene Diseases of the bo	nes (taber	culosis e	vcented		***		•••	***	2
150	Congenital malform									ź
151	Congenital debility,									27
154	Senility									8
155	Suicide by poison		***	***					***	5
159 163	Suicide by firearms		***			***		***	•••	4
166	Other suicides Conflagration			***						1
173	Traumatism in min	nes and qu								2
175	Traumatism by ot	her crushi	ng (vehic		lways, la	ndslides			***	2
185	Fractures (cause n									3
186 187	Other external viol					***			***	1
187	Ill-defined organic Sudden death	disease	***	1.	***				***	2
189	Cause of death not									8
			1	fotal					***	310

#### TABLE 17.

# CLASSIFICATION OF DEATHS (NATIVES AND COLOURED), 1924.

# Deaths classified according to the international classification of causes of sickness and death.

		31	icanes	5 anu (	icatii.					
Classi										No. of
cation N	Typhoid fever			Disease.					-	Deaths. 2
4	Malaria			***						8
4a	Blackwater fever	111								1
8	Whooping cough		***		***	***	***			175
10 14	Influenza Dysentery	***	***		144		***	***		35
20	Purulent infection and	septicat	mia							10
24	Tetanus									3
26	Pellagra		***	***						1
27 28	Beri-beri	***		***		***		***		1 71
30	Tuberculosis of the lun Tuberculous meningitis									1
31	Abdominal tuberculosis									2
32	Potts' disease									2
34	Tuberculosis of other		***	***		***				1
35 37	Disseminated tuberculos Syphilis		***				***	***		11
45	Cancer and other mal	ignant t	umours	of other	organs.	or of	organs	not spe	rified	4
47	Acute articular rheum	47 a								1
49	Scurvy			***	111	***				9
55	Other general diseases		***	***	***		***		***	2
55a 60	Trypanosomiasis Encephalitis	***					•••			3
61	Simple meningitis									22
61c	Cerebro-spinal fever			***						1
63	Other diseases of the s				+++			***		3
64 66	Cerebral hæmorrhage-									5 4
68	Paralysis without spec Other forms of mental									11
69	Epilepsy									6
76	Diseases of the ears	***			111		***			3
77	Pericarditis				***					1
78 79	Acute endocarditis Organic diseases of the	heavt	***		***					6
81	Diseases of the arterie		ma, and	eurism, e	te.					ĭ
82	Embolism and thrombo		***		***					1
85	Hæmorrhage; other di	seases of	the cit	rculatory	system				***	2
89 90	Acute bronchitis	•••		***						4 2
91	Chronic bronchitis Broncho-pneumonia									7
92	Pneumonia									130
96	Asthma									2
104	Diarrhoea and enteritis				***					3
105 109	Diarrhoea and enteritis Hernia, intestinal obst				***	***		***		33
113	Cirrhosis of the liver									5
115	Other diseases of the li		***							1
116	Diseases of the spleen			***						5
117 119	Simple peritonitis (non			***						32
124	Acute nephritis Diseases of the bladder									ĩ
127	Non-venereal diseases of									1
131	Cysts and other tumou					***	4.4.4	***		1
132	Salpingitis and other d					ans				1
136 137	Other accidents of labo Puerperal septicæmia					100		***		1
138	Puerperal albuminuria		vulsions							î
142	Gangrene									4
144	Acute abscess					110				4
145 146	Other diseases of the				***					2
140	Diseases of the bones Diseases of the joints				atism e	vcented	1		***	1
151	Congenital debility, ic					m				5
154	Senility	344		****						7
157	Suicide by hanging an					***			***	1
159 160			instrur	nente				***	***	1
166	Suicide by cutting and Conflagration	piercing		nents						6
168	Absorption of deleterio				excepted	)				1
170	Traumatism by firearms									2
173	Traumatism in mines a	and quar	rries							1
175	Traumatism by other									2
185 186	Fractures (cause not s Other external violence									10
186a	Execution									8
187	Ill-defined organic disea	ise								1
189	Cause of death not sp									8
				- 4 - 2						
			T	otal	•••					494

-									
Class								No.	of Deaths.
cation 1	No.			Disease				Indian.	Coloured.
4	Malaria							2	1
4a	Blackwater fever							_	î
8	Whooping cough	***			***		***		1
10	Tellana	***						3	L
	Influenza	***						0	
28	Tuberculosis of the lu	ngs							3
37	Syphilis			111		111		1	
47	Acute articular rheun	natism		***				1	
61	Simple meningitis				***				3
63	Other diseases of the	spinal co	ord					1	
69	Epilepsy								1
78	Acute endocarditis								ĩ
79	Organic diseases of th		***	***				2	î
89	Acute bronchitis		***	***	1.1.1			**	1
91		***	***	***					1
	Broncho-pneumonia		111	111	***	***	***		1
92	Pneumonia	***			1.1.1	***		_	1
96	Asthma							1	
104	Diarrhœa and enteriti	is (under	two yes	irs)				1	1
151	Congenital debility, i	icterus an	nd sclere	ma				1	
175	Traumatism by crushin				dslides.	etc.)			1
189	Cause of death not s							1	1
200	chance of actual not a	president of	or in och						
			To	tals				14	18

#### TABLE 18.

# Return of diseases and deaths (in-patients) in all Government hospitals and Memorial Hospital, Bulawayo, for the year 1924.

#### EUROPEANS.

D	pital of	Yearly	total.	Total	pital
Diseases.	Remaining in hospital at end of 1923.	Admis- sions.	Deaths.	cases treated.	Remaining in hospital at end of
INFECTIVE DISEASES.					-
Dysentery-Amobic		30		30	1
Bacillary		5		5	
Snteric	7	42 5	6	49 5	2
Jonorrheea		1		1	
nfluenza		91		91	2
dalaria—(a) Tertian	3	161 244	5	164 245	4 3
(c) Æstivo-autumnal	i	8	2	240	1
(e) Blackwater		20	1	20	i
feasles		1		1	
dalta fever	3	16		19	
Pneumonia	2	69 3	16	71	
Rheumatic fever	1	9	1	10	ï
epticæmia		6	6	6	
rypanosomiasis (sleeping sickness)		1		1	***
yphilis—(b) Secondary	ï	2		2	
Cetanus		1		1	
fuberculosis	5	20	9	25	2
Other infective diseases		5		5	2
INTOXICATIONS.					
lcoholism	1	12		13 1	1
GENERAL DISEASES.		1			
				10	
Anæmia		12	1 "ï	12	
Diabetes		i	1	î	
xophthalmic goitre	1			1	
sout	1	1		2	
eucocythæmia	ĩ	1 51	1	$\frac{1}{52}$	2
LOCAL DISEASES.					
Diseases of the nervous system					
Neuritis	4	28		32	
Meningitis		2	ï	2	
Myelitis		1		1	
Absence of busin		1	1	1	
Abscess of brain Congestion of brain	***	2	1	1	
Sub-section 2-		~		2	
Apoplexy		11	4	11	2
Paralysis	2	4		6	1
Chorea	···· 1	1 5		1 6	
Epilepsy	1	4		4	1
Hysteria		8		8	
Sub-section 3-mental diseases-					
Dementia		2		2	
Other diseases of the nervous system	3	35	2	1 38	2
Diseases of the eye-	199		1	00	2
Conjunctivitis	2	13		15	
Keratitis	1	3		4	
Ulceration of cornea		8		8	
Cataract	ï	1		2	1
Other diseases of the eye		15		15	
			1	3	1
Carried forward	43	968	58	1,011	29

Di	pital of	Yearly	total.	Total	ining pital of
Diseases.	Remaining in hospital at end of 1923.	Admis- sions.	Deaths,	cases treated.	Remaining in hospital at end of
Brought forward	43	968	58	1,011	29
Diseases of the ear-					
Inflammation		6		6	
Other diseases		4		4	
Diseases of the nose		10		10	***
Piseases of the circulatory system— Pericarditis		4	2	4	1
Endocarditis		8	2	8	1
Valvular mitral		5		5	
Arterial sciences of the sizeulatory system		7 29	1	7 29	
Other diseases of the circulatory system Diseases of the respiratory system—		20	1		-
Laryngitis		10		10	1
Bronchitis		47		47	
Broncho-pneumonia		12 8	3	12 8	2
Francess		3		3	
Other diseases of the respiratory system		15		15	
Diseases of the digestive system-		-	1.000	-	
Stomatitis		• 7 22		7 22	
Caries of teeth		5		5	1
Glossitis		7		7	
Inflammation of tonsils	3	70		73	
Gastritis	1	29		30	
Ulceration of stomach	1	9		9 2	1
Stricture of stomach		4	3	4	
Dyspepsia		3		3	
Enteritis		18		18	1
Appendicitis	8	183	5	191 18	10
Ulceration of intestines		2		2	1
Hernia	1	29		30	i
Diarrhœa		15		15	1
Constipation	1	9		-10	
Colic	1	17		17 18	 1
Hepatitis-acute		5		5	
Abscess of the liver		4		4	1
Cirrhosis	1	6		7	1
Jaundice	1 2	6		1 8	
Ascites		2		2	
Gallstones		18	2	18	2
Other diseases of the digestive system		30		30	1
Diseases of the lymphatic system-	and the second second			1	
Inflammation of lymphatic gland Diseases of the urinary system—		1		1	
Acute nephritis		6	1	6	
Bright's disease		6	2	6	
Pyelitis		5		5 4	
Renal colic	1	6		7	
Cystitis		16	1	16	1
Vesical calculus		2		2	
Hæmaturia		1 4		1	
Other diseases of the urinary system Diseases of the generative system—		4	1	4	
Male organs-					
Urethritis		1		1	
Stricture		9		9	
Prostatitis	· ···	5		53	1
Orchitis		6		6	1
Epididymitis		2		2	1
Other diseases of the male organs		13		13	
Female organs-		6		6	
Ovarian cyst		8		8	
Endometritis	1	45		46	
Displacement of uterus	2	.8		10	1
Vaginitis		1 5		1 1	
Menorrhæa		52		52	
Leucorrhœa		2		2	
		T	1		
Carried forward	67	1,839	88	1,906	62

	pital of	Yearly	total.	Total	pital of
Diseases.	Remaining in hospital at end of 1923.	Admis- sions.	Deaths.	cases treated.	Remaining in hospital at end of
Brought forward	67	1,839	88	1,906	62
Diseases of the generative system (continued)					
Female organs (continued)-					
Abortion	1	53		54	
Retained placenta		75		75	
Premature birth Puerperal septicæmia		2		2	
Mastitis		5	ĩ	5	
Abscess of breast	1	2		3	
Other diseases of the female organs	1	26		27	2
Confinements	1	37		38	
Diseases of organs of locomotion-					
Osteitis		7	1	7	
Arthritis		12		12	
Bursitis		3		3	
Other diseases of organs of locomotion	1	14		15	
Diseases of connective tissue-	2	41		43	0
Cellulitis		41		41	2
Abscess	1			1	1000
Diseases of the skin-					
Urticaria		4		4	
Eczema		3		3	
Boil		9		9	
Carbuncle		11		11	1
Herpes		6		6	
Tinea		3		3	
Ulcers		17		17	1
Other diseases of the skin		12		12	
Injuries-general	5	132	3	137	6
local	12	112		124	
fractures		53	1	53	4
Surgical operations-major				(471)	
minor *				(700)	
Fumours	12	54	11	66	2
Poisons	***	10	2	10	1
Snake bite		2		2	***
Parasites					
Cestoda-Tænia solium		4		4	
Tænia saginata Not otherwise classified	***	244		1 244	***
Gun-shot wounds	 1	12	***	244 13	
Bilharzia		10		10	***
Senility		4		4	3
Not diagnosed		35		35	5
Burns		1		1	
Totals	105	2,833	109	2,938	91

# TABLE 19.

# Return of diseases and deaths (in-patients) in all Government hospitals and Memorial Hospital, Bulawayo, for the year 1924.

		100	 -	-	~
- NI	- 40		17	LC.	<u> </u>
-1.5	£1.		v :-	<b>r</b> .,	S.

Diseases,	spital d of	Yearly	total.	Total	spital spital
Andreades.	Remaining in hospital at end of 1923.	Admis- sions.	Deaths.	treated.	Remaining in hospital at end of 1924.
INFECTIVE DISEASES.					
Beri-beri		1	1	1	
Diphtheria		4		4	
Dysentery—Amœbic Bacillary		44		44	3
Enteric		8	1	8	
Gonorrhœa		11 332	30	11 340	
Influenza		2		2	
Malaria-(a) Tertian		169	2	169	
(b) Quartan	 6	17 114	1 2	17 120	 6
(c) Æstivo-autumnal	1			120	
(e) Blackwater		3	2	3	
Pneumonia	6 2	381 30	117	387 32	16 1
Rheumatic fever		10	8	10	1
Trypanosomiasis (sleeping sickness)	1	1	1	2	1
Syphilis-(a) Primary	5	90 40	35	95 45	12
(b) Secondary	1	40		40	
Tetanus		3	3	3	
Tuberculosis	16	132 2	88	148 2	16
Other infective diseases GENERAL DISEASES.		2		2	
				0	
Anæmia	1	8 2	*** *	9 2	3
Purpura	2	10	ĩ	12	1
Scurvy	7 2	116	10	123	26
Other general diseases	2	69	3	71	3
LOCAL DISEASES.					
Diseases of the nervous system— Sub-section 1—					
Neuritis	5	34		39	3
Meningitis	1	31 1	26	32 1	
Myelitis Encephalitis		2	2	2	
Abscess of brain		1		1	1
Sub-section 2-		11	5	11	
Apoplexy	ĩ	21	7	22	7
Epilepsy	2	17	3	19	
Neuralgia		2 2		2 2	
Sub-section 3-Mental Diseases-		-		~	
Idiocy		4		4	1
Mania		1 8	ï	1 8	111
Other diseases of the nervous system		16		16	
Diseases of the eye-			10.00		
Conjunctivitis		67 7		67 7	5
Ulceration of cornea	2	12		14	
Iritis		6		6	
Cataract		2 5	***	2 5	
Other diseases of the eye		8		8	
Diseases of the ear-	0	-			
Other diseases	2	6 5		8 5	
Diseases of the nose	ï			1	

The	pitio	Yearly	count.	Total	pita
Diseases. •	Remaining in hospital at end of 1923.	Admis- sions.	Deaths.	cases treated.	Remaining in hospital at end of
Brought forward	77	1,869	332	1,926	115
iseases of the circulatory system-					
Pericarditis		3	3 4	37	
Endocarditis	1	6	1	6	
Arterial sclerosis		3	î	3	1
Aneurism		1		1	
Other diseases of the circulatory system	1	19	5	20	2
Laryngitis		4		4	
Bronchitis	4	48	7	52	2
Broncho-pneumonia		25	4	25	
Abscess of lung		1 24	1	1 24	ï
Other diseases of the respiratory system		7	2	7	
iseases of the digestive system-			1.00		
Stomatitis	1	4		5	
Caries of teeth		1 2		$\frac{1}{2}$	
Glossitis	ï	1		22	
Sore throat	i	25		26	
Gastritis		21		21	
Dyspepsia		2 4		2	
Enteritis	1	6	1	47	
Appendicitis	î	2		3	
Ulceration of intestines		1	1	1	
Hernia	1	12	1	13	
Diarrhœa	1	14 18		15 19	
Colis	1	6		6	
Colic		2		2	1
Pancreatitis		1	1	1	
Hepatitis-acute	1	1 2		2	
Abscess of the liver		7	1 5	27	
Cirrhosis		2	2	2	
Peritonitis		11	8	11	1
Ascites	3	9	2	12	1
Other diseases of the digestive system		4	1	4	2
Splenitis	1	7		8	1
Inflammation of lymphatic gland		8		8	1
Suppuration of lymphatic gland		61		1	
Other diseases of the lymphatic system	3	4	1 4	64	6
iseases of the urinary system-					
Acute nephritis		4	1	4	
Bright's disease		3	2	3	
Pyelitis		22	1	22	
Renal colic	ï	3		4	
Vesical calculus		1		1	
Hæmaturia		3		3	
Other diseases of the urinary system		2		2	
iseases of the generative system— Male organs—					
Urethritis	3	1		4	
Gleet		1		1	
Stricture		3		3	- 1
Inflammation of scrotum Hydrocele		6	"ï	36	1
Orchitis	1	14		15	2
Other diseases of the male organs		3		3	
Female organs-	-				
Ovarian cyst			1	1 2	
Vaginitis		3		3	
Dysmenorrhœa		1		1	
Menorrhagia		2		2	
Leucorrhœa		1 4		1 4	
Abortion		3		* 3	
Retained placenta		4		4	
Premature birth		1		1	
	1	1	-	-	-

	pital of	Yearly	total.	Total	ining pital I of
Diseases.	Remaining in hospital at end of 1923.	Admis- sions,	Deaths.	treated.	Remaining in hospital at end of
Brought forward	104	2,328	394	2,412	138
Diseases of the generative system (continued)-					
Female organs (continued)-			1000		
Puerperal septicæmia		1 2		1 2	
Abscess of breast		ā		ã	
Other diseases of the female organs		6	1	6	1
Confinements		3	1	3	
Diseases of organs of locomotion-	2		2	10	
Osteitis	2	8 21	1 2	10 22	2
Arthritis	i	3		4	
Spondvlitis		10		10	
Other diseases of the organs of locomotion		14		14	
Diseases of connective tissue-			1000		
Cellulitis	2	105	2	107	9
Abscess	5	66	3	71	8
Diseases of the skin-		1		1	
Urticaria		9		9	
Boil		6		6	
Psoriasis		1		1	
Oriental sore	3	34		37	10
Tinea	***	3		3 5	
Scabies		1 i		1	
Acne	40	215	2	255	17
Other diseases of the skin	1	8		9	3
Injuries—general	- 23	503	21	526	42
local	64	287		351	35
fractures		74	5	74	6
Surgical operations-major				(105)	
minor	1		6	(318) 23	***
Tumours		2		2	
Malformations	1			ī	
Poisons		8		8	
Snake bite		16	***	16	2
Parasites					
Cestoda-Taenia solium	1	2	***	3 2	
Tænia saginata		114	ii	114	1
Gun-shot wound	ï	12	3	13	î
Hydatids		1		1	
Bilharzia		10		10	
Senility		3	2	3	1
Not diagnosed		19 23	2	19 23	
Burns		37	4	37	7
Onyalai		2		2	
Suicide-cut throat		1	1	1	
	1		-		1
Totals	250	3,991	462	4,241	283

TABLE 20.

Table giving the number of beds in each Government Hospital and Ingutsheni Mental Hospital, the daily average number of patients treated, the revenue and expenditure of each and the approximate charge on public funds for each patient in hospital during 1924.

		No. 0	No. of beds.	Daily ave	Daily average of patients treated		No. of	No. of			Deficit of revenue	Approximate charge on public
Name of hospital.	átal.	White.	Coloured and native.	White.	Coloured and native.	Total white, coloured and native.	staff.	native staff.	viross expenditure.	Kevenue.	over expenditure.	funds for each patient treated.
Salisbury	:	60	100	47.9	64.4	112.3	36	53	$\frac{x}{17,748}$	£ 6,839	£ 10,909	£ s. d. 4 18 6
Umtali	:	36	20	11.5	16	27.5	9	13	3,900	1,158	2,742	4 10 2
Gwelo		28	34	13.25	44.25	57.5	9	17	4,692	1,593	3,099	3 19 5
Fort Victoria	:	13	13	.41	.63	1.04	00	10	1,706	329	1,377	6 3 6
Enkeldoorn		4	4	.53	2.22	2.75	1	00	705	27	678	12 6 7
Gwanda	:	10	18	1.49	7.13	8.62	61	2	961	258	703	3 9 8
Gatooma	:	16	60	5.9	70.4	76.3	9	15	4,116	1,448	2,668	3 9 8
Shamva	:	14	15	1.56	11.32	12.88	~	12	1,944	364	1,580	5 19 1
Sinoia	:	11	∞	1.6	6.21	7.81	61	9	1,109	212	268	5 3 8
Belingwe		6	15	.14	5.11	5.25	1	51	509	59	450	7 10 0
Ingutsheni A Hospital	Mental	36	144	28.9	162.5	191.4	6	17	6,420	1,039	5,381	18 19 3

														STATE	MENT	OF P	ROGID	(55 A)		TABLE		IOSPIT	TALS 1	OR TH	e ye.	AR 197	4														
-	1	1	-		20	O. OF CRIT	MAINTAIN	XD.	-	-							x x	FEND	ITURE					-	_			-	***	N 1 N 0 A.		IIIVIS	CE RECE	IVER.			11			TOTAL AN	OUNT
San of buyers	Tradit species of period	Teori cupeditate.					ante.	1	nn. Vie	Province of Arrival Arrival	Per cost, of total.	Pergn. anglish testiments and readon.	Per costs of total.	President, condi-	Per suits, of takel.	Proof, Nation and	Per cont. of table	And the state of t	Per multi al total.	tange	Pres arrest, of totals.		Pur cost, of total.	1	For cost, of table	Office and other suprement.	Per sease, of takes	Prove p	annan . Ma	Represented by transmission of the protoments of the protoment of the protoment of the transmission and the day for malicent.	Tenc	Witten	Kalina	1	Bruyes press, of	Cost per copet per down on prime superdiffere back.	Lame to the memory of the first state of the	Properties of total experiment and Visc 7.1 discrete and tasks of Reseptent staff.	Pro cond. of table.	NT N	NING.
				3,432	20.043	17.511	23.527	30,943	43,630	£ 1.850	16.0	£ 2.119	11.2	£ 900		4		£ 504	2.6	5 24		£ 3,013	17.0	£ 3.054	82.0	£ 222	13	4 7,917	£ 1,115	£ 3,195	4	1 1,900	1 879	£ 6,839	28.3	4.4	£ x d. 4 18 6	£ 735	41	£ 3,644	£ 8,798
Maintery -	2,215			2,007	4,285	4,200	5,834	6.546	10,119	455	11.6	411	12.4		110	100	41	143	42	201	24	612	157	1.943	32.4	30		1,552	227	813	2,392	1,023	145	1,158	29.7	4 8	4 10 2	126	3.2	222	4313
Frida -	793	4.0		2,558	3,114	4,817	16,121	7,205	-11,245	638	13.3	533	11.6	141	7.0	246	5.2	125	2.7	192	41	950	20.2	1,541	32.8	14	2	808	938	1,795	3,625	691	902	1,590	32.9	3.4	3.19 5	126	2.7	319	534
Februar -	225			1,008	3,600	1,409	3,147	2,507	6,817	268	157	176	10.0	133	3.0	85	5.0	19	1.7	25	1.5	182	10.7	THT	42.0		.4	408	102	502	1,012	304	23	329	19.1	3.8	0.0.0	63	8.7	122	165
Quanda -	202		11	1,095	1,825	543	2,654	1,638	4,479	173	15.0	90	9.4	28	3.0	26	3.7	32	3.3			155	161	205	41.4	7	2	300	196	166	571	69	189	358	26.5	3 1	3 9 8	42	4.6	54	170
Calablanta	. 55		10	778	1,094	195	813	927	1,911	11.	11.5	14	7.4	5.5	2.5	30	4.5	Ŧ	1.0	38	2.6	89	12.6	353	50.0	1	-	10		143	153	11	5	31	2.5	5.0	11 6 1	21	3.0	72	28
latoona	. T00	4,1	14	1,830	3,235	2,172	25,694	4,002	31,092	515	12.5	490	11.9	255	6.2	235	3.7	111	2.7	68	11	239	12.9	1,550	37.6	45	1.1	1,100	697	2,589	4,445	871	327	1,445	352	2.4	5 5 8	105		1,012	
Barro	217	1.9	44	1,106	4,392	549	4,131	1,735	8,533	255	14.8	217	11.2	134	6.9	62	3.4	53	2.7			249	12.8	NON	44.7	8	- 3	233	151	366	7.50	229	185	364	18.7	3.10	5 19 1	63 43	3.2		105
-	173	1,1	29	704	2,196	587	2,297	1,351	4,461	185	16.9	80	2.2	115	10.4	34	3.0	62	3.8	24	22	114		414	36.4	- 1	4	168	102	219	455	140	72	212	.19.1	8.10	5 3 8 T 35 0	*1	8.8	105	105
Magya	60			365	7.90	50	1,863	415	2,595	69	13.6	42	*2				1.4		LA			09 1,536	13.6 23.8	246	45.3 35.5	-	1.6	50	14 650	126 9,111	290 10,155	39 334	705	1,039	11.6	1 2	18 19 34		41	192	233
bqutsheei	. 344	6,4	20*	9,294	6,222	10,008	59,578	13,899	65,800	918	14.5	102		514		2018				-		1,000									1.5100			.,				1000			
Totals	5,594	43,5	10 1	8,603	55,013	42,600	145,633	71,358	200,646	6,437	147	4,374	10.0	3,444	7.9	2,866	4.5	1,130	16	455	1.0	7,764	17.7	15,513	35.4	IAT		12,219	4,212	19,112	35,573	9,694	8,682	18,826	30.4	8.8	5 9 0	1,440	3.3	6,004	4,829
-									* Include	e value o	t supplies	from ho	pital fare	a and go	olen, £71	2.			t In o	dealsting	this fig-	ure, the	value of s	opplies fo	m hospit	al farm a	usd garde	en is deduc	ted from	total expen	diture.										



TABLE 22.

Return of Government and pauper patients treated in Government hospitals during 1924.

		Num	Number of free patients.	inte.	Total	Total number of units treated	reated.		Loss of revenue represented, reckoning
Name of hospital.		White.	Native.	Totals.	White.	Native and coloured.	Totals.	Cost of maintenance.	58. a day for whites, and 28. 6d. a day for natives, plus extras.
Salisbury	:	248	502	750	5,218	15,121	20,339	£ 8. d. 4,841 14 0	£ s. d. 3,194 12 6
Umtali	:	64	170	234	1,257	3,992	5,249	1,228 5 4	813 5 0
Gwelo	:	36	271	307	2,950	8,437	11,387	1,865 3 10	1,792 2 6
Fort Victoria		28	85	113	559	2,898	3,457	633 3 0	502 0 0
Enkeldoorn	:	~	41	49	166	813	626	243 3 8	143 2 6
Gwanda	:	20	50	20	114	1,102	1,216	191 0 8	166 5 0
Gatooma		21	887	908	242	20,231	20,473	2,400 9 2	2,589 7 6
Shamva		4	111	115	40	2,852	2,892	547 17 10	366 10 0
Sinoia		9	65	11	16	1,567	1,658	316 3 8	218 12 6
Belingwe	:	61	41	43	26	1,755	1,781	301 3 4	225 17 6
Ingutsheni Mental Hospital	al	36	181	217	9,570	53,906.	63,476	5,112 19 10	9,130 15 0
Totals	:	473	2,404	2,877	20,233	112,674	132,907	17,681 4 4	19,142 10 0





