#### **Annual report of the Medical Department / Tanganyika Territory.**

#### **Contributors**

Tanganyika. Medical Department.

#### **Publication/Creation**

Dar Es Salaam : Government Printer, [1939]

#### **Persistent URL**

https://wellcomecollection.org/works/gqjpq2t2

#### License and attribution

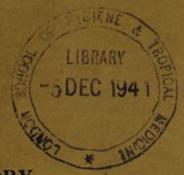
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

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



3m. 10626





TANGANYIKA TERRITORY

# Annual Report of the Medical Department

for year ended 31st December

1939

of the Laboratory and
Research Division

1940
Dar es Salaam
PRINTED BY THE GOVERNMENT PRINTER
Price Sh 1/-

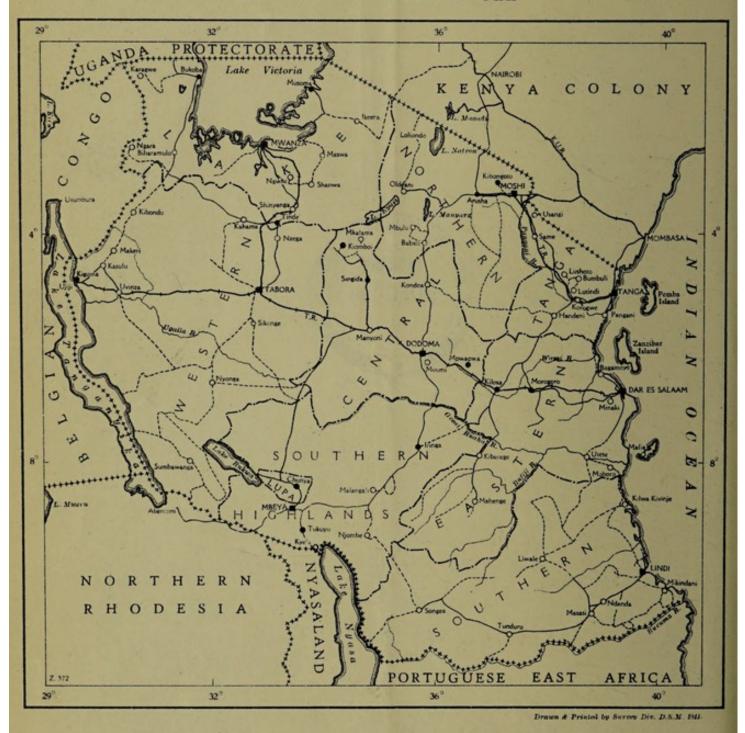


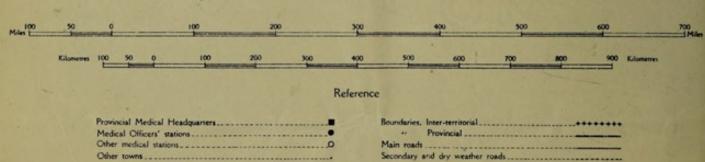
TANGANVIEA TERRITORY



#### TANGANYIKA TERRITORY

#### MEDICAL ADMINISTRATION MAP





#### TANGANYIKA TERRITORY

### Abridged Annual Report of the Medical Department 1939

The first eight months of 1939 saw preparations in hand for the inevitable war and after the 3rd September pressure on the staff was greatly increased at many centres in connection with the equipping and mobilization of the Field Ambulance Company, Casualty Clearing Station and Motor Ambulance Convoy, and preparations for an ambulance train and general hospital. The examination of large numbers of recruits resulted in a reduction of the attention given to the civil population by Government staff at some centres as did the internment of a number of German doctors on the outbreak of war; and arrangements for the care and treatment of enemy alien internees had to be completed. At the central internment camp at Dar es Salaam accommodation was provided for one thousand male enemy subjects and the design of the arrangements for the feeding and sanitation were a great credit to Dr Wilkin, Medical Officer of Health, who was largely responsible for it. The effect which war and the consequent curtailment of the social services will have on the health of the people cannot yet be assessed, but we have the lessons of the 1914-1918 period before us.

- 2. Volunteer Medical Services.—Excellent work has been done by the St John Ambulance Association which with the assistance of volunteer medical and nursing staff has arranged for the training of some eight hundred civilians of all races in first aid and home nursing and almost three hundred persons obtained certificates. Members of the public have come forward most generously with offers of help, personnel and material for the medical services in war-time.
- 3. Red Cross Fund.—The Tanganyika Red Cross Fund, opened on the 9th October, 1939, by the Governor for the benefit of members of His Majesty's Forces on active service, closed on the 29th February, 1940, with a total of £8,118.
- 4. Reductions in staff.—Admissions to hospital fell off during the first two months of the war but the attendances were again normal by the end of the year. With eleven of the medical staff and five others absent with the Forces, supervision of the medical and health work of the Territory could not be maintained at its former standard. Sickness among the staff also took a heavy toll, including two deaths and two invalidings.
- 5. Provincial Medical Administration.—With the extension of the provincial system to all provinces, except the Eastern, better co-ordination of the various medical services, tribal, mission and government, is gradually being attained. The reports of the provincial medical staff, though economy forbids publication, provide a summary of the more important conditions affecting health in each province and will be invaluable to those who take over the work of the various provinces in the future.

- 6. Recommendations for Development of Medical Services. Early in the year recommendations covering the next ten years were submitted to the Central Development Committee for the extension of the health services. The programme included an extension of the ordinary medical services of the Territory by the addition of a medical officer and a health visitor in each province, to make possible better supervision of the district work. Recommendations for a new native hospital at Dar es Salaam with associated medical training school and central laboratory, originally put forward in 1929, were renewed with added emphasis. A scheme of tuberculosis control involving a sanatorium and village settlement on the Central Railway and extensions at Kibongoto, and for diagnosis by x-ray and special treatment at central hospitals were also among the proposals submitted to the Central Development Committee. The need for treatment of patients in the early stages, by the provision of better facilities at existing institutions, is very great. Proposals for a scheme for venereal disease control at Bukoba and anti-malarial works at various large towns were also submitted.
- 7. Training of Africans.—The whole subject of the training of Africans in medical and public health, the line of work likely to have the greatest effect on the future health of the population and the importance of which is increasing every year, was fully dealt with in the recommendations submitted to the Central Development Committee. Available facilities for training are now being used as far as staff permits; but such training is greatly handicapped by the lack of residential accommodation for students at the centres where medical staff and clinical material are available for teaching. This applies particularly to the training of African girls as nurses. The supply of literate girls is improving but so long as we are limited to the selection of girls who can be housed and looked after by relatives or missions in towns, we cannot hope for adequate progress, and the need for a hostel, in charge of a suitable European home sister, is urgent.
- 8. Care of Native Labour.—Dr D. B. Wilson carried out a valuable survey of the conditions under which native labour is employed on sisal estates, and his recommendations were submitted to the Labour Advisory Board during their consideration of the Manual Workers Employment Bill. The report shows the need for improvement in the housing, feeding and general care of labour on sisal estates and for better standards of medical treatment for employees.
- 9. Nutrition.—Dr B. S. Platt gave valuable assistance and advice in planning future nutrition investigations and measures for putting recent knowledge into practice for the better feeding of the large numbers of the people living at a low economic level and in institutions and industrial organizations. A free grant of £5,252 from the Colonial Development Fund for three years work was received but work had to be curtailed on account of war conditions. Investigations by Mr and Mrs Culwick into population statistics, land tenure and African dietetics were continued in Bukoba District. These workers also visited Nyasaland to see Dr Platt's methods of demonstrating remedies for the peasant's needs on the ground. Investigation of undernutrition and non-specific enteritis in agricultural labourers was continued by Dr McKenzie whose findings suggest the importance of a meat ration and of Vitamins A and the B<sub>2</sub> complex. There appeared to be a constant, seasonally marked, sub-optimal intake of Vitamin C. Studies were also carried out on African children at a boarding school. Important work was carried out by

Dr Raymond, Government Analyst, both in the Dunn Nutritional Laboratories at Cambridge and on the study of the dietaries of territorial institutions, troops and interned Europeans. The prison dietaries were revised as a result. Investigation of many local native foodstuffs was also carried out. The assistance of other departments, especially that of Agriculture and the Agricultural Research Station at Amani, is gratefully acknowledged.

10. Deficiency Diseases.—Scurvy and other deficiency diseases continued in the Lupa gold mining area; and other conditions attributed to avitaminosis were reported in smaller numbers from other provinces, but few classical deficiencies are seen by the medical staff. The mortality from nutritional diarrhoea at Morogoro has shown a satisfactory decrease since 1936, attributable to better feeding, earlier hospitalization and better treatment. The poor nutritional state observed at the medical examination of recruits was a frequent cause of rejection.

The sum of the observations on this subject is the existence of a very general sub-nutritional state of large numbers of the population, not amounting to well-defined deficiency disease. Education of all races in better feeding and

guidance in the means of attaining it are the remedies.

11. Prisons.—A reduction of the death rate of prisoners from 19·16 to 15·09 in spite of four fatal cases of cerebro-spinal fever at Dar es Salaam is recorded. New dietary scales were introduced experimentally in November.

- 12. Sleeping Sickness.—Two fresh foci of sleeping sickness occurred in the north Mwanza District, and in the Mahenge sub-District, the latter probably an extension from the endemic area in the Liwale District; there was a recrudescence in the endemic areas of Tabora and Kahama, attributed to dispersal from some of the older settlements. Six hundred and sixty-three cases with one hundred and eighty-four deaths were reported, the greatest increase being in the Western Province where the sparse population favours infection of individuals who live or seek their livelihood in the tsetse infested bush.
- 13. Cerebro-spinal meningitis.—Cerebro-spinal meningitis was reported from all provinces and a serious epidemic occurred in the Western Province (one thousand five hundred and seventy-two cases with one hundred and eleven deaths), two thousand one hundred and eighty-three cases with two hundred and thirty-seven deaths were notified in all, ten times the number in 1938. The sulphanilamide drugs proved their value in reducing mortality.
- 14. Laboratory Services.—The Laboratory suffered heavily from casualties due to illness and deaths among the staff and it was twice necessary on that account to close Mpwapwa Lymph Laboratory during the year. The Senior Pathologist has undertaken many war duties outside his normal sphere particularly in the organization of first-aid training and ambulance work. The Government Analyst also undertook the training of personnel in anti-gas measures for Air Raid Precautions. An increased demand arose for chemical examination of produce for export which provided additional revenue; and chemical work in connection with nutritional problems is referred to in paragraph 9 above.

15. Plague.—The isolation in pure culture of Pasteurella pestis from the bone marrow of a rat received from Mbulu is of particular importance, confirming the existence of rat plague in that district and thus accounting for the sporadic human cases reported every few years.

16. Smallpox.—The investigation of material from the Southern Province smallpox cases confirms the suspicion that we are dealing with a virus against

which anti-variolous lymph is not fully protective and further investigation is proceeding.

17. "Both" Respirators.—Grateful acknowledgment is made of Lord Nuffield's generous gift of three "iron lungs", which have been installed at Dar es Salaam, Tanga and Mwanza. The Shipping Companies and Crown

Agents also helped us by reducing or waiving their usual charges.

18. Abbreviation of the Report.—This report is abridged from one hundred and forty-one pages of typescript and refers only to matters of special importance. Further particulars of incidence of any special disease or other matter usually reported on will be supplied on application to the department. It has been necessary to omit reference to much work carried out by members of the staff which was valuable and of great technical interest.

19. The heavy burden which has fallen on those members of the staff left behind to carry on the medical services has its reward in the knowledge that we have contributed in no small measure in men and material to the efforts of our forces in the field, of whom we think often and with gratitude. We appreciate the sympathy, practical help and forbearance which have been shown

by the public at a time of no little difficulty.

#### APPENDIX

General Diseases. See Table A.—Diseases of skin, cellular tissue, bones and organs of locomotion provided the greatest number of cases, 131,643 (18·12 of total); ulcers showed an increase of 2·53 per cent. Digestive diseases (15·93 per cent) and respiratory diseases (12·39 per cent) followed.

Communicable Diseases.—Recorded cases of infectious and parasitic diseases numbered 248,533 (34.23 per cent of total) and accounted for 35 per cent of the deaths in Government institutions. They include:—

			Cases	Death	8
Smallpox			599	27	see paragraph 16.
Cerebro-spinal meni	ngitis		2,183	237	see paragraph 13.
Malaria	olatodi		59,030		montose athoropolyment (a)
Blackwater fever	10 101		66	16	
Relapsing fever (tick	borne)		1,842	16	
Trypanosomiasis			663	184	see paragraph 12.
Enteric fever			143	22	- Calves vaccinated.
Paratyphoid fever			54	11	
Dysentery			2,324	38	(689 amoebic, 363 bacillary).
Ankylostomiasis			13,862	_	18d mark administration of the contract of the
Schistosomiasis			6,299	PROTEIN.	
Gonorrhoea	n. Jonbi	w.i	10,842	004	
Syphilis	during		22,245	N SERVE	ples. The Government Am
Yaws			75,081	1	(9,161 primary, 5,891 second-
					ary) diagnosis liable to be
Tuberculosis:					confused with syphilis.
Pulmonary			1,775	-10	
Non-pulmonary	and I		968	-	
Or er er er		-	v 77 13	7 7	1: 77 0.705

Statistical Information.—(a) Estimated population: European 9,165; Asian 33,974; African 5,217,345 (from Blue Book, 1938).

- (b) Total births and birth rates: Not known.
- (c) Total deaths and death rates: Not known.
- (d) Infantile mortality rates: Not known.
- (e) See Table A.

Special Summaries.—(a) The issue of bills of health as a routine was abolished by the Ports (Pratique) (Amendment) Rules and there was no occurrence for special note under Port Health. Local aircraft were taken over by the military authorities on the outbreak of war and there are no special circumstances to report in connection with aeroplane traffic.

- (b) A general reduction in maternity and child welfare work is recorded throughout the Territory. Total confinements in clinics numbered 3,516.
- (c) (i) Work done at hospitals and dispensaries continued to increase though a reduction in the number of in-patients occurred attributable to the war.

In-		In-patients	Gove	rnment hospitals (57) Out-patients	s (57) Total		Tribal Dispensaries (295) Out-patients	
1938		40,669		641,193	683,719		789,915	
1939		34,967	7	689,660	726,362		834,408	

Under "out-patients" first attendances only are recorded.

- (ii) There are no separate venereal disease clinics; the number of cases of venereal diseases treated is given above under "Communicable Diseases." Ninety-three patients were admitted to the two mental hospitals: accommodation for European patients was opened at Dodoma. There were 3,776 attendances by Government servants and their families at the dental surgeries at Dar es Salaam and Tanga.
- (iii) Laboratories.—Forty-one thousand seven hundred and eighty-eight specimens examined.
  - (a) Pathological section (includes main laboratory and Sewa Haji Hospital clinical laboratory at Dar es Salaam and branch laboratories at Mpwapwa Lymph Institute and Tanga Hospital only) ... 40,363
    - (b) Vaccine Lymph Institute, Mpwapwa:-

Calves vaccinated, 104.

Total pulp in grammes, 2,655.

Average yield per calf, 25.5 grammes.

Vaccine issued, 747,022 doses.

- (c) Chemical Unit.—One thousand four hundred and twenty-five samples. The Government Analyst was on leave during a large part of the year.
  - (d) Malaria Unit, Dar es Salaam :-

contract to their nost	Mosquitoes dissected	Post Stomach		Infection index	
Anopheles gambiae	1,334	16	35	Highest in June, 6.6.	
Anopheles funestus	1,175	6	20	,, March, 4.7.	

(d) Training of local medical and health personnel—see paragraph 7 of text. Eleven Tanganyika students were studying medicine in Uganda at the end of the year.

Training of African dispensers was continued at Dar es Salaam, and at Minaki and Ndanda Missions. African tribal personnel (to take charge of tribal dispensaries) is trained in established medical schools at Mwanza, Bukoba and Tukuyu, and to a lower standard in the various central hospitals of the Territory. Non-European girls receive training in nursing at the European Hospital, Dar es Salaam. Training of laboratory assistants is undertaken at Dar es Salaam, and of sanitary inspectors at Tanga.

## A.—DISEASES AND DEATHS BY GROUPS (Government institutions only), 1939. (CLASSIFIED IN ACCORDANCE WITH MANUAL OF INTERNATIONAL LIST OF CAUSES OF DEATH 1931 EDITION)

	Cases	Deaths	Percentage of group to total cases	Percentage of deaths to total deaths
I.—Infectious and Parasitic Diseases	248,533	545	34.23	35.07
II.—Cancer and other Tumours	517	34	.07	2.29
III.—Rheumatism, Diseases of Nutrition and of Endocrine Glands and other General		-1		
Diseases	8,287	16	1.14	1.03
IV.—Diseases of the Blood and Blood-forming	0,201	10	4.4.4	1.00
Organs	5,441	16	.75	1.03
V.—Chronic Poisoning	176	_	.02	
VI.—Diseases of the Nervous and Sense Organs	61,619	50	8.50	3.21
VII.—Diseases of the Circulatory System	3,023	49	.42	3.15
VIII.—Diseases of the Respiratory System	90,043	299	12.39	19.24
IX.—Diseases of the Digestive System	115,685	149	15.93	9.59
X.—Non-venereal Diseases of the Genito-		-	2000	-
urinary System and Adnexa	7,242	83	.99	5.34
XI.—Diseases of Pregnancy, Childbirth and				
the Puerperal State	848	31	.11	2.00
XII.—Diseases of the Skin, Cellular Tissue,	The same of the sa	100000	1000000	10000
Bones and Organs of Locomotion	131,643	67	18.12	4.31
XIII.—Congenital Malformation and Diseases		1	153	1
of Early Infancy	228	5	.03	.32
XIV.—Old Age	385	13	.05	.84
XV.—Affections produced by External Causes	46,799	170	6.44	10.94
XVI.—Ill-defined Diseases	5,893	27	.81	1.73
Total	726,362	1,554	100.00	100.00

#### TABLE B .- FINANCIAL

Expenditure:			Actual expenditure
Provision by Central Government—		£	£
Ordinary recurrent		208,829	
Special		3,886	
Total		212,715*	193,683
Provision by Native Authorities		19,294	19,101
From Colonial Development Fund-			
Sleeping Sickness Research		2,888	1,814
Anti-malarial works, Dar es Salaam		6,430	5,620
Nutrition Survey		1,318	645
	Total	£242,645	£220,863
Revenue:			£
By hospital, laboratory, dental and other fees			. 9,413
By reimbursement by Tanganyika Railways for		al services	
		Total	. £12,413

<sup>\*</sup>This sum was equal to 10.4 per cent of the territorial estimates for recurrent and special items. The average expenditure per head of the population was eighty cents of a shilling, varying between fourty four cents in the Central province and one hundred and sixty six cents in the Eastern province.

LIBRARY Provision by Native Authoritica

wonly on any land on



