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BRITISH HONDURAS.
ANNUAL
MEDICAL AND SANITARY REPORT
FOR THE YEAR ENDING
31 DECEMBER, 1936.

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By

R. L. CHEVERTON

M. R. C. S., L. R. C. P., M. R. San. I. (London)

Senior Medical Officer.

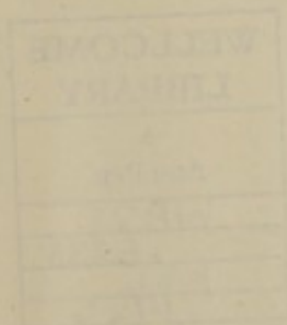
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BRITISH HONDURAS.

Medical Department,

Belize, 19th May, 1937.

Sir,

I have the honour to submit, for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State, the Medical Report on the Health of the Colony of British Honduras for the year 1936 together with Returns, etc., appended thereto.

I have the honour to be,

Sir,

Your obedient servant,

R. L. CHEVERTON

Senior Medical Officer.

The Honourable

The Colonial Secretary.

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BRITISH HONDURAS
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I. ADMINISTRATION.

(a) Staff.

The Staff consists of a Senior Medical Officer and six Medical Officers—one for Belize and one each for the Districts of Corozal, Orange Walk, Stann Creek, Toledo and Cayo.

The Senior Medical Officer is allowed consulting practice. The Medical Officers are allowed private practice in accordance with the regulations for the Colonial Medical Service.

A Matron (European) controlling a native staff.

TABLE I. details the Medical and Nursing Staff.

It is with profound regret that the death of Dr. J. I. Moir Senior Medical Officer be recorded. Dr. Moir died of tetanus on September 28th. Barely twenty months had elapsed since the arrival of Dr. Moir in the Colony, but the Department speedily realized, and the whole colony felt, that the Government Medical Service was singularly fortunate in having such a Senior Medical Officer at such a time.

The Department was being prepared to adopt an aggressive attitude to Public Health matters and plans were made for immediate, long-continued and unremitting action against those diseases and sanitary evils which sap the health of the Colony; nor was the purely therapeutic angle neglected, for during Dr. Moir's administration, a new radiological department was created and a new laboratory service began.

Dr. V. F. Anderson arrived in the Colony on return from leave on January 27th. He was appointed Acting Senior Medical Officer on 26th September and acted in that capacity until the end of the year.

Dr. F. H. Killam, a private practitioner, acting Medical Officer, Belize, from 30th September to 31st December.

Dr. W. A. S. George was absent on leave from 3rd June to 30th November and resumed his substantive post as Medical Officer, Corozal. During his absence on leave, his duties were performed by Dr. D. W. Degazon, Medical Officer, Orange Walk, in conjunction with his own duties.

(b) Legislation.

The following amendments to Public Health legislation were passed;

Ordinance No. 21—An Ordinance to amend the Public Health Ordinance—
Cap. 53, C. L. 1924.

Statutory Rule & Order No. 46—Governing the manufacture and sale of food.

Statutory Rule & Order No. 50—The Town of Belize. Declaration of populous building area, Order 1936.

Statutory Rule & Order No. 57—Building Bye-Laws.

The object of the amendment of the law governing the manufacture and sale of food was to give the Local Health Authority of Belize a greater scope in the control of the manufacture of food-stuffs and to empower medical examination of handlers and vendors of such food-stuffs.

The object of the declaration of populous building area was to empower the Local Authority of Belize to enforce the building of latrines and water closets on each premises.

The other legislations were all minor changes in existing laws.

(c) Financial.

In this section the figures all refer to the year ending 31st December, 1936.

Medical Department.

Receipts, Hospital and Asylum Fees	\$5,165.45
Expenditure, Personal Emoluments	\$45,095.65
Other Charges	43,814.62
	\$88,910.27

The Institutions in respect of which the expenditure was incurred are as follows:—

Institution and average daily number of inmates.

Belize Hospital	55.00
Poor House	46.38
Lunatic Asylum	56.62

District Hospitals.

Corozal	8.60
Orange Walk	5.13
Stann Creek	12.92
Toledo	8.90
Cayo	8.11

The expenditure for dieting is shown in the following table:—

	Total amount	Av. daily number	Cost per head per diem
Belize Hospital	\$4,248.86	55.00	.19
Lunatic Asylum and Poor Houses	7,599.90	103.00	.19
Corozal Hospital	725.29	8.60	.23
Orange Walk Hospital	452.57	5.13	.25
Stann Creek Hospital	1,223.89	12.92	.26
Toledo Hospital	750.93	8.90	.26
Cayo Hospital	763.79	8.11	.26

II. PUBLIC HEALTH.

(a) General Remarks.

There has been a small but definite improvement in the health of the colony possibly due to an improvement in the economic circumstances of the Colony.

The diseases which offer the greatest problems to the Medical Department are, malaria, diseases the result of mal-nutrition, venereal diseases and pulmonary tuberculosis.

Malaria—endemic—it is safe to assume that almost every single inhabitant has been infected or will be infected. The loss of the feeling of abounding health is not appreciated since few have experienced it—but the economic loss is potent and serious.

Nutrition. During the year, there has been a slight improvement in conditions directly due to imbalance of nutrition and under-nutrition, this being presumably a result of the turn of the economic tide—but not the most sanguine observer will prophesy that this tide will ever again ever be such that it could be "taken at the flood."

Intestinal parasites, especially in the regions outside of Belize, are a potent source of ill health.

These three—malaria, mal-nutrition and intestinal parasites, all preventible to a greater or less extent, are the persistent, unrelenting evils which sap the vitality of a population not intrinsically of feeble and degenerate stock.

Charitable organizations and Government Relief Funds contributed to the relief of distress among the people.

The Senior Medical Officer made tours to the various districts during the year.

(1) General Diseases.

Nephritis. The increasing incidence of a peculiarly intractable nephritis noted last year has again been encountered this year.

Cancer was responsible for 19 deaths or 3.6% of the total certified deaths as against 21 deaths in 1935.

Diabetes was responsible for nine deaths.

Government Officials. Figures showing invaliding, and death rates of European and Native Officials are not available as these are attended by Private Medical Practitioners.

Medical and Sanitary Reports from Districts. These are appended.

(2) Communicable Diseases.

(a) Mosquito or Insect-borne.

Malaria.—The deaths from this disease during the past five years are as follows:—

1932—69 deaths or 15.5% of total certified deaths.
1933—42 deaths or 9.3% of total certified deaths.
1934—43 deaths or 10.8% of total certified deaths.
1935—41 deaths or 6.9% of total certified deaths.
1936—91 deaths or 0.1% of living population.

The number of cases of Malaria treated in the public hospitals of the colony during the past five years are as follows:—

	1932	1933	1934	1935	1936
Belize	197	296	150	193	289
Corozal	55	76	75	68	138
Stann Creek	112	115	137	111	165
Orange Walk	40	39	42	49	88
Cayo	37	113	70	74	59
Toledo	33	38	102	94	108
Total for Colony	474	587	576	589	847
Percentage of Total Hospital cases	19.5	25.42	22.41	20.3	21.5

The type of parasite most commonly encountered is the sub-tertian, or aestivo-autumnal.

The vector or vectors of malaria, their habitat and habits are unknown in British Honduras but *Anopheles Albimanus* is from its geographical distributions thought to be the principal vector.

Black-water Fever.—Nine cases were treated in the hospitals. One with one death in Belize, three with one death in Corozal, three with one death in Stann Creek and two in El Cayo.

Yellow Fever.—The last recorded case was in 1921. The increase in the index of domestic mosquitoes in Belize since 1921 when the Rockefeller Sanitary Officials cleared the town, is to say the least of it alarming, and indicates the lack of interest in vital sanitary matters among the people of Belize.

One hundred bloods were sent to the Rockefeller Institute in New York for investigation for the presence of protection against Yellow Fever virus. Fifty were from the town of Belize, 25 being adults and 25 children and the same number and divisions were from the town of Stann Creek. In no case was blood taken from any adult or child who had been outside the colony. Several of the bloods of the adults both from Belize and Stann Creek showed the presence of protective anti-bodies against the yellow fever virus, but as the last recorded epidemic was in 1921, this causes no surprise or alarm.

In not one of the 25 bloods taken from the children under 15 years of age in Stann Creek, *i.e.* children born after the year 1921 was there evidence of any protective anti-body. In the bloods of the children taken from Belize however, there was one blood which showed protective anti-bodies—that from a girl, aged 14 years, who had never even left the city for any other part of the colony in all her life. This is a peculiarly disturbing observation. It is perhaps too slender an evidence on which to base the theory that there is a dormant type of yellow fever in Belize analogous to the dormant type of yellow fever in West Africa, but it is a matter important enough to demand an imperative decision one way or another.

Enteric Fever.—One case was notified.

Dysentery.—Both bacillary and amoebic types occur, and the latter probably predominates.

Eighty-six cases were treated in the various hospitals during the year with 7 deaths. There were 34 uncertified deaths in which the cause is stated to have been "Dysentery, Diarrhoea and Bowels." Many of these are probably cases of dysentery.

Tuberculosis.—Certified deaths from this disease are as follows:—

1932—43 deaths or 9.6% of total certified.
1933—50 deaths or 11.1% of total certified.
1934—51 deaths or 12.9% of total certified.
1935—41 deaths or 6.9% of total certified.
1936—48 deaths or 0.08% of living population.

There were also during the year 104 uncertified deaths in which the cause is stated to have been "Consumption," "Cough," or "Cold."

There were 55 cases of tuberculosis treated in the various hospitals in the colony during the year as against 63 in 1935 and 50 in 1934.

During the year 13 cases of tuberculosis were notified as against 13 last year.

Tuberculosis is prevalent, but accurate statistics are not available—it being the astonishing attitude of the people that tuberculosis has such a social stigma that patients do not seek treatment till the disease is hopelessly advanced.

Venereal Diseases—are extremely prevalent—but cases are never cured only relieved, since the patient as soon as acute symptoms are relieved discontinues treatment until his next bout of unhappiness. Late lesions of vascular syphilis are common, of nerve syphilis, very rare.

There is a male Venereal Ward in the Belize Hospital which is always full—but no female Venereal Ward. The female infective and untreated population is the great reservoir of these diseases. The weekly Venereal Disease Clinic for out-patients established last year, had to cease work owing to lack of drugs in the month of November. Extra funds have been voted for this purpose for the coming year.

Small Pox.—There were cases of 8 Variola Minor (Alastrim). The cases were distributed as follows :—Corozal 2, Orange Walk 4, Belize 2.

The Medical Officers vaccinated all contacts. The last case reported was in May. There is good reason to believe that the original infective case came from Quintana Roo, Mexico. There is a frontier of several score miles along which, owing to financial stringency, it is impossible to put a sanitary cordon.

The total number of successful vaccinations under the age of five performed during the year is as follows :—

	<i>District</i>	<i>Total</i>
Belize	423
Corozal	105
Orange Walk	178
Stann Creek	81
Toledo	47
Cayo	23
	Total for Colony	857

The figures for the past four years are :—

1932	.. .. .	1,056
1933	.. .. .	1,262
1934	.. .. .	1,893
1935	.. .. .	1,101

Influenza and Whooping-cough.—These were prevalent in the colony during the year, and contributed largely to the death rate. There was a serious outbreak of whooping-cough in the Orange Walk District. See Medical Officer's report from that district.

Skin Diseases.—Scabies, ringworm, &c., are very prevalent. The rich and varied assortment of mycological infections of the skin have not so far been investigated.

(c) **Helminthic Diseases.**

Ankylostomiasis.—Is prevalent in all districts. Other helminthic diseases are also common.

Morbidity.—The accompanying table shows the number of deaths from all causes occurring in the various districts of the Colony during the four quarters of the year as compared with the previous year :—

Vital Statistics.

The population of the Colony at the end of the year was estimated to be 56,071 as detailed in Table 2.

The average Birth Rate of the Colony exceeds the Death Rate by 11.1 per thousand. The Birth Rate is highest in Toledo District and lowest in Orange Walk. The Death Rate is highest in Orange Walk and lowest in Stann Creek.

Registration of Births and Deaths is compulsory. There is no registration of still-births.

Infantile Mortality.

Figures dealing with Infantile Mortality are shown in Table 3.

The Infantile Mortality Rate for the Colony is 152.7 as against 170.10 last year. It is highest in Orange Walk and lowest in Stann Creek. The British Honduras Infant Welfare League which was inaugurated in 1928 in Belize has continued to do work of the utmost importance. There were 6,398 attendances at the Clinic during the year, this being an increase of 591 over the previous year, the average attendance at each clinic being 133.

In four districts, an Infant Welfare Clinic has been started, the Medical Officer in each district being the technical advisor, but the work is done, or it is hoped that it will be done, by voluntary helpers.

III. SANITATION AND HYGIENE.

ADMINISTRATIVE.

There is a Central Board of Health for the entire Colony consisting of seven members. The Senior Medical Officer is Chairman of this Board and Medical Officer of Health for the Colony.

The Colony is divided into six districts, each with a Local Authority. The Local Authority for the town of Belize is the Town Board of Belize.

In each of the Districts, the Medical Officer is the District Medical Officer of Health.

(1) PREVENTIVE MEASURES.

Yellow Fever.—Owing to the amount of work thrown on the Inspectors, by matters relating to the new drains and filling of lots, and also by changes in the cadre of the inspectors, it has not been possible to do the regular weekly inspection of water receptacles. Further, the abnormal wet season in the latter four months of the year completely disrupted the anti-malarial program, and the financial stringency prevented a campaign during the few dry spells. There is therefore an increase in the number of mosquitoes and what above all gives rise to grave anxiety is the large number of *aedes egypti* (the yellow-fever mosquito) seen.

Arrivals in the Colony from Guatemala, Mexico and Spanish Honduras are all subjected to medical surveillance on landing, but owing to the length of our coast line and boundaries, it is safe to assume that evasions frequently occur; and therein lies a serious potential source of infectious diseases.

Screening of water receptacles is not universally practiced as a preventive measure—while it is the most effective, it is the most expensive. The use of larvivorous fish is by far the most commonly used and cheapest anti-stegomyia measure. Oiling is a measure which is also frequently used.

Crab Destruction.—The destruction of crabs by means of Cyanogas was continued during the year. The results have been satisfactory. Crabs are temporarily decreased in number and so are also crab holes, sheltering and breeding places for mosquitoes and sandflies. It is unfortunate that the vote under this Subhead is so small.

Malaria.—Preventive measures are inadequate on account of lack of funds. All pools of stagnant water within the Town of Belize are periodically oiled.

Dysentery.—Faulty methods of disposal of excreta are mainly responsible for the presence of this disease, which is particularly prevalent in the out-lying districts. By education and example, much can be done to make the country villagers latrine-minded.

Table showing number of Deaths from all causes occurring in various Districts during four quarters of the Year as compared with previous Year.

Districts	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		Total	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
Belize ..	98	98	93	95	90	96	128	91	409	380
Corozal ..	43	72	52	60	62	70	86	43	243	245
Orange Walk	28	54	44	68	44	52	64	33	180	207
Stann Creek ..	47	30	24	30	19	15	24	27	114	102
Toledo ..	45	34	58	50	99	38	75	45	277	167
Cayo... ..	24	60	30	37	74	32	63	26	154	155
Total ..	285	348	301	340	351	303	440	265	1,377	1,256

Of the total number of deaths, 41.0% were certified by a Medical Practitioner as against 43.06% in 1935.

Tuberculosis.—When a person who has been notified to be suffering from this disease dies, the room is disinfected by the Sanitary Inspector.

Until such times the Local Authority is in a position to deal effectively with delapidated houses, and over-crowding this disease will increase. The enforcement of building bye-laws, and the filling of swamp lots will do much to help in the campaign against this disease.

Accommodation has been provided for 12 destitute sufferers from this disease at the Belize Poor House. The general public is well informed of the infectious nature of the disease.

Skin Diseases.—They are very prevalent in Belize. Scabies and Ringworm are rampant especially in the dry season. The Local Authority has erected four bath houses over the sea, two for males and two for females. If the people avail themselves sufficiently of these facilities, this should prove a successful measure.

Venereal Diseases.—A clinic has been established at Belize Hospital for the treatment of these diseases.

(2) GENERAL MEASURES.

(a) Sewage Disposal.

(a) **The Town of Belize.**—The majority of householders in Belize empty their utensils into the river and the canals running through the town, or into the sea.

Individual septic tanks are becoming popular among the better class residents, but there are too many houses where owing to lack of water, funds, or of space, water closets are an impossibility. This being so, the emptying of utensils into the canals, while it may be unsightly and disagreeable, is far more sanitary than storage in pails or pits within the house or in close proximity to other houses.

The Public Latrines are all built over the sea or rivers or canals, and they are maintained in a sanitary condition. Modern flush urinals and water closets have been installed at the public market.

(b) **In other parts of the Colony.**—In Stann Creek Town, conditions resemble those prevailing in Belize. In other districts, pit latrines are in use. In the scattered villages in the country districts, the most primitive methods exist, the surface of the ground being almost entirely used.

(b) Removal and Disposal of Refuse.

The scavenging of the town of Belize and other towns in the Colony is performed by the Local Authority and under the direction of the Senior Sanitary Inspector.

The Bye-laws require that the receptacle used by householders should be covered, but are very often not covered, causing a nuisance and plague of flies. The Bye-laws requiring daily sweepings and cleaning of yards by householders has not been repealed but a written notice, giving time for the cleaning up and sweeping is now given. This notice is usually complied with.

The town rubbish is "dumped" within the town limits, and is used to fill swamp areas.

(c) Water Supply.

Belize.—Rain water stored in vats, tanks and other receptacles on premises of householders is the source of drinking water. Ordinance No. 16 of 1927 providing for a proper water supply for every house has not been enforced.

There are many wells but these are not used for the supply of water for drinking purposes.

During the year the water supply has been augmented by the construction of 6 tanks of a total capacity of 2,372,330 Imperial gallons. Pipes lead the

water to streets hydrants at convenient locations in the neighbourhood which each tank serves.

This additional water supply added to the previously existing household vats is believed to render the town free of the fear of water shortage during the dry season.

In the out-districts the water supply is similar to Belize. In Stann Creek, river water is also used.

(d) Drainage.

The construction of street-drains in Belize was started and pushed rapidly until an abnormally heavy rainy season in the latter part of the year brought work to a standstill. Already a great improvement can be observed but as some of the drains had to be above the level of the lots, many of the latter are flooded and remain so for in some cases ten days after the cessation of the rains. This is a source of grave anxiety from an anti-malarial point of view. The only solution seems to be the expensive one of proper filling and grading of the lots.

In other parts of the Colony, conditions are on the whole better than in Belize because there is a natural fall.

(e) Filling in of Lots.

Belize.—Lots on which houses are already built are being continually filled in by their owners to render them less swampy. Much still remains to be done in the way of filling. Very many lots are continually under water in the rainy season due to absence of proper drainage.

(f) Clearing of Bush.

The house lots are kept comparatively free from bush, except unoccupied lots.

(3) SCHOOL HYGIENE.

Education is denominational. Systematic inspection of the schools has begun in Belize late in the year and for this reason no statistics of any value at the present time are available.

(4) HOUSING.

In Belize the population live in wooden houses with galvanized iron roofs, standing usually on wooden piles about seven feet above the level of the ground which is often low-lying, swampy and flooded. The work of the Town Board and the efforts of private individuals are gradually showing a marked improvement in this connexion; more especially is this so in the northern area—Free-town Area—where extensive filling-in has been done in connexion with the reclamation scheme, jointly financed by the Government and the Town Board. It is unusual to find the ground floor used as a sleeping-room. It is generally used as a store-room, washing-room, kitchen or garage.

There were no building regulations before the year 1928. In consequence, householders erected houses how, where and in whatever manner they liked. Often, therefore, collections of small tenement houses are found packed together without order in the back-yards of houses of a better class and decent appearance facing the street. Building regulations have now been passed designed to prevent this and to provide that there should be sufficient ventilation in, and free space around each house. These regulations, however, apply only to new erections.

IV. PORT HEALTH WORK AND ADMINISTRATION.

During the year quarantine regulations were in force against the Central American Republics, Mexico and Brazil.

V. SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR 1936, TAKEN AT BELIZE, BRITISH HONDURAS.

MONTH	BAROMETER		THERMOMETERS (Fahrenheit)		RELATIVE HUMIDITY	WIND Maximum Velocity and Direction	RAINFALL Inches
	Highest	Lowest	Highest	Lowest			
1934							
January	30.060	29.810	85.0	52.0	92	36—E. & S.E.	4.59
February	30.148	29.750	88.0	65.0	95	36—S.E.	3.85
March	30.040	29.820	87.0	60.0	92	33—S.E.	1.47
April	30.080	29.780	89.0	65.0	94	36—S.E.	4.30
May	30.030	29.750	91.0	66.0	93	28—S.E.	10.14
June	29.980	29.649	91.0	67.0	94	36—S.E.	15.30
July	29.970	29.790	88.0	66.0	95	42—S.E.	11.98
August	29.980	29.768	90.0	67.0	94	48—E.	6.56
September	29.930	29.770	90.0	66.0	94	30—S.E.	12.83
October	29.980	29.730	88.0	66.5	95	30—E.	14.37
November	30.240	29.800	87.0	61.0	96	36—N.W.	23.90
December	30.210	29.880	84.0	53.0	95	26—N.W.	2.51
Total Sums	360.648	357.297	1,05.08	754.0	1129	—	111.80
Mean	30.054	29.774	88.1	62.9	94	—	—

REMARKS :—

Observation are taken at 6a.m. only from January to May, and for the month of December, and at 6a.m. and 6p.m. from June to November. Meridian of Longitude adopted for calculation of time adopted as standard in the Colony is 90° W.

Latitude of the Station :—80° 11' W. and Latitude 17° 31' N. Barometer Cistern 17 feet above Mean Sea Level. Anemometer above ground 45.7 feet. Rain gauge top above ground 3 feet. Thermometers above ground 5.6 feet.

Remarks to Table V.

Observations are taken at 6 a.m. only from January to May and the month of December, and at 6 a.m. and 6 p.m. from June to November.

Meridian of Longitude adopted for calculation of time adopted as standard in the Colony 90°W.

Hours slow of Greewich Mean time—6 hours.

Longitude of the station—88° 11'W. Latitude of the station 17° 31'N.

Barometer cistern 17 ft. above mean sea level.

Anemometer 45.7 ft. above ground.

Raingage top 3 ft. above ground.

Thermometers 5.6 ft. above ground.

All vessels arriving in the port of Belize are boarded by the Medical Officer, Belize.

During the year, no quarantinable disease occurred in the port.

VI. HOSPITALS AND DISPENSARIES.

In the Belize Hospital, in addition to the cases detailed in the classified returns appended to this report, there were 17,131 attendances at the Out-patient Department during the year. There were 131 major and 172 minor operations. In 154 cases, general anaesthesia, and in 57 cases, spinal anesathesia was used.

One thousand, one hundred and fifty-eight mothers and expectant mothers attended as out-door patients in connexion with the Maternity Ward.

There is a dental clinic held twice a week at which patients in all the Institutions are attended to, and in addition, there were 727 non-paying outdoor cases.

A modern X-Ray plant was installed in the Belize Hospital during the year.

A Laboratory for bacteriological and biochemical diagnostic procedures was established during the year. A dispenser was sent to Jamaica to be trained as laboratory technician.

Owing to shortage of medical staff, full use has not yet been made of the facilities the laboratory offers.

A new operating table for the Belize Hospital has replaced one which had been in use for 29 years.

There is a persistent and increasing demand for private ward accommodation in the Belize Hospital which cannot be met as the block of private wards destroyed in the Hurricane of 1931 has not been replaced.

There are six hospitals in the Colony—one for each district. The hospital in the capital town, Belize, contains sixty-two beds and twelve cots. The number of beds in the other hospitals ranges from nineteen to six. In these hospitals treatment is afforded fro medical, surgical and obstetrical cases. The poor and indigent receive free treatment in all the hospitals. For other classes the fees range from 25 cents to \$3.00 a day for each person. Cases of tuberculosis are ordinarily not received for treatment in the hospitals. Accommodation for twelve destitute sufferers from this disease is provided at the Belize Poor House.

Each district and each hospital of the colony is in the charge of a Medical Officer under a Senior Medical Officer who is ex-official Mecial Officer of Health for the entire colony. In the Belize Hospital, there is one English-trained Matron controlling a subordinate native nursing staff. At each district hospital, there is a competent native nursing staff, together with a competent native nurse who has received a course of training at the Belize Hospital extending over a period of three years.

Repairs, alterations and painting have been carried out at El Cayo Hospital.

VII. PRISONS AND LUNATIC ASYLUMS.

The Prison is a well-managed institution ; the grounds and individual cells and out-buildings have been maintained in an excellent condition.

The diet is plentiful and well cooked.

The average daily number of prisoners during the year was 50.54 as compared with 52.00 in 1935.

The Lunatic Asylum :—

Number of patients remaining at end of 1935	56
Admissions	19
Deaths	8
Discharges	5
Number of patients remaining at end of 1936	62

The buildings and grounds are maintained in a sanitary condition and the patients are well looked after. Opportunities for recreation and amusement are however very limited.

TABLE I. A.—MEDICAL STAFF.

Senior Medical Officer	J. Innes Moir, M.B., Ch.B., D.P.H. (Aberd.)
Medical Officer, Belize—	V. F. Anderson, M.D., D.P.H. (Lond.) D.T.M. (Liverpool)
<i>Absence on leave—1st to 27th January, 1936.</i>	
Medical Officer, Corozal—	W. A. S. George, L.R.C.P. & S. (Edin.) L.R.F.P. & S. (Glasgow)
<i>Absence on leave—3rd June to 30th November.</i>	
Medical Officer, Orange Walk—	D. W. A. Degazon, M.B., B.Ch. M.R.C.S., L.R.C.P. (London)
Medical Officer, Stann Creek—	L. M. Ram, M.D., B.S. (Punjab) M.R.C.P. (Edin.), D.P.H. (London)
<i>REMARKS :—C. S. Harwood, M.D. London, M.R.C.S. Eng. L.R.C.P. London, D.P.H., Private Practitioner. Acted from 1st to 31st January.</i>	
Medical Officer, Toledo—	E. C. Savona, M.D. Malta
Medical Officer, Cayo—	T. Patterson, M.B., Ch. B. (Oxon.)

TABLE I. B.—EUROPEAN NURSING STAFF.

Matron, Public Hospital, Belize—	Miss L. M. Roberts, S.R.N., M.B.E.
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TABLE I. C.—NATIVE MEDICAL SUBORDINATE STAFF.

Medical Office.

First Class Clerk	J. F. Romero
<i>Absence on leave—20th April to 19th July, 1936.</i>	
Second Class Clerk	E. Trapp
Typist	W. Ysaguirre
Messenger	W. McField

(2) *Public Hospital, Belize.*

Dispenser and Storekeeper	P. A. Hyde
Laboratory Assistant and Dresser	H. L. Bennett
Absence on study leave—22nd April to 2nd November.	
Staff Nurse	A. Jordon
Absence on leave—12.6.36-21.8.36.	
Staff Nurse	B. McNeil
Absence on leave—24.4.36-23.5.36.	
Staff Nurse	C. Pilgrim
Absence on leave—1.6.36-31.7.36	
Remarks :—Acting Nurse-in-Charge, Punta Gorda Hospital 1.8.36 31.12.36.	
Staff Nurse	E. Felix
Remarks :—Acting Nurse-in-Charge, Punta Gorda Hospital 1.1.36-31.7.36.	
2 Male Attendants	H. Franklin S. Ricketts
2 Ware Servants	M. Barnett M. Belisle
2 Ward Maids	R. Johnson D. Garnett
1 Servant, Nurses Quarters	M. Romero

(3) *Lunatic Asylum, Belize.*

Head Attendant	F. Clarke
Attendant	S. Adolphus
.. .. .	V. Guild
.. .. .	R. King
.. .. .	C. Crawford
.. .. .	H. Buckley
Female Attendant	M. Jackson
.. .. .	D. Jordon
.. .. .	(Retired 30.9.36.)
.. .. .	L. Burrows
.. .. .	(Retired 30.9.36.)
.. .. .	G. Aikman
.. .. .	A. Smith
.. .. .	E. Usher

(4) *Poor Houses, Belize.*

Attendant	E. Sampson
Dismissed on 12.8.36.	
Attendant	R. Andrews
.. .. .	E. Reyes

(5) *District Public Hospitals.*

(a) Corozal—Head Nurse	L. Arnold
1 Probationer, 1 Ward Maid	
(b) Orange Walk—Head Nurse	A. Card
Absence on leave—10.5.36-9.8.36	
1 Ward Maid	
(c) Stann Creek—Head Nurse	G. Humphrey
2 Ward Maids	
(d) Toledo—Head Nurse	B. McNeil
Doing duty in Belize	
1 Ward Maid	
(e) Cayo—Head Nurse	E. Haylock
1 Probationer, 1 Ward Maid	

TABLE 2.
COMPARATIVE STATEMENT OF POPULATION BY DISTRICTS, 1933-1936 WITH BIRTH AND DEATH RATE PER THOUSAND.

DISTRICT	Population					Births					Deaths				
	1933	1934	1935	1936	1936	1933	1934	1935	1936	1936	1933	1934	1935	1936	
Belize ..	20,469	20,930	21,309	21,683	21,683	738	743	788	744	744	359	282	409	326	
Corozal ..	7,945	8,017	8,095	8,119	8,119	309	261	321	279	279	204	189	243	211	
Orange Walk ..	6,413	6,457	6,487	6,447	6,447	210	200	210	195	195	157	156	180	173	
Stann Creek ..	5,959	6,062	6,151	6,250	6,250	185	206	203	194	194	111	103	114	109	
Toledo ..	6,058	6,228	6,223	6,308	6,308	245	301	272	231	231	152	131	277	163	
Cayo ..	6,926	7,050	7,183	7,264	7,264	255	234	287	236	236	134	110	154	91	
Total ..	53,770	54,754	55,448	56,071	56,071	1,942	1,945	2,081	1,879	1,879	1,117	971	1,377	1,256	

DISTRICT	Birth-rate per thousand					Death-rate per thousand				
	1933	1934	1935	1936	1936	1933	1934	1935	1936	1936
Belize ..	37.0	35.4	36.9	34.8	34.8	17.5	13.4	19.1	17.5	17.5
Corozal ..	38.0	32.5	39.6	33.1	33.1	25.6	23.5	30.0	30.2	30.2
Orange Walk ..	32.7	30.9	32.3	25.9	25.9	24.4	24.1	27.7	32.1	32.1
Stann Creek ..	31.0	33.9	33.0	32.4	32.4	18.6	16.9	18.5	16.3	16.3
Toledo ..	40.4	48.3	43.7	39.9	39.9	25.0	21.0	44.5	26.5	26.5
Cayo ..	36.8	33.1	39.9	32.4	32.4	19.3	15.6	21.4	21.3	21.3
Average ..	36.1	35.5	37.5	33.5	33.5	20.8	19.2	24.8	20.2	20.2

TABLE 3.—INFANTILE MORTALITY TABLE.

DISTRICT	<i>Number of children born alive and dying within one year</i>				<i>Death-rate per thousand</i>			
	1933	1934	1935	1936	1933	1934	1935	1936
Belize ..	62	54	93	78	84.1	72.6	118.0	103.4
Corozal ..	50	40	76	64	161.8	153.2	236.7	237.9
Orange Walk ..	41	29	52	47	195.2	130.0	247.6	281.4
Stann Creek ..	23	24	24	19	124.3	126.2	108.3	90.0
Toledo ..	40	34	64	30	163.2	112.9	235.3	119.0
Cayo ..	26	20	45	49	101.9	85.4	156.7	207.6
Total ..	242	201	354	287	124.6	102.8	170.1	152.7

TABLE 4.—SANTITARY STAFF.

OFFICE	NAME	ABSENCE ON LEAVE	REMARKS
Clerk, Central Board of Health	Miss W. Ysaquirre		

COROZAL DISTRICT, MEDICAL AND SANITARY REPORT.

Dr. W. A. S. George, Medical Officer.

Vital Statistics.

Births	..	..	..	..	..	..	269
Deaths	..	..	..	..	..	..	245

Vaccinations.—One hundred and five successful vaccinations were performed during the year. These were primary vaccinations. In addition to these, 186 re-vaccinations were also done.

Rainfall 93.23 inches.

Quarantine.—Eight thousand, four hundred and ninety-one persons reported for quarantine.

*Public Health.**Communicable Diseases* —

Malaria	..	..	..	..	..	..	693
Influenza	..	..	..	..	..	..	219
Dysentery	..	..	..	..	..	..	61
Tuberculosis	..	..	..	..	..	..	22
Enteric Group	..	..	..	..	..	..	2
Alastrim	..	..	..	..	..	..	4

General European population. Fairly good. Occasional attacks of malaria.

European officers. Health good.

Native Officers. Fairly good, except for occasional attacks of malatia.

Hygiene and Sanitation.

Preventive Measures.

Mosquito and insect borne Diseases :—

Malaria.—The total treatment shows an increase due to the abnormal rains experienced from June onwards leading to a larger area of swamp and inundated areas and a consequent increase in mosquito production. The Hondo overflowed its banks and reached as far as Pembroke Hall Creek.

All water receptacles are wired, fished or oiled. Weeds and bush cut are removed periodically. Low-lying areas in the town drained and stagnant pools oiled.

Trypanosomiasis, Yellow Fever and Filariasis.—None.

Epidemic Diseases, Small Pox, Alastrim.—Four cases discovered and segregated. Contacts vaccinated.

The town and district were visited and inspected by the Medical Officer and Sanitary Inspector.

General Measures of Sanitation.

Sewage Disposal.—There are 17 water closets, 15 sea closets, 447 pit latrines and 7 closets with the pail system.

Scavenging.—A motor truck collects the town rubbish and carries it to two dumps outside the town which are fired periodically.

Drainage.—Surface drains—Seven, all leading to the sea. On account of the extremely heavy rainfall, a number of lots at the back of the town were flooded and many drains and gutters were dug to help draw off water from the flooded areas.

Water Supply.—Rain water contained in vats chiefly in town. In the out villages there are a few vats but most people use drums or barrels for rain water, and others use well water.

The District Board has a few vats which are totally inadequate when the dry weather is prolonged. I strongly recommend that two large iron tanks as erected in Belize should be erected in Corozal, at the earliest opportunity for the storage of rain water.

Clearance of Bush and Undergrowth.—In the town, the District Board has this cleared periodically. In the out villages, the Police and Sanitary Inspector endeavour to get the inhabitants to keep their villages as free from bush and undergrowth as possible. Great difficulty however is being experienced in some villages in this respect. The old system of "Finni" appears to be breaking down.

Market.—This was kept in a clean state and duly visited by the Sanitary Staff. A new and larger market will soon be required.

Slaughter-house.—This was kept in a clean state.

Prison.

The Prison was kept in a clean state and was periodically inspected by the Medical Officer and Sanitary Inspector.

The bath-rooms would do well with a coat of paint.

The old pit latrine was closed down and a new one installed on the north-western boundary.

The health of the prisoners was fairly good.

Hospital.

	Male	Female	Private	Total
Number of beds ..	11	6	3	20
Total number of patients	321
Daily average number of patients	8.6
Total deaths..	24
Percentage of deaths	7.4
Major operations	8
Minor operations	81

Sufficiency of Accommodation.—The female ward could take another bed. Ordinarily the accommodation is sufficient but there are times when we are rushed for beds and have to use cots as a temporary measure.

Defects.—General repairs and wiring are needed and painting if possible.

The hospital is still using kerosene lamps. Some attempt should be made to do away with this antiquated system of lighting and batteries supplied for the 32 volt plant in the hospital which could then be used and electric light obtained for the hospital.

Improvements.—Each of the private wards should have their own Water-closets.

Changes in Staff.—Dr. George was granted vacation leave from June to December. Dr. Degazon from Orange Walk acted for the period, paying weekly visits to Orange Walk.

General Remarks.—The staff worked uniformly well. The Hospital was inspected by His Excellency the Governor, the Senior Medical Officer and the Auditor.

Something should be done to prevent the promiscuous sale and use of the oil of chenopodium and preparations containing it. Numbers of cases of swollen children with all the symptoms of an acute nephritis will be found on investigation to be due to an overdose of chenopodium. In some cases a child of one or two years has been given a tablespoonful for a dose for worms.

An epidemic of whooping cough and measles swept through the district during the early part of the year accounting for a number of deaths of children under one year. During the latter half of the year the increase in malaria was very noticeable. The rainfall during that period was double that of former years and accounted for flooding of large areas for quite a while, leading to increase in mosquito production and an increase in Malaria. There was a definite decrease in these conditions towards the end of the year and things assumed a more normal aspect, though Influenza of rather a virulent type involving the respiratory passages particularly made its advent during December.

ORANGE WALK DISTRICT, MEDICAL AND SANITARY REPORT.

Dr. D. W. Degazon, Medical Officer.

Administration.

The Staff consists of a—

Medical Officer

Nurse-in-Charge

Ward Maid

Messenger

Cook.

The Sanitary Inspector is employed by the District Board. At present his duties do not extend beyond the limits of the town.

During the outbreak of Influenza in June, the hospital nursing staff proved inadequate and extra assistance had to be obtained.

Hospital.—The accommodation consists of 11 beds—6 male, 4 female, and 1 private room.

	1935	1936
Total number of admissions	184	176
Deaths	21	17
Daily average	4.61	4.95

Several additions were made to the surgical equipment of the hospital including the donation by the Honourable R. S. Turton of a small operating table, Thomas' splints, Dare Haemoglobinometer, sigmoidoscope, cystoscope, and urethroscop.

The hospital still lacks much necessary equipment. Owing to the absence of road communication and the now infrequent mail opportunities to Belize considerable delay occurs in sending on cases, and in obtaining sera or special drugs for urgent cases of any comparatively uncommon disease. A large number of people are also reluctant or unable to afford the expense of proceeding to Belize for radiographic and laboratory investigations.

Public Health.

General Remarks.—There has been a considerable amount of illness throughout the district this year. During the early months Whooping Cough was still raging in the outlying villages. The course of the epidemic was attended with the highest mortality in the village of San Jose. In this small community of 30 families 45 deaths occurred chiefly among infants and children of school age. A combination of factors—increasing poverty with its sequel malnutrition, chronic malaria and ankylostomiasis had lowered the vitality of the people and rendered them highly susceptible to the graver complications of the disease. Before the wave of illness had subsided the inhabitants of the village were transferred from their ancestral home to a virgin strip of land on the outskirts of Orange Walk, and had to contend with the additional difficulties of making a home in new surroundings. A supply of quinine and cough mixture was made available for free distribution among them. The childish mentality and fatalistic attitude of most of the adults however, proved a great obstacle in the treatment of their children. Government provided temporary housing in Orange Walk during the transition period.

The villages of San Estevan, Guinea Grass, Yeo Creek, San Antonio, San Roman, San Lazaro, Trinidad, August Pine Ridge, San Felipe and the mahogany camps of Blue Creek, Sierra de Agua, and San Jose were all visited by the Medical Officer in the course of the year. There is a considerable amount of poverty and undernutrition in all these villages. As a result of the continued economic depression the dietary of the people has become more and more restricted, and now consists almost entirely of corn. Pork, poultry, and eggs, the only other foodstuffs locally produced are now more often bartered than consumed. The fall in the standard has been accompanied by a lowered resistance to disease.

Vital Statistics.

There were 167 births in the district and 209 deaths, 50 of which occurred in infants under the age of one year. As compared with last year, there has been an increase in the death rate, a fall in the birth rate, and an increase in the infantile mortality 12.5 per cent of the total number of deaths were certified by the Medical Officer.

Prevalent Diseases.—Malaria as usual has been responsible for the bulk of the ill-health in the district. Eighty-nine cases were treated in hospital with six deaths. There was an increase in the number of cases of cerebral and algid malaria. The unusually heavy rains this year have undoubtedly been responsible for increased breeding of mosquitoes.

Influenza.—There was a short wave of this disease in June. Eight cases of Influenza pneumonia occurred in the town, five of which succumbed.

Nutritional Macrocytic Anaemia.—This condition seems to be very prevalent, and is probably a manifestation of the increasing dietetic deficiencies. Nearly all the cases have occurred in women, either in pregnancy or as the sequel to an attack of malaria. A few haematological investigations have revealed in some cases haemoglobin values as low as 15 per cent (Dare), erythrocyte counts of under 500,000 and a megaloblastic reaction in blood films. Treatment with intramuscular liver extract and marmite has proved very successful but is expensive. The maintenance treatment of the disease with these preparations out of hospital is beyond the means of most of the patients. We have made the experiment of treating one case with a locally prepared extract of raw hog's stomach, which is cheap and easily obtained, with very encouraging results.

This condition would seem to be identical with the Tropical Megalocytic Anaemia of Indian women described by Wills and Metha in 1930.

Helminthiasis.—Ankylostomiasis, Ascariasis, and Oxyuriasis are common in children of school age. Stool examinations can only be carried out occasion-

ally on hospital and on a few outdoor patients. In the absence of accurate surveys it is difficult to say how much of the subnormal vitality of the village populations is attributable to hook-worm or to undernutrition.

Infectious Diseases.—There was an outbreak of Alastrim in the village of San Felipe in February. Seven cases occurred with one death. This was in a newly born infant whose mother was suffering from the disease at the time she went into labour. A fresh supply of potent lymph in capillary tubes was available and with the assistance of the police constable at August Pine Ridge, who is a public vaccinator, the epidemic was rapidly got under control.

Venereal Diseases are on the increase. An irrigator has been set up at the hospital and is constantly being used. Only palliative treatment can be undertaken with the limited supply of specific remedies available. In private few patients are able to afford a course of curative treatment.

Pulmonary Tuberculosis has been responsible for four deaths in the town this year.

Infantile Mortality.—The further increase in the infantile mortality this year can be accounted for by the ravages of the Whooping Cough epidemic among the debilitated children of San Jose. In the town of Orange Walk the health of the children generally has shown an improvement on last year.

An Infant Welfare Clinic has been started and has an average attendance of 40 per clinic.

Prison.

The health of the prisoners has been fairly good throughout the year; the only diseases being Malaria and mild attacks of Influenza.

Sanitation.

The whole town was inspected monthly by the Sanitary Inspector. Thirty-two notices were served on householders with defective vats and insanitary latrines, 26 complied.

A well-constructed concrete water-closet and septic tank were erected in the yard of the Police Station this year. This is the only advance toward better disposal of excreta to be recorded.

Toward the end of the year a number of larvivorous fish were caught and an attempt was made to acclimatise them in barrels. This method proved very laborious, the mortality among the fish being about 80 per cent. The oiling of larvae-containing vats has proved unsatisfactory; the use of fish is much more efficacious. A fish-tank is however essential for the efficient continuance of this method.

The insanitary wells in the Trial Farm Road area still remain one of the chief public health problems of the town. A scheme for the erection of a large properly constructed well in conjunction with a small reservoir to supply the needs of this area was rejected by the District Board owing to lack of funds.

TOLEDO DISTRICT, MEDICAL AND SANITARY REPORT.

Dr. E. C. Savona, Medical Officer.

Staff, Accommodation and Equipment.—This remains as last year;

Staff Nurse	I
Probationer	I
Junior Probationer	Vacant
Male Orderly and Messenger ..	I
Cook	I

This is insufficient for the needs of the hospital.

The average daily admission during the year has been around 8.9 and the number of beds in the hospital is 8 so that there is almost always one patient above the accommodation provided. There is plenty of space in the hospital and scope in the district for enlargement (Maternity, Infant Welfare, Venereal Disease, Hookworm Clinic &c.) and a laboratory and an office for the compilation of statistics if the district hospitals are going to follow on the lead in Belize. The equipment is far from satisfactory but suffices for the immediate needs and routine treatments.

Because of all this no scope is afforded whereby the more modern methods of practice can be initiated. Surgery in the district is for the same reason not possible.

Finance.—Two hundred and seven patients were treated in the hospital during 1936 at an average cost per head of twenty-four cents per day. Of these 131 (55) were admitted as IV class, 75 were of the pauper class and one as III class. The receipts amounted to \$343.19 and the outstanding debts at the end of the year stood at \$256.10 some which run back into 1933. There are many reasons for this, but as other public debts, the slowness in securing hearing in the summary courts, as well as the difficulty of following up on the judgment therein given, accounts in the main for the idea at large that any time is the time to pay one's indebtedness to Government. Until this is corrected there is small hope that this sum will vary very much.

Two thousand, five hundred and sixty-one patients received out-patient treatment free of charge. This amount is in excess of what should be the case and represents a sizeable amount of revenue were the provisions of M.P. 1971-33 enforcee—some \$600.00—if only the really indigent were excluded from this number.

Prevalent Diseases.—These remain the same, viz; Malaria, uncinariasis, tropical ulceration, venereal disease and tuberculosis. While no attempt is made to check the prevalence, I am of the opinion that ground is distinctly being lost with respect to Malaria and hookworm in that no more than a half-hearted attempt is being made by the Board to check mosquito population and the dissemination of infected material respectively.

As to malaria, there were 4 cases of the cerebral type during the year under review; the infectivity continues to be heightened or else the parasites in the preponderating number of cases have become quinine resistant so that the greatest difficulty has been experienced in cutting short the febrile manifestations. The relapse rate has also increased. Whether this can be put down to a dissemination of the use of Atebrin and Plasmoquine or the newer associated compound cannot be stated. There has been unfortunately a readiness to resort to oral therapeutics in preference to quinine. It has not been possible to discriminate with any amount of accuracy between subtertian and benign tertian infection. In cases treated at the hospital and in a few met with in private practice which clinically were of the subtertian variety, this inefficacy of treatment was very marked, cases taking as much as 75 grs. intramuscularly and the fever relapsing still after 36 grms. of Arsenobenzol and a course or two of Atebrin and Plasmoquine.

Ninety-eight cases of Malaria were treated at the hospital with 10 deaths. Of these 7 were of the algid variety with 4 deaths, and 7 showed a serious hepatitis with pronounced jaundice which culminated in death in one case.

Relief continues to be the end in treatment, any eradication of the disease beyond keeping the parasite rate beyond the clinical level being out of the question with a mosquito population breeding unchecked and human reservoirs all about.

Helminthiasis.—Every admission into the hospital received chenopodium and tetrachloride on admission as a routine. The admission of hookworm cases per se is not encouraged and those with late effects, as in reality are those that apply for treatment, only then as a work of mercy—very few of which to receive permanent benefit.

Some 200 cases have in all been treated. Periodic mass treatment have not been attempted since these are useless in the absence of supporting sanitary work. The type of people affected do not wear shoes and the advocacy of this measure would be a counsel of perfection since few of the patients seen wear shoes except when on holiday in the town. These do not as a rule seek treatment till the infection is well-nigh incurable and a condition of grave anaemia of the aplastic type sets in. It is interesting to note in the few cases that do make a recovery and throw off the infection, how immune they are to well-infected localities whereas others in the same locality seem unable to resist its first attack.

Tropical Ulceration.—Remains a problem. No known treatment seems to do any good. Disinfestation from worms, balanced diet and intravenous calcium do very little good, these ulcers healing if they do at all in their own good time.

Veneral Disease.—These are Syphilis, Gonorrhoea Chancroid and Climatic Bubo. These cases are seen late but the many protean sequelae of infection seen in Europe are not seen here. All three require a long treatment if patients are to be rendered non-infective. As this is seldom carried out in toto it is not surprising to see this disease spreading. All that applicants for treatment ask for is relief from pain and inconvenience. As to syphilis, intramuscular bismuth does very well but the condition of the mouth seldom permits it, and it has not the tonic effect that salvarsan gives to a system devitalized by chronic malaria in most instances. Gonorrhoea is on the increase and any measure of prolonged irrigation or douching is out of the question failing properly trained orderlies and nurses for this sole purpose. The treatment given accordingly is sketchy beyond requirements, and as with syphilis, unless the patient can provide his own medicines and is willing to submit to a long course of treatment, no cure is aimed at but only relief from the more pressing symptoms.

Climatic bubo is also very common. Treatment with antimony has not given any result in my hands. Protein shock treatment has not been attempted for shortage of space in hospital, where a period of supervision becomes imposed.

In all of these, therefore, the defect of treatment lies in ;

(a) Popular repugnance to any prolonged term of treatment and the vetoes that this implies.

(b) The non-provision of the newer drugs and the lack of means of effecting topical applications by a specialized staff.

(c) The lack of necessary space in the hospital for the hospitalization of the more deserving cases where such treatment would have to be supervised.

(d) Lack of the necessary knowledge about the nature of these diseases.

To cover all these points, a clinic becomes necessary in the absence of which there is very little scope to afford a permanent benefit on sufferers from these diseases. This would imply the services of a male and female attendant, proper diagnostic and treatment equipment and the provision of drugs in quantities much more generous than are available now. How all this can be made to come about, unless application be made to the Carnegie or Rockefeller Foundations, is difficult to make out ; there is scope for such a clinic is evinced by the gratifying response to the exigous amount of relief given during the year.

Tuberculosis.—There were 3 deaths in the district of the 4 cases treated. All these were of the pulmonary type. These cases all report when it is too late to do anything for them and in all cases were sent back home after application for admission to hospital was declined. The plight of these cases is deplorable in that their own kin fight shy of them and neglect them and it is not always possible to send them to the T. B. Ward in Belize.

Vaccination.—Forty-seven successful vaccinations were performed by the Medical Officer during the year—none by the Sanitary Inspector during the course of his surveillance of persons coming from overseas. A batch of 60 vaccinations done in Monkey River were unsuccessful. The lymph supplied

during the first part of the year was indifferent but latterly it was up to standard producing in fact rather alarming vesicles in some instances.

Quarantine.—No persons applied for the provisions of M.P. 714-24. This is partly due to the slackening up of the Sanitary Inspector's activities under the Local Board of Health with a cut salary and partly due to a less number of people being admitted at the port of Punta Gorda. There is a lot of irregular traffic between this territory and that of the neighbouring republics which has of necessity to go unchecked.

The number of persons who reported for Surveillance during the year was 946 and the number of boats given pratique to was 674. The United Fruit Company's boats called weekly from Belize and the "Heron" was inspected weekly on her way back north.

The Out-district.—The out-lying villages of San Antonio, Crique Sarco and Barranco and the town of Monkey River were periodically visited during the year. These visits with perhaps the exception of Monkey River, had perforce to be perfunctory routine inspections, there being no way (1) of transporting the paraphernalia requisite to dispensary treatment and (2) no persons to delegate routine treatments to. The shutting down of the unsatisfactory district dispensary run by the unremunerated School Teacher of San Antonio has led to a complete local cessation of routine relief to the Indians. The hope remains expressed that with the advent of the road to San Antonio it will be possible to establish a small clinic at which treatment could be given to the Indians weekly.

Maternity and Infant Welfare.—No provisions obtain at the hospital for conducting labours, normal or abnormal. The type of case admitted generally is too varied for the one nurse attending on all and the expectant or lying-in mother to be a safe measure. The hospital is simply not fitted for this work and it is taxing the willingness of the nurse in charge to take on this as a routine. That it is time that some such provisions were found is shown by the number of maternity cases applying for their labour to be conducted at the hospital who had to be declined. In the absence of this the mother has to rely on the expensive because unsafe help at the hands of local midwives. The all too common cases of puerperal fever, perineal tears, cyctocele, displaced uterus, incomplete abortions, retention of placenta and general ill-health after child-bearing is eloquent enough cry to have this pressing need seen to.

The native licensed midwives actually on the register at the present moment are 8 in number and as they are mostly 60 years old or over, there seems scope for insisting on trained midwives, if available, to practice in the near future. Apart from those midwives, there is a certain amount of irregular midwifery being practiced.

Infant Welfare.—Knowledge in Childcraft is sadly wanting. The most fantastic ideas obtain as to how to bring up children and this is, unfortunately not limited to the more ignorant mothers. Any proposition of instituting an Infant Clinic will have to be very carefully gone into if one were not to include instructions in old wives' practices.

General.—The health of the district gener'ly shows a slight bettering this year due no doubt to the better conditions of living. This is offset by the hyperendemic variation of malaria mentioned last year which now seems established—malarial relapses being frequent, common and obstinate to treatment. There were 107 deaths in the district of which only 31 were certified; 45 of the total number of deaths were returned as due to "fever" 41 to "fever and fits" and 7 to "diarrhoea" in adults. Taking these latter as manifestations of malaria this continues to be the greatest of killing diseases. There were three deaths due to tuberculosis.

Sanitation.

It is difficult not to repeat oneself under this head. It cannot be said that sanitation really exists nor will it so long as the Medical Officer's authority goes for nothing and the meagre funds allotted to it swamped by the age-long usages of the District Board, whose interest are civic, not medical. The dual control by the Chairman, District Board and the Medical Officer has long been shown

unworkable and leads to a state of affairs of insuperable difficulties. Sanitation as a health measure is a medical necessity and as such should be directed, controlled and effected by the Medical Department according to a plan consonant with the general medical policy over the whole Colony. This obtained in a small way in the old days of the Central Board of Health, but since this work has been delegated to the Local District Board, things have been allowed to let slide and the community suffers from the effects. Under the prevailing conditions, the Sanitary Inspector has no real master or else has two so-called, and he does not serve either; he realises he is paid by the Board and consequently his old allegiance to the Department is just about gone. There is, furthermore, no healthy observation of the Bye-laws and of the Health Law, Chapters 52, 53, 54, 55 and 56 by the district as a whole and in the face of this any activity in the way of a regimentation of sanitary ideas is just about useless effort.

The general points of sanitation are with regard to—

(1) *Disposal of Refuse*.—A scavenger-cart-dustman was provided for this early in the year and a set of rules drafted by which he could be controlled. The job is now carried out indifferently and instead of the rubbish being used to fill up low-lying lots, it is thrown around the Government pier giving an unsightly and inodorous dump.

(2) *Oiling of the Town* as a check to mosquito population. Still less of this is done than in former years. A relic of the Sanitary Inspector's duties under the Central Board of Health is the rendering of a monthly summary of mosquito inspection. This is done in a haphazard way and is of itself of doubtful accuracy. It is not used as an index for the necessity of oiling. Oiling carried out in this manner rightly earns the District Board's unwillingness to spend money in this item.

(3) *Latrines*.—These were painted during the year and white-washed once or twice. They are in indifferent repair and insufficient in number. More should be built and the building of the sea-latrines encouraged. Two applications for the erection of private latrines were entertained during the year, but all sorts of difficulties were put in the way of their construction and to date, none have been erected.

(4) *Slaughter-house*.—This fell down from disrepair a few months back and is being rebuilt, unfortunately with no improvement. The attached vat has long been allowed to decay and there is no provision for hot water. A sloping cement floor to the slaughter-house is a necessity. There is no lair for the animals, and hogs are slaughtered out in the open. The majority of the animals are slaughtered at the Settlement at no fixed or appropriate locality. Ante and post-mortem inspection is accordingly perfunctory for this reason. Bye-laws provide for the slaughter to take place at the slaughter-house, but this is not done and the only inspection that takes place is not that of the carcass, but of the prepared meat, which is pointless.

(5) *Drinking Water*.—With the rainfall in Punta Gord, around 200 inches, it is no less than a rebuke to the District Board for the people to run short of water during the few dry weeks of the year. While this can be put down to the people's own thriftlessness and supineness before a benevolent Government, I would not encourage the collection and storage of water in all manner of receptacles. Too much of this takes place at the present moment. There is altogether too much of mosquitoes breeding unchecked to go and add to this voluntarily.

The District Board put up a large vat at the south end of the town last year. The Government building on the north side provides a large enough catchment area for a similar vat to be erected at the Court-house, providing sufficient funds are found.

(6) *The Cemetery*.—The site for this is highly unsatisfactory, it being a water-logged locality during the major part of the year. A system of proper drainage was turned down by the District Board last year as being too costly, so mean-while resolution of corpses continues to be a very slow process indeed.

(7) *Rank Vegetation.*—This continues the major difficulty in the sanitation of the town. Apart from the unsightliness of the town, it offers an excuse for the people to dispose of their night-soil in unauthorised localities and confirms them in the easy logic that where Government does not deem it necessary to keep the town clean, it is not incumbent upon them to clean their own lots. This cleaning is done twice yearly at times regulated by the sufficiency of the funds on hand, which are not always ideal. Nor is this carried out as a whole task covering all the town at one time, but it is done piecemeal; as superintendence of this is faulty, a thorough job is commonly not made of it. No attempt is made to clean up the mess incidental to macheting of this grass and scrub and consequently is often difficult to say if this has been cut close enough.

The passing of Bye-laws to make persons responsible at least for the cleaning of the drains and streets immediately abutting on their lots would go along towards relieving the funds of the District Board in meeting this necessity. Remains then the necessity of having these Bye-laws enforced and the adherence to them of the people at large.

(8) *Bakeries.* There are three of them in town. None can be said to comply with the regulations in force and apart from medical examination of the bakers, nothing is done to enforce a hygienic product. There are no professional bakers, odd people baking bread at odd moments. The baking of bread and the slaughtering of cattle for meat should be restricted to one or two professionals in the trade, who, in compensation for the monopoly, should be made to adhere to strict regulations. It is only in this way that a certain amount of control can be effected.

STANN CREEK DISTRICT, MEDICAL AND SANITARY REPORT.

Dr. L. M. Ram, Medical Officer.

It is my sad duty to begin my first report of a district in this Colony by placing on record the untimely death during the year of a valued an esteemed professional colleague—the late Dr. C. S. Harwood—from whom I took charge on February 1st, 1936.

This district has an area of 840 square miles, with an estimated population of 5023 at the end of the year. The town of Stann Creek approximating 270 acres, has an estimated population of 3000. This estimate is based on intercensal increase closely tallied with the house to house enumeration done in October which revealed:—

Male adults	667
Male children	621
Female adults	1018
Female children	658
Total	2964

Of these, 218 were below the age of 5 years. The majority of the people are Caribs.

Stann Creek is a low-lying town, 3 feet above sea level. In addition to the swamps it is always flooded by the river during the rainy months. The average rainfall during the year has been 112.5 inches.

The Hospital. It contains 15 beds, accommodating 8 male and 7 female patients, the daily average being 13. There has been some strain on beds although no serious case has been refused admission. There is no private ward. The total number admitted during the year was 439.

	Males	Females
Admitted	248	191
Discharged	226	171
Died	16	14
Remaining	6	6

Of these 185 were class "4" bringing in \$465.25. Three hundred and twenty-eight dollars wer paid by the end of the year.

The principal diseases and causes of death are shown in the following table:—

Incidence of Diseases.

Malaria and Black-water	168
Skin, Cellular tissue etc.	65
Venereal	45
Respiratory	27
Genito-urinary	20
Puerperal	17
Dysentery	16
Digestive	15
Nervous	12
Helminthiasis	12
Other Infectious Diseases	11
Circulatory	9
Metabolic (Diabetes)	5
Tumours	4

Deaths.

Malaria and Black-water	14
Respiratory	4
Circulatory	4
Skin, Cellular tissue etc.	3
Digestive	2
Genito-urinary	1
Dysentery	1
Puerperal	1

There were three cases of Blackwater fever with one death.

The malaria is mostly of subtertian type and all its various manifestations are met with e.g. cerebral, algid, gastric, pulmonary, haemorrhagic, etc.

The death rate in hospital 6.8% of the total admissions. The out-patient attendances have been 3,926.

During the year the hospital compound has been filled up, the post-mortem table improved and covered with a cement top, and a tap with a wash-basin and a hose fitted in the post-mortem room.

The staff consists of,

- One trained nurse
- Three ward maids (locally employed).
- One cook
- One female attendant.

A trained junior nurse to replace one of the ward maids would add to the efficiency of the institution.

Sanitation and Public Health.

The administration, finance, and control of the staff rests with the executive head in the district. The medical department acts in a purely advisory capacity.

The staff consists of a sanitary inspector who also acts as "foreman of works." He is assisted by an assistant sanitary inspector styled also as "captain of labourers".

There has been no serious outbreak of any epidemic during the year. Mild influenza became epidemic in Pomona Industrial School towards the end of May and early part of June. Forty-four out of the 60 inmates were laid down with no complications and no deaths. A separate report has been sent to the Senior Medical Officer. There has been a localized outbreak of dysenteric malaria in November in Commerce Bight. Free distribution of quinine nipped it in the bud.

Vital Statistics.

Total population	5,023
Total births	201
Total deaths	102
Crude birth rate	per M 38.02
Crude death rate	Per M 20.3
Deaths under 1 year	11
Infant mortality	Per M 55.

Out of 102 deaths, 56 were certified by the Medical Officer. Six deaths were from pulmonary tuberculosis of which 3 occurred in Seine Bight. Out of 20 deaths from malaria and blackwater fever, 14 were in Stann Creek Hospital, most of them within the first 24 hours. Malaria fatality rate for the whole district: 4 per thousand. Malaria case mortality rate in the hospital: 8.3%. Morbidity rate is very high but the exact figure cannot be guessed.

General Sanitation.

Water Supply. Rain water stored in private vats and barrels; these are periodically examined and fished if necessary. River water used during the dry season has protective bye-laws. Out-stations usually use well or river water.

Refuse Disposal. No bye-laws exist for its control. Very few houses have private refuse bins. There were 27 public refuse bins in 1934 of which 12 were defective. In 1935, 15 were defective and in 1936 there were only 14 of which 10 were broken. A start has been made by construction of a cement public refuse bin of a more permanent character near the market, but lack of funds stopped further effort in that direction.

Night Soil Disposal. There are 5 public latrines on the sea front and only 13 houses provided with septic tanks. Forty houses have some sort of "pail closets". The buckets are emptied into the sea at night.

Housing. The houses are mainly "all wood" structures raised on piles about 3-6 feet above ground level. The total number of houses in the town is 843 of which 74 are made of "wild cane" and 98 of "cabbage". One hundred and twenty-eight houses were defective and with very primitive standards even could not be declared fit for human habitation. No. byellaws exist to control or regulate the building of houses. Peculiar structures crop up at odd places and make the place more unsightly.

Food Supply. Periodical physical examination of all those who handle food is under consideration and with the help of bye-laws, better control over its cleanliness would be exercised. Bakeries, restaurants and aerated water factories have been regularly visited, and some improvements suggested have been adopted.

The new slaughter house, plans for which were made and approved, could not be built due to lack of funds, and so the old insanitary structure still remains.

"Fly-tangle-foot" was used to lessen the nuisance of house flies in the market and was successful to some extent.

Anti-mosquito work. Finances allowed only one mosquito survey during the year. The mosquito indices were higher all round, both in the town and the out-stations, as compared with the figures of 1935, which by themselves were far from satisfactory. As both *Stegomyia* and *Anopheles* abound, the danger from yellow fever or severe malaria in the near future passes the bounds of hypothetical or theoretical consideration only. More money will have to be spent for fishing, oiling, and clearing of rank vegetation, as well as for a more frequent mosquito survey.

Refuse Disposal. No bye-laws exist for its control. Very few houses have private

Infant Welfare Centre. In June, 1936, under the auspices of the District Board, a beginning was made with the help of a part-time paid Health Visitor. The Clinics have been held every fortnight in the hospital. Every child is visited once a month in the house by the Health Visitor who is a trained midwife. A donation of \$50.00 from the Government and \$10.00 from the Infant Welfare League, Belize, have been gratefully received. As there are 218 babies on the register, a more suitable place than the hospital verandah is required to hold the clinic. It is intended to appeal to private philanthropy and Social workers for help next year.

Quarantine and Vaccination. There have been 1175 people under quarantine observation during the year. The vaccinations numbered 81, of which 62 were carried on in the hospital.

Five cases of suspected alastrim came under observation in the district which were suitably dealt with.

Out-station. A medical and sanitary survey of the whole district has been carried out. Certain reputed unhealthy places like Seine Bight and Commerce Bight have been visited more than once. Eight shallow insanitary wells in Placentia, Seine and Commerce Bights have been replaced by sanitary concrete ones. The defective latrines have been repaired.

Government Institutions.

Prison and Police Station. There were few prisoners during the year. Both the premises and the health of the inmates were maintained in a satisfactory condition. A new septic tank with a vat has been put up, a great improvement on the old "bucket".

Industria School, Pomona. Due to the absence of matron on leave from April, the school has been visited at weekly intervals. The usual annual examination of each inmate has been carried out. Except for the mild influenza outbreak in May as mentioned above, the general health of the inmates remained good. There were 5 inmates suffering from "bed-wetting" 3 of whom had to be circumcised. A new diet has been suggested to replace the old one.

This is a reformatory school for juvenile offenders and as its future is uncertain, I refrain from further comment.

EL CAYO DISTRICT, MEDICAL AND SANITARY REPORT.

Dr. T. Patterson, Medical Officer.

An epidemic of measles which started towards the end of 1935 died down during the first two months of the year and a small outbreak of whooping cough cleared up by the end of March. Diarrhoea and vomiting amongst very young children occurred in April and some cases of German measles were observed. In May a mild epidemic of influenza appeared and lasted well into June. During the remainder of the year, health on the whole was very good indeed, with a minimum of malaria, except for a small outbreak in September. Two cases of blackwater fever were treated in hospital during this month.

Seven cases of pulmonary tuberculosis were admitted as in-patients, two of these cases being readmitted during the year. A few cases of syphilis were treated. The disease is not common in Cayo, but the reverse is true of gonorrhoea which is regarded lightly by the population.

An extraordinary amount of eczema of the body was met with throughout the year, apparently of a contagious nature, since whole families would be afflicted at the same time. Vitamine C in the shape of citrus fruits, appeared to benefit the condition which was less common among the negro population.

Prisoners were always examined upon admission and discharge. Very few were ill at any time.

The town was well cleared of bush and weeds in December, lack of funds having previously proved an obstacle to this clearance.

The Medical Officer visited the town of Benque Viejo once a week and the sanitary inspector spent a week in each month inspecting the premises etc. of this town.

The slaughter house and markets of both towns were kept in good condition and no diseased meat was found.

REPORT OF THE SENIOR SANITARY INSPECTOR, BELIZE.

During the year, six Sanitary Inspectors were employed by the Local Authority and have been actively engaged in Public Health Work.

The following table demonstrates the work performed by them:—

Number of visits to premises	35,540
Number of notices serve (low-lying lots)	Nil
Number of notices served, cutting grass and bush	989
Number of crab holes treated and retreated	57,942
Number of notices served, repairs to vats	172
Number of notices served, erection of vats	Nil
Number of days at work, oiling stagnant pools	35
Disinfection of houses conducted	32

In sanitary conditions found in premises in Belize.

(a) Presence of mosquito larvae:—

The following table shows the percentage of mosquito infection for the year:—

	Inspections.		
	1st	2nd	Av.
In vats and tanks %	10.6	14.9	11.8
In vases in houses	0.3	0.6	0.46
In barrels %	28.6	31.6	29.3
In wells %	9.5	15.0	10.9
In other receptacles %	11.2	16.9	12.4

It is unfortunate that owing to limitation of funds, the work performed in this direction is inadequate.

Anti-mosquito work is of great importance owing to the swampy lands and low-lying lots within the town limits, which necessitates a full-time staff in this direction.

During the year, 1,414 vats and tanks were fished and refished by the Sanitary Inspectors for the destruction of mosquito larvae.

Twenty-four notices for screening of vats and tanks were served and 24 have been complied with.

No prosecution was made during the year in this respect.

Forty notices were served and complied with in respect of wells during the year. Thirteen have been filled in, 37 fitted with mosquito-proof covers and pumps, and 113 were kept with larvivorous fish by individual owners.

Two thousand and seven barrels were inspected during the year for presence of mosquito larvae and 589 were found with larvae. These were all oiled and house-holders warned against keeping water in open barrels. The owners of the majority of barrels found with larvae are indigent and cannot afford to erect a tank on their premises since the hurricane and only in cases of persistent neglect is a prosecution made.

During the year, no prosecution was made for breaches of the mosquito regulations.

Oiling stagnant pools.—The Sanitary Inspectors have been occupied for 35 days oiling stagnant pools and drains in the town for the destruction of mosquito larvae.

Erection of new vats. During the year, no notices in respect of the erection of vats were served. This is partly due to the large storage iron tanks which were in course of erection by the Government, so as to furnish a constant water supply in the town of Belize.

Repairs to Vats—During the year, 172 notices were served in respect to repairs of vats. One hundred and thirty-eight notices were complied with. No prosecutions were made by the Local Authority in this respect during the year.

Cutting and clearing of bush. Nine hundred and eighty-nine notices were served in this respect and 914 have been complied with. Fifty-two lots were cleared by the Local Authority and the expenses incurred charged to Private Improvement Expenses. No prosecutions were made by the Local Authority in this respect during the year.

The Local Authority has done extensive work during the year in trying to keep the streets and drains free from grass and bush. It is unfortunate that a solution has not yet been found for the destruction of these luxuriant growths.

Low-lying lots. During the year, no notices were served in this respect, but considerable filling has been done to lots in the town, especially in the Freetown and Mesopotamia areas, conjointly by the Government and Local Authority and the work is to be continued.

Drainage. Extensive and commendable work has been done during the year in the construction of concrete drains in the town, and it is to be continued.

Scavenging. The general scavenging of the town is performed by the Local Authority under the direction of the Senior Sanitary Inspector.

The rubbish is collected and conveyed to the dumping grounds within the town limits, by mule carts and motor trucks. The rubbish deposited on these grounds is generally covered over with some other material within 48 hours so as to avoid any nuisance arising therefrom. The general scavenging of the town is satisfactorily performed, subject to the funds available.

Crab Destruction. During the year, 57,942 crab holes were destroyed by use of cyanogas, as against 63,241 last year. Crab holes afford ideal breeding places for mosquitoes, and the crabs themselves are destructive to vegetable and flower plants, especially by night. It is to be hoped that the amount of money estimated for this work will be increased.

Septic Tanks. There are 219 septic tanks in the town of Belize as against 209 last year and 112 direct lines.

The use of modern sewage disposal is becoming more popular among the better class residents.

The remaining householders dispose of their excreta nightly to the sea, river or canals in buckets or other utensils.

Water Supply. The water supply of the town has been increased considerably by the erection of six water storage iron tanks with a capacity to store 2,372,330 Imperial gallons of water for public convenience. Water pipe lines have been provided in all sections of the town to facilitate the distribution of water to the public. This has relieved the people of the difficulty encountered during the dry season of the year in obtaining water for drinking purposes.

Public Latrines. There are 14 latrines and one large septic tank with accommodation for twenty persons in the town for public use.

During the year, 998 visits of inspection of latrines were made by the sanitary staff. They are usually found in a sanitary condition, and on no occasion was it found necessary to report on their condition.

Latrine Accommodation in Schools. Latrine accommodations in schools are inadequate. The Wesleyan Methodist and St. Mary's Schools have adopted a modern sewage disposal, for the convenience of their pupils. The St. Ignatius School in the Mesopotamia area has adopted a sewage system known as the Kentucky Automatic Flush

tank which has been working satisfactorily. The other schools have adopted the use of the antiquated bucket system.

Public Baths. Four bath houses have been constructed in the town for use of the general public. These are being used and kept in a sanitary condition.

Bakeries. There are 11 bakeries in the town of Belize, seven are in use, the others are in a state of disrepair. They are visited weekly by the Sanitary Staff and instructions given to lime-wash or paint when required.

Instructions are also given to provide other sanitary requirements in connection therewith.

All employees are certified by a Medical Practitioner as fit persons to be employed in bakehouses.

During the year, 6 prosecutions were made for breaches of the Bake-house Bye-laws, and six convictions obtained. Fines were imposed amounting to \$12.00.

Market and Slaughter-house. During the year, 260 visits of inspection were made to the market and 32 to the slaughter-house. They are usually found in a sanitary condition.

The general sanitary condition of the market is satisfactory. Two water closets and one urinal have been constructed for use in connection with the market and are being used and kept in a sanitary condition.

The water supply for use in the slaughter-house has been increased.

The conveyance of meat from the slaughter-house to the market is not satisfactory. This is generally done by doreys which are used for other purposes.

All butchers, assistants and meat vendors are certified by a Medical Practitioner as fit persons to be engaged as aforesaid.

Cold Storage. The cold storage is kept in a clean and sanitary condition, and is visited weekly by the Sanitary Staff.

The following foodstuffs were seized and destroyed as unfit for human consumption:

200 lbs. Salt Beef,

200 lbs. Ribs,

238 lbs. Meat from Cold Storage,

85 only Edam Cheese,

5 cases Shoulder Hams,

11 lbs, 4 oz. Ham.

9 lbs, 4 oz. Bacon.

General Remarks. During the year, the Sanitary Staff has been making every effort in trying to educate the community in hygienic principles.

Several amendments have been made in the Public Health Ordinance so as to bring about a higher standard of sanitation.

HOSPITAL - BELIZE.

Return of Diseases and Deaths (In-Patients) for the Year 1936.

Diseases	Remaining in Hospital at end of 1935	Yearly total		Total cases treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
1— 1* (a) Typhoid ..	—	—	—	—	—
2— 2* (b) Paratyphoid ..	—	2	—	2	—
3— 3* Typhus Fever ..	—	—	—	—	—
4— 4* Relapsing Fever ..	—	—	—	—	—
5— 5* Undulant Fever ..	—	—	—	—	—
6— 6* Small Pox ..	—	—	—	—	—
7— 7* Measles ..	—	—	—	—	—
8— 8* Scarlet Fever ..	—	—	—	—	—
9— 9* Whooping Cough ..	—	—	—	—	—
10— 10* Diphtheria ..	—	4	1	4	—
10— 11* Influenza—					
(a) With respiratory complications ..	—	—	—	—	—
(b) Without respiratory complications ..	—	13	—	13	—
11— 12* Cholera ..	—	—	—	—	—
12— 13* Dysentery—					
(a) Amoebic ..	—	20	—	20	1
(b) Bacillary ..	—	3	1	3	—
(c) Unclassified ..	—	10	3	10	1
13— 14* Plague—					
14a*(a) Bubonic ..	—	—	—	—	—
14b*(b) Pneumonic ..	—	—	—	—	—
14c*(c) Septicaemic ..	—	—	—	—	—
14— 16* Acute poliomyelitis ..	—	—	—	—	—
15— 17* Encephalitis lethargica ..	—	—	—	—	—
16— 18* Cerebrospinal Fever ..	—	—	—	—	—
17— 21* Rabies ..	—	—	—	—	—
18— 22* Tetanus ..	—	3	2	2	—
19— 23* Tuberculosis of the respiratory System ..	1	21	1	22	—
20— 24-32* Other Tuberculosis Disease ..	—	9	2	9	—
21— 33* Leprosy ..	—	1	—	—	—
22— 34-35* Venereal Diseases					
34a-34b* (a) Syphilis ..	2	39	3	41	3
35* (b) Gonorrhoea ..	2	30	—	32	—
35* (c) Other V. D. ..	2	23	—	25	2
23— 37* Yellow Fever ..	—	—	—	—	—
24— 38* Malaria—					
(a) Benign Tertian ..	2	—	—	2	—
(b) Subtertian ..	—	—	—	17	—
(c) Quartan ..	—	—	—	—	—
(d) Unclassified ..	1	286	10	287	5
25— 44-46* Blackwater Fever ..	—	1	1	1	—
26— 39* Kala-azar ..	—	—	—	—	—
27— 39* Trypanosomiasis ..	—	—	—	—	—
28— 39* Yaws ..	—	—	—	—	—
29— 39* Other Protozoal Diseases ..	—	6	—	6	1
30— 40* Ankylostomiasis ..	—	—	—	—	—
31— 42* Schistosomiasis ..	—	—	—	—	—
32— 41, 42* Other helminthic Diseases ..	—	8	—	8	2
33— 15, 19, 20, 36, 43, 44 Other Infectious and/or Parasitic Diseases ..	—	14	1	14	—

Numbers followed by an asterisk (*) are corresponding numbers in International List (1929 Rev.)

HOSPITAL - BELIZE.

Return of Diseases and Deaths (In-Patients) for the Year 1936.

Diseases	Remaining in Hospital at end of 1935	Yearly total		Total cases treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
34— 45-55* Cancer and Other Tumours ..	—	—	—	—	—
45-53* (a) Malignant ..	1	8	1	9	—
54* (b) Non-Malignant ..	—	7	—	7	—
55* (c) Undetermined ..	—	—	—	—	—
35— 56-57* Rheumatic condi- tions ..	—	20	—	20	—
36— 59* Diabetes ..	—	9	—	9	—
37— 60* Scurvy ..	—	—	—	—	—
38— 61* Beri-beri ..	—	—	—	—	—
39— 62* Pellagra ..	—	—	—	—	—
40—53, 63, 64 Other Diseases—					
(a) Nutritional ..	2	8	—	10	1
65-69* (b) Endocrine Glands & General	—	3	—	3	—
41— 70-74* Diseases of the Blood and Blood- forming Organs	—	18	—	18	—
42— 75-77* Acute and Chronic Poisoning ..	—	14	2	14	—
43— 82* Cerebral Haemorrhage ..	—	7	3	7	—
44— 78-81* 83-87* Other Diseases of Nervous System	—	13	1	13	—
45— 88* Trachoma ..	—	—	—	—	—
46— 88* Other Diseases of Eye and Annexa	1	28	—	29	2
47— 89* Diseases of the Ear and Mastoid Sinus ..	—	11	—	11	—
48— 90-103* Diseases of the Circulatory Sys- tem—					
90-95* (a) Heart Diseases	—	22	2	22	1
96-103* (b) Other Circula- tory Diseases ..	—	9	3	9	—
49— 106* Bronchitis ..	—	14	1	14	—
50—107-109* Pneumonia—					
107* (a) Broncho-Pneumonia ..	—	14	6	14	—
108* (b) Lobar-Pneumonia ..	—	4	2	4	—
109* (c) Otherwise Defined ..	—	14	4	14	—
51—104, 105* 110-114* Other Diseases of the Respiratory System ..	—	33	2	33	2
52—119-120* Diarrhoea and Enteritis—					
(a) Under 2 years of Age ..	—	3	—	3	—
(b) Over 2 years of Age ..	—	1	—	1	—
53— 121* Appendicitis ..	4	39	1	43	5
54— 122* Hernia, I testinal bstruction ..	1	27	3	28	2
55— 124* Cirrhosis of the Liver ..	1	2	1	3	—
56—1251-27* Other Diseases of the Liver and Biliary passages ..	—	11	—	11	—

Numbers followed by an asterisk (*) are corresponding numbers in International List (1929 Rev.)

HOSPITAL - BELIZE.

Return of Diseases and Deaths (In-Patients) for the Year 1936.

Diseases	Remaining in Hospital at end of 1935	Yearly total		Total cases treated	Remaining in Hospital at end of 1936
		Admissions	Deaths		
57—115, 118* 123, 128* 129* Other Diseases of the Digestive System	—	51	2	51	1
58—130*132* Nephritis (all forms)—	—	3	1	3	—
130* (a) Acute	1	9	1	10	—
131* (b) Chronic	—	—	—	—	—
59—133-139* Other Non-Veneral Diseases of the Genito-Urinary System	3	92	4	95	2
60—140-150* Diseases of Pregnancy, Childbirth and the Puerperal State	—	38	3	38	2
140-141* (a) Abortion	—	13	—	13	—
142* (b) Ectopic Gestation	—	1	—	1	—
145-147* (c) Toxaemias of Pregnancy	—	12	1	12	—
143, 144* 148-150* (d) Other conditions of the Puerperal State	5	292	6	297	10
61—151-156* Diseases of the Skin, Cellular tissue, Bones and Organs of locomotion	3	97	3	100	5
62—157-161* Congenital Malformations and Diseases of early Infancy—	—	—	—	—	—
158* (a) Congenital Debility (Children under 1 year)	—	1	—	1	—
159* (b) Premature Birth (do.)	—	2	2	2	—
160* (c) Injury at Birth (Children under 1 year)	—	—	—	—	—
63 162- Senility	—	4	—	4	—
64—163-198* External Causes—	—	—	—	—	—
163-171 (a) Suicide	—	—	—	—	—
172-198* (b) Other forms of Violence	—	65	2	65	2
65—199-200* Ill-defined Causes	—	10	—	10	—
TOTAL	32	1,522	82	1,554	50

Numbers followed by an asterisk (*) are corresponding numbers in International List (1929 Rev.)

DISTRICT HOSPITALS.

Return of Diseases and Deaths (In-Patients) for the Year 1936.

Diseases	Corozal Hospital		El Cuyo Hospital		Orange Walk Hospital		Stann Creek Hospital		Toledo Hospital	
	Total cases treated	Deaths	Total cases treated	Deaths	Total cases treated	Deaths	Total cases treated	Deaths	Total cases treated	Deaths
1— 1* (a) Typhoid ..	1	—	—	—	—	—	—	—	—	—
2— 2* (b) Paratyphoid ..	1	—	—	—	—	—	—	—	—	—
3— 3* Typhus Fever ..	—	—	—	—	—	—	—	—	—	—
4— 4* Relapsing Fever ..	—	—	—	—	—	—	—	—	—	—
5— 5* Undulant Fever ..	—	—	—	—	—	—	1	—	—	—
6— 6* Small Pox ..	—	—	—	—	—	—	4	—	—	—
7— 7* Measles ..	1	—	1	—	—	—	—	—	—	—
8— 8* Scarlet Fever ..	—	—	—	—	—	—	—	—	—	—
9— 9* Whooping Cough ..	—	—	—	—	2	2	—	—	—	—
10— 10* Diphtheria ..	—	—	—	—	—	—	—	—	—	—
10— 11* Influenza ..	—	—	—	—	—	—	—	—	—	—
10— 11a* (a) With Respiratory complications ..	6	—	1	—	4	3	—	—	—	—
10— 11b* (b) Without respiratory complications ..	—	—	—	—	1	—	—	—	—	—
11— 12* Cholera ..	—	—	—	—	—	—	—	—	—	—
12— 13* Dysentery ..	—	—	—	—	—	—	—	—	—	—
12— 13a* (a) Amoebic ..	7	—	18	1	3	—	10	—	1	—
12— 13b* (b) Bacillary ..	3	1	—	—	—	—	3	—	—	—
12— 13c* (c) Unclassified ..	—	—	—	—	5	1	3	1	—	—
13— 14* Plague—	—	—	—	—	—	—	—	—	—	—
13— 14a* (a) Bubonic ..	—	—	—	—	—	—	—	—	—	—
13— 14b* (b) Pneumonic ..	—	—	—	—	—	—	—	—	—	—
13— 14c* (c) Septicaemic ..	—	—	—	—	—	—	—	—	—	—
14— 16* Acute Poliomyelitis ..	—	—	—	—	—	—	—	—	—	—
15— 17* Encephalitis Lethargica ..	—	—	—	—	—	—	—	—	—	—
16— 18* Cerebrospinal fever ..	—	—	—	—	—	—	—	—	—	—
17— 21* Rabies ..	—	—	—	—	—	—	—	—	—	—
18— 22* Tetanus ..	1	1	1	1	—	—	—	—	—	—
19— 23* Tuberculosis of the Respiratory System ..	6	2	9	—	1	1	6	—	2	1
20— 24-32* Other Tuberculosis Diseases ..	1	—	—	—	—	—	—	—	—	—
21— 33* Leprosy ..	—	—	—	—	—	—	—	—	—	—
22— 34-35* Venereal Diseases	—	—	—	—	—	—	—	—	—	—
22— 34a-34b* (a) Syphilis ..	2	—	3	—	4	—	13	—	4	—
22— 35* (b) Gonorrhoea ..	7	—	11	—	2	—	25	—	15	—
22— 35* (c) Other V. D. ..	—	—	—	—	4	—	7	—	4	—
23— 37* Yellow Fever ..	—	—	—	—	—	—	—	—	—	—
24— 38* Malaria—	—	—	—	—	—	—	—	—	—	—
24— (a) Benign Tertian ..	75	2	14	—	1	—	—	—	—	—
24— (b) Subtertian ..	38	8	18	3	7	3	—	—	108	5
24— (c) Quartan ..	25	1	—	—	—	—	—	—	—	—
24— (d) Unclassified ..	—	—	27	—	80	3	165	13	—	—
25— 44-46* Blackwater Fever ..	3	1	2	—	—	—	3	1	—	—
26— 39* Kala-azar ..	—	—	—	—	—	—	—	—	—	—
27— 39* Trypanosomiasis ..	—	—	—	—	—	—	—	—	—	—
28— 39* Yaws ..	—	—	—	—	—	—	—	—	—	—
29— 39* Other Protozoal ..	—	—	—	—	—	—	—	—	—	—
30— 40* Ankylostomiasis ..	1	—	13	1	2	—	3	—	14	2
31— 42* Schistosomiasis ..	—	—	—	—	—	—	—	—	—	—
32— 41, 42* Other Helminthic Diseases ..	—	—	2	—	—	—	9	—	—	—
33—15, 19, 20, 36, 43, 44* Other Infectious and/or Parasitic Diseases ..	6	—	—	—	—	—	—	—	—	—

Numbers followed by an asterisk (*) are corresponding numbers in International List (1929 Rev.)

DISTRICT HOSPITALS.

Return of Diseases and Deaths (In-Patients) for the Year 1936.

Diseases	Corozal Hospital		El Cayo Hospital		Orange Walk Hospital		Stann Creek Hospital		Toledo Hospital	
	Total cases treated	Deaths	Total cases treated	Deaths	Total cases treated	Deaths	Total cases treated	Deaths	Total cases treated	Deaths
34— 45-55* Cancer and other Tumours ..	—	—	—	—	—	—	—	—	—	—
45-53* (a) Malignant ..	2	—	—	—	1	—	1	—	2	—
54* (b) Non-Malignant ..	3	—	1	—	—	—	—	—	—	—
55* (c) Undetermined ..	—	—	—	—	1	—	3	—	—	—
35— 56-57* Rheumatic Conditions ..	8	—	2	—	4	—	—	—	—	—
36— 59* Diabetes ..	2	—	—	—	—	—	5	—	—	—
37— 60* Scurvy ..	—	—	—	—	—	—	—	—	—	—
38— 61* Beri-beri ..	—	—	—	—	—	—	—	—	—	—
39— 62* Pellagra ..	1	—	—	—	—	—	—	—	—	—
40— 58, 63, 64* Other Diseases ..	—	—	—	—	—	—	—	—	—	—
(a) Nutritional ..	—	—	—	—	3	2	—	—	2	—
65-69* (b) Endocrine Glands and General ..	3	—	—	—	1	—	—	—	—	—
41— 70-74* Diseases of the blood and blood-forming Organs ..	3	—	—	—	4	1	—	—	11	—
42— 75-77* Acute and Chronic Poisoning ..	—	—	—	—	—	—	—	—	—	—
43— 82* Cerebral Haemorrhage ..	1	—	—	—	—	—	—	—	—	—
44— 78-81* ..	—	—	—	—	—	—	—	—	—	—
83-87* Other Diseases of Nervous System ..	—	—	7	—	1	—	12	—	—	—
45— 88* Trachoma ..	—	—	—	—	—	—	—	—	—	—
46— 88* Other Diseases of the Eye and Annexa ..	3	—	—	—	—	—	—	—	2	—
47— 89* Diseases of the Ear and Mastoid Sinus ..	2	—	2	—	5	—	—	—	2	—
48— 90-103* Diseases of the Circulatory System—	—	—	—	—	—	—	—	—	—	—
90-95* (a) Heart Diseases ..	5	2	1	—	1	—	9	4	2	1
96-103* (b) Other Circulatory Diseases ..	2	—	—	—	—	—	—	—	—	—
49— 106* Bronchitis ..	1	—	9	—	—	—	—	—	—	—
50— 107-109* Pneumonia—	—	—	—	—	—	—	—	—	—	—
107* (a) Broncho-Pneumonia ..	3	—	5	1	1	1	4	2	5	1
108* (b) Lobar-Pneumonia ..	16	2	5	2	1	—	12	1	2	2
109* (c) Otherwise Defined ..	—	—	1	1	—	—	—	—	—	—
51— 104, 105* ..	—	—	—	—	—	—	—	—	—	—
110, 114 Other Diseases of the Respiratory System ..	—	—	6	—	—	—	11	1	—	—
52— 119-120* Diarrhoea and Enteritis—	—	—	—	—	—	—	—	—	—	—
(a) Under 2 yrs. of Age ..	—	—	1	1	—	—	—	—	—	—
(b) Over 2 yrs. of Age ..	1	—	5	2	—	—	10	1	—	—
53— 121* Appendicitis ..	2	—	1	—	1	—	—	—	—	—
54— 122* Hernia, intestinal Obstruction ..	1	1	—	—	—	—	3	—	—	—
55— 124* Cirrhosis of the Liver ..	—	—	—	—	1	—	2	2	—	—

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