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### **Contributors**

British Honduras. Medical Department.

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**BRITISH HONDURAS**

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**MEDICAL REPORT**

**FOR THE YEAR 1930**

**BY**

**W. E. BURTON**

M.D., C.M. (McGill)

**PRINCIPAL MEDICAL OFFICER**

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1932

Printed by the Government Printer

**BELIZE**



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BRITISH HONDURAS

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MEDICAL REPORT

FOR THE YEAR 1930

BY

W. E. BURTON

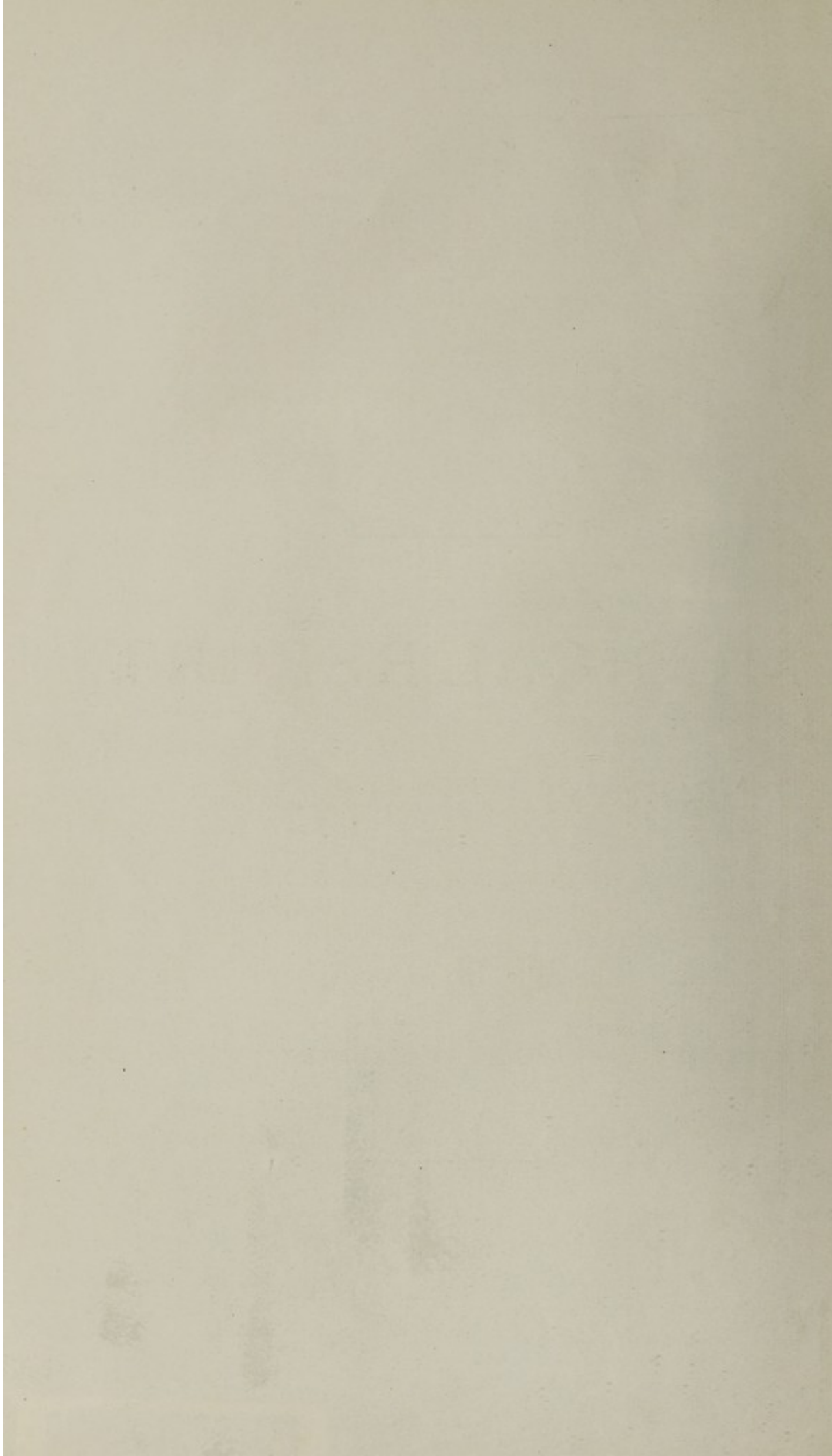
M.B., F.R.C.S.

PRINCIPAL MEDICAL OFFICER

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BRITISH HONDURAS

MEDICAL REPORT

FOR THE YEAR 1930

17

W. F. BURTON

M.D., C.M. (LOND)

PRINCIPAL MEDICAL OFFICER

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BRITISH HONDURAS.

MEDICAL DEPARTMENT,

Belize, 30th April, 1931.

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 and Sanitary Conditions of the Colony of British Honduras for the year 1930 together with the Returns, &c., appended thereto.

I have the honour to be,

SIR,

Your obedient servant,

W. E. BURTON,

*Principal Medical Officer.*

The Honourable  
The Colonial Secretary.



Washington, D.C.  
June 10, 1914

I have the honor to acknowledge the receipt of your letter of the 5th inst. and in reply to inform you that the same has been forwarded to the proper authorities for their consideration. I am, Sir, very respectfully,  
Your obedient servant,

W. R. BURTON,  
Special Agent in Charge.

100-10000

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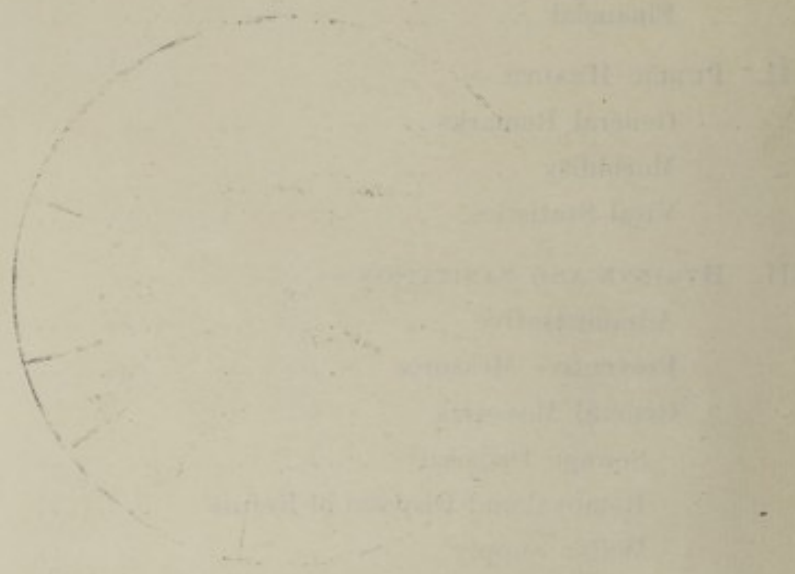
The Honorable  
The Federal Reserve Board

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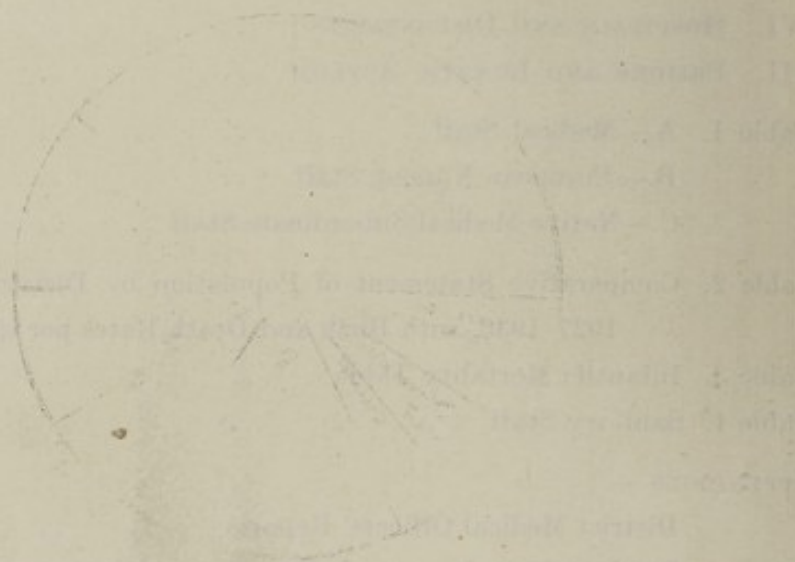
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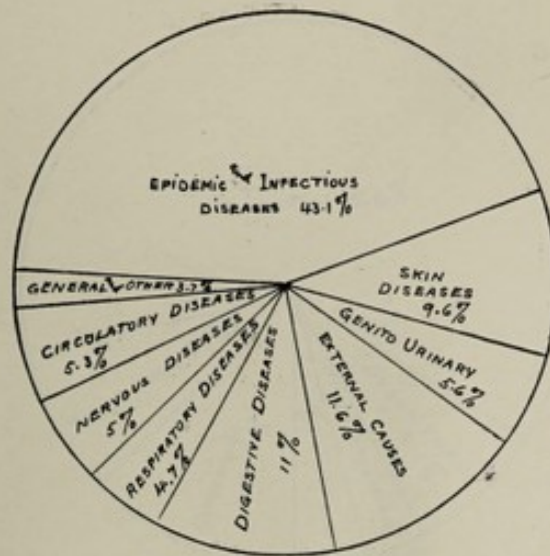
3. The Pathology of the Disease  
4. The Symptoms of the Disease



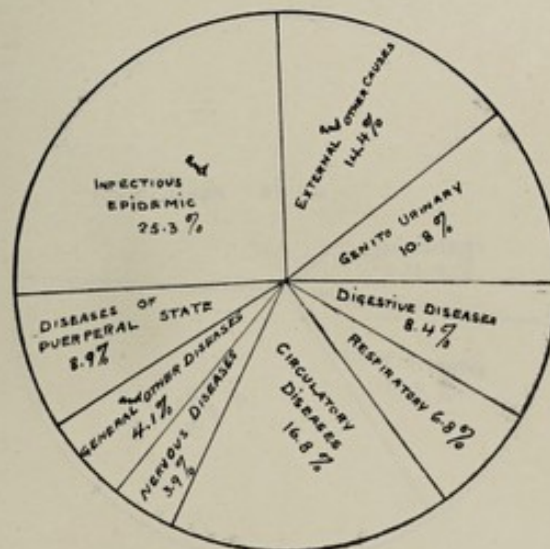
5. The Treatment of the Disease  
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GENERAL SYSTEMIC AND PREVENTABLE DISEASES.

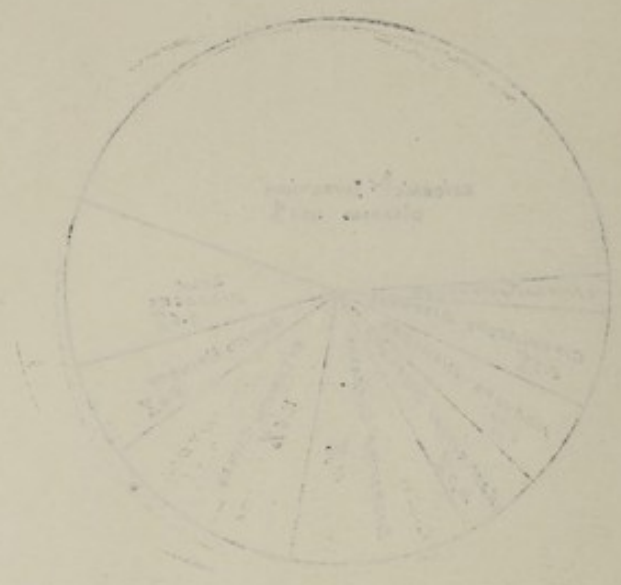
Total Hospital Cases 2,021.



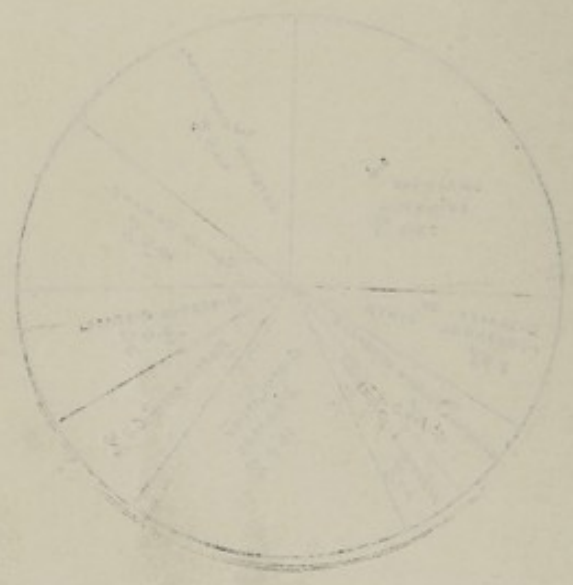
Total Deaths in Hospitals 166.



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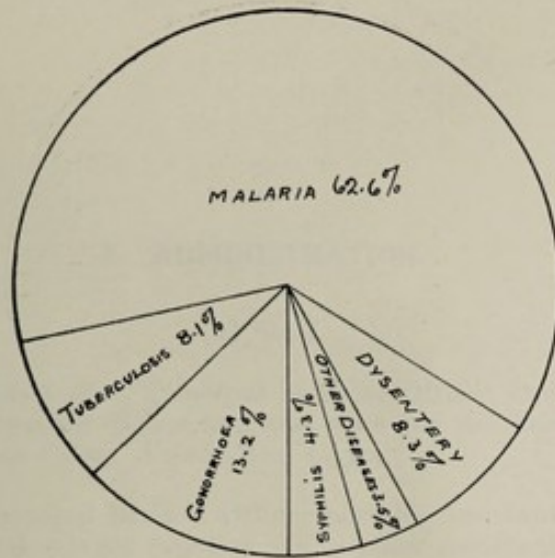


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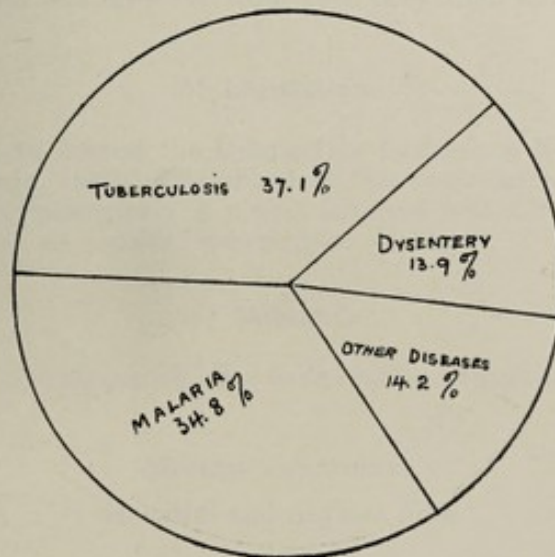


INFECTIOUS DISEASES.

Total Incidence Hospital Cases 873.



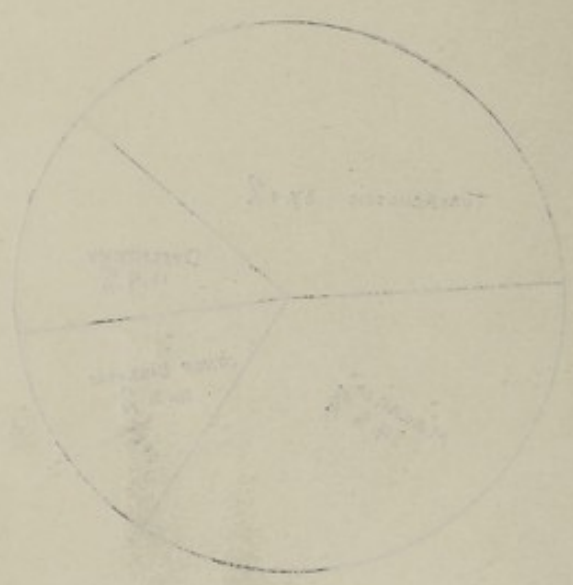
Total Deaths in Hospitals 43.



INVESTIGATION OF THE  
 LOCAL FACTORS IN THE EPIDEMIOLOGY OF



LOCAL FACTORS IN THE EPIDEMIOLOGY OF



BRITISH HONDURAS  
ANNUAL MEDICAL AND SANITARY REPORT FOR THE  
YEAR ENDING 31st DECEMBER, 1930.

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I. ADMINISTRATION.

(a) Staff.

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

Neither the Principal Medical Officer nor the Assistant Medical Officers in Belize are allowed private practice. The other Assistant Medical Officers are allowed private practice.

A European Nursing Staff controlling a native Staff and consisting of—

- (a) A Matron—Belize Hospital.
- (b) A Nursing Sister—Belize Hospital.

Table 1 details the Medical and Nursing Staff.

Dr. W. F. MacDonald arrived in the Colony on 7th June 1930 and assumed duty in Stann Creek District.

Dr. W. Johnson was on leave from 16th May 1930 until 31st December, 1930.

(b) Legislation.

An Ordinance to amend the Quarantine Ordinance No. 27 of 1929 was enacted on 31st July, 1930. The object of this amendment is to specify the period during which passengers in a ship infected with Cholera are to be detained or subjected to medical supervision (5 days).

(c) Financial.

In this section the figures all refer to the financial year ending 31st March, 1931.

*Medical Department.*

<i>Receipts :</i>	Hospital and Asylum Fees	..	\$8,203.00
<i>Expenditure :</i>	Personal Emoluments	.. ..	\$47,431.28
	Other Charges	.. ..	38,970.89
			<hr/>
			\$86,402.17
			<hr/>



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

<i>Institution</i>	<i>Average daily number of inmates</i>
Belize Hospital ..	52.00
Poor House ..	38.26
Lunatic Asylum ..	48.87
District Hospitals—	
Corozal .. ..	6.25
Orange Walk ..	5.00
Stann Creek ..	9.05
Toledo .. ..	7.60
Cayo .. ..	8.13

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

	<i>Total amount</i>	<i>Average daily number</i>	<i>Cost per head per diem</i>
Belize .. ..	\$18,401.38	139.13	.36
Corozal .. ..	979.48	6.25	.42
Orange Walk .. ..	1,138.55	5.00	.55
Stann Creek .. ..	1,322.74	9.05	.40
Toledo .. ..	975.26	7.60	.44
Cayo .. ..	1,657.48	8.13	.55

Belize includes Public Hospital, Poor House and Lunatic Asylum.

#### *Central Board of Health.*

Personal Emoluments ..	\$10,942.00
Other Charges .. ..	6,500.00
Total Expenditure ..	<u>\$17,442.00</u>

The total expenditure for Medical and Sanitary Service (in so far as the Central Board of Health is concerned with the latter service) is \$103,844.17.

## II. PUBLIC HEALTH.

### (a) General Remarks.

No quarantinable disease occurred in the Colony during the year.

Whooping Cough and Chicken Pox have been epidemic among children.

#### (1) GENERAL DISEASES.

Cancer was responsible for 14 deaths or 2.8% of the total certified deaths as against 24 deaths in 1929.

Diabetes was responsible for one death.

#### (2) COMMUNICABLE DISEASES.

##### (a) Mosquito or Insect-borne.

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

1926	..	28 deaths or 5.5% of total certified deaths.
1927	..	36 deaths or 6.9% of total certified deaths.
1928	..	43 deaths or 10.4% of total certified deaths.
1929	..	43 deaths or 9.2% of total certified deaths.
1930	..	53 deaths or 10% of total certified deaths.

172 uncertified deaths occurred in which the cause of death is stated to have been "Fever." A large number of these deaths were probably due to Malaria.

The number of cases of Malaria treated in the Public Hospitals of the Colony during the past five years is as follows :—

<i>Hospital</i>	1926	1927	1928	1929	1930
Belize .. ..	165	130	187	146	212
Corozal .. ..	43	35	42	80	95
Stann Creek ..	96	74	110	55	54
Orange Walk ..	51	35	43	80	85
Cayo .. ..	30	23	31	83	67
Toledo .. ..	48	22	27	41	34
Total for Colony	433	319	440	485	547
Percentage of Total Hospital Cases	22.5	16.8	22.7	22.3	24.3

The type of the disease most commonly met with is the Sub-tertian or Aestivo Autumnal.

*Black-water Fever.*—11 cases were treated in the Hospitals—4 in Corozal and 7 in Orange Walk with one death.

*Yellow Fever.*—There has been no occurrence of this disease since 1921.

*Enteric Group and Dysentery.*

*Enteric Fever.*—There were three cases of Enteric Fever in the Corozal Hospital, with one death.

*Dysentery.*—73 cases were treated in the various hospitals during the year with 7 deaths. There were 42 uncertified deaths in which the cause is stated to have been "Dysentery, Diarrhoea and Bowels." Many of these are probably cases of Dysentery. Both the Bacillary and Amoebic types occur.

(b) *Infectious Diseases.*

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

1926	..	49 deaths ..	9.6% of total certified.
1927	..	48 deaths ..	9.2% of total certified.
1928	..	40 deaths ..	9.7% of total certified.
1929	..	51 deaths ..	10.9% of total certified.
1930	..	62 deaths ..	12.9% of total certified.

There were also during the year 23 uncertified deaths in which the cause of death is stated to have been "Consumption," "Cough" or "Cold."

There were 69 cases of Tuberculosis treated in the various Hospitals in the Colony during this year as against 63 cases in 1929 and 41 cases in 1928.

During the year 12 cases of Tuberculosis were notified as against 19 last year.

The Pulmonary form of this disease most commonly occurs.

*Venereal Diseases* are very common in all the districts. Unfortunately it is difficult to get patients to submit to orthodox treatment in the early stages and to continue same long enough to effect a permanent cure. There is a Venereal Disease Ward of twelve beds at the Belize Hospital which is always full.

*Small Pox.*—No case of this disease occurred during the year.

The total number of successful vaccinations performed during the year was as follows :—

<i>District</i>	<i>Total</i>
Belize .. ..	597
Corozal .. ..	78
Orange Walk ..	186
Stann Creek ..	223
Toledo .. ..	85
Cayo .. ..	158
Total for Colony 1,327	

The figures for the past four years are—

1926 .. ..	774
1927 .. ..	1,165
1928 .. ..	1,189
1929 .. ..	1,061

(c) *Helminthic Diseases.*

*Ankylostomiasis* is extremely prevalent in the country districts of the Colony.

*Morbidity.*—The following 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 :—

<i>District</i>	<i>First Quarter</i>		<i>Second Quarter</i>		<i>Third Quarter</i>		<i>Fourth Quarter</i>		<i>Total</i>	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
Belize ..	98	88	70	85	82	78	99	105	349	356
Corozal ..	24	41	36	47	58	25	47	38	165	151
Orange Walk	26	28	31	37	44	38	38	50	139	153
Stann Creek	42	19	24	19	20	17	9	31	95	86
Toledo ..	36	33	35	30	49	31	39	46	159	140
Cayo ..	23	32	48	23	57	39	37	21	165	115
Total ..	249	241	244	241	310	228	269	291	1,072	1,001

Of the total number of deaths, 48.6% were certified by a Medical Practitioner as against 43.2 in 1929.

#### Vital Statistics.

The population of the Colony at the end of the year was estimated to be 52,136 as detailed in Table 2.

In all the Districts the Birth-rate is much in excess of the Death-rate; and in all the districts there is an increase in population.

The Birth-rate is highest in Toledo 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 109.5 as against 129.5 last year. This is highest in Orange Walk and lowest in Stann Creek. The British Honduras Infant Welfare League was inaugurated in 1928. This is purely a voluntary organisation, supported by voluntary subscriptions. It is doing excellent work; unfortunately limited funds preclude the Committee of the League from extending their work to all the districts. It operates only in Belize where there is a weekly clinic for babies. There is also a staff of voluntary health visitors.

Tables showing the sick, invaliding and death rates of European or Native officials are not inserted as Government Officials are attended by Private Medical Practitioners.

Appended are extracts from the Reports of the Assistant Medical Officers for the various districts.

### III. HYGIENE AND SANITATION.

#### Administrative.

There is a Central Board of Health for the entire Colony consisting of seven members. The Principal 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 Assistant Medical Officer is the District Medical Officer of Health.

Table 4 details the Sanitary Staff controlled by the Central Board of Health.

#### Preventive Measures.

*Yellow Fever.*—The absence of any pipe-borne water supply in the Colony necessitates considerable storage of rain water in tanks, vats, barrels, and other receptacles, with consequent *Stegomyia* breeding.

The Sanitary Staff have been engaged in frequent inspections in order to detect the presence or absence of mosquito larvae in these receptacles.

The *Stegomyia* House Index for 1930 works out at 0.3% for Belize as against 0.4% in 1929.

These *Stegomyia* surveys have not been made as frequently as they should in Belize on account of the fact that the Sanitary Inspectors have been engaged in supervising the work of Crab Destruction. While the figures may be said to be satisfactory, they are capable of considerable reduction, especially in regard to barrel inspection (8.5% in 1930 and 5.8% in 1929).

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 great source of danger, necessitating the reduction of the *Stegomyia* Index to a vanishing point.

Screening of water receptacles is not universally practised 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 anti-*stegomyia* preventive measure. It is both cheap and effective. Oiling is an effective 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 places of mosquitoes and sandflies.

*Malaria.*—Preventive Measures are most inadequate. All that is being done at present is the oiling of pools of stagnant water within the Towns; the large swamps in the immediate neighbourhood remain undrained and untreated because of the expense involved.

The use of Quinine prophylactically is not popular. Quinine in limited quantity is available from all hospitals in the Colony for this purpose and \$350 is to be expended next year in free distribution of Quinine by Medical Officers.

*Dysentery.*—While house flies are not as plentiful in this Colony as in other tropical countries, there are still enough of them to be dangerous.

Faulty methods of disposal of excreta are also responsible for the presence of this disease, which is particularly prevalent in the outlying districts. Latrines have been provided for the Villages of Maskall and Bomba by the Central Board of Health—by education and example, much can be done to make the country villagers latrine minded.

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

Accommodation is provided for five destitute sufferers from this disease at the Belize Poor Houses. Beyond this, no preventive measures may be said to be taken—although the general public is well informed of the infectious nature of the disease.

Cases of tuberculosis will continue to increase until means are forthcoming to provide free treatment for all early cases in isolation.

Measures to prevent the access of dust, dirt and flies to foodstuffs are generally adopted.

#### General Measures.

#### SEWAGE DISPOSAL.

(a) *The Town of Belize.*—The majority of householders in Belize empty their utensils into the River, the Canals running through the town, or into the

sea. A pump capable of periodically emptying the North Side Canal has been provided by the Local Authority and is giving excellent service. Another pump for the South Side Canal is shortly to be erected by the Local Authority.

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 River or Canals and they are maintained in a sanitary condition. Additional Public Latrines may be desirable in situations other than the banks of the river, the canals, and the sea, but in the absence of any automatic water flush, it would be impossible to maintain them in sanitary condition owing to the difficulty of getting any one to remove their contents.

The provision of Kentucky Sanitary Privies in the schools is now under consideration.

(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.

#### REMOVAL AND DISPOSAL OF REFUSE.

The scavenging of the town of Belize and other towns in the Colony is performed under the direction of the Local Authority. In Belize, additional carts have been employed by the Local Authority during the latter part of the year and conditions are now much improved.

In Belize, there is far too much paper and light rubbish scattered on the streets. Light covers for the scavenging carts are necessary to prevent scattering of the contents of the carts. The Bye-laws require that the receptacles used by householders should be covered, but they are very often not covered. The Bye-law requiring daily sweeping and cleaning of yards by householders needs to be immediately enforced.

The town rubbish is utilised in Belize for making the foundation of new roads and is "dumped" within the town limits. The rubbish is now being covered with earth within 24 hours of "dumping" it.

#### WATER SUPPLY.

(a) *Belize.*—Rain water stored in vats, tanks and other receptacles on premises of householders is the only source of drinking water.

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

The Town Board has a supply of rain water stored in vats for sale to the general public.

The supply is inadequate if there is a prolonged dry season and generally for domestic and sanitary services.

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

## DRAINAGE.

*In Belize.*—There are a few drains in the town, but few of them act effectually owing to the absence of any fall to the sea. During high tide, there is actually an inflow from the sea, river, and canals to the adjoining streets and house lots.

In the rainy season, oil has to be continually applied to such water in these drains as does not soak through the soil.

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

## FILLING IN OF LOTS.

*Belize.*—Lots on which houses are already built are being continually filled in to render them less swampy. The Town Board's Dredger has been a great assistance to owners of low-lying lots by providing spoil for the filling in of same. The beneficial effect of the Dredger's operations is particularly apparent in the new area known as Mesopotamia, but much still remains to be done in the way of filling. Very many lots are however continually under water in the rainy season—due to absence of proper drainage.

One hundred and eight notices were served on owners of low-lying lots in respect to the area in which the Dredger was throwing up spoil. Twenty-four of these notices were complied with.

## CLEARING OF BUSH.

The house lots are kept comparatively free from bush and large areas of mangrove swamps immediately adjoining the town of Belize have been cleared of bush during the year. These should not be allowed to grow up again.

## SLAUGHTER HOUSE AND MARKET.

These are maintained by the Town Board in a satisfactory condition. The market space is however insufficient and the problem of relieving congestion is under consideration by the Town Board. Frequent visits of inspection are made by the Chief Sanitary Inspector.

## Measures taken to spread Knowledge of Hygiene and Sanitation.

Elementary Hygiene is taught in the Schools. Dr. F. L. Davis, late Assistant Medical Officer, Corozal, has written an Elementary Book on Hygiene which is in use in the schools. Lectures are given by the Medical Officers to the Police. The Chief Sanitary Inspector gives lectures and practical demonstrations to the Sanitary Staff.

## Recommendations for future Work.

- (i) Surface drainage for a part if not the whole of the town of Belize.
- (ii) Provision for the treatment in isolation of early cases of Tuberculosis.
- (iii) Increased storage of rain water or installation of a pipe-borne system of water supply.

Appended is the Report of the Chief Sanitary Inspector.

IV. PORT HEALTH WORK AND ADMINISTRATION.

During the year, Quarantine regulations were in force against the Republics of Guatemala, Mexico and Brazil.

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

During the year, no quarantinable disease occurred in the Port or in the Colony.

The number of passengers reporting daily for medical inspection is as follows :—

Month	Passengers Reporting for Medical Inspection									
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
Jan	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100
Feb	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200
Mar	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300
Apr	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
May	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500
June	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
July	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700
Aug	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800
Sept	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
Oct	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000
Nov	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
Dec	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200
<b>Total</b>	<b>20,000</b>	<b>21,000</b>	<b>22,000</b>	<b>23,000</b>	<b>24,000</b>	<b>25,000</b>	<b>26,000</b>	<b>27,000</b>	<b>28,000</b>	<b>29,000</b>

A SUMMARY OF MEDICAL INSPECTION REPORTS FOR THE YEAR 1914



V. SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR 1930 TAKEN AT BELIZE, BRITISH HONDURAS.

MONTH	BAROMETRIC PRESSURE (Fahrenheit Degrees)					AIR TEMPERATURE						RELATIVE HUMIDITY			
	Monthly Mean	Highest	Date	Lowest	Date	Monthly Mean	Max.	Min.	Means of Max. Min.	Absolute Maximum and Minimum Max. Min.	Date	Max.	Min.	Mean	
January ..	30.115	30.180	17th	30.028	3 and 21	71.8	75.4	68.3	84.0	19th	60.5	10th	98	88	93
February ..	30.029	30.180	8 and 18	29.870	15th	76.3	82.0	70.7	85.0	7th	62.0	19th	97	85	92
March ..	29.957	30.168	3rd	29.800	7th	78.8	84.4	73.3	87.0	21 and 24	61.0	4th	98	87	92
April ..	29.623	30.118	7th	29.830	26th	79.5	85.6	73.4	87.0	6, 25, 27	64.5	7th	97	89	93
May ..	29.935	30.019	23rd	29.849	30th	81.1	85.9	76.4	89.0	27th	71.5	25th	98	85	92
June ..	29.871	29.980	27 and 30	29.720	14 and 17	79.4	84.9	74.3	88.0	1, 13, 14	68.0	28th	100	89	94
July ..	29.945	30.029	6, 22, 27	29.820	6th	78.7	83.3	74.2	86.0	22nd	69.0	30th	98	89	95
August ..	29.947	30.090	13th	29.860	27th	80.5	85.6	75.4	87.0	13th	69.0	25th	100	92	95
September ..	29.858	29.998	26th	29.740	29th	80.0	85.5	74.5	89.0	7th	69.0	3rd	98	92	96
October ..	29.829	30.030	31st	29.710	1st	80.2	84.9	75.5	87.5	26th	71.0	4 and 25	100	89	95
November ..	29.999	30.109	7th	29.860	1st	75.6	81.7	69.5	88.0	13th	62.5	7th	100	87	94
December ..	29.939	30.200	9th	29.760	21st	73.4	79.9	66.9	83.5	20th	59.0	24th	100	84	94
Total Sums	359.042	361.101	—	357.787	—	935.3	999.1	872.6	1041.0	—	787.0	—	1184	1056	1125
Average Mean ..	29.920	30.091	—	29.815	—	77.9	83.2	72.7	86.7	—	65.5	—	98%	88%	93%



## VI. HOSPITALS AND DISPENSARIES.

In the Belize Hospital, in addition to the cases detailed in the Classified Returns appended to this report, there were 6,529 attendances at the Out-patient department during the year. There were fifty major and sixty-four minor operations.

One hundred and fifty-two mothers and expectant mothers and seventy-one babies attended as out-door patients in connection with the Maternity Ward.

The Hospital buildings have been painted.

There are five District Hospitals, each in charge of the Assistant Medical Officer of the District.

## VII. PRISONS AND LUNATIC ASYLUM.

*The Prison* is a well managed institution; the grounds and individual cells and outbuildings have been maintained in an excellent sanitary condition.

The diet is plentiful and well cooked.

The average daily number of prisoners during the year was 40.00 as compared with 43.00 in 1929.

Only minor ailments were treated.

There was one execution by hanging—the cause of death being fracture dislocation of the cervical vertebrae.

<i>The Lunatic Asylum.</i> —Number of patients remaining at end of 1929	45
Admissions .. .. .	24
Deaths .. .. .	5
Discharges .. .. .	9
Number of patients remaining at end of 1930	55

The buildings and grounds are maintained in a sanitary condition and the patients are well looked after. Opportunities for recreation and amusement are limited. The Women's Auxiliary Society and the Catholic Guild very kindly arranged four musical entertainments for the inmates during the year.

TABLE 1. A.—MEDICAL STAFF.

OFFICE	NAME	ABSENCE ON LEAVE	REMARKS
Principal Medical Officer	W. E. Burton, M.D., C.M. (McGill)		
Assistant Medical Officer, Belize	A. W. Dunn, L.R.C.P., L.R.C.S., L.R.F.P. & S. (Glasgow), M.B., Ch.B. V. F. Anderson, M.B., B.S. (London), M.R.C.S. (England), L.R.C.P. (London)		Transferred to Orange Walk on 13.1.30. Transferred from Orange Walk on 14.1.30.
Radiologist, Belize Hospital	S. Kent Smith, M.D.		Part time officer: Private Practitioner.
Assistant Medical Officer, Corozal	W. A. S. George, L.R.C.P. & S. (Edin.), L.R.F.P. & S. (Glasgow)		
Assistant Medical Officer, Orange Walk	V. F. Anderson, M.B., B.S. (London), M.R.C.S. (England), L.R.C.P. (London)		Transferred from Orange Walk on 14.1.30.
	A. W. Dunn, L.R.C.P., L.R.C.S., L.R.F.P. & S. (Glasgow), M.B., Ch.B.		Transferred to Orange Walk on 13.1.30.
Assistant Medical Officer, Stann Creek	E. C. Savona, M.D. (Malta)		
Assistant Medical Officer, Stann Creek	W. F. MacDonald, M.D., C.M. (McGill)		Transferred to Punta Gorda on 12.5.30. to relieve Dr. Johnson on leave. Arrived in Colony on 7.6.30.
Assistant Medical Officer, Punta Gorda	W. Johnson, L.M.S.S.A. (London) E. C. Savona, M.D. (Malta)	16.5.30 to 31.12.30	Transferred on 12.5.30 from Stann Creek.
Assistant Medical Officer, Cayo	T. Patterson, M.B., Ch.B. (Oxon.)		

TABLE 1. B.—EUROPEAN NURSING STAFF.

OFFICE	NAME	ABSENCE ON LEAVE	REMARKS
Matron, Public Hospital, Belize	L. M. Roberts, M.B.E., S.R.N.		
Nursing Sister, Public Hospital, Belize	Celia E. V. Clark, S.R.N., C.M.B. Cert.		

TABLE 1. C.—NATIVE MEDICAL SUBORDINATE STAFF.

OFFICE	NAME	ABSENCE ON LEAVE	REMARKS
(1) <i>Medical Office.</i>			
Chief Clerk & Accountant	J. F. Romero	9.7.30 to 16.8.30	
Second Class Clerk	E. Trapp		
Typist	W. Ysaguirre	28.8.30 to 10.11.30	
Messenger	R. Ewing		
(2) <i>Public Hospital, Belize.</i>			
Dispenser & Storekeeper	P. A. Hyde		
Dispensary Assistant	H. L. Bennett		
3 Male Attendants	G. Sabido		
	S. Ricketts	1.5.30 to 31.5.30	
	H. Franklin		
(3) <i>Lunatic Asylum, Belize.</i>			
Head Attendant	F. Clarke		
5 Male Attendants and 4 Female Attendants			

TABLE I. C.—NATIVE MEDICAL SUBORDINATE STAFF (continued).

OFFICE	NAME	ABSENCE ON LEAVE	REMARKS
(4) <i>Poor Houses, Belize.</i>			
Male Attendant	H. N. Springer		
2 Female Attendants	F. Taylor	1.6.30 to 30.6.30	
	I. Bennett		Resigned on 31.1.30.
	C. Diamond		Appointed on 1.2.30.
(5) <i>District Public Hospitals.</i>			
(a) Corozal—Head Nurse 1 Probationer	L. Arnold		
(b) Orange Walk—Acting Head Nurse 1 Probationer	M. Sheran	5.11.30 to 31.12.30	
(c) Stann Creek—Head Nurse 1 Probationer	A. Card		
(d) Toledo—Head Nurse	E. Haylock		Transferred to Belize Hospital on 31.1.30.
	A. Jordan		Acting Head Nurse from 28.1.30 to 5.9.30.
	P. Fisher		Acting Head Nurse from 6.9.30 to 31.12.30.
(e) Cayo—Head Nurse 1 Probationer	G. Humphrey		

TABLE 2.

COMPARATIVE STATEMENT OF POPULATION BY DISTRICTS, 1927-1930, WITH BIRTH AND DEATH RATE PER THOUSAND.

DISTRICT	Population				Births				Birth-rate per thousand			
	1927	1928	1929	1930	1927	1928	1929	1930	1927	1928	1929	1930
Belize ..	18,835	19,258	19,676	20,068	640	738	767	748	33,979	38,321	38,981	37,273
Corozal ..	7,293	7,431	7,577	7,682	282	294	311	256	38,667	39,563	41,045	33,324
Orange Walk ..	5,984	6,092	6,194	6,249	210	220	241	208	35,093	36,605	38,908	33,285
Stann Creek ..	5,404	5,540	5,626	5,741	191	214	181	201	35,346	38,628	32,172	35,011
Toledo ..	5,627	5,738	5,815	5,919	236	246	236	244	41,946	42,872	40,584	41,223
Cayo ..	6,106	6,227	6,340	6,477	235	239	278	252	38,486	38,381	43,848	38,907
Total ..	49,249	50,286	51,228	52,136	1,794	1,954	2,014	1,909	36,427	38,857	39,314	36,615

Death-rate per thousand

DISTRICT	Deaths				Death-rate per thousand			
	1927	1928	1929	1930	1927	1928	1929	1930
Belize ..	392	315	349	356	20,812	16,356	17,737	17,739
Corozal ..	154	156	165	151	21,102	20,993	21,776	19,656
Orange Walk ..	156	115	139	153	26,069	18,877	22,441	24,483
Stann Creek ..	127	78	95	86	23,501	14,079	16,885	14,979
Toledo ..	157	135	159	140	27,901	25,527	27,345	23,652
Cayo ..	143	118	165	115	23,419	18,949	26,025	17,755
Total ..	1,129	917	1,072	1,001	22,924	18,235	20,926	19,199

TABLE 3.—INFANTILE MORTALITY TABLE.

DISTRICT	Number of children born alive and dying within one year				Death-rate per thousand			
	1927	1928	1929	1930	1927	1928	1929	1930
Belize ..	92	55	79	69	143.7	74.5	102.9	92.2
Corozal ..	34	52	34	30	120.5	176.8	109.3	117.2
Orange Walk ..	40	35	37	33	190.9	156.9	153.5	158.6
Stann Creek ..	31	22	19	18	162.3	102.8	104.9	89.5
Toledo ..	34	20	41	29	144.0	81.3	173.7	118.9
Cayo ..	26	37	51	30	110.6	112.9	183.4	119.0
Total ..	257	221	261	209	143.2	113.1	129.5	109.5

TABLE 4.—SANITARY STAFF.

OFFICE	NAME	ABSENCE ON LEAVE	REMARKS
Chief Sanitary Inspector and Clerk, Central Board of Health	J. H. Peach		
Sanitary Inspector, Belize	A. E. Arnold		
"	L. E. Cervantes	1.5.30 to 31.5.30	
"	H. A. Flowers		
"	V. E. Sampson	16.9.30 to 31.10.30.	
"	W. H. Wright	1.6.30 to 15.7.30.	
"	W. C. Card	16.7.30 to 15.7.30.	
Sanitary Inspector, Corozal	M. J. Villamor		
"	E. C. Romero		
"	G. Miller		
Sanitary Inspector, Orange Walk	E. S. Skeen	1.8.30 to 31.10.30.	
Sanitary Inspector, Stann Creek	J. A. Gentle	16.4.30 to 31.5.30.	
Sanitary Inspector, Toledo	J. P. Smith		
Sanitary Inspector, Cayo			



## APPENDICES.

Extracts from Reports of Assistant Medical Officers, Corozal, Cayo, Orange Walk, Stann Creek and Toledo.

Report of Chief Sanitary Inspector.

Hospital Returns.

DR. W. A. S. GEORGE, ASSISTANT MEDICAL OFFICER, COROZAL,  
writes as follows :—

## II. PUBLIC HEALTH.

## General Remarks.

There was a good deal of Malaria during the year under review, owing to excessive rain and a wave of malaria which seems to have swept the southern parts of Mexico and this colony. Fortunately the mortality was very low.

The excessive rain caused flooding in many areas and the swamps were therefore more extensive and mosquito production increased.

Diarrhoea and Dysentery seem to be most prevalent from April to August or September, the season when green plums, pears, craboos and mangoes abound. There would appear to be some connection between the incidence of diarrhoea and dysentery and digestion of these fruits.

## III. HYGIENE AND SANITATION.

## (I) Preventive Measures.

(a) *Mosquito and insect borne diseases.*—All water receptacles are wired, fished or oiled.

Weeds and bush cut and removed, low-lying areas drained, stagnant pools oiled.

The town is inspected from end to end bi-monthly by the Sanitary Staff.

Empty bottles, cans, tins or other receptacles capable of holding water are ordered to be removed when found lying about. Prosecution follows non-removal. So far, there has not been necessity for prosecution.

*Trypanosomiasis, Yellow Fever and Filariasis.*—None of these diseases exist in this district. Strict quarantine is kept against the neighbouring republics against Yellow Fever.

(b) *Epidemic Diseases.*—Vaccination is compulsory. 88 were vaccinated at the hospital during the year.

*Dysentery.*—This exists in both types. The amoebic being far more common than the bacillary, and not so fatal.

*Enteric Fever.*—This is not prevalent. Only five cases being recorded for the year. Undoubtedly the scarcity of fresh dairy milk and hence less infection from handling accounts for the low incidence. Milk pasteurised or sterilised is mostly used.

*Tuberculosis.*—Twenty-five cases of the pulmonary type and fifteen cases of abdominal and other types of the disease were recorded during the year. Insufficient ventilation particularly at nights and insufficient sunlight and ventilation during the day is one of the faults of people in this district, along with over-crowding—the sick and the healthy together. Efforts are being made to overcome these faults.

(c) *Helminthic Diseases.*

*Ankylostomiasis.*—Only twenty-seven cases were recorded. Most of these cases are from the country, where it is difficult to keep the roving Maya Indian population from depositing their faeces everywhere else than the pit latrine. Sanitation is gaining ground and perhaps when the young generation come to maturity, a definite change for the better will be noticed.

*Taeniasis.*—A few cases were recorded. The round worm predominating. A few cases of ringworm of the body were also recorded.

(II) General Measures of Sanitation.

SEWAGE DISPOSAL.

There are 5 water closets, 7 septic tanks, 446 pit latrines, 12 sea closets, and 19 privies with the bucket system in the town of Corozal, and 571 pit latrines in the out-districts.

*Scavenging.*—There are 2 mule carts provided for the purpose in the town of Corozal. On an average, 26 cart loads of refuse are removed daily to two dumps which are fired periodically.

*Drainage.*—Surface—Seven in the town all leading to the sea.

*Water Supply.*—Rain water contained in vats for drinking purposes in the town. In the out-districts, well water is used along with rain water caught in barrels.

The water supply is inadequate and a proper water supply is requisite.

*Offensive Trades.*—Tanning of hides is the only one at present.

*Clearance of bush and undergrowth.*—Periodical inspections are carried out and notice served on defaulters. All notices so far have been carried out.

*Sanitary Inspections.*—The whole town is completely inspected twice monthly. The district is visited by the Sanitary Inspector monthly. The Medical Officer also visits and inspects the various villages at least once a year and the Principal Medical Officer pays an annual visit of inspection to the district.

V. PRISONS.

The prison was kept in a clean state. Most of the prisoners who were attended had complaints which they had brought in with them from outside.

The prison was periodically inspected by the sanitary staff and the Assistant Medical Officer.

## VI. HOSPITAL.

Number of beds in Hospital—	Male Ward	..	..	12	beds
	Female Ward	..	..	5	„
	Private Wards	..	..	2	„
Average daily number of patients—	Males	..	..	4.1	
	Females	..	..	2.1	
	Total	..	..	6.2	
Total cases treated	..	..	..	..	223
Total deaths	..	..	..	..	11
Percentage of deaths	..	..	..	..	4.9 per cent
Major operations performed	..	..	..	..	6
Minor operations performed	..	..	..	..	31

## Cases presenting peculiar or interesting features.

*Malarial Dysentery.*—Many cases of malaria have come for treatment for dysentery—presenting all the features and symptoms of dysentery—frequent stools often with blood and mucus and some cases straining. Emetin has little or no effect. Intramuscular injections of quinine cures the condition. I have never seen malarial dysentery referred to anywhere; but it would certainly appear to be the correct name for such cases.

*Blackwater Fever.*—There is no doubt that certain cases of Malaria develop haemoglobinuria after taking quinine by the mouth. At first I formed the opinion that it was solely after taking the Bi-sulphate, but I have noticed it also after liquid quinine—quinine sulph. dissolved in acid sulph. dil. and even after taking plain quin. sulph. in capsules, but the majority of cases seem to be in those who have taken the Bi-sulphate.

For treatment, I at once stop quinine by the mouth and give intra-muscular injections of Quinine bi or di hydrochloride. The next day there is a perceptible change in the urine and after three or four days (giving one injection daily) the urine is clear again and the fever gone. Five or six injections are all that are necessary. Diet for the first three or four days is milk and barley water.

The interesting point is this, and one worthy of research, why it is that quinine by the mouth in certain cases causes haemoglobinuria, and yet quinine given intramuscularly in the same cases cures them. Though given intramuscularly it is absorbed and excreted through the various organs and must pass through the kidney and yet does not lead to haemoglobinuria.

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DR. T. PATTERSON, ASSISTANT MEDICAL OFFICER, CAYO,

writes as follows:—

There was little sickness in 1930 compared with the previous year in the autumn of which about 75% of the population were suffering from malaria. From 60 to 80 cases of malaria were seen each month, but there was little

dysentery. Unfortunately gonorrhoea was still on the increase as in the previous four or five years. This may have been due, in part, to unwillingness to seek medical aid until an advanced stage of the disease had been reached and to the discontinuance of treatment before a cure had been effected.

There are, in the District, quite large numbers of people who genuinely think that the disease is caused by kicks from mules, falls from breadnut trees and by getting the feet wet, and perhaps these occurrences can possibly stir up an old infection. The number of recurrences of an apparently cured disease, no doubt, accounts for the wide-spread ignorance of the original source of infection and for the difficulty one experiences in convincing many that the disease is venereal.

The following were accomplished during the year :—

1. The Hospital was screened.
2. The drains of Cayo and Benque Viejo were repaired and added to considerably with very satisfactory results.
3. A certain amount of anti-hookworm work was done in the outlying parts of the district.
4. Vaccinations were performed with greater success.
5. The usual monthly inspections of all lots, vats, latrines, etc., were carried out by the Sanitary Inspector in Cayo and Benque Viejo.

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DR. A. W. DUNN, ASSISTANT MEDICAL OFFICER, ORANGE WALK,  
writes as follows :—

The last year was conspicuous by the very short duration of the "dry" season, heavy rains causing an early breaking up of the mahogany gangs. As a direct result of this, the ponds or "pans" from which water is obtained for drinking purposes were never nearly dry, with the result that dysentery was, as compared with previous years, practically negligible.

Both *bacillary* and *amoebic dysentery* were met in the few cases obtained.

*Malaria* on the other hand, was very prevalent but the type answers well to quinine medication.

Seven cases of *Blackwater Fever* were treated, with one death. Absolute rest seems to be one of the main principles of treatment.

*Hookworm* is very prevalent in the villages and causes much debility and many deaths. This state will not be remedied until proper latrines are built and used.

#### *Infectious Diseases*

*Chicken Pox* was rampant during the last months of the year.

*Whooping-cough* was present in a small localised epidemic in Sierra de Agua.

*Mumps* was met in three cases.

There is no doubt that the death rate in this district could be reduced by one half if the natives could be educated to leave their bush medicines and seek medical aid when sick. Out of the total deaths, over two thirds are uncertified and "fever" and "fits" occupy a prominent position in the causes of deaths.

*Veneral Diseases.*

*Syphilis* is not a common disease among the natives of this district but is frequent in the mahogany camps.

*Gonorrhoea* in the same camps is about as common as Malaria and is mainly treated by the use of "bush" medicines which check the discharge without curing the disease. This is becoming more and more frequent in the Indian villages.

*Sanitation* is as in previous years.

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DR. W. F. MacDONALD, ASSISTANT MEDICAL OFFICER, STANN CREEK,  
writes as follows :—

I have not done any private work since assuming duty as Assistant Medical Officer in this district.

As is usual here, the most prevalent preventable diseases were Malaria, Pulmonary Tuberculosis and Dysentery. These were responsible for nine deaths. Cardiac and Renal diseases were also large contributors to mortality rate. There being seven deaths due to these diseases.

There is nothing of outstanding importance to report regarding the general health of the community.

During the year some minor improvements were made in the interior of the Hospital—rearranging and painting of the beds and repairing the sanitary apparatus.

The Hospital grounds were also somewhat improved by filling in with sand and generally eliminating nuisance and potential breeding places for mosquitoes.

I have made application for the painting of the hospital and building of Central Board of Health to be included in the Estimate for 1931. The work of the Staff has been carried out in an efficient and harmonious manner.

A new Rain Gauge has been installed near the hospital grounds, but the recording of the rain-fall is now being done by the District Commissioner's Staff.

*Sanitation and Public Health.*

The general health of the district seems to have been remarkably good. With the exception of small sporadic out-breaks of Malaria and Dysentery, no epidemics of any importance occurred.

Systematic inspections of water vats and latrines were carried out by the Sanitary Inspector, Mr. Skeene. He also supervised a fairly extensive oiling programme.

I think it is fairly obvious, that in town-sites in the British Honduras Coastal area on swampy land, the policy of "filling in" should be adopted whenever possible.

The costly, and of a necessity, repeated oiling can in this way be reduced to a minimum. Drains, roadside and otherwise (apart from canals required in flood conditions) are in my opinion useless. They only act as depression where water lodges, making further potential breeding places for mosquitoes.

Latrine accommodation is limited, but what there is, is kept clean and paths to night soil dumping grounds are supervised and kept clean.

Garbage from bins, etc., is dumped into swampy ground in back areas.

There are some thirty-six bins to be kept clean with only one scavenger, one mule and cart. Considering the area he has to cover, the work is quite well done.

A new type of bin we are using is gradually displacing the older pattern.

The Market has been somewhat improved. A new floor was put in the slaughter house and screening of fresh food supplies—fish, meat and vegetable has been adopted.

The water supply is inadequate. A large fresh water vat is required.

*Pulmonary Tuberculosis.* This is a much too common disease in the community, particularly among the Caribs, due largely to their methods of living and it would seem a natural susceptibility to this disease.

Better methods of isolation and treatment of infected persons should be instituted.

I have very grave doubts if any method of disinfection will free infected houses from Tuberculosis, but we are better equipped now with a new MacKenzie sprayer.

I am all against taking infective Tuberculosis cases into the hospital here. They are, as a rule, dirty in their habits, fill the wards with tuberculosis infected sputum to the danger of the nursing staff and the other patients in the hospital.

#### *Venereal Diseases.*

My experience here is that one runs across very little Venereal Disease in Hospital practice.

The native population have an antipathy to injections in any form particularly so to intravenous N. A. B.

Gonorrhoeal infections and chancroid conditions seldom apply for hospital relief and it is very difficult to gauge their incidence.

*Malaria.*—This is one of, if not the most common conditions met with.

One runs across a few cases of Sub-Tertian in Hospital practice. These are usually severe ones with cerebral symptoms (Coma and Convulsions) and as a rule are in children and end fatally.

But the greatest number of cases is of the B. T. type and is usually chronic. The treatment of these cases is patchy and they invariably recur.

Quinine is, without a doubt, still our sheet anchor in Malaria. In some cases where this drug is not tolerated well, Plasmoquin is employed and in chronic cases, Arsenic.

Enlarged spleens are, in my experience, not common here. This may be due to the mild type one finds in this country and perhaps an acquired immunity.

Dr. Harwood has had a rather interesting series of cases here of Malarial Haemoglobinuria. Whether the condition (haemoglobinuria) was caused by malarial toxins or by Quinine is interesting. At any rate when quinine was discontinued, the condition cleared up.

This same phenomenon has been observed in Blackwater but with this disease we had to deal with a Haematuria.

*Government Industrial School, Pomona.*—I visit this institution weekly and one is impressed with what good food, clothing, housing, sanitation and discipline will do for native boys.

The general health of these boys is excellent. They are nearly all well nourished, well developed, and as far as one can see, quite happy. Illness among them is rare. An occasional case of Malaria is seen but, as a rule, the hospital is empty.

This institution is extraordinarily well run. While I am not familiar with the economic side, the Sanitary and Health conditions are very satisfactory.

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DR. E. C. SAVONA, ASSISTANT MEDICAL OFFICER, TOLEDO,  
writes as follows :—

*Prevalent Diseases.*

*Malaria.*—Just before and during the rainy season.

Suggestions for prevention.—(1) Oiling of the town more extensively.  
(2) Cutting of the bush.

*Ankylostomiasis.*—Endemic.

Suggestions for abating.—Mass treatment. Education in Schools. The building of more latrines.

*Tropical Ulceration.*—Endemic. Increasing sandflies. Bad results in treatment dissuading people from undergoing treatment. Two cases treated with Tn. Ferri. Perch. applications and liquid paraffin dressings did well. All the known treatments with the exception of Berberine Sulphate failed.

*Dysentery.*—Endemic.

Suggestions for abating.—Education in the Schools. Increased storage of rain water for drinking purposes.

*Influenza* has been pretty common during the last quarter. Presents the peculiar complication of a persistent Laryngitis, attended in one case, by the onset of Pulmonary Oedema.

*Sanitation.*

This is greatly hampered by indifference of the people at large. The Sanitary Inspector does what he can but has not the whole-hearted support of the Community which tends to the cooling off of whatever enthusiasm he may have at one time had.

The funds at the hands of the District Board are collected with difficulty and in dribblets so as not to allow of a continuum of work to be done. This in the long run accounts for the greater cost of the upkeep of the sanitation of the town.

As to improvements, much has been done. The Market has been increased in size and a fish-stall inserted. This part of the work is in as much as no facilities have been found to allow of the fish being landed beside the Market. A concrete stairway is in contemplation and when this is done, then the Bye-laws can be enforced.

(b) A McKenzie Spray has been bought for the better disinfection of Houses.

(c) A crab destroying apparatus has been bought and the Sanitary Inspector instructed in its use.

(d) The concreting of part of the drains is under consideration and the material has already been bought.

(e) A considerable area at the back of the town has been drained or filled in consequence of the building of the new Back Street.

(f) The restoring of the Latrines and the building of new ones is under consideration.

*Vaccination.*—This is highly unsatisfactory, because evasions are common and because of the impossibility of storing lymph for more than a few days and the general inaccessibility of Public Vaccinators. The method now obtaining is for me to make vaccination tours and spending the lymph as soon as received. This is proving successful.

*Quarantine.*—The Regulations do not provide against the surreptitious entry to Barranco and other places on the Coast without first reporting in the port of entry. This happens time and again.

The number of persons attending Quarantine during 1930 was 1,822.

The number of boats boarded by the Assistant Medical Officer was 60 (52 mail-boat).

## HOSPITAL.—

Number of beds in Hospital .. .. .	8
Average daily number of patients .. .. .	7.06
Total Cases treated .. .. .	165
Total Deaths .. .. .	9
Percentage of Deaths .. .. .	5.46%
Operations Major .. .. .	4
Operations Minor .. .. .	15



The Accommodation at the hospital is insufficient. This is mainly due to the advent of the Tropical Oil Products Company which has increased the population considerably. This was most felt last September when the Company was employing some 700 men.

There is no private ward which is some drawback. The Tropical Oil Products Company's staff have to rely on Quirigua hospital if any serious case occurs.

Space for increasing the existing accommodation is not wanting. Since the building of the new Nurses Quarters the whole lower storey of the Hospital has become available. In addition to this, also, a space, enough for 4 additional beds was afforded by alterations to the Hospital effected in November.

The Nursing Staff are now adequately housed since the building of the New Quarters ; but the staff is meagre beyond the actual needs.

The Hospital as a whole lacks—

- (1) The provision of a sterilising apparatus.
- (2) A chemical refrigerator to enable the otherwise perishable material to be stored.
- (3) Means for the periodical disinfecting and disinfecting mattresses. This is not done at present and the only precaution taken to secure a periodical cleaning of the hospital mattresses is to put them out to sun.

(4) A suitable Dietary. A properly balanced diet is well nigh impossible and the Nurse-in-Charge has in many instances to rely on tinned foods to provide meals for the inmates of the hospital. While the nutritive value of these is nil, such foods do not present the attractiveness to tickle the sick palate peculiar to the diseased state. Vegetables are unknown and if imported, usually stale. Fruits ditto. When added to this, you interpose the variation of tastes of the various races admitted—Caribs, creoles, coolies, Maya Indians and Spaniards, it becomes nearly impossible to cater a meal that is at all presentable. The provision of the Refrigerator above mentioned will enable beef now slaughtered once a fortnight to be imported and stored weekly ; so also game and vegetable and fruits. With these on hand, provided a refrigerator be found, it becomes an easier matter to make a dietary.

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#### REPORT OF CHIEF SANITARY INSPECTOR.

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BELIZE DISTRICT.

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Six Sanitary Inspectors were employed during the year 1930 and the following table shows the work performed by them during the year as compared with last year :—

	1929	1930
Number of visits to premises .. .. .	61,988	38,040
Number of notices served—Low-lying lots ..	Nil	108
Number of notices served—Cutting of bush ..	292	345
Number of crab-holes destroyed, treated and re-treated	88,448	100,116
Number of notices—Repairs to Vats .. ..	215	269
Number of notices—Erection of new vats .. ..	68	45
Number of days at work oiling stagnant pools ..	51	27
Disinfection of houses .. .. .	23	15

#### Insanitary Conditions found in Premises in Belize.

##### (a) Presence of Mosquito Larvae.

The following table shows the percentage of mosquito infection for the year 1930 :—

##### Inspections.

	First	Second	Third	Fourth	Fifth	Sixth	Average for year
In vases in houses ..	0.2%	0.3%	0.2%	0.5%	0.6%	—	0.3%
In vats and tanks ..	8.4%	8.8%	5.4%	6.1%	8.7%	—	7.5%
In barrels ..	7.0%	12.4%	9.0%	4.7%	8.1%	—	8.5%
In wells ..	4.6%	5.4%	7.6%	3.3%	4.7%	—	5.2%
In other receptacles	3.7%	3.4%	4.6%	2.7%	3.8%	—	3.5%

Last year's figures are as follows :—

##### Inspections.

	First	Second	Third	Fourth	Fifth	Sixth	Average for year
In vases in houses ..	0.5%	0.4%	0.7%	0.2%	0.4%	0.4%	0.4%
In vats and tanks ..	8.2%	5.4%	2.5%	0.8%	5.4%	7.6%	6.3%
In barrels ..	4.8%	8.6%	1.9%	5.6%	7.6%	6.6%	5.8%
In wells ..	1.4%	4.6%	1.4%	20.5%	4.6%	1.7%	5.9%
In other receptacles	4.6%	4.5%	0.6%	4.0%	5.5%	4.0%	4.5%

During the year, 1,607 vats and tanks were fished by the Sanitary Inspectors. Twenty-six notices for screening vats and tanks were served and complied with. No prosecutions were made.

During the year, 20 notices were served in respect to wells. Five wells have been filled in ; thirty-three fitted with mosquito-proof covers and pumps. Twenty-nine wells were kept fished by their owners. Two hundred and six barrels were found with mosquito larvae. These are oiled and house-holders warned against keeping water in open barrels and in cases only of persistent

neglect is a prosecution made. Thirteen such prosecutions were made during the year; thirteen convictions were obtained and fines varying from \$2.00 to \$3.00 inflicted. No cases were dismissed.

Other prosecutions for breaches of the Mosquito Ordinance numbered four as against four in 1929. In four cases convictions were obtained. Fines were imposed in two cases. No cases were dismissed.

(b) *Defective Scavenging.*

Sixty premises were found to be insanitary, owing to the accumulation of rubbish thereon, and reported to the Local Authority.

(c) *Septic Tanks.*

There are now one hundred septic tanks in the town. Thirty-eight were erected previous to the adoption by the Local Authority of a standard type.

The remaining premises in Belize have their excreta removed daily to the sea or canals in buckets or other utensils.

**Low-lying Lots.**

One hundred and eight notices in respect to low-lying lots were served during the year. Twenty-four were complied with. No prosecution was made.

**Cutting and Clearing of Bush.**

Three hundred and forty-five notices were served. Three hundred and thirty-nine have complied with the notices, and the necessary cutting and clearing has been done by individual owners. Three prosecutions were made by the Local Authority and convictions obtained.

**Crab Destruction.**

During the year, 100,116 crab-holes were destroyed as against 88,448 last year. Owing to weather conditions, no more could be accomplished. Cyanogas is ineffective if the crab-hole is full of water. The amount voted for this purpose during the financial year 1930-31 was \$1,500.00.

**Repairs to Vats.**

Two hundred and sixty-nine notices were served in respect to repairs to vats. Two hundred and twenty-seven were complied with. In fourteen cases the time limit of compliance has not expired. Twenty-five prosecutions were made by the Local Authority. Twenty-five convictions were obtained and fines imposed.

**Erection of New Vats.**

Forty-five notices in respect to erection of new vats have been served by the Sanitary Inspectors. Ten have complied with the notices. Six prosecutions have been carried out under the orders of the Local Authority and six convictions obtained. The Local Authority has adopted a scheme by which owners may obtain vats from the Local Authority, paying for them by instalments. This has improved the situation.

**Oilting Stagnant Pools.**

The Sanitary Inspectors have been occupied for twenty-seven working days this year in supervising labourers oilting stagnant pools in the town of

Belize, as against fifty-one days last year. The amount voted for this purpose during the financial year 1930-31 was \$1,350.

#### Market and Slaughter House.

Forty visits of inspection were made to the Market and Slaughter House by the Chief Sanitary Inspector as against thirty-seven visits last year.

#### Public Latrines.

There are twenty-one public latrines in Belize. Three hundred and fifty-five visits of inspection by Sanitary Inspectors were made during the year. They are usually sanitary. On four occasions only was it found necessary to make a report to the Local Authority.

#### Latrine Accommodation in Schools.

Latrine accommodation for schools is inadequate. The Kentucky sanitary privy erected by the Roman Catholic authorities at one of their schools is giving satisfaction. This type is economical both as regards construction and the amount of water for the requirements.

#### General Remarks.

The bakeries in Belize were visited once every three months during the year and instructions given to limewash when required.

The following food was seized and destroyed by me as unfit for human consumption :—

150 lb. Cake  
 $\frac{1}{2}$  bbl. Pork Ribs  
 $\frac{1}{2}$  bbl. Pork  
 1 crate Hams 33 $\frac{1}{2}$  lb.  
 1 crate Shoulders  
 3 crates Sausages.

Visits of inspection were made to Punta Gorda, Northern River, Corozal and Orange Walk.

During the year, a suspicious disease in animals occurred at Never Delay, Belize River, and I was sent to investigate. I diagnosed Anthrax, which was confirmed by the Agricultural Department, Florida, U.S.A. In consequence, I was detailed to supervise the inoculation of all animals in the infected area against this disease.

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## SANITARY INSPECTIONS IN DISTRICTS OTHER THAN BELIZE.

<i>District</i>	<i>Number of visits made to premises</i>	<i>Number of barrels found with larvae</i>	<i>Number of wells kept fished by owners</i>	<i>Number of latrines</i>	<i>Number of inspections of latrines</i>	<i>Number of vats and tanks fished</i>	<i>Total number of vats</i>	<i>Average percentage mosquito infection</i>
Orange Walk ..	5,032	89	195	287	2,231	106	106	Houses 0.0% Wells 0.0% Tanks 1.6% Barrels 7.4% Others 1.3%
Corozal ..	13,288	43	450	488	5,858	446	450	Houses 0.0% Wells 0.2% Tanks 0.4% Barrels 3.2% Others 2.6%
Cayo ..	11,066	386	4	245	5,601	72	72	Houses 0.0% Wells 0.0% Tanks 0.2% Barrels 13.3% Others 4.1%
Stann Creek ..	25,935	469	31	118	1,014	134	176	Houses 0.0% Wells 5.3% Tanks 1.4% Barrels 6.7% Others 2.7%
Punta Gorda ..	7,668	193	20	8	72	74	85	Houses 0.0% Wells 1.2% Tanks 0.6% Barrels 10.2% Others 2.0%



Return of Diseases and Deaths (In-Patients), District Hospitals, 1930—*cont'd.*

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
79. Eclampsia, Convulsions (non-puerperal) 5 years or over .. .. .	—	—	—	—	—	—	3	—	—	—
81. Chorea .. .. .	—	—	—	—	—	—	1	—	—	—
82. A.—Hysteria .. .. .	—	—	—	—	1	—	—	—	4	—
B.—Neuritis .. .. .	—	—	1	—	1	—	2	—	2	—
D.—Neuralgia .. .. .	—	—	3	—	—	—	—	—	—	—
85. Affections of the Organs of Vision—										
(b) Conjunctivitis .. .. .	1	—	1	—	—	—	1	—	2	—
(c) Corneal Ulcer .. .. .	—	—	—	—	—	—	—	—	1	—
(d) Glaucoma .. .. .	—	—	—	—	—	—	—	—	1	—
(f) Keratitis .. .. .	—	—	—	—	—	—	—	—	1	—
(g) Ophthalmia .. .. .	—	—	—	—	—	—	—	—	1	—
(h) Optic Neuritis .. .. .	—	—	—	—	—	—	—	—	3	—
(j) Other affections of the Eye .. .. .	1	—	1	—	—	—	—	—	—	—
86. Affections of the Ear or Mastoid Sinus .. .. .	—	—	—	—	—	—	1	—	—	—
IV.—Affections of the Circulatory System.										
90. Other Diseases of the Heart—										
(a) Valvular—										
Mitral .. .. .	—	—	1	—	—	—	6	6	—	—
Aortic .. .. .	—	—	—	—	—	—	4	4	—	—
(b) Myocarditis .. .. .	—	—	2	2	—	—	10	5	2	—
(c) Unclassified .. .. .	—	—	—	—	1	1	—	—	—	—
91. Diseases of the Arteries—										
(a) Aneurism .. .. .	—	—	—	—	—	—	1	—	—	—
(b) Arterio-Sclerosis .. .. .	4	1	—	—	—	—	—	—	—	—
93. Diseases of the Veins—										
Haemorrhoids .. .. .	1	—	—	—	—	—	—	—	—	—
Varicose Veins .. .. .	—	—	—	—	—	—	1	—	—	—
94. Diseases of the Lymphatic System—										
Lymphangitis, lymphadenitis (non-filarial) .. .. .	—	—	1	—	1	—	—	—	—	—
Unclassified .. .. .	2	—	—	—	—	—	—	—	—	—
V.—Affections of the Respiratory System.										
97. Diseases of the Nasal Passages—										
Adenoids .. .. .	—	—	—	—	—	—	—	—	2	—
Other diseases .. .. .	1	—	—	—	—	—	1	—	—	—
98. Affections of the Larynx—										
Laryngitis .. .. .	—	—	—	—	—	—	—	—	2	—
99. Bronchitis—										
(a) Acute .. .. .	5	1	1	—	2	—	2	—	1	—
(b) Chronic .. .. .	—	—	—	—	3	—	8	—	1	—
(c) Undifferentiated .. .. .	—	—	1	—	—	—	—	—	1	—
100. Broncho-Pneumonia .. .. .	—	—	—	—	—	—	4	1	2	—
101. Pneumonia—										
(a) Lobar .. .. .	3	2	6	2	1	1	1	—	2	1
102. A. Pleurisy .. .. .	—	—	—	—	1	—	2	—	3	—
B. Empyema .. .. .	—	—	—	—	—	—	—	—	1	—
105. Asthma .. .. .	—	—	1	—	3	—	1	—	—	—
106. Pulmonary Emphysema .. .. .	—	—	—	—	—	—	—	—	1	—
VI.—Diseases of the Digestive System.										
108. A.—Diseases of Teeth or Gums—Caries, Pyorrhoea, &c. .. .. .	—	—	1	—	—	—	—	—	1	—
B.—Stomatitis .. .. .	—	—	—	—	—	—	1	—	—	—
109. Affections of the Pharynx or Tonsils—										
Tonsillitis .. .. .	—	—	—	—	—	—	1	—	3	—
Pharyngitis .. .. .	—	—	—	—	—	—	2	—	—	—
111. A.—Ulcer of the Stomach—										
(a) Gastric .. .. .	—	—	1	1	1	—	—	—	—	—
(b) Pyloric .. .. .	—	—	2	—	—	—	—	—	—	—





Return of Diseases and Deaths (In-Patients), District Hospitals, 1930 — *cont'd.*

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
141. A.—Metritis .. ..	5	—	—	—	1	—	—	—	1	—
B.—Other affections of the female Genital Organs—										
Displacements of Uterus .. ..	—	—	—	—	1	—	1	—	—	—
Amenorrhoea .. ..	—	—	—	—	—	—	—	—	1	—
Dysmenorrhoea .. ..	—	—	1	—	—	—	—	—	—	—
Other Affections .. ..	—	—	—	—	—	—	1	—	—	—
142. Diseases of the Breast (non- puerperal)—										
Mastitis .. ..	—	—	—	—	1	—	2	—	3	—
Abscess of Breast .. ..	—	—	2	—	—	—	2	—	—	—
VIII.— <i>Puerperal State.</i>										
143. A.—Accidents of Pregnancy										
(a) Abortion .. ..	2	—	3	—	—	—	—	—	—	—
(b) Ectopic Gestation .. ..	—	—	—	—	—	—	3	—	—	—
(d) Other accidents of Pregnancy .. ..	—	—	—	—	1	—	7	—	—	—
B.—Normal Labour .. ..	—	—	—	—	—	—	6	—	—	—
C.—Accidents of Parturition										
(a) Sequelae of Labour (149) .. ..	1	—	1	—	—	—	—	—	—	—
D.—Accidents of the Puer- perium										
(b) Puerperal Septicae- mia (146) .. ..	—	2	1	—	—	2	—	—	—	—
(d) Puerperal Eclamp- sia (148) .. ..	—	—	—	—	—	—	3	—	—	—
(e) Puerperal Affections of the Breast (150)	—	—	—	—	—	—	1	—	—	—
IX.— <i>Affections of the Skin   and Cellular Tissues.</i>										
151. Gangrene .. ..	4	1	—	—	—	—	1	—	2	1
152. Boil—Carbuncle .. ..	1	—	—	—	1	—	—	—	—	—
153. Abscess .. ..	7	—	2	—	4	—	10	—	6	—
Whitlow .. ..	—	—	2	—	—	—	—	—	1	—
Cellulitis .. ..	1	—	8	—	3	—	4	—	1	—
154. A.—Tinea .. ..	—	—	—	—	—	—	—	—	1	—
B.—Scabies .. ..	—	—	—	—	—	—	1	—	—	—
155. Other Diseases of the Skin—										
Eczema .. ..	1	—	2	—	1	—	1	—	1	—
Myiasis .. ..	1	—	—	—	—	—	—	—	—	—
Ulcers .. ..	6	—	8	—	7	—	17	—	—	—
Other Skin Affections ..	2	—	2	—	2	—	1	—	18	—
X.— <i>Diseases of Bones and   Organs of Locomotion (other   than Tuberculous).</i>										
157. Diseases of Joints—										
Arthritis .. ..	—	—	1	—	—	—	2	—	—	—
Synovitis .. ..	—	—	4	—	—	—	—	—	1	—
158. Other Diseases of Bones or Organs of Locomotion ..	—	—	1	—	—	—	—	—	—	—
XI.— <i>Malformations.</i>										
159. Malformations—										
Unclassified .. ..	—	—	2	—	—	—	—	—	—	—
XIII.— <i>Affections of Old Age.</i>										
164. Senility—										
Senile Dementia .. ..	—	—	—	—	—	—	2	2	—	—
Senile Debility .. ..	—	—	—	—	2	—	—	—	—	—
XIV.— <i>Affections produced by   External Causes.</i>										
170. Suicide by Firearms ..	—	—	1	1	—	—	—	—	—	—
175. Food Poisoning—										
Botulism .. ..	—	—	—	—	—	—	—	—	1	1
Other .. ..	—	—	—	—	—	—	1	1	—	—
176. Attacks of poisonous animals—										
Unclassified .. ..	—	—	—	—	—	—	1	—	—	—

Return of Diseases and Deaths (In-Patients), District Hospitals, 1930 — *cont'd.*

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
177. Other accidental Poisonings	1	—	—	—	—	—	—	—	—	—
178. Burns (by Fire) .. .. .	1	—	—	—	1	—	—	—	3	—
179. Burns (other than by Fire)	—	—	1	—	—	—	—	—	—	—
182. Drowning (accidental) .. .	—	—	—	—	—	—	1	1	3	3
183. Wounds (by Firearms, war excepted) .. .. .	1	—	6	—	—	—	—	—	—	—
184. Wounds (by cutting or stab- bing Instruments) .. .	6	—	6	—	5	—	4	—	1	—
185. Wounds (by Fall) .. .. .	1	—	2	—	—	—	4	—	—	—
187. Wounds (by Machinery) .. .	—	—	4	—	—	—	—	—	1	1
188. Wounds (crushing, <i>e.g.</i> rail- way accidents, &c.) .. .	2	—	—	—	—	—	—	—	2	—
189. Injuries inflicted by animals	—	—	—	—	—	—	—	—	11	—
201. A.—Dislocation .. .. .	—	—	1	—	—	—	—	—	—	—
B.—Sprain .. .. .	—	—	—	—	—	—	1	—	—	—
C.—Fracture .. .. .	5	—	2	1	1	—	4	—	3	—
202. Other external Injuries .. .	—	—	4	—	—	—	1	—	—	—
XV.— <i>Ill-Defined Diseases.</i>										
205. A.—Diseases not already specified or ill-defined—										
Ascites .. .. .	3	—	—	—	3	1	1	1	—	—
Oedema .. .. .	—	—	—	—	—	—	1	1	—	—
Debility (excluding 160 and 164(b) ) .. .	—	—	—	—	—	—	—	—	3	—
B.—Malingering .. .. .	—	—	—	—	—	—	3	—	—	—
XVI.— <i>Diseases, the total of     which have not caused 10     Deaths.</i>										
A. Ophthalmic Depart- ment .. .. .	—	—	—	—	—	—	1	—	—	—
B. Dental Department	—	—	—	—	—	—	2	—	—	—
C. Casualties .. .. .	—	—	—	—	—	—	2	—	—	—
D. Not Sick .. .. .	—	—	—	—	—	—	3	—	—	—
F. Births .. .. .	—	—	—	—	—	—	7	—	—	—
TOTAL .. .. .	223	11	238	16	166	9	293	35	209	17

## SUMMARY

Return of Diseases and Deaths (In-Patients), District Hospitals, 1930.

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
I. Epidemic, Endemic and Infectious Diseases ..	124	2	107	4	104	4	85	8	62	7
II. General Diseases not mentioned above .. ..	6	—	8	1	5	—	3	—	4	—
III. Affections of the Nervous System and Organs of the Senses .. ..	8	3	6	—	2	—	8	—	16	—
IV. Affections of the Circulatory System .. ..	7	1	4	2	2	1	22	15	2	—
V. Affections of the Respiratory System .. ..	9	3	9	2	10	1	19	1	16	1
VI. Diseases of the Digestive System .. ..	9	1	34	4	6	1	32	3	37	1
VII. Diseases of the Genito-urinary System (non-Venereal) .. ..	14	—	5	—	6	1	26	2	13	2
VIII. Puerperal State ..	3	—	6	1	1	—	22	—	—	—
IX. Affections of the Skin and Cellular Tissues .. ..	23	1	24	—	18	—	35	—	30	1
X. Diseases of Bones and Organs of Locomotion .. ..	—	—	6	—	—	—	2	—	1	—
XI. Malformations .. ..	—	—	2	—	—	—	—	—	—	—
XIII. Affections of Old Age ..	—	—	—	—	2	—	2	2	—	—
XIV. Affections produced by External Causes .. ..	17	—	27	2	7	—	17	2	25	5
XV. Ill-Defined Diseases ..	3	—	—	—	3	1	5	2	3	—
XVI. Diseases, the total of which have not caused 10 Deaths .. ..	—	—	—	—	—	—	15	—	—	—
Total number of Cases	223	11	238	16	166	9	293	35	209	17

## HOSPITAL—BELIZE.

Return of Diseases and Deaths (In-Patients) for the year 1930.

Diseases	Remaining in Hospital at end of 1929	Yearly total		Total cases treated	Remaining in Hospital at end of 1930
		Admissions	Deaths		
<i>I.—Epidemic, Endemic and Infectious Diseases.</i>					
5. Malaria—					
(a) Tertian .. ..	—	189	4	189	8
(c) Aestivo-autumnal .. ..	—	5	—	5	—
(d) Cachexia .. ..	1	8	—	9	—
(f) Unclassified .. ..	1	8	—	9	—
16. Dysenteric Group—					
(a) Amoebic .. ..	1	4	—	5	1
(b) Bacillary .. ..	—	10	—	10	—
(c) Undefined .. ..	2	—	—	2	—
29. Tetanus .. ..	—	2	2	2	—
31. Tuberculosis, Pulmonary and Laryngeal .. ..	2	28	8	30	2
32. Tuberculosis of the Meninges or Central Nervous System .. ..	—	1	1	1	—
33. Tuberculosis of the Intestines or Peritoneum .. ..	—	4	2	4	1
35. Tuberculosis of Bones and Joints .. ..	1	3	—	4	1
38. Syphilis—					
(a) Primary .. ..	—	2	—	2	—
(b) Secondary .. ..	—	1	—	1	—
(c) Tertiary .. ..	—	9	—	9	—
(d) Hereditary .. ..	1	2	—	3	—
(e) Period not indicated .. ..	—	18	—	18	2
39. Soft Chancre .. ..	—	9	—	9	—
40. A.—Gonorrhoea and its complications .. ..	11	63	—	74	3
C.—Gonorrhoeal Arthritis .. ..	—	3	—	3	—
41. Septicaemia and Pyaemia .. ..	—	2	1	2	—
	20	371	18	391	18
<i>II.—General Diseases not mentioned above.</i>					
44. Cancer or other malignant Tumours of the Stomach or Liver .. ..	—	1	—	1	—
46. Cancer or other malignant Tumours of the Female Genital Organs .. ..	—	3	—	3	—
48. Cancer or other malignant Tumours of the Skin .. ..	—	1	—	1	—
49. Cancer or other malignant Tumours of Organs not specified .. ..	—	1	—	1	—
50. Tumours non-Malignant .. ..	—	3	—	3	—
51. Acute Rheumatism .. ..	—	1	—	1	1
52. Chronic Rheumatism .. ..	—	9	—	9	—
57. Diabetes (not including Insipidus) .. ..	—	5	—	5	—
58. Anaemia .. ..	—	17	5	17	—
60. Diseases of the Thyroid Gland .. ..	—	3	—	3	—
64. Diseases of the Spleen .. ..	—	1	—	1	—
66. Alcoholism .. ..	—	5	1	5	—
69. Other General Diseases— Haemophilia .. ..	—	1	—	1	—
	—	51	6	51	1
<i>III.—Affections of the Nervous System and Organs of the Senses.</i>					
71. Meningitis (not including 24 or 32) .. ..	—	1	—	1	—
72. Locomotor Ataxia .. ..	—	1	—	1	—

## HOSPITAL—BELIZE.

Return of Diseases and Deaths (In-Patients) for the year 1930.

Diseases	Remaining in Hospital at end of 1929	Yearly total		Total cases treated	Remaining in Hospital at end of 1930
		Admissions	Deaths		
74. Apoplexy—					
(a) Haemorrhage .. .. .	—	1	1	1	—
(b) and (c) Cerebral Throm- bosis and Embolism .. .. .	—	2	2	2	—
75. Paralysis—					
(a) Hemiplegia .. .. .	—	3	—	3	—
(b) Other Paralyses .. .. .	—	1	—	1	—
77. A.—Mania and Melancholia	—	1	—	1	—
B. Delusional Insanity .. .. .	—	2	—	2	—
78. Epilepsy .. .. .	—	6	—	6	—
80. Infantile Convulsions .. .. .	—	2	—	2	—
81. Chorea .. .. .	—	1	—	1	—
82. A.—Hysteria .. .. .	1	12	—	13	—
B.—Neuritis .. .. .	—	2	—	2	—
C.—Neurasthenia .. .. .	—	9	—	9	—
84. Other affections of the Ner- vous System—					
Cerebral .. .. .	—	1	—	1	1
Cerebral Compression .. .. .	—	2	—	2	—
85. Affections of the Organs of Vision—					
(b) Conjunctivitis .. .. .	—	4	—	4	—
(c) Other affections of the Eye .. .. .	—	9	—	9	1
86. Affections of the Ear—					
Otitis Media .. .. .	—	2	—	2	—
	1	62	3	63	2
<i>IV.—Affections of the Circula-     tory System.</i>					
88. Acute Endocarditis .. .. .	—	4	2	4	—
90. Other Diseases of the Heart—					
Valvular (unclassified)—					
Mitral .. .. .	—	2	1	2	—
Aortic .. .. .	—	2	—	2	—
Myocarditis .. .. .	—	8	1	8	2
Unclassified .. .. .	—	14	4	14	1
91. Diseases of the Arteries—					
(a) Aneurism .. .. .	—	5	1	5	1
(b) Arterio-Sclerosis .. .. .	—	1	—	1	1
(c) Other diseases .. .. .	—	2	—	2	—
93. Diseases of the Veins—					
Haemorrhoids .. .. .	—	1	—	1	—
94. Diseases of the Lymphatic System—					
Lymphadenitis, Bubo (non-specific) .. .. .	—	1	—	1	—
	—	40	9	40	5
<i>V.—Affections of the Respira-     tory System.</i>					
97. Diseases of the Nasal Passages					
Adenoids .. .. .	—	3	—	3	—
99. Bronchitis—					
(a) Acute .. .. .	—	1	—	1	—
(b) Chronic .. .. .	—	3	—	3	—
(c) Not classified .. .. .	—	11	—	11	2
100. Broncho-pneumonia .. .. .	—	4	3	4	—
101. Pneumonia—					
(a) Lobar .. .. .	—	1	—	1	—
(b) Unclassified .. .. .	2	—	—	2	—
102. Pleurisy and Empyema .. .. .	—	4	—	4	—
105. Asthma .. .. .	—	2	—	2	—
107. Other affections of the Lungs	—	3	—	3	—
	2	32	3	34	2

## HOSPITAL—BELIZE.

Return of Diseases and Deaths (In-Patients) for the year 1930.

Diseases	Remaining in Hospital at end of 1929	Yearly total		Total cases treated	Remaining in Hospital at end of 1930
		Admissions	Deaths		
<i>VI.—Diseases of the Digestive System.</i>					
108. A.—Diseases of Teeth or Gums—Caries, Pyorrhoea, &c. . . . .	—	10	—	10	—
B.—Stomatitis . . . . .	—	8	1	8	—
109. Affections of the Pharynx or Tonsils—					
Tonsilitis . . . . .	—	16	—	16	1
111. A.—Ulcer of the Stomach . . . . .	—	1	—	1	—
B.—Ulcer of the Duodenum . . . . .	—	2	—	2	—
112. Other affections of the Stomach—					
Gastritis . . . . .	—	3	—	3	—
Dyspepsia . . . . .	—	2	—	2	—
113. Diarrhoea and Enteritis—					
Under two years . . . . .	—	3	—	3	—
114. Diarrhoea and Enteritis—					
Two years and over . . . . .	—	3	—	3	—
Colitis . . . . .	—	2	—	2	—
115. Ankylostomiasis . . . . .	—	2	—	2	—
116. Diseases due to Intestinal Parasites—					
(c) Ascaris . . . . .	—	6	—	6	1
117. Appendicitis . . . . .	—	13	1	13	1
118. Hernia . . . . .	1	3	—	4	—
119. A.—Affections of the Anus, Fistula, &c. . . . .	—	1	—	1	—
B.—Other affections of the Intestines—					
Constipation . . . . .	—	8	—	8	—
122. Cirrhosis of the Liver . . . . .	—	1	—	1	1
123. Gall Stones . . . . .	1	—	—	1	—
124. Other affections of the Liver—					
Abscess . . . . .	—	1	1	1	—
Hepatitis . . . . .	—	3	—	3	—
Jaundice . . . . .	—	2	—	2	—
Cholecystitis . . . . .	1	5	—	6	—
126. Peritonitis (of unknown cause)	1	1	1	2	—
127. Other affections of the Digestive System . . . . .	—	5	—	5	—
	4	101	4	105	4
<i>VII.—Diseases of the Genito-urinary System (non-Venereal).</i>					
128. Nephritis—					
Acute . . . . .	—	1	1	1	—
Chronic . . . . .	—	4	1	4	—
Uraemia . . . . .	—	11	11	11	—
131. Pyelitis . . . . .	—	12	—	12	—
132. Urinary Calculus . . . . .	—	1	—	1	—
133. Diseases of the Bladder—					
Cystitis . . . . .	—	9	—	9	1
134. Diseases of the Urethra—					
(a) Stricture . . . . .	1	—	—	1	—
136. Diseases (non-Venereal) of the Genital Organs of Man—					
Phimosis . . . . .	—	1	—	1	—
137. Ovarian Cyst . . . . .	—	1	—	1	—
138. Salpingitis . . . . .	—	4	—	4	—
141. B.—Other affections of the Female Genital Organs—					
Dysmenorrhoea . . . . .	—	1	—	1	—
Leucorrhoea . . . . .	—	2	—	2	—

## HOSPITAL—BELIZE.

Return of Diseases and Deaths (In-Patients) for the year 1930.

Diseases	Remaining in Hospital at end of 1929	Yearly total		Total cases treated	Remaining in Hospital at end of 1930
		Admissions	Deaths		
142. Diseases of the Breast (non- puerperal)					
Mastitis .. .. .	—	2	—	2	—
Abscess of Breast ..	—	1	—	1	—
	1	50	13	51	1
VIII.— <i>Puerperal State.</i>					
143. A.—Normal Labour .. ..	6	98	2	104	3
B.—Accidents of Pregnancy—					
(a) Abortion .. .. .	—	4	—	4	—
(c) Other Accidents of Pregnancy .. .. .	—	7	—	7	—
Haemorrhage .. .. .	—	2	1	2	—
Hyperemesis Gravidarum	—	1	—	1	—
145. Births .. .. .	6	108	3	114	3
Still Births .. .. .	—	6	6	6	—
148. Puerperal Eclampsia .. ..	—	2	2	2	—
150. Puerperal Affections of the Breast .. .. .	—	1	—	1	—
	12	229	14	241	6
IX.— <i>Affections of the Skin and Cellular Tissues.</i>					
151. Gangrene .. .. .	—	5	—	5	—
153. A.—Abscess .. .. .	—	14	1	14	—
C.—Cellulitis .. .. .	—	15	2	15	1
155. Other Diseases of the Skin—					
Eczema .. .. .	—	2	—	2	—
Ulcers .. .. .	1	9	1	10	2
Cutaneous Leishmaniasis	3	11	—	14	4
Impetigo .. .. .	—	4	—	4	—
Elephantiasis .. .. .	1	—	—	1	—
	5	69	4	65	7
X.— <i>Diseases of Bones and Organs of Locomotion.</i>					
157. Diseases of Joints—					
Arthritis .. .. .	—	4	—	4	—
Synovitis .. .. .	1	—	—	1	—
158. Other Diseases of Bones or Organs of Locomotion—					
Inflamed Muscles .. .. .	—	1	—	1	—
	1	5	—	6	—
XI.— <i>Malformations.</i>					
159. Malformations—					
Webbed fingers .. .. .	—	1	—	1	—
	—	1	—	1	—
XII.— <i>Diseases of Infancy.</i>					
162. Other affections of Infancy	4	—	—	4	—
	4	—	—	4	—
XIII.— <i>Affections of Old Age.</i>					
164. Senility .. .. .	—	10	2	10	—
	—	10	2	10	—

HOSPITAL—BELIZE.

Return of Diseases and Deaths (In-Patients) for the year 1930.

Diseases	Remaining in Hospital at end of 1929	Yearly total		Total cases treated	Remaining in Hospital at end of 1930
		Admissions	Deaths		
<i>XIV.—Affections produced by External Causes.</i>					
165. Poisoning—					
(a) Ptomaine .. ..	—	5	—	5	—
(c) Kerosene .. ..	—	1	—	1	—
179. Burns (other than by Fire) ..	1	—	—	1	—
183. Wounds (by Firearms, war excepted) .. ..	—	3	1	3	—
184. Wounds (by cutting or stabbing Instruments) .. ..	—	12	—	12	—
188. Wounds (by crushing) .. ..	—	1	—	1	—
189. Wounds inflicted by Animals—					
Dog Bites .. ..	—	2	—	2	—
201. B.—Sprains .. ..	—	7	—	7	—
C.—Fractures .. ..	3	18	1	21	—
	4	49	2	53	—
<i>XV.—Ill-Defined Diseases.</i>					
205. A.—Diseases not already specified or ill-defined ..	1	—	—	1	—
	1	—	—	1	—



## SUMMARY

### HOSPITAL—BELIZE.

Return of Diseases and Deaths (In-Patients) for the year 1930.

Diseases	Remaining in Hospital at end of 1929	Yearly total		Total cases treated	Remaining in Hospital at end of 1930
		Admissions	Deaths		
I. Epidemic, Endemic and Infectious Diseases .. ..	20	371	18	391	18
II. General Diseases not mentioned above .. ..	—	51	6	51	1
III. Affections of the Nervous System and Organs of the Senses .. ..	1	62	3	63	2
IV. Affections of the Circulatory System .. ..	—	40	9	40	5
V. Affections of the Respiratory System .. ..	2	32	3	34	2
VI. Diseases of the Digestive System .. ..	4	101	4	105	3
VII. Diseases of the Genito-urinary System (non-Venereal) .. ..	1	50	13	51	1
VIII. Puerperal State .. ..	12	229	14	241	6
IX. Affections of the Skin and Cellular Tissues .. ..	5	60	4	65	7
X. Diseases of Bones and Organs of Locomotion .. ..	1	5	—	6	—
XI. Malformations .. ..	—	1	—	1	—
XII. Diseases of Infancy .. ..	4	—	—	4	—
XIII. Affections of Old Age .. ..	—	10	2	10	—
XIV. Affections produced by External Causes .. ..	4	49	2	53	—
XV. Ill-Defined Diseases .. ..	1	—	—	1	—
<b>TOTAL number of Cases ..</b>	<b>55</b>	<b>1,061</b>	<b>78</b>	<b>1,116</b>	<b>45</b>

