

## **Annual medical and sanitary report / Saint Vincent.**

### **Contributors**

Saint Vincent. Chief Medical Officer's Office.

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SAINT VINCENT

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ANNUAL MEDICAL

AND

SANITARY REPORT

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1932.

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KINGSTOWN :  
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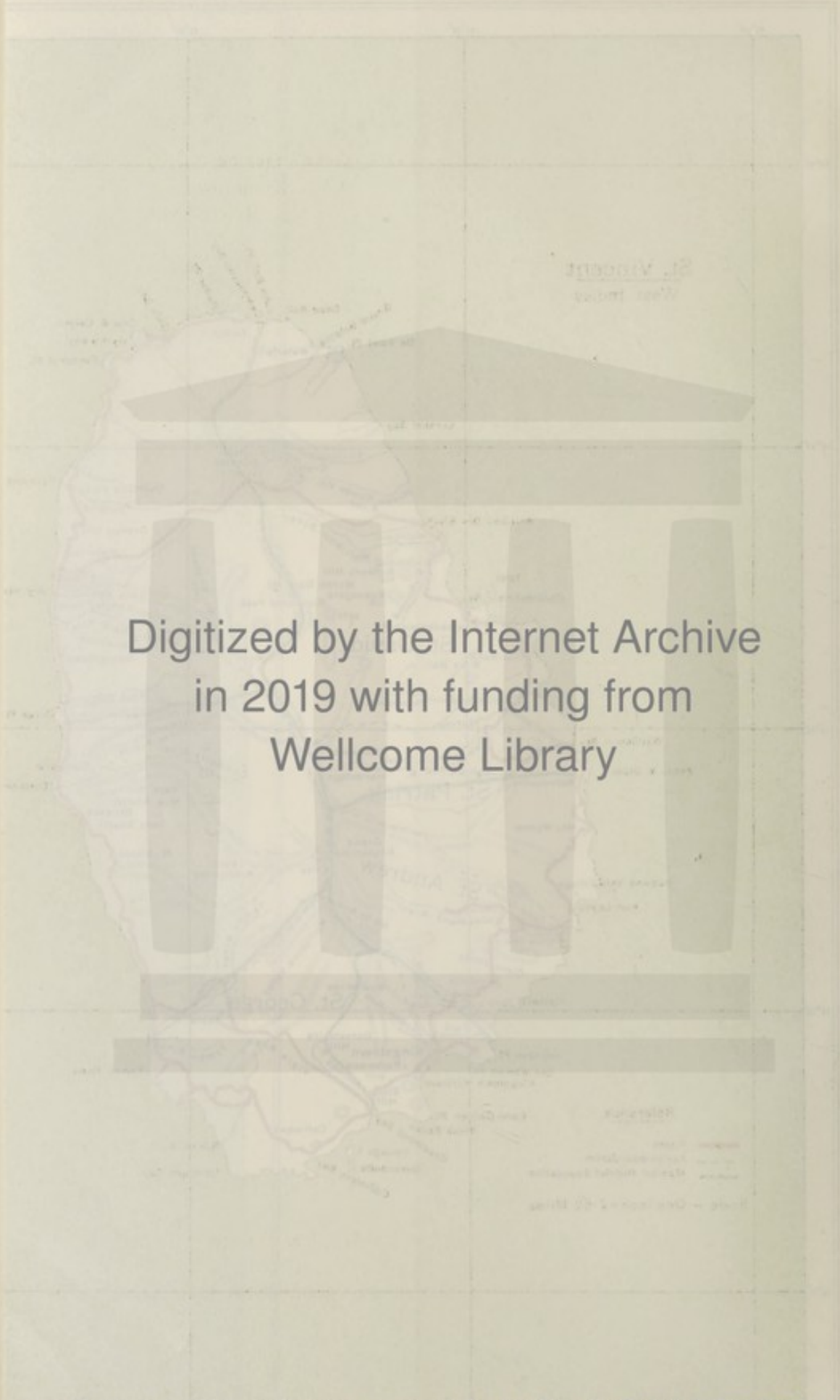
# St. Vincent West Indies

**Reference**

- Roads
- - - Parish Boundaries
- Medical District Boundaries

Scale — One Inch = 2.62 Miles





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## SAINT VINCENT.

CHIEF MEDICAL OFFICER'S OFFICE,  
KINGSTOWN,  
27th March, 1933.

Sir,

I have the honour to submit for your information and of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State for the Colonies, the Medical Report on the Health and Sanitary conditions of Saint Vincent for the year 1932 with the returns etc., appended thereto.

I have, etc.,

STANLEY BRANCH,  
*Chief Medical and Health Officer.*

The Honourable  
COLONIAL SECRETARY,  
Saint Vincent,  
(359/1933).

**REPORT ON THE MEDICAL DEPARTMENT FOR THE YEAR ENDING 31ST  
DECEMBER, 1932.**

**I. Administration.**

**(a) STAFF.**

Dr. Branch, Chief Medical and Health Officer resumed his duties on 17. 1. 32.

Dr. Lai Kiow, Resident Surgeon was granted 5 months and 22 days leave on full pay from 23. 2. 32 followed by 6 months and 9 days leave on half pay. During his absence the Medical Officer No. 1 District acted as Resident Surgeon to 5. 4. 32. After this date Medical Officer District 2 South acted as Resident Surgeon in conjunction with the duties of part of his district. He resided in the Resident Surgeon's quarters. The other portion of District 2 South was served by the Medical Officer District 2 North.

Dr. Brereton was confirmed in his appointment as a Medical Officer in the Windward Islands Medical Service as from 18. 12. 31.

Dr. Gallwey, Medical Officer District 5 was granted 28 days sick leave followed by 28 days vacation leave from 29. 10. 32. During his absence the Medical Officers of Districts 3 and 4 assisted in the discharge of the duties.

Dr. Slinger, Medical Officer District 1 was granted 28 days sick leave from 27. 7. 32. His duties were performed by the Chief Medical Officer and the Acting Resident Surgeon.

Miss Shaw, the Nurse-Matron, was granted 28 days leave on full pay from 12. 2. 32.

Mr. Chapman, the Chief Sanitary Inspector was granted 14 days casual leave from 31. 5. 32.



Many and various departmental changes and periods of leave were arranged for among the Junior Staff of Dispensers, Sanitary Inspectors and Nurse-Midwives.

Miss Amy Cropper, Clerk, Medical Department, resigned her position on 31. 8. 32. She left the Service to be married to Dr. Stewart, a previous Medical Officer. Miss Dorothy Grant was appointed to the vacancy.

(b) ORDINANCES AFFECTING THE PUBLIC HEALTH ENACTED DURING THE YEAR 1932.

1. Cap. 24. Indictable offences—a subsection was added to provide for the punishment of officers etc., of Institutions for the abuse of female lunatics. No. 8 of 1932.

The following sets of Regulations received Legislative sanction—

(a) Under the Public Health Ordinance—

(1) Prohibiting the use of Saccharine in the preparation and manufacture of aerated waters.

2. Governing the sale of milk.

3. „ bake houses.

4. „ food vendors and food vending establishments.

5. With respect to Mosquitoes.

(b) Under the Lunatics Ordinance—

1. Regulations for the Government of the Saint Vincent Mental Home.

#### FINANCIAL.

The Revenue and Expenditure for the years 1931 and 1932 are herewith shewn:—

REVENUE.		1931.	1932.
		£ s. d.	£ s. d.
Receipts from Hospital and Graham Wing	...	85 9 11	59 5 7
„ „ Dispensaries	...	230 14 10	190 14 11
„ „ Police and Prisons	...	22 19 4	— — —
		339 4 1	250 0 6
EXPENDITURE.		1931.	1932.
		£ s. d.	£ s. d.
Personal Emoluments	...	7,009 18 9	7,210 11 5
Other charges	...	6,176 17 6	6,426 19 11
		13,186 16 3	13,637 11 4
Revenue of the Colony	...	102,803 1 8	93,594 9 3
Expenditure due solely to Sanitation:—			
		1931.	1932.
		£ s. d.	£ s. d.
a. Personal Emoluments	...	699 10 0	726 6 8
b. Travelling Allowances	...	200 0 0	197 10 2
c. Sanitary Measures	...	1,386 16 10	1,451 5 4
Totals	...	2,286 6 10	2,375 2 2

The allocation of the Expenditure "Sanitary Measures" was arranged under the following sub-heads.

	1931.	1932.
	£ s. d.	£ s. d.
1. Kingstown Scavenging and Cleaning ...	795 16 2	796 12 4
2. Small Towns ...	311 13 2	331 4 0
3. Anti-mosquito work* ...	14 11 1	63 13 7
4. Rat Destruction ...	1 2 7	2 18 3
5. Public and School Latrines ...	61 4 0	102 7 9
6. Vaccines and serums (including refrigeration) ...	101 1 8	40 2 8
7. Disinfection of premises ...	9 16 7	12 4 8
8. Rent of Office ...	50 5 0	50 5 0
9. Miscellaneous (including Publicity and Propaganda) ...	16 8 8	19 15 7
10. Incinerator ...	24 17 11	32 1 6
Totals ...	1,386 16 10	1,451 5 4

\* This increase in expenditure is due to canalising the Judge's Lodge Ravine.

## II. Public Health.

1. *General Remarks.* The sickness recorded in the Districts by the various Medical Officers, as well as the numbers treated in the Institutions are shewn in the following table with the corresponding figures for 1931 :—

	1931.	1932.
Attendances at Dispensaries ...	34,997	35,477
Colonial Hospital—In patients ...	1,191	1,183
Out patient casualties ...	304	413
Casualty Hospitals (2) In patients ...	73	141
Pauper, Lunatic and Leper Asylums ...	184	175
Totals ...	36,749	37,389

The attendances at the district dispensaries continue to show considerable increase. The above are exclusive of persons attended by the resident dispensers at Sandy Bay, Bequia and Union Island. Whooping cough continued to be prevalent in the 4th district during the year.

The number of deaths exclusive of still-births was 682 as compared with 899 in 1931. Deaths of children under 1 year 188; deaths of children from 1 to 5 years 101. Still-births numbered 128 as compared with 119 in 1931.

Diarrhoea in children under 2 years of age was prevalent in every district throughout the year, 1,100 cases were recorded with 70 deaths. In persons over 2 years of age there were 359 cases and 26 deaths. The type was milder than was experienced in 1931.

The year 1932 was very much more healthy than 1931. The increased number of attendances at dispensaries does not necessarily mean increased morbidity. When work is slack the peasant finds more time to look for a bottle of medicine for himself or child especially when it can be obtained free of cost under the plea of lack of purchasing power due to agricultural depression.

### 2. Communicable Diseases.

#### *Mosquito or Insect borne—Malaria.*

The district returns recorded 942 attendances and 10 deaths; 33 cases were treated in the Colonial Hospital without any deaths.

That portion of the coastal belt of District 2 South extending from Clare Valley to Buccament Bay and including Cane Grove Village was heavily infected with *Anopheles Argyratarsis* during the months of July and August. A mild



epidemic of Malaria broke out in this area; 242 cases occurred in a short while. Measures for control were instigated and carried out by the Sanitary Department from the start. There was daily house to house inspection by the Sanitary Inspector, District Dispenser and Nurse-Midwife followed by intensive quinine medication. At the same time active measures were taken to drain where necessary or fill in the existing pools.

Malaria is more prevalent in District 2 South than in any other District of the Island, and makes itself evident with varying degrees of intensity every year at the height of the rainy weather when there is a considerable rise in the level of the subsoil water and the formation of numerous breeding pools throughout the affected area.

It was a surprise to note 4 deaths from Malaria in the 4th District. Anopheline breeding places are known on the Windward side of the Island but during the past five years malaria has not been a cause of much trouble in that locality.

344 ozs. Quinine Sulphate costing £37 was issued for use during the year.

*Infectious Diseases—Enteric fever.*

There were 20 cases and 2 deaths as compared with 83 cases and 17 deaths in 1931. No case is recorded as having occurred in the area of the epidemic of 1931. Excluding the abnormal figures of 1931 the yearly average Typhoid incidence for the period 1927-1932 is 12.8 cases and 3.2 deaths for the entire Colony.

Distribution.		Cases.	Deaths.
Kingstown	...	7	—
District 1	...	8	—
„ 2 (South)	...	1	—
„ 3	...	4	2
Totals	...	20	2
1st Quarter	...	5	—
2nd „	...	4	—
3rd „	...	2	—
4th „	...	9	2
Totals	...	20	2

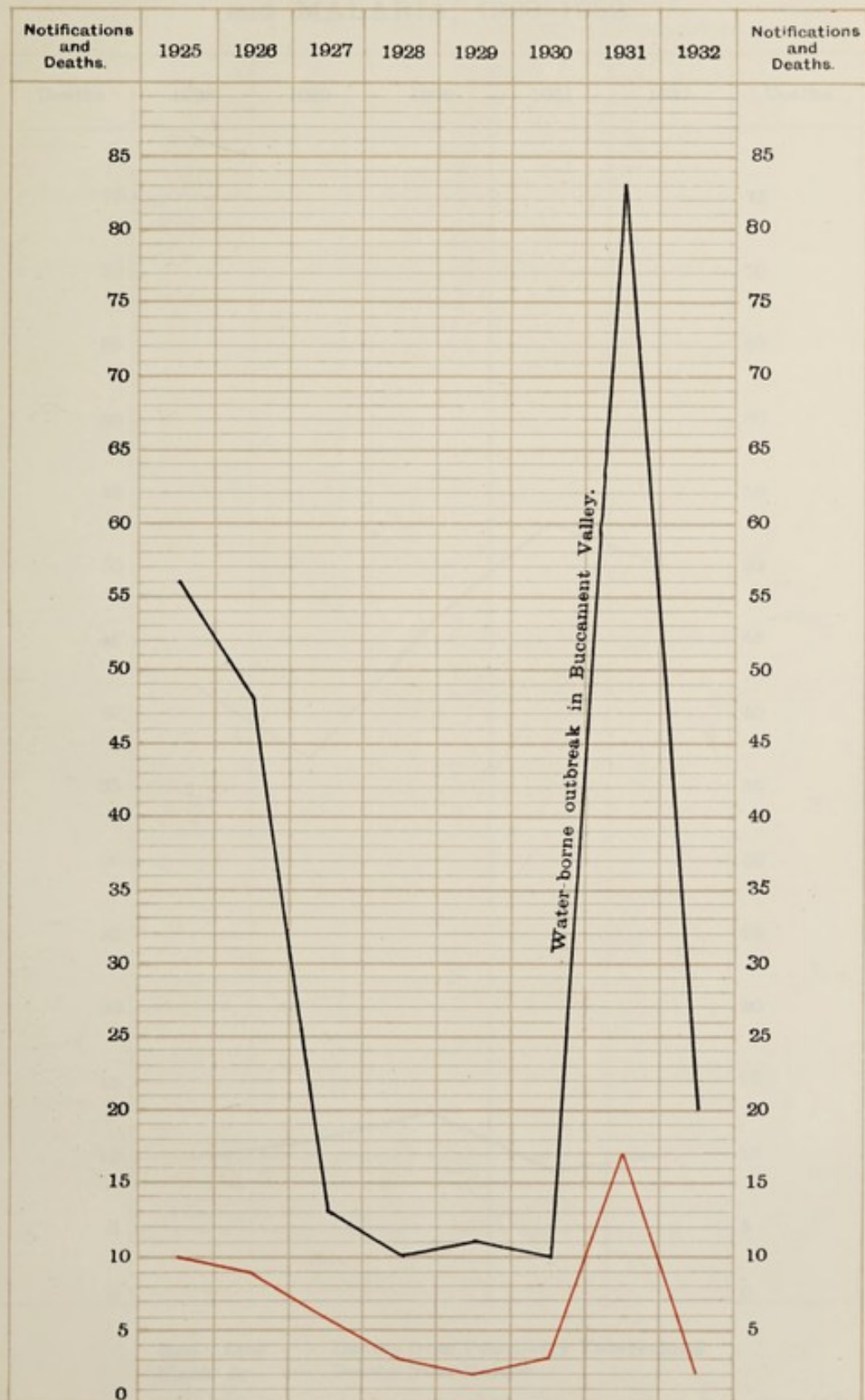
In the Kingstown area 6 cases occurred among 2 families on the Road directly east of the Colonial Hospital. They gave the impression of a common source of infection; they were all collected, isolated and notified within a fortnight. In District 3 one fatal case was isolated from the Escape barracks, and 3 cases, children, from one house at Calder. Whenever a case of the Enteric group is notified a mass inoculation of the contacts and the residents of the neighbourhood is carried out. In this way during the year 780 persons were inoculated.

As a result of the cases at Calder the Mahoe Spring was screened and protected from possible pollution. This spring is the main water supply of the residents in this locality.

In the control of infectious diseases the practice of terminal disinfection is no longer insisted on. Whenever a person dies of an infectious disease the occupiers of the house are required to give the house and furniture a good cleaning and scrubbing and the bed and bedding thorough washing and exposure in sunlight. "We have already stated that most experienced workers in the sphere of public health share the views we have expressed, that the most important sources of infectious disease are to be found in living beings and not on inanimate objects. Persons not things are dangerous. Terminal fumigation and the extensive disinfection of places and objects by means of chemical solutions cause

# ENTERIC FEVER IN ST. VINCENT.

Notifications and Deaths, 1925--1932.



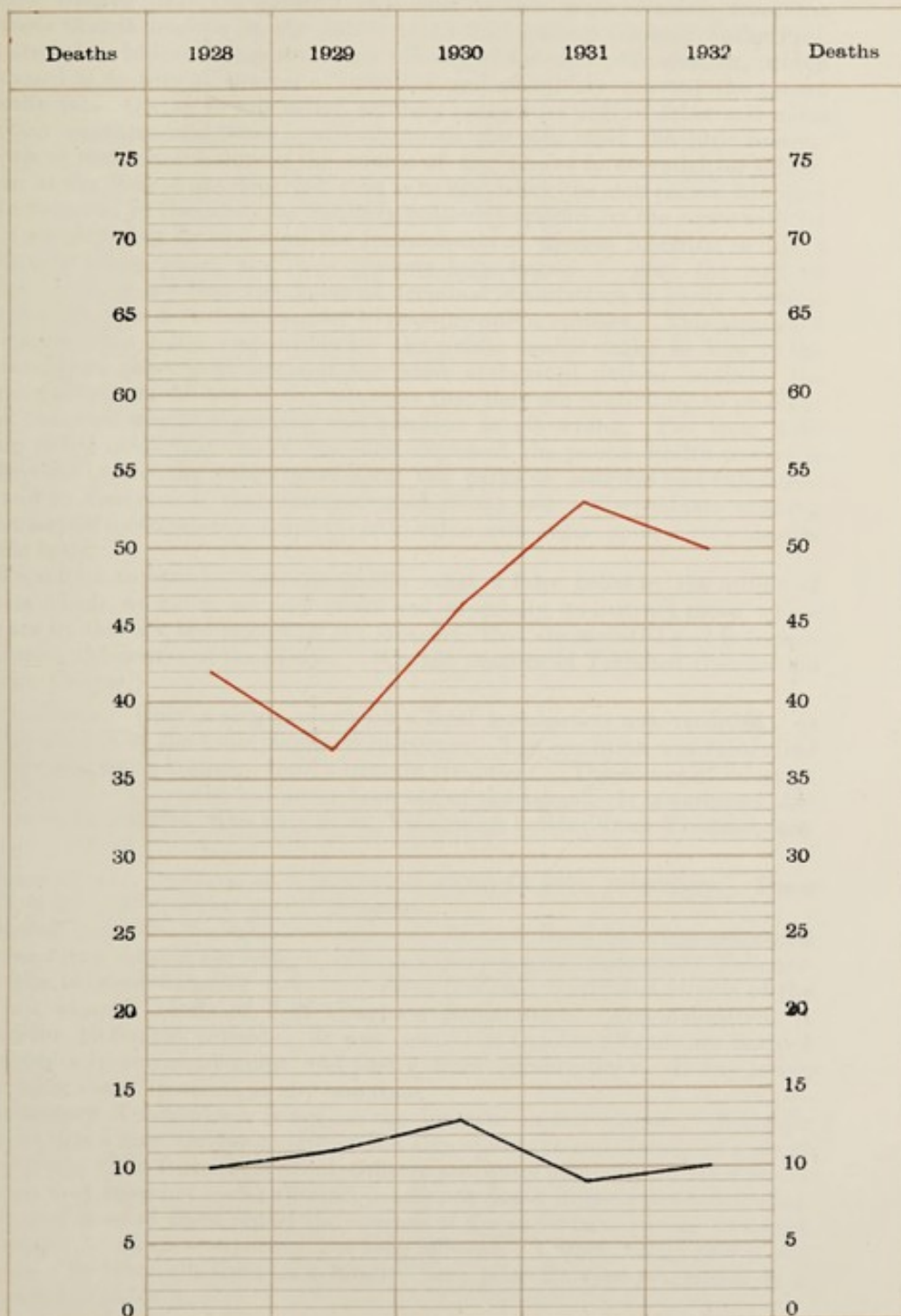
Black Line — Notifications  
Red do. — Deaths





# ST. VINCENT

## Curves of DEATHS from PULMONARY TUBERCULOSIS and MALARIA, 1928-1932.



Red Line — Deaths from Pulmonary Tuberculosis  
Black do — Deaths from Malaria

ST. VINCENT  
 Causes of DEATHS from PULMONARY TUBERCULOSIS  
 and MALARIA 1928-1933



Solid Line --- Deaths from Pulmonary Tuberculosis  
 Dashed Line --- Deaths from Malaria

in the first place a useless disturbance to the patient after his cure, or to his householders by subjecting them to measures that are always troublesome and generally costly. But the greatest objection to this method arises from the confidence that it inspires in the public mind and among sanitary authorities. They are led to believe in the sovereign efficacy of terminal disinfection, which is supposed to destroy all sources of infection and effectively prevent the spread of the disease. Owing to this belief, sanitary authorities neglect other and more important measures, and those in attendance on the sick omit the little precautions whose performance during the course of the illness is essential for safety. So soon as the disease has departed, that is to say, when the sick person has died or been removed to Hospital, the Sanitary authority appears on the scene with its belated activity; but by this time the transmission of disease infection to others has already taken place, and new persons have begun to play the part of "carrier". Some say that the value of terminal disinfection is really a matter of psychology, that it is done in order to reassure public opinion. This argument would imply that those responsible for the public health ought to bow to the most inveterate preconceptions and the most antiquated notions while all the time recognising the futility of the measures that they are continuing to practise. I think that this way of regarding the question is all wrong. Far from subscribing to it I think that one of the chief duties of the public health worker is to endeavour to lead the public mind upon the paths of progress and enlightenment and to convince it that fumigation of rooms and indiscriminate washing with antiseptic solutions has scarcely any value and rests upon a very slender scientific basis.

We ought to banish from the public mind a false belief in the utility of processes which we know are not useful and especially to instruct those whose duties are by the sick bed regarding the measures that are essential and indispensable during the course of the illness." (On the practice of Terminal Disinfection by Carlos Chagas.)

*Diphtheria.* Only a single case with a fatal termination was recorded. It was the little girl of the Chief Sanitary Inspector. The condition was recognised too late to gain any advantage from antitoxin treatment. The source of infection was not traced. The child had never been out of the Island. It is surmised that one of the elder children, who were in St. Vincent on holiday from Trinidad, may have been a carrier.

*Tuberculosis.* 74 cases were notified of whom 63 were pulmonary. There were 52 deaths, 50 of whom were Pulmonary.

During the year the Administrator had the Low Point building renovated and turned into a home for female patients suffering from Pulmonary Tuberculosis. The building formerly used as a Yaws Hospital is situated on one of the lower but exposed bluffs of Fort Charlotte promontory. Accommodation is provided for 10 female patients. It was opened in October; funds are derived partly from a Government grant and partly from subscriptions. It has never yet had more than 7 patients at any one time.

Pulmonary Tuberculosis is not on the increase in this Colony. When it does occur it is a very serious condition and almost always ends fatally in a short space of time. The District Medical Officers are quite emphatic in their statements that they have not seen two cases in any one house in their districts during the year, and most of them report the absence of direct contacts among members of any family in which one person has been afflicted. Unfortunately this is not always so. In District 1 there is a family, very poor Portuguese, which in 3 years has lost 4 children.

*Yaws and Syphilis.* In 1931 the recorded injections numbered 28,368, at a cost of £200. In 1932 injections numbered 25,758 at a cost of £190; Arsenicals were valued at £183, Bismuth preparations at £7. "Sobita" continues to give satisfaction; the ease with which it can be given, comparative painlessness, low



toxicity and unlimited supply at a very low cost, are undoubted points in favour of its use in mass treatment. In cases of Syphilis, especially tertiary manifestation, and late obstinate tertiary yaws, most Medical Officers prefer and think they get better results from Arsenicals. It is gratifying to note the continued decrease in the price of Arsphenamines.

Vital Statistics.	1931.	1932.
Estimated Population ...	47,961.	Census returns 49,665
(Estimated increase in 1932)		1,704)
Births, excluding still-births ...	1,852	2,002
Birth rate per 1000 ...	41.09	40.31
Still-births ...	119	128
Percentage of live to still-births ...	6.04	6.39
Total deaths ...	1,018	810
Death rate per 1000 ...	21.23	16.31
Deaths of children under 1 year (excluding still-births) ...	281	188
Infant mortality per 1000 births ...	162	94

## CAUSES OF DEATH.

	District 1.	District 2 (South).	District 2 (North).	District 3.	District 4.	District 5.	Grenadines.	Total.
<i>I. Infectious and Parasitic Diseases.</i>								
1. Typhoid Fever ...	2							2
9. Whooping Cough ...					7			7
10. Diphtheria ...	1							1
11. Influenza ...				1				1
22. Tetanus ...	3	1		5	1	1		11
23. Tuberculosis Pulmonary ...	25	2	2	8	8	4	1	50
25. Tuberculosis Peritoneal ...	1							1
32. Tuberculosis Disseminated ...	1							1
34a. Syphilis Congenital ...	5	1	1	5		6	1	19
34b. Syphilis acquired ...	3	1	2	1			1	8
36. Septicæmia ...	1		1	1				3
38. Malaria ...	1	4	1		4			10
39. Yaws ...	2	4			1			7
42. Ascariasis ...	7	10	2	6	5	5	1	36
<i>II. Cancer and other Tumours.</i>								
46. Cancer of Digestive Organs ...	2	2				1		5
47. „ „ Respiratory „ ...	1							1
48. „ „ Uterus ...	1	1				1	1	4
49. „ „ other female genitalia ...	1							1
50. „ „ Breast ...	1		1		1			3
51. „ „ Male genito-urinary ...	1				1			2
52. „ „ Skin ...	1							1
53. „ „ other organs ...				2			1	3
54. Non-malignant Tumours ...	3		1					4
55. Tumours of undetermined nature ...		1						1
<i>III. Rheumatism, Diseases of nutrition and Endocrine glands.</i>								
59. Diabetes ...	3	1	1					5
67. Diseases of the Thymus ...					1			1
<i>IV. Diseases of the Blood forming organs.</i>								
71. Anæmia ...			1					1
Carried forward ...	66	28	13	29	29	18	6	189

## CAUSES OF DEATH.—Continued.

	District 1.	District 2 (South).	District 2 (North).	District 3.	District 4.	District 5.	Grenadines.	Total.
Brought forward	66	28	13	29	29	18	6	189
<b>V. Chronic Poisoning.</b>								
76. By organic substances	...				2			2
<b>VI. Diseases of the Nervous System.</b>								
79. Meningitis	1						1	2
82. Cerebral Hæmorrhage	6	2	3	9	1	6	1	28
84. Other forms of Insanity	2							2
85. Epilepsy	...					1		1
86. Infantile convulsions	...				1	1		2
87. Other diseases of the Nervous System	...				1			1
<b>VII. Diseases of the Circulatory System.</b>								
91. Acute Endocarditis	1							1
92. Valvular Disease	7	2	1	7	2	4		23
93. Diseases of the Myocardium	2	1		3		2	1	9
94. .. of the Coronary Arteries	...					1		1
95. Other Diseases of the Heart	1			2	2			5
96. Aneurysm	1			1				2
97. Arterio-Sclerosis	...	6		2				8
98. Gangrene	3	2	1					6
100. Diseases of the Veins	1	1	1					3
<b>VIII. Diseases of the Respiratory System.</b>								
106. Bronchitis	3	4		7	12	11		37
107. Broncho-pneumonia	2	1	7	2	1			13
108. Lobar Pneumonia	2			1				3
109. Pneumonia (not defined)	...			1				1
110. Pleurisy	2							2
112. Asthma	1	1	2				1	5
<b>IX. Diseases of the Digestive System.</b>								
117. Ulcer of the Stomach	1							1
118. Other diseases of the Stomach	...					1		1
119. Diarrhœa (over 2 years of age)	6	5	1	7	5	2		26
120. Diarrhœa (under 2 years of age)	11	8	3	18	24	3	3	70
122. Intestinal obstruction	2		1					3
123. Other diseases of the Intestines	...				2			2
124. Cirrhosis of the Liver	...			1	1			2
127. Other diseases of the gall bladder	...				1	1		2
129. Peritonitis without stated cause	...			1				1
<b>X. Non-Venereal Diseases of the Genito-Urinary System and Annexa.</b>								
130. Acute Nephritis	...	1		2	7			10
131. Chronic Nephritis	7	1		3	3	3		17
132. Nephritis (not defined)	...				1			1
135. Diseases of the bladder	...				1			1
137. Diseases of the Prostate	2	1						3
139. Diseases of the female Genitalia	1							1
<b>XI. Diseases of Pregnancy and the Puerperal State.</b>								
145. Puerperal Sepsis	1							1
146. Puerperal convulsions	1					1		2
149. Other accidents of childbirth	1					1		2
Carried forward	134	64	33	96	96	56	13	492



## CAUSES OF DEATH.—Continued.

	District 1.	District 2 (South).	District 2 (North).	District 3.	District 4.	District 5.	Grenadines.	Total.
Brought forward	134	64	33	96	96	56	13	492
XII. <i>Diseases of the Skin and Cellular Tissue.</i>								
151. Carbuncle		2						2
XIV. <i>Congenital malformations.</i>								
157. Spina bifida &c.			1			2	1	4
XV. <i>Diseases of early Infancy.</i>								
158. Congenital Debility	12	5	3	9	5	6		40
159. Premature Birth	4	1		5			2	12
161. Other Diseases	1	1		3			4	9
XVI. <i>Old age.</i>								
162b. Other forms of Senile Decay	34	14	1	12	9	5	5	80
XVII. <i>Deaths from Violence.</i>								
174. Homicide by cutting Instrument	1		1					2
181. Accidental Burns	2				1			3
183. Accidental Drowning		2			1		1	4
186. Accidental injury by fall	1					1		2
198. Execution	1							1
XVIII. <i>Ill-defined Diseases.</i>								
200. Cause of Death ill-defined	2	2	3	7	10	6	1	31
	192	91	42	132	122	76	27	682

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Totals.
Still-Births St. Vincent	42	27	24	26	119
" " Grenadines	3	2	2	2	9
Totals	45	29	26	28	128

	Males.	Females.	
Still-Births St. Vincent	71	48	119
" " Grenadines	4	5	9
Still-Births Legitimate	25.		
Illegitimate	103.		

## III. General Measures of Sanitation.

*Sewerage Disposal.* The septic tanks in and around Kingstown now number 33. They are giving satisfaction.

At Edinboro the emptying of contents of latrine pails into the sea created a nuisance on the foreshore and affected the bathing at this seaside resort. The conservancy was changed; privy cess-pits have been substituted for pail latrines, or disposal pits provided for receiving the contents of pails.

The public latrines throughout the Colony were kept in repair and regularly cleaned during the year.

409 privy cess-pits, 32 pail latrines and 3 septic tanks were installed.

428 latrines were repaired following on verbal instructions by Sanitary Inspectors. There are still localities in which the people, from sheer indifference, will not keep their latrines in a state of repair unless driven to do so.

*Scavenging and refuse disposal.* 1,505 tons of house refuse and street sweepings were collected in Kingstown and destroyed by Incinerator and trenching. The refuse collected amounted to 3,110 cartloads, equivalent of 3,764 cubic yards.

In spite of the Regulation requiring metal covered dust bins, unsightly boxes are still seen here and there in Kingstown, the householder pleads poverty when pressure is being brought to bear on him.

There are 31 public dust bins in Kingstown, moveable metal receptacles placed in the market Square and in poorer sections of the Town. In the small towns the scavenging service was well maintained. 8,962 donkey-cart loads of rubbish were removed.

During the year with the help of the Colonial Development Funds Watson type of Incinerator was erected in the small towns of Georgetown, Layou, and Chateaubelair. Each of the five small towns of the Colony is now thus supplied.

The Kingstown Incinerator and the road of approach cost £27 for maintenance and repairs.

*Drainage.* The concreted drains laid down in Georgetown, Chateaubelair, Barrouallie and Calliaqua have given satisfaction. The scheme for Kingstown to abolish the central underground sewer has not yet materialised.

Kingstown, surrounded by a crescent of hills, is subject to occasional flooding in times of heavy rainfall. On October 8th there was a precipitation of over 4 inches of rain between 9 a.m. and noon. Certain portions of the Town were flooded to a greater extent than had been experienced for many years.

There are certain weak spots in the drainage system of the Town which if attended to and corrected would lessen the frequency of floodings.

The Tropical disturbance which occurred in the Caribbean during the early part of November affected the Leeward foreshore of this Island for many days. Huge groundswells lashed the coastline and in some cases forced their way inland. Quantities of debris were thrown up by the sea on the coast line of the towns; the outfalls of main drains were blocked with sand; collections of stagnant water soon became offensive. This was tackled quickly and efficiently by the Department but it involved increased labour and expenditure.

*Water supplies.* Colonial Development Funds enabled the completion of the "Sion Hill" water supply. The water is obtained from the Kingstown Board's supply at Richmond Hill and is pumped by a Hydram to a reservoir at an elevation of 400 feet. From the reservoir the water is distributed by gravitation. Besides being of considerable advantage to the people of the neighbourhood, it should result in a diminution of stegomyia in the area of supply.

Small water supplies from Spring sources in Mesopotamia and Calder Estate were efficiently protected from pollution. This affords a reasonably pure drinking water for the villagers in these areas.

With the exception of that from Colonarie River for the settlements along its course, the other local pipe borne supplies at Georgetown, Stubbs, Calliaqua, Layou, Barrouallie, Troumaca and Chateaubelair are drawn from Springs. At times such supplies are intermittent and the cause known but unfortunately correction is indefinitely delayed. Settlements in the Buccament and Cumberland Valleys and at Argyle still use raw river water for their drinking supply.

In Kingstown the rainfall was heavy and almost continuous during the year. There was practically no dry season. Even so the water supply was not continuous during the year. The progress of events leads one to foresee that in the near future there will be an insistent demand for a continuous and more liberal pipe borne supply for Kingstown and its immediate suburbs.



*Clearance of bush and overgrowth.* There has been no diminution in the activity of the Department in reducing overgrowth. In Kingstown the cutting down of trees is done for the householder free of charge. 1,486 trees were cut down and 2,410 trimmed as the result of notices or verbal directions by the Sanitary Inspectors.

There is still an excess of overgrowth in the villages. It is only by careful persistence that the owner can be induced to part with a breadfruit tree, even after it is explained to him that excessive numbers in a small area retard fruitful crops.

*Sanitary Inspection and Work.* 60,760 visits of inspection were made; 11,471 notices and verbal orders given; 10,172 were complied with; 444 latrines were built; 429 repaired; 4,252 yards and 405 hog swamps were cleaned; 150 drains were cleaned and 63 repaired; 747 accumulations of manure were removed; 23 dustbins were provided by householders and 29 repaired; 110 shops were scrubbed, 134 cobwebbed and 103 lime washed; 19 cake trays were rendered fly proof; 12 dwelling houses were repaired; 120 boats were emptied of stagnant water; 28 shop bins were built; 202 cess-pits were deodorised.

*Deratisation.* 1,102 rats and mice were caught and destroyed. Traps are set and poisoned baits laid at the request of householders.

#### Housing and Town Planning.

The scheme for the erection of 100 two-roomed cottages for peasants by means of a loan from the Colonial Development Fund was carried out during the year. The houses, 20 ft. x 10 ft., 8 ft. high from floor to plate, are built of concrete slabs 18 ins. x 9 ins. x  $4\frac{1}{2}$  ins., and are roofed with wallaba shingles. 50 such houses were put up at Chateaubelair, the other 50 in and around Georgetown.

At Chateaubelair an area of land was purchased from the Petit Bordel Estate and divided up into building lots 75 ft. x 50 ft. This new settlement forms an extension of the small Town of Chateaubelair, to which it is connected by a concreted bridge over the Petit Bordel River. It is intersected by 3 good roads, has a pipe borne water supply with 4 stand pipes, and provided with a recreation ground. Each house has a pit latrine but no kitchen.

At Georgetown the houses are built on lots already the property of the persons for whom the houses are built. In some cases the lots were already vacant; in others dilapidated houses were removed to make room for the new ones. The new houses do not form a separate collection or settlement as at Chateaubelair. They are not provided with either latrines or kitchens. Ventilation is secured by fixed jalousies in the gable ends and over the door and window heads.

The houses are sold to the section of the population known as the labouring peasantry on the hire purchase system. On payment of the first monthly instalment of 6/5 the labourer is allowed to occupy the house. Thereafter he is required to pay monthly instalments on a fixed schedule until the purchase price—£55 is paid off. A maximum of 25 years is allowed for the payment.

Under the provisions of the "Dwelling House Regulations" 198 building notices were approved of and 128 buildings erected. These are exclusive of the "model houses" put up under the Colonial Development Fund.

The cardinal factors sought to be achieved by the regulations are:—a minimum house plot of 75 feet x 50 feet, provision of sufficient ventilation  $\frac{1}{16}$  of the floor space, provision of a latrine, and living rooms with an area not less than 64 square feet, the exclusion of wattle and daub or trash houses from the small towns.



### Labour Conditions.

With the expenditure of the Colonial Development Funds on more road reconstruction and house building schemes labour was well employed during the first eight months of the year. Thereafter there was a definite falling off. Towards the end of the year wages were reduced below a satisfactory living standard.

### Food in Relation to Health.

Regulations dealing with the sale of milk, food vendors and food vending establishments, bake houses and the use of Saccharine in the manufacture of aerated waters, received legislative sanction and were put into force.

The food vending regulations require Registration and Medical Certification of all classes of food vendors. All certificates expire on June 30th and December 31st each year.

Numbered milk badges stamped with the year of issue and expiring at the end of every such year were introduced.

A type of milk pail fitted with a draw off tap and a small, capped opening on the top, was made compulsory. These regulations have resulted in a greater measure of control of food vendors.

Due in a large measure to the high standard of cleanliness set by the "Sanitary Bakery" there has been general improvement in the bake houses. There are 37 registered bake houses of which 7 are in Kingstown.

Provision shops are required to provide covered bins instead of barrels for keeping such food stuffs as flour, rice, peas, sugar, etc.

The establishment of a Government plant for making ice and ensuring cold storage at exceedingly cheap rates has brought the use of ice within the means of all members of the community.

One boat load of Jack-fish, 5 lbs. deep sea fish and 5 lbs. salted herrings were seized and condemned as unfit for human consumption.

### School Hygiene.

Regular quarterly visits of inspection were paid by the District Medical Officers to the Primary Schools of the Colony. In his report each Medical Officer is required to note the number of children present, those recommended for medical treatment and those suffering from yaws, ulcers or skin diseases. In addition he is asked to comment on the school building, yard and latrine accommodation. Owing to lack of personnel and the necessary facilities the scope of the inspection is a limited one.

In a large percentage of cases the school buildings are described as overcrowded. It is estimated that only 65% of the children of school age are on the school registers, and the average attendance about 56%.

The Methodist Missionary Society have established a "Community School" at the Glen in the 3rd Medical District, about a mile beyond the small town of Calliaqua. The Institution has as its main object an education which will equip the pupil for taking his place in the life of the community after leaving school. It is a valuable educational asset.

The Sanitary Department is responsible for the erection and maintenance of all school latrines. The managers of schools are responsible for the scavenging and cleaning. There has been a great and steady improvement since the Department was made responsible. Under Denominational control owing chiefly to lack of funds, the latrines were usually badly constructed or in conditions of disrepair. The present condition is much more satisfactory.

During 1932 the following work was done:—

*New Latrines Erected.*

1. Spring Village Wesleyan.	3 compartment privy cesspit	...	...	£ 16	1	8
2. Belle Vue Roman Catholic.	3 compartment privy cesspit	...	...	15	14	8
3. Biabou Wesleyan.	3 compartment privy cesspit	...	...	13	17	1
4. Westwood Wesleyan.	3 compartment privy cesspit	...	...	18	19	11

*b. Reconditioned Latrines.*

1. Troumaca Government.	"Kentucky" converted into privy cesspit	...	...	6	2	10
2. Owia Anglican.	Repaired and moved to new site	...	...	8	3	10
3. Gomea Wesleyan.	General repairs	...	...	4	13	10
4. Union Wesleyan.	Repaired and moved to new site	...	...	4	15	8

*c. Minor Repairs.*

1. Lowmans Anglican	...	...	2	11	1
2. Grammar School	...	...	4	4	0
3. Belair Anglican	...	...	3	6	
4. Marriagua Government	...	...	3	7	
5. Stubbs Government	...	...	17	0	
6. Kingstown Wesleyan	...	...	1	7	3
7. Buccament Government	...	...	3	15	3
8. Layou Government	...	...	5	0	
9. Canouan Government	...	...	3	8	
10. Brighton Wesleyan	...	...	4	9	
11. Paget Farm Anglican	...	...	3	2	

Total	...	...	£ 102	7	9
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**Measures taken to spread the knowledge of Hygiene and Sanitation.**

With the development of a sanitary conscience among the labouring-classes the role played by the Sanitary Inspector in the everyday life of the people is becoming more evident. Previously he was looked upon as an excrescence and a distinctly unwelcomed visitor; now he is accorded a measure of usefulness and responsibility; he is called upon to investigate many and various complaints and have them remedied. Recent Public Health Legislation has tended to bring the Inspector into more intimate touch with the General Public. In turn this has given him increased opportunities for discussing health matters.

Lantern lectures, health talks and the distribution of Public Health Literature were continued throughout the year. The Department is grateful to the editor of the "Vincentian" for readily publishing articles on health topics and for distributing leaflets printed at his own cost, throughout the Colony. One of the most successful lantern lectures was given at the Park Hill Village accompanied by an address by the Chief Medical and Health Officer on pride and ambition in reference to sanitary progress.

In response to a request from the Education Department the Chief Sanitary Inspector gave a correspondence course in Hygiene to candidates preparing for a Pupil Teachers' examination.

No course of training was given during the year. All the District Sanitary Inspectors are now locally qualified; in addition nine other persons in the Colony hold the Certificate.



The Sanitary Inspectors' Library now has 60 volumes of very useful books. I desire to express my thanks to the Chief Sanitary Inspector for his help and loyalty during the year. I am also indebted to him for copious notes and tables prepared for me for this section of the Report.

#### **REPORT ON KINGSTOWN BY SANITARY INSPECTOR BRERETON.**

##### **Inspection of Premises and work done.**

5,158 inspections were made;—2,342 cottages, 830 barracks, and 1,986 shops, bakeries, parlours, factories and other premises. 496 verbal orders were issued, 290 complied with without further action; 63 intimation notices were served, 52 complied with; 16 Statutory notices were served, 17 complied with.

Great attention was paid to the reduction of the excessive number of large trees in the Town. Privies were inspected regularly to ensure proper maintenance and regular scavenging and cleansing. The prevention of Mosquito breeding engaged our attention. With the passing of Mosquito Regulations regular inspection of premises and the removal of old and broken receptacles capable of holding water, were carried out.

In the months of November and December notices were served on owners of Food vending establishments requiring them to limewash their premises. As a result of these notices 17 retail shops, 5 bake houses, 3 cook shops and 5 parlours were so limewashed.

##### **Sewerage Disposal.**

The prevailing system of sewerage disposal in Kingstown is by pail. A few people of the better class are installing septic tanks. During the year 3 were installed. Of the 33 in use at present in and around Kingstown only 1 had to be repaired during the year, the others are all giving satisfactory service. 7 pail latrines were built and 8 repaired. The 3 Public Latrines were regularly maintained, scavenged and cleaned.

##### **Scavenging and Refuse Disposal.**

1,505 tons of house refuse and street sweepings were collected and destroyed by Incinerator. 22 bins were provided, 1 repaired and 28 fitted with covers as a result of notices.

##### **Water Supply.**

The water supply was maintained as in previous years. During the dry season the water was locked off to a lesser extent than in previous years. It may be interesting to know that towards the end of the year the Richmond Hill supply which hitherto was kept as a reserve, was drawn upon by means of a Hydram in order to supply Sion Hill with water. Another step taken was the installation of water supplies to various tenement houses. The value derived therefrom cannot be overestimated. There were 11 installations and 1 extension.

##### **Food Vending and Food Establishments.**

The year 1932 witnessed a distinct improvement in the control of Food Vendors. With the enforcement of the Food Vendors Regulations there was better regularity in the Medical examination and registration. This regularity still continues. It will be noticed that the number of shop clerks is considerably lower than in 1931. This is the result of the business slump, on account of which nearly all large retail establishments had to reduce their staffs. Steps were taken to protect foodstuffs put up for sale in retail shops. The old method of keeping foodstuffs in barrels covered with bags was abolished and covered wooden bins substituted. Nearly all the shops are now provided with these.

*Bread.* The advent of the Sanitary Bakery has brought about a general improvement in the supply of bread. It is pleasing to know that the other bakeries are trying to emulate the high standard of tidiness and cleanliness set up



by this bakery, and on this score there has been improvement in all the bake houses in the District.

*Milk.* The milk trade has increased during the year. In Kingstown there were 131 vendors registered. The regulation enforcing the use of a badge for the current year is responsible for this increase. The milk regulations require the use of a covered pail provided with a tap for selling milk by retail. All the milk vendors are now using this type of pail. The Department has rigidly to enforce this Regulation.

#### Prosecutions.

In Kingstown there were 11 cases, 7 convictions, 2 cases dismissed and 2 withdrawn. It is the policy of the Department to resort to the strong arm of the Law after all persuasive measures fail.

#### Publicity and Propaganda.

One lantern lecture was given on Victoria Park. At this lecture the Chief Medical and Health Officer and the Chief Sanitary Inspector spoke to the large gathering on the Work of the Red Cross during the War and on Tuberculosis and Hookworm. Other efforts are made to educate the people by speaking to them on Sanitary matters during the course of inspections.

#### Meat.

484 cattle, 88 calves, 219 sheep, 87 goats, 258 pigs, were slaughtered in the Town during the year. Regular inspections were made of the Abattoir.

#### Housing.

In Kingstown the housing conditions are not all that could be desired, yet with the passage of time improvements are being brought about. Today the barracks of the town are all supplied with fly proof latrines. These latrines are maintained and scavenged by the owners of the houses. Ventilation was a factor not much considered by the general public but today every householder in the Town seems to realise its importance for good health; during the year 4 buildings were ventilated at the instance of the Department.

Paul's Lot received great attention. A number of trees was removed and general measures taken to improve conditions. The efforts of the Department were not fruitless. There are quite a number of new houses and with the new spirit abroad the people are repairing their properties and taking all steps necessary to keep in line. The two most noticeable changes consist of getting rid of the damp that existed before and better housing conditions.

#### General Health of the District.

The general Health of the District was maintained at a satisfactory standard. There were seven cases of Typhoid, without any deaths. There were 14 notifications of Pulmonary and 4 of other forms of Tuberculosis. Three deaths occurred from Pulmonary and one from Tubercular Adenitis. It is gratifying to the Department to realise that the public think it wiser to consult the Doctor and get first hand advice rather than hide from him as of old, and this undoubtedly is the major step in the prevention of disease and preservation of continued good health.

#### REPORT ON BEQUIA BY SANITARY INSPECTOR RICHARDS.

1. 109 visits of Inspection were made; 112 notices served; 508 verbal orders given; 41 latrines were built and 97 repaired; 109 yards and 62 hog swamps cleansed; 62 drains cleaned; 57 accumulations of manure removed; 19 bins with hinged covers provided shops by their owners; 9 retail shops scrubbed and 11 cobwebbed; 2 dwelling houses repaired and 3 premises disinfected for Infectious diseases.

2. The scavenging of the town was done by one labourer who worked daily except on Sundays. The street and beach were cleaned daily, refuse burned and buried; refuse on dumping ground was burned twice a week; cleaning and clearing of drains, weeding street and trimming overhanging growths etc., were done as required; the Public latrine was cleansed twice per week and occasionally at other times when required.

3. Pits with box seats and pail latrines are being used. Contents of pails are emptied into the sea, cesspits deodorised with coal dust as horse manure is very scarce in the Island.

A few pail latrines were changed to pit latrines by my instructions after explanations to owners of premises as to the cost and difficulty in upkeep of a pail latrine and the insanitary conditions that arise if improperly kept. More stringent steps are now being taken in laying down pits instead of pail latrines.

4. Rain water stored in tanks and deep well water are the only sources of water supply.

5. There are earthen drains in the Town which are by no means satisfactory. One drain, half concreted half earthen, has caused damage to the street on two occasions after heavy rains and tends to form pools of stagnant water.

6. There are 4 bakeries, 11 groceries, 11 shop clerks, 10 milk vendors, 11 hucksters and 5 bakers.

The bakeries and groceries were kept in good sanitary condition. Shop clerks, milk vendors, hucksters and bakers were examined and granted certificates.

7. Under the provisions of the dwelling house regulations 8 notices for the erection of dwelling houses were approved; at the end of the year 5 of these buildings were completed.

8. During the year 3 cases of Tuberculosis were discovered; 2 were sent to the Colonial Hospital, the other to the Tubercular Home. Terminal and Concurrent disinfection were carried out by the District Sanitary Inspector.

The general health of the District was good.

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TABLE 1.

STATISTICAL RECORD OF SANITARY WORK.  
Inspections of Premises etc., by Sanitary Inspectors.

Months.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Visits to dwelling Houses and other Premises ...	5,079	5,362	5,360	5,176	5,044	5,147	4,780	5,362	4,860	4,694	4,829	5,067	60,760
No. of Shops, Stores, Bake houses, etc., Inspected.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average per Month.
Retail Shops ...	119	161	184	148	184	176	153	154	160	122	163	210	161
Bake houses ...	31	34	47	32	25	39	38	35	36	62	29	44	37
Markets ...	4	4	5	4	25	5	8	27	23	12	5	4	10
Fish Trays ...	104	86	61	64	60	52	69	46	103	73	70	53	70
Cake ..	52	73	83	35	59	94	96	54	69	63	65	68	69
Bread Shops ...	5	6	9	3	3	7	7	9	10	6	4	5	6
Cook ..	4	2	2	2	1	1	2	4	2	1	4	6	2
Parlours ...	6	10	24	1	11	10	20	18	27	14	10	13	13
Fry Shops ...	2	3	—	—	1	1	1	1	1	1	—	1	1
Hotels ...	1	1	2	—	—	2	1	4	2	2	2	1	1
Public Latrines ...	13	19	22	19	26	27	18	22	25	25	22	26	22
Estate ..	7	4	2	2	—	7	4	5	13	18	2	13	6
Aerated Factories ...	12	21	18	6	21	9	9	7	8	6	6	6	10
Other Factories ...	22	9	25	23	10	13	16	7	20	6	8	19	14
Tanneries ...	2	5	2	3	2	2	3	4	4	3	5	4	3
Schools ...	15	22	24	23	22	23	20	16	21	22	18	20	20
Dumping grounds ...	21	24	25	30	24	27	16	15	20	15	20	18	21
Cemeteries ...	9	11	18	11	11	14	15	14	9	19	10	14	12
Church Yards ...	11	12	12	10	15	9	13	14	12	12	11	8	11
Slaughteries ...	3	6	4	3	7	6	4	13	11	7	9	9	6
Dairies and Cowsheds ...	—	1	1	1	1	1	1	1	1	1	1	1	1
Boats ...	28	122	124	100	138	157	154	162	140	139	103	135	125
Garages ...	40	15	14	11	11	22	9	12	11	11	13	15	15
Milk Vendors' utensils...	29	21	24	25	53	35	48	41	61	102	55	52	45

TABLE 2.

## Results of Notices and Verbal Directions.

Yards Filled in ...	52	Bake houses cobwebbed ...	47
.. Cleaned ...	4,252	.. .. scrubbed ...	41
Drains ..	150	Retail shops ..	61
Concrete drains constructed ...	9	Parlours ..	6
.. .. repaired ...	3	Cook shops ..	2
Earthen .. constructed ...	97	Dust bins provided ...	23
.. .. repaired ...	60	.. .. repaired ...	1
Privy Cesspits built ...	411	Uncovered Dust bins covered ...	28
.. .. repaired ...	294	Concrete floor of shops repaired ...	3
Pail Closets constructed ...	33	.. .. Bake houses ..	9
.. .. repaired ...	87	Public Latrines cleansed ...	115
Accumulations of Manure removed ...	747	Water Closets constructed ...	3
Trees cut down ...	1,486	.. .. repaired ...	1
.. trimmed ...	2,410	Cesspits deodorised ...	202
Premises cleared of bush ...	462	.. emptied ...	9
Dwelling Houses repaired ...	12	.. filled in ...	92
Privies Limewashed ...	3	Cisterns screened ...	2
Bake houses ..	38	Hog swamps cleansed ...	405
Retail shops ..	57	Boats emptied of stagnant water ...	76
Cook shops ..	3	Cake Trays made flyproof ...	19
Parlours ..	5	Bread bins ..	6
Retail shops cobwebbed ...	80	Shop bins provided ...	28
Parlours ..	7	Building Notices Approved ...	198



TABLE 3.  
DERATISATION.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
(a) Poisoned	58	—	67	63	17	15	21	16	33	31	25	28	374
(b) Trapped	22	6	47	28	38	46	57	71	57	46	29	67	514
(c) Mice	11	—	—	—	—	—	—	—	—	—	—	—	11
Totals	91	6	114	91	55	61	78	87	90	77	54	95	899

TABLE 4.

Registration of persons engaged in the preparation and sale of Food.

Sanitary District.	Shop Clerks.	Milk Vendors.	Dairymen.	Bread Vendors.	Pa-lour Keepers.	Hucksters.	Bakers.	Aerated water Makers.	Cook Shop Employees.	Butchers and Slaughtermen.	Totals.
Kingstown District	53	131	—	10	18	16	16	5	2	—	251
No. 1	28	—	8	—	5	6	4	7	—	2	60
No. 2 (North)	35	21	11	7	—	37	7	—	—	4	122
No. 2 (South)	50	56	14	—	1	27	16	—	—	7	171
No. 3	59	22	—	3	16	—	—	—	—	7	107
No. 4	42	1	1	—	—	2	4	—	—	—	50
No. 5	50	17	14	2	1	7	21	4	—	—	116
Totals	317	248	48	22	41	95	68	16	2	20	877

TABLE 5.

Medical examination of persons engaged in the preparation and sale of Food.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
Shop Clerks	37	36	69	30	36	37	142	35	11	6	8	8	455
Milk Vendors	14	21	8	20	116	35	17	9	6	8	4	7	265
Dairymen	1	3	3	3	14	23	9	2	2	6	4	3	73
Bread Vendors	2	2	2	1	2	2	4	2	2	—	—	—	19
Pa-lour Keepers	3	3	6	—	5	1	6	2	4	1	1	—	32
Hucksters	14	31	21	11	7	12	21	4	2	1	—	15	139
Bakers	10	9	9	6	9	7	30	2	3	1	1	2	89
Aerated Water Makers	3	1	6	—	—	1	5	—	—	—	—	—	16
Cook Shop Employees	—	—	—	1	—	—	—	—	1	—	—	—	2
Butchers	5	—	—	2	2	—	5	1	—	—	—	—	15
Slaughtermen	1	2	—	—	—	—	—	1	—	—	—	—	4
Totals	90	108	124	74	191	118	239	58	31	23	18	35	1,109

TABLE 6.

Register of establishments engaged in the preparation and sale of Food.

Sanitary District.	Description of Premises.								Totals.
	Aerated Water Makers.	Provision Shops.	Parlours.	Bakeries.	Dairies.	Groceries.	Fry Shops.	Cook Shops.	
Kingstown ...	6	26	18	7	—	4	—	3	64
No. 1 ...	3	26	4	2	1	—	—	—	36
No. 2 (North) ...	—	25	—	6	—	—	—	—	31
No. 2 (South) ...	1	38	1	9	—	—	—	—	51
No. 3 ...	—	45	1	—	—	—	—	—	46
No. 4 ...	—	27	—	4	—	8	—	—	39
No. 5 ...	2	36	1	11	—	1	—	—	51
Bequia ...	—	11	—	4	—	—	—	—	15
Union Island ...	—	8	—	7	—	—	—	—	15
Totals ...	12	242	25	50	1	13	2	3	348

TABLE 7.

Disinfection.

Sanitary District.		Terminal.	Concurrent.
Kingstown ...	...	12	14
No. 1 ...	...	6	20
No. 2 (North) ...	...	3	29
No. 2 (South) ...	...	2	38
No. 3 ...	...	10	10
No. 4 ...	...	7	7
No. 5 ...	...	5	8
Bequia ...	...	3	212
Union Island ...	...	1	5
Totals ...	...	49	343

TABLE 8.

Privies Built.

Sanitary District.		No. of Privy Cesspits Built.	No. of Pail Closets Built.	No. of Septic Tanks Built.	Total No. Built.
Kingstown ...	...	—	7	3	10
No. 1 ...	...	36	—	—	36
No. 2 (North) ...	...	37	—	—	37
No. 2 (South) ...	...	23	4	—	27
No. 3 ...	...	156	—	—	156
No. 4 ...	...	120	1	—	121
No. 5 ...	...	19	—	—	19
Bequia ...	...	20	21	—	41
Totals ...	...	411	33	3	447

TABLE 9.  
Privies Repaired.

Sanitary District.	No. of Privy Cesspits repaired.	No. of Pail closets repaired.	No. of Septic Tanks repaired.	Total No. of all Types of Priv- ies repaired.
Kingstown ...	—	8	1	9
District No. I ...	15	—	—	15
.. No. II (North) ...	42	1	—	43
.. No. II (South) ...	45	19	—	64
.. No. III ...	43	—	—	43
.. No. IV ...	105	—	—	105
.. No. V ...	6	—	—	6
Bequia ...	38	59	—	97
Totals ...	294	87	1	382

TABLE 10.  
New Buildings Erected.

Sanitary District.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
District No. I ...	3	1	—	—	—	—	—	18	—	—	—	7	29
.. No. II (North) ...	—	—	1	—	—	50*	—	—	—	2	—	2	55
.. No. II (South) ...	—	1	1	1	—	—	—	—	1	4	—	—	8
.. No. III ...	1	3	5	3	9	3	3	3	1	2	—	—	33
.. No. IV ...	1	5	1	3	4	2	11	1	3	7	1	2	41
.. No. V ...	1	—	—	—	—	—	—	—	—	4	2	50*	57
Bequia ...	—	1	—	—	—	2	1	1	—	—	—	—	5
Totals ...	6	11	8	7	13	57	15	23	5	19	3	61	228

\* Labourers' Cottages built under Colonial Development Scheme.

TABLE 11.  
Scavenging and Cleansing.

Sanitary District.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	No. of Loads.	No. of Cubic Yards.
Kingstown ..	258	218	266	230	246	239	258	268	289	269	280	289	3,110	3,760
Chateaubelair ...	79	45	70	96	98	92	162	113	120	140	120	150	1,285	643
Barrouallie ...	135	198	210	94	132	149	182	240	240	156	136	142	2,014	1,007
Layou ...	111	118	132	102	150	160	156	200	140	128	144	190	1,731	865
Calliaqua ...	112	105	118	92	113	89	112	89	96	118	75	67	1,186	593
Georgetown ...	285	276	295	222	201	222	182	193	208	203	225	234	2,746	1,831
Totals ...	980	960	1,091	836	940	951	1,052	1,103	1,093	1,014	980	1,072	12,072	8,699



TABLE 12.  
PROSECUTIONS.  
Cases Determined and Penalties Imposed.

Offences.	No. of Cases.	No. of Convictions.	Fines.			Costs.			Totals.			Remarks.
			£	s.	d.	£	s.	d.	£	s.	d.	
I. Failing to comply with Notices	16	15	2	4	0	2	6		2	6	6	1 Contained and dismissed.
II. Having human excreta on premises	13	12	2	6	0	4	0		2	10	0	1 Contained and dismissed.
III. Engaging as a Food Vendor without being registered by the Sanitary Authority	3	3	1	12	0	5	0		1	17	0	
IV. Defæcating in a place other than a place provided for the purpose	1	1		6	0	2	6			8	6	
V. Throwing Rubbish on the foreshore	1	1		1	0					1	0	
VI. Keeping a pig within 20ft. of a dwelling house	1	1		3	0					3	0	
VII. Erecting a dwelling house without previously giving notice to the Sanitary Authority	8	7	1	4	6	4	0		1	8	6	1 Dismissed and contained.
VIII. Occupying a dwelling house without providing privy accommodation	1	1		3	0					3	0	
IX. Keeping pigs in a town	1	1		5	0					5	0	
X. Keeping pigs within 200 yards of the limits of a town	12	11	2	17	0				2	17	0	1 Case withdrawn.
XI. Obstructing a Sanitary Inspector in the exercise of his duties	1	1		5	0					5	0	
XII. Carrying human faecal matter through the streets of Kingstown in an open receptacle	5	3		17	0	10	0		1	7	0	Cases dismissed.
XIII. Carrying human faecal matter through the streets in a receptacle not properly covered so as to prevent the escape of offensive odours	2	2	1	1	0	8	0		1	9	0	
XIV. Throwing offensive matter in a place other than that provided for the purpose	2	2										Convicted and contained.
XV. Failing to license a Bakery	1	1		4	0	2	6			6	6	
XVI. Engaging a baker without his having a Medical certificate in his possession	1	1		4	0	2	6			6	6	
XVII. Erecting a dwelling house without privy accommodation	2	1		5	0	1	6			6	6	
XVIII. Throwing mango peelings on the streets	3	2		5	6	4	0			9	6	1 Case withdrawn.
XIX. Using a milk pail to convey milk for sale without the said pail being provided with a tap	1	1										Magistrate's order to provide tap.
XX. Failing to keep premises free from Mosquito Larvæ	3	3		5	0					5	0	
Totals	78	70	14	8	0	2	6	6	16	14	6	

## IV. Port Health Work.

## a. Places under Quarantine at December 31st 1931 :—

Colon	-	Small Pox.
Haiti	-	" "
St. Martin	-	" "
St. Bartholomew	-	" "
Florida-Tampa	-	" "
Guatemala	-	" "
Venezuela	-	" "
Brazil	-	Yellow Fever.

## b. Places quarantined during the year 1932 :—

None.

## c. Places from which quarantine was raised during the year 1932 :—

St. Martin  
St. Bartholomew.

## d. Places under quarantine at December 31st 1932 :—

Colon	-	Small Pox.
Haiti	-	" "
Florida-Tampa	-	" "
Guatemala	-	" "
Venezuela	-	" "
Brazil	-	Yellow Fever.

e. Port of Kingstown—Total Arrivals 1932 ... 2,595

" " — " Departures 1932 ... 2,309

## V. Maternity and Child Welfare.

*Colonial Hospital Returns—Maternity Ward 1932.*

Total number of cases	-	257
Babies born alive	-	204 (3 prs. twins)
Still-born full term	-	17 (8 macerated)
" Premature	-	13 (8 " )
B.B.A's	-	9
Miscarriages	-	11
Normal births	-	236
Twins	-	3 pairs
Breech Presentation	-	3
Transverse	-	1
Foot and Hand	-	1

*Deliveries under general Anæsthesia.*

Manual removal of Placenta	-	2
Puerperal Manias	-	3
Puerperal Sepsis	-	2
Eclampsia	-	7
Ectopic Gestation	-	2
Deaths	-	3

*Deaths.*

- 1 Eclamptic several fits before admission. Died five hours after delivery.
- 1 Large head, ruptured Uterus. Patient died 1½ hours after admission.
- 1 Puerperal Sepsis. (Died 5 weeks after delivery.)
- 3 Eclamptic patients developed Mania, all made good recoveries.



*Notes on Still-born babies.*

17 cases of still-born in 1932. 8 were macerated.

*Of the remaining 9*

- 1 Freak twin
- 1 Mother eclamptic
- 1 Obstructed labour large head
- 1 Mother eclamptic
- 1 Impacted shoulders (still-born)
- 1 Foot and hand presentation (twin)
- 1 Transverse presentation
- 1 Still-born
- 1 Breech twin.

The figures for this Return are kindly submitted by the Nurse Matron of the Hospital.

The *Ante-natal Clinic* was continued during the year. 65 cases attended. 7 cases, 2 multipara and 5 primipara, were kept under constant observation and treatment for albumenuria; one of the primipara developed Eclampsia. There were 5 cases of still-birth among primipara and 1 breech presentation.

The total still-births for the Colony including the Grenadines were 128 as compared with 119 in 1931.

Of 11 deaths from Tetanus 8 occurred in the newly born, 1 in District 1; 5 in District 3; 1 in District 4 and 1 in District 5. This is a considerable improvement on the figures for 1931.

As opportunity occurs, practising but unlicensed "Grannies" are brought into the Maternity Ward at the Hospital for observation and training. Those that prove satisfactory are licensed and continue to be under the observation of the District Medical Officer.

The Midwives in each District are encouraged to seek the help and advice of the Medical Officer and to apply to him for her requirements such as disinfectants, cord powder, ligatures, etc. It is hoped by degrees to reduce this type of infant mortality to a minimum.

5 Midwives were registered, one each in Districts 1, 3 and 4 and two in Kingstown.

**VI. Hospitals and Dispensaries.**

1. The Dispensary at Treumaca, built from Colonial Development Funds, was completed early in the year. It is well equipped and stocked with drugs. It is a very nice building and a great asset to District 2 North. It has accommodation for a district Nurse-midwife. As soon as the finances of the Colony permit it is hoped to have such a Nurse for this area.

2. The Motor Ambulance continued to give good service at a moderate cost.

3. The Medical Officer District I paid 17 visits to Bequia.

4. The Medical Officer, Carriacou, paid 20 visits to Union Island, 5 to Mayreau and 6 to Canouan. He reports that the transport arrangements are unsatisfactory and until something better can be arranged his visits to these islet Dependencies must continue to be irregular:—

"The period under review was free from any kind of epidemic. Sanitary conditions, although somewhat primitive, have been fairly satisfactory. There was not a single case of Yaws met with during the year".

5. The Resident Dispensers at Sandy Bay, Bequia and Union Island rendered first aid and attended respectively 842, 707, and 450 cases. A total of 1,999. At every dispensary and subsidiary dispensary in each district there is a system of regular dressings of casualties, ulcers, wounds, burns, etc. There is no excuse for any individual in this Colony to assert that he cannot get attention for such conditions, but it cannot be expected that he can turn up at any hour of

the day or night to have his "sore" dressed. In compiling these statistics no estimate has been made of the thousands of such cases which have been "dressed."

6. No very extensive alterations or improvements have been carried out during the year by the Public Works Department. The shadow of financial depression became too dark and expensive necessities were postponed. Still there were some minor improvements of great benefit. Through the kindness of the late Executrix of the Simmons Bequest Fund a modern accouchement bed was added to the labour room of the Maternity Ward.

The kitchens at both the Hospital and Fort Institutions were improved by limewashing, new enamelled iron sinks and aluminum cooking equipment. Only such improvements could be carried out that could be defrayed by sums allocated to the Medical Vote.

## VII. Prisons and Asylums.

### (a) Prisons.

		Remaining from 1931.	Admitted. 1932.	Discharged.	Died.	Sent to Hospital.	Remaining 31. 12. 32.
Males	...	27	202	206	1	10	23
Females	...	4	136	134	—	2	6

One Prisoner was sent to the Lunatic Asylum and one died as the result of Judicial hanging.

The Prison Surgeon reports that the general health was fairly good. The prevalent diseases were—Gonorrhœa, syphilis and common colds. "Malingering is too prevalent and appears to be increasing. I suggest that it be regarded with more seriousness by the prison authorities".

### *Pauper Asylum.*

		Remaining from 1931.	Admitted 1932.	Discharged.	Died.	Daily average.	Remaining 31. 12. 32.
Males	...	29	10	6	5	30	28
Females	...	33	13	12	8	30	26
		62	23	18	13	60	54



*Lunatic Asylum.*

	Remaining from 1931.	Admitted 1932.	Discharged.	Died.	Daily average.	Remaining 31. 12. 32.
Males	26	8	4	3	30	27
Females	25	11	1	3	33	32
	51	19	5	6	63	59

*Leper Asylum.*

	Remaining from 1931.	Admitted 1932.	Discharged.	Died.	Remaining 31. 12. 32.
Males	8	3	1	—	10
Females	9	—	—	—	9
	17	3	1	—	19

## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
1.— <i>Epidemic, Endemic, and Infec- tious Diseases.</i>						
1. Enteric Group—						
(a) Typhoid Fever	...	11	2	11	3	
(b) Paratyphoid A.	...	6		6	1	
(c) Paratyphoid B.	...					
(d) Type not defined	...					
2. Typhus	...					
3. Relapsing Fever	...					
4. Undulant Fever	...					
5. Malaria—						
(a) Tertian	...					
(b) Quartan	...					
(c) Aestivo-autumnal	...	33		33	3	
(d) Cachexia	...					
(e) Blackwater	...					
6. Smallpox—						
Alastrim	...					
7. Measles	...					
8. Scarlet Fever	...					
9. Whooping Cough	...					
10. Diphtheria	...					
11. Influenza	...					
12. Miliary Fever	...					
13. Mumps	...					
14. Cholera	...					
15. Epidemic diarrhoea	...					
16. Dysentery—						
(a) Amœbic	...					
(b) Bacillary	...					
(c) Undefined or due to other causes	...					
17. Plague—						
(a) Bubonic	...					
(b) Pneumonic	...					
(c) Septicemic	...					
(d) Undefined	...					
18. Yellow Fever	...					
19. Spirochaetosis ictero-hæmorrhagica	...					
20. Leprosy	...					
21. Erysipelas	...					
22. Acute Poliomyelitis	...	1		1		
23. Encephalitis Lethargica	...					
24. Epidemic Cerebro-spinal Fever	...					
25. Other Epidemic Diseases—						
(a) Rubella (German Measles)	...					
(b) Varicella (Chicken Pox)	...					
(c) Kala-azar	...					
(d) Phlebotomus Fever	...					
(e) Dengue	...					
(f) Epidemic Dropsy	...					
(g) Yaws	...	22	1	265	17	
(h) Trypanosomiasis	...					
26. Glanders	...					
27. Anthrax	...					
28. Rabies	...					
29. Tetanus	...	1	2	8		
Total carried forward	...	23	301	5	324	24



## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward	23	301	5	324	24	
I.— <i>Epidemic, Endemic, and Infectious Diseases (contd.).</i>						
30. Mycosis						
31. Tuberculosis, Pulmonary and Laryn- geal	1	23	10	24		
32. Tuberculosis of the Meninges or Cen- tral Nervous System						
33. Tuberculosis of the Intestines or Peritoneum		3	1	3		
34. Tuberculosis of the Vertebral Column		2		2		
35. Tuberculosis of Bones and Joints		1		1		
36. Tuberculosis of other organs—						
(a) Skin or Subcutaneous Tissue						
(Lupus)						
(b) Bones		5	2	5	2	
(c) Lymphatic System						
(d) Genito-urinary						
(e) Other organs						
37. Tuberculosis disseminated—						
(a) Acute						
(b) Chronic						
38. Syphilis—						
(a) Primary	2	14		16		
(b) Secondary		3		3		
(c) Tertiary	2	10	1	12	1	
(d) Hereditary		2		2		
(e) Period not indicated						
39. Soft Chancre						
40. A.—Gonorrhœa and its complications		20		20	2	
B.—Gonorrhœal Ophthalmia		3		3		
C.—Gonorrhœal Arthritis		1		1		
D.—Granuloma Venereum		2	1	2		
41. Septicæmia						
42. Other Infectious Diseases—						
Trypanosomiasis						
II.— <i>General Diseases not mentioned above.</i>						
43. Cancer or other malignant Tumours of the Buccal Cavity						
44. Cancer or other malignant Tumours of the Stomach or Liver		2	1	2	1	
45. Cancer or other malignant Tumours of the Peritoneum Intestines, Rec- tum						
46. Cancer or other malignant Tumours of the Female Genital Organs	1	2	1	3		
47. Cancer or other malignant Tumours of the Breast		1		1		
48. Cancer or other malignant Tumours of the Skin						
49. Cancer or other malignant Tumours of Organs not specified						
50. Tumours non-Malignant		10		10		
51. Acute Rheumatism		4		4		
52. Chronic Rheumatism		1		1		
Total carried forward	29	410	22	439	30	

## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	29	410	22	439	30	
II.— <i>General Diseases not mentioned above (contd.)</i>						
53. Scurvy (including Barlow's Disease) ...						
54. Pellagra ...						
55. Beri-Beri ...						
56. Rickets ...						
57. Diabetes (not including Insipidus) ...		3		3		
58. Anæmia—						
(a) Pernicious ...						
(b) Other Anæmias and Chlorosis ...	2			2		
59. Diseases of the Pituitary Body ...						
60. Diseases of the Thyroid Gland—						
(a) Exophthalmic Goitre ...						
(b) Other diseases of the Thyroid Gland, Myxœdema ...		1		1		
61. Diseases of the Para-Thyroid Glands ...						
62. Diseases of the Thymus ...						
63. Diseases of the Supra-Renal Glands ...						
64. Diseases of the Spleen ...						
65. Leukæmia—						
(a) Leukæmia ...						
(b) Hodgkin's Disease ...						
66. Alcoholism ...		1		1		
67. Chronic poisoning by mineral substances (lead, mercury, &c.) ...						
68. Chronic poisoning by organic substances (Morphia, Cocaine, &c.) ...						
69. Other General Diseases—						
Auto-intoxication ...						
Purpura Hemorrhagica ...						
Hæmophilia ...						
Diabetes Insipidus ...						
III.— <i>Affections of the Nervous System and Organs of the Senses.</i>						
70. Encephalitis (not including Encephalitis Lethargica) ...						
71. Meningitis (not including Tuberculous Meningitis or Cerebro-spinal Meningitis) ...		4	1	4		
72. Locomotor Ataxia ...						
73. Other affections of the Spinal Cord ...						
74. Apoplexy—						
(a) Hæmorrhage ...						
(b) Embolism ...						
(c) Thrombosis ...		1		1		
75. Paralysis—						
(a) Hemiplegia ...		3		3		
(b) Other Paralysis ...						
76. General Paralysis of the Insane ...						
77. Other forms of Mental Alienation ...						
78. Epilepsy ...		5		5		
79. Eclampsia, Convulsions (non-puerperal) 5 years or over ...						
80. Infantile Convulsions ...						
Total carried forward ...	31	428	23	459	30	



## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	31	428	23	459	30	
III.— <i>Affections of the Nervous System and Organs of the Senses</i> (contd.)						
81. Chorea ...		1		1		
82. A.—Hysteria ...	1	2		3		
B.—Neuritis ...		2		2		
C.—Neurasthenia ...						
83. Cerebral Softening ...						
84. Other affections of the Nervous Sys- tem, such as Paralysis Agitans ...						
85. Affections of the Organs of Vision—						
(a) Diseases of the Eye ...		6		6		
(b) Conjunctivitis ...		4		4		
(c) Trachoma ...						
(d) Tumours of the Eye ...						
(e) Other affections of the Eye ...		5		5		
86. Affections of the Ear or Mastoid Sinus ...						
IV.— <i>Affections of the Circulatory System.</i>						
87. Pericarditis ...						
88. Acute Endocarditis or Myocarditis ...		2	1	2		
89. Angina Pectoris ...	1	1		2		
90. Other Diseases of the Heart—						
(a) Valvular—						
Mitral ...		10	5	10		
Aortic ...		2		2		
Tricuspid ...						
Pulmonary ...						
(b) Myocarditis ...	1	2	1	3	1	
91. Diseases of the Arteries—						
(a) Aneurism ...		1		1		
(b) Arterio-Sclerosis ...		4		4		
(c) Other diseases ...		2		2		
92. Embolism or Thrombosis (non- cerebral) ...						
93. Diseases of the Veins—						
Hæmorrhoids ...		3		3		
Varicose Veins ...		1	1	1		
Phlebitis ...						
94. Diseases of the Lymphatic System—						
Lymphangitis ...						
Lymphadenitis, Bubo (non- specific) ...	2	18		20		
95. Hæmorrhage of undetermined cause...						
96. Other affections of the Circulatory System ...						
V. <i>Affections of the Respiratory System.</i>						
97. Diseases of the Nasal Passages—						
Adenoids ...	1	2		3		
Polypus ...						
Rhinitis ...						
Coryza ...						
Total carried forward ...	37	496	31	533	31	

## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward	37	496	31	533	31	
<i>V.—Affections of the Respiratory System (contd.)</i>						
98. Affections of the Larynx— Laryngitis	—	—	—	—	—	
99. Bronchitis—	—	—	—	—	—	
(a) Acute	—	9	1	9	1	
(b) Chronic	2	1	—	3	—	
100. Broncho-Pneumonia	—	1	1	1	—	
101. Pneumonia—	—	—	—	—	—	
(a) Lobar	—	4	2	4	—	
(b) Unclassified	—	—	—	—	—	
102. Pleurisy, Empyema	—	3	1	3	—	
103. Congestion of the Lungs	—	—	—	—	—	
104. Gangrene of the Lungs	—	—	—	—	—	
105. Asthma	—	1	—	1	—	
106. Pulmonary Emphysema	—	—	—	—	—	
107. Other affections of the Lungs— Pulmonary Spirochaetosis	—	—	—	—	—	
<i>VI.—Diseases of the Digestive System.</i>						
108. A.—Diseases of Teeth or Gums— Caries, Pyorrhoea, &c.	—	—	—	—	—	
B.—Other affections of the Mouth— Stomatitis	—	—	—	—	—	
Glossitis, &c.	—	—	—	—	—	
109. Affections of the Pharynx or Tonsils— Tonsillitis	—	18	—	18	—	
Pharyngitis	—	3	—	3	—	
110. Affections of the Oesophagus	—	—	—	—	—	
111. A.—Ulcer of the Stomach	—	1	—	1	—	
B.—Ulcer of the Duodenum	—	—	—	—	—	
112. Other affections of the Stomach— Gastritis	—	3	—	3	—	
Dyspepsia, &c.	—	6	—	6	1	
113. Diarrhoea and Enteritis— Under two years	—	3	1	3	—	
114. Diarrhoea and Enteritis— Two years and over	—	—	—	—	—	
Colitis	—	12	3	12	1	
Ulceration	—	—	—	—	—	
114a Sprue	—	—	—	—	—	
115. Ankylostomiasis	—	2	—	2	—	
116. Diseases due to Intestinal Parasites	—	—	—	—	—	
(a) Cestoda (Taenia)	—	—	—	—	—	
(b) Trematoda (Flukes)	—	—	—	—	—	
(c) Nematoda (other than Ankylostoma)—	—	—	—	—	—	
Ascaris	—	10	4	10	1	
Trichocephalus dispar	—	—	—	—	—	
Trichina	—	—	—	—	—	
Dracunculus	—	—	—	—	—	
Strongylus	—	—	—	—	—	
Oxyuris	—	—	—	—	—	
(d) Coccidia	—	—	—	—	—	
(e) Other parasites	—	—	—	—	—	
(f) Unclassified	—	—	—	—	—	
Total carried forward	39	573	44	612	35	



## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward	39	573	44	612	35	
VI.—Diseases of the Digestive System (contd.)						
117. Appendicitis	...	3		3		
118. Hernia	1	28	2	29	3	
119. A.—Affections of the Anus, Fis- tula, &c.	...					
B.—Other affections of the In- testines	...					
Enteroptosis	...					
Constipation	...	1		1		
120. Acute Yellow Atrophy of the Liver...	...					
121. Hydatid of the Liver	...					
122. Cirrhosis of the Liver— (a) Alcoholic	...					
(b) Other forms	...					
123. Biliary Calculus	...					
124. Other affections of the Liver— Abscess	...					
Hepatitis	...					
Cholecystitis	...	2		2		
Jaundice	...	1		1		
125. Diseases of the Pancreas	...					
126. Peritonitis (of unknown cause)	...	1		1		
127. Other affections of the Digestive System	...	2		2		
VII.—Diseases of the Genito-urinary System (non-Veneral)						
128. Acute Nephritis	...	3		3		
129. Chronic	...	8	2	8		
130. A.—Chyluria	...					
B.—Schistosomiasis	...					
131. Other affections of the Kidneys— Pyelitis, &c.	...					
132. Urinary Calculus	...					
133. Diseases of the Bladder— Cystitis	...	11		11		
134. Diseases of the Urethra— (a) Stricture	1	11		12	2	
(b) Other	...	18		18		
135. Diseases of the Prostate— Hypertrophy	1	7	2	8		
Prostatitis	...	3		3		
136. Diseases (non-Veneral) of the Geni- tal Organs of Man— Epididymitis	...					
Orchitis	2	6		8		
Hydrocele	...	8		8		
Ulcer of Penis	1	4		5		
137. Cysts or other non-malignant Tumours of the Ovaries	1	1	1	2		
138. Salpingitis— Abscess of the Pelvis	...					
139. Uterine Tumours (non malignant)	2	6		8		
140. Uterine Haemorrhage (non-puerperal)	...					
Total carried forward	48	697	51	745	40	

## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	48	697	51	745	40	
VII.— <i>Diseases of the Genito-urinary System (non-Venereal) (contd.)</i>						
141. A.—Metritis ...		2		2		
B.—Other affections of the Female Genital Organs—						
Displacements of Uterus ...		1		1		
Amenorrhoea ...						
Dysmenorrhœa ...		3		3		
Leucorrhœa ...						
142. Diseases of the Breast (non-puerperal)—						
Mastitis ...		1		1		
Abscess of Breast ...		2		2		
VIII.— <i>Puerperal State.</i>						
143. A.—Normal Labour ...	4	236		240	2	
B.—Accidents of Pregnancy—						
(a) Abortion ...		9		9	1	
(b) Ectopic Gestation ...		2		2	1	
(c) Other accidents of Pregnancy ...		1	1	1		
144. Puerperal Hæmorrhage ...						
145. Other accidents of Parturition ...		1		1		
146. Puerperal Septicæmia ...		2	2	2		
147. Phlegmasia Dolens ...						
148. Puerperal Eclampsia ...		3	1	3	1	
149. Sequelæ of Labour ...						
150. Puerperal affections of the Breast ...						
IX.— <i>Affections of the Skin and Cellular Tissues.</i>						
151. Gangrene ...		1		1		
152. Boil—						
Carbuncle ...		5		5		
153. Abscess—						
Whitlow ...		22		22		
Cellulitis ...		3		3	2	
154. A.—Tinea ...		23		23		
B.—Scabies ...		1		1		
155. Other Diseases of the Skin—						
Brythema ...						
Urticaria ...		1		1		
Eczema ...		10		10		
Herpes ...						
Psoriasis ...						
Elephantiasis ...		1		1		
Myiasis ...						
Chigoes ...		1		1		
Cutaneous Leishmaniasis ...						
X.— <i>Diseases of Bones and Organs of Locomotion (other than Tuberculous).</i>						
156. Diseases of Bones—						
Osteitis ...						
157. Diseases of Joints—						
Arthritis ...		7		7	1	
Synovitis ...		1		1		
Total carried forward ...	52	1,036	55	1,088	48	



## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward	52	1,036	55	1,088	48	
X.— <i>Diseases of Bones and Organs of Locomotion (other than Tuberculous)</i> (contd).						
158. Other Diseases of Bones or Organs of Locomotion	...	4		4		
XI.— <i>Malformations.</i>						
159. Malformations—						
Hydrocephalus	...					
Hypospadias	...					
Spina Bifida, &c.	...					
XII.— <i>Diseases of Infancy.</i>						
160. Congenital Debility	...	1	1	1		
161. Premature Birth	—					
162. Other affections of Infancy	—	4		4		
163. Infant neglect (infants of three months or over)	—	5	2	5		
XIII.— <i>Affections of Old Age.</i>						
164. Senility—						
Senile Dementia	—	1	5	7		
XIV.— <i>Affections produced by External Causes.</i>						
165. Suicide by Poisoning	—					
166. Corrosive Poisoning (intentional)	—					
167. Suicide by Gas Poisoning	—					
168. Suicide by Hanging or Strangulation	—					
169. Suicide by Drowning	—					
170. Suicide by Firearms	—					
171. Suicide by cutting or stabbing Instruments	—					
172. Suicide by jumping from a height	—					
173. Suicide by crushing	—					
174. Other Suicides	—					
175. Food Poisoning—						
Botulism	—					
176. Attacks of poisonous animals—						
Snake Bite	—					
Insect Bite	—					
177. Other accidental Poisonings	—	1		1		
178. Burns (by Fire)	—	2	1	2		
179. Burns (other than by Fire)	—	3		3		
180. Suffocation (accidental)	—					
181. Poisoning by Gas (accidental)	—					
182. Drowning (accidental)	—					
183. Wounds (by Firearms, war excepted)	—					
184. Wounds (by cutting or stabbing Instruments)	—	20		20		
185. Wounds (by Fall)	1	13	1	14		
186. Wounds (in Mines or Quarries)	—					
187. Wounds (by Machinery)	—	5		5		
188. Wounds (crushing, e.g. railway accidents, &c.)	—					
Total carried forward	54	1,100	65	1,154	48	

## COLONIAL HOSPITAL.

## Return of Diseases and Deaths (In-Patients) for the Year 1932.

Diseases.	Remaining in Hos- pital at end of 1931.	Yearly Total.		Total Cases Treated.	Remaining in Hos- pital at end of 1932.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	54	1,100	65	1,154	48	
XIV.— <i>Affections produced by External Causes</i> (contd.)						
189. Injuries inflicted by Animals, Bites, Kicks, &c. ...		1		1		
190. Wounds inflicted on Active Service...						
191. Executions of civilians by belligerents						
192. A.—Over fatigue ...						
B.—Hunger or Thirst ...						
193. Exposure to Cold, Frost bite, &c. ...						
194. Exposure to Heat—						
Heatstroke ...						
Sunstroke ...						
195. Lightning Stroke ...						
196. Electric Shock ...						
197. Murder by Firearms ...						
198. Murder by cutting or stabbing In- struments ...						
199. Murder by other means ...						
200. Infanticide (Murder of an infant under one year) ...						
201. A.—Dislocation ...		3		3		
B.—Sprain ...						
C.—Fracture ...	3	19		22	3	
202. Other external Injuries ...		1		1		
203. Deaths by Violence of unknown cause ...						
XV.— <i>Ill-Defined Diseases.</i>						
204. Sudden Death (cause unknown) ...						
205. A.—Diseases not already specified or ill-defined—						
Ascites ...						
Edema ...						
Asthenia ...						
Shock ...						
Hyperpyrexia ...						
B.—Malingering ...		2		2		
XVI.— <i>Diseases, the total of which have not caused 10 Deaths.</i>						
Total ...	57	1,126	65	1,183	51	



## Classification of Operations at Colonial Hospital 1932.

Operations.	No.	Deaths.	Operations.	No.	Deaths.
Amputations:—			Brought forward ...	149	
Finger ...	4		Glands:—		
Hand ...	1		Excision ...	8	
Arm ...	1		Hernia:—		
Toe ...	14		Radical cure ...	19	
Foot ...	4		Strangulated ...	9	2
Leg ...	7		Hydrocœl:—		
Thigh ...	1		Radical cure ...	7	
Breast ...	1		Hysterectomy ...	1	
Penis ...	1		Incision and drainage:—		
Scrotum ...	3		Abscesses ...	43	
Testicle ...	1		Incised wound stitching ...	5	
Appendectomy ...	1		Laparotomy:—		
Avulsion of Nail ...	25		Acute Intestinal		
Circumcision ...	59		Obstruction ...	1	
Curettage ...	3		Fibroids ...	4	
Enucleation of Eye ...	6		Peritonitis Tubercular ...	1	
Excising Fistula ...	1		Ectopic Gestation ...	2	
Extraction of Foreign body:—			Ovarian Tumour ...	2	1
Back ...	1		Pterygium:—		
Buttock ...	1		Excision ...	1	
Eye ...	1		Reduction of Para-		
Foot ...	1		phimosis ...	1	
Hand ...	2		Scraping ulcer ...	10	
Extraction of teeth ...	4		Sequestrectomy ...	4	
Fractures:—			Tendon repair ...	1	
Reduction ...	5		Tonsillectomy ...	22	
Ununited Fracture ...	1		Tumour simple ex-		
			cision ...	13	
Carried Forward ...	149		Total ...	303	3

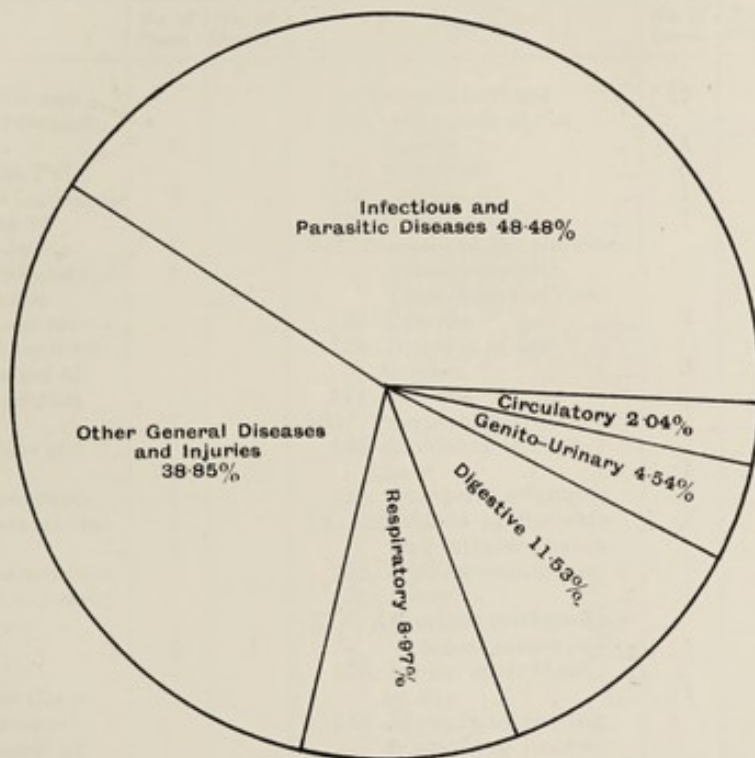
## CHATEAUBELAIR HOSPITAL.

## Return of diseases and deaths for the year 1932

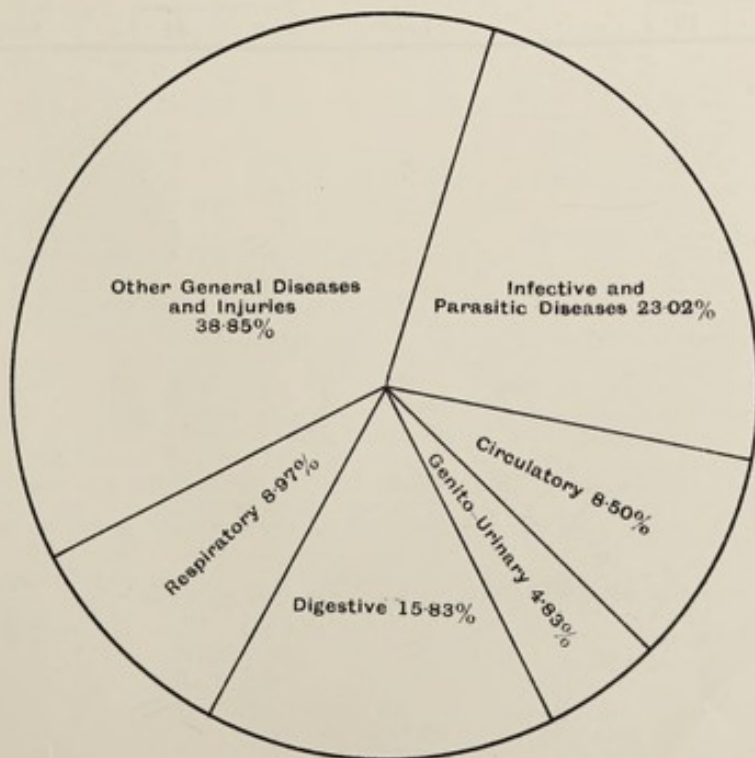
Diseases.	No. of Cases.	No. of Deaths.	Diseases.	No. of Cases.	No. of Deaths.
I. Epidemic, Endemic and Infectious Diseases:—			Brought forward ...	23	1
5. Malaria ...	3	1	VII. Diseases of the Genito-urinary System:—		
38. Primary Syphilis ...	3		128. Acute nephritis ...	1	
Tertiary „ ...	6		133. Cystitis ...	2	
40. Gonorrhœa and its complications ...	1		134. Stricture ...	1	
II. General Diseases not mentioned above:—			141. A. Netritis ...	1	
57. Diabetes (not including Insipidus) ...	1		B. Other affections of female genital organs		
III. Affections of the Nervous system and organs of the senses:—			VIII. Puerperal State:—		
84. Other affections of the nervous system ...	2		143. A. Normal labour ...	12	
V. Affections of the Respiratory system:—			IX. Affections of the skin and cellular tissues:—		
102. Pleurisy ...	1		153. Abscess ...	4	
VI. Diseases of the digestive system:—			Cellulitis ...	1	
118. Hernia ...	4		155. Ulcers ...	22	
127. Other affections ...	2		XIV. Affections produced by external causes:—		
Carried forward ...	23	1	182. Drowning accidental ...	1	
			194. Wound by cutting instruments ...	4	
			198. Murder produced by cutting and stabbing instruments ...	1	1
			201. Fracture ...	5	
			Total ...	88	2

# GENERAL SYSTEMATIC AND PREVENTABLE DISEASES ST. VINCENT, 1932.

TOTAL INCIDENCE, 35,477.



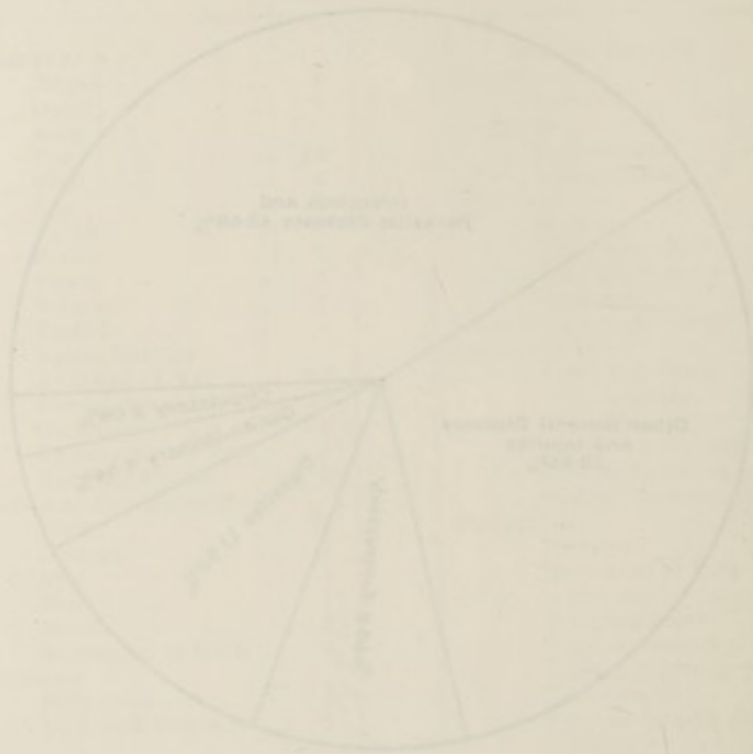
TOTAL DEATHS, 682.





# GENERAL SYSTEMATIC AND PREVENTABLE DISEASES ST. VINCENT 1933

TOTAL INCUBATED DISEASES



TOTAL DISEASES



## GEORGETOWN HOSPITAL.

Return of diseases and deaths for the year 1932.

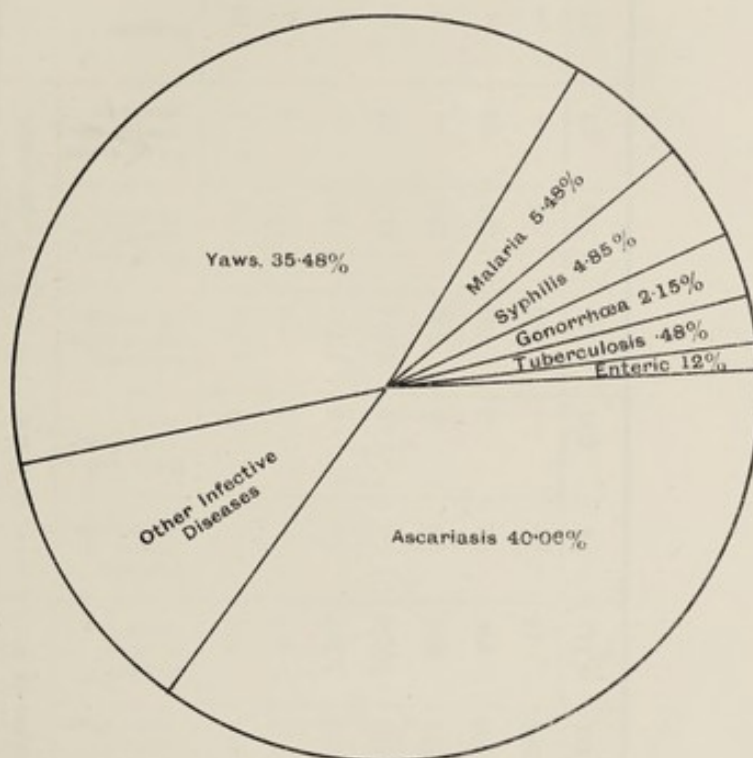
Diseases.	No. of Cases.	No. of Deaths.	Diseases.	No. of Cases.	No. of Deaths.
<b>I. Epidemic, Endemic and Infectious Diseases:—</b>			Brought forward ...	18	2
25. Yaws ...	1		109. Affections of the Tonsils ...	1	
31. Tuberculosis, Pulmonary and Laryngeal ...	2		112. Gastritis ...	6	
35. Tuberculosis of Bones and Joints ...	1		116. Ascariasis ...	1	
38. Syphilis, secondary ...	1		119. Constipation ...	1	
<b>II. General diseases not mentioned above:—</b>			<b>VII. Diseases of the Genito-urinary System (Non-Venereal):—</b>		
46. Cancer or other malignant Tumours of the female genital organs ...	1		133. Cystitis ...	2	
49. Cancer, organs not specified ...	1		134. Diseases of the Urethra ...	3	
51. Acute Rheumatism ...	1		141. Metritis ...	1	
52. Chronic Rheumatism ...	1		<b>VIII. Puerperal State:—</b>		
58. Anæmia ...	1		143. Accidents of Pregnancy ...	1	
<b>III. Affections of the nervous system and organs of the senses:—</b>			148. Puerperal eclampsia ...	1	1
74. Apoplexy ...	1	1	<b>IX. Affections of the skin and cellular tissues:—</b>		
82. Neuritis ...	1		153. Abscess—Cellulitis ...	1	
<b>IV. Affections of the Circulatory System:—</b>			155. Ulcer ...	1	
90. Other diseases of the Heart:—			<b>XIV. Affections produced by external causes:—</b>		
Aortic ...	3	1	179. Burns, other than by fire ...	1	
Myocarditis ...	2		184. Wounds by cutting or stabbing instruments ...	3	
<b>VI. Diseases of the Digestive System:—</b>			185. Wounds by fall ...	10	
108. Diseases of teeth or gums ...	1		201. Fracture ...	3	
Carried forward ...	18	2	202. Other external injuries ...	7	1
			<b>Total</b> ...	<b>61</b>	<b>4</b>



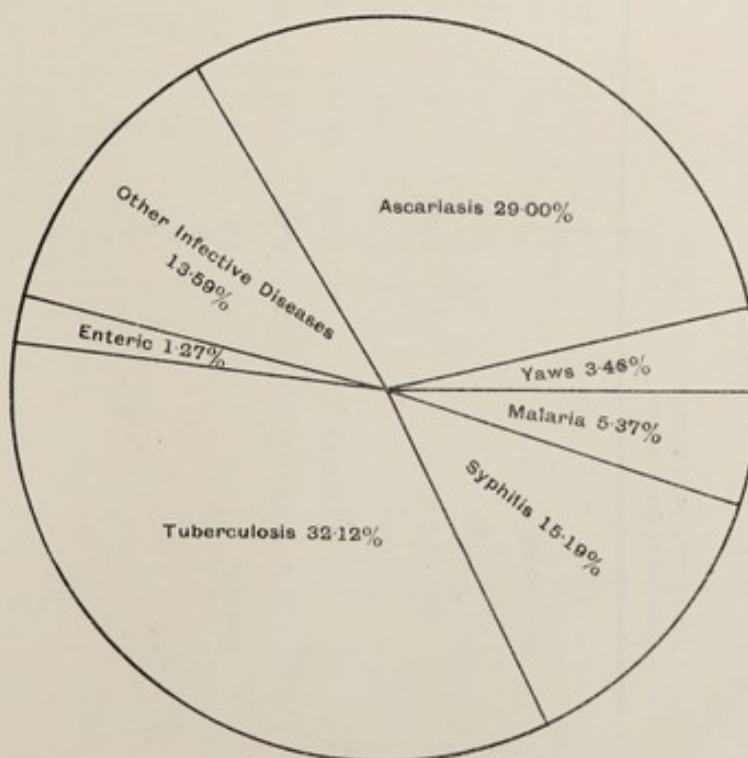
	District I Diseases.	District II (South) Diseases.	District II (North) Diseases.	District III Diseases.	District IV Diseases.	District V Diseases.	Grenadines Diseases.	Total No. of Diseases.
<i>Infective Diseases :—</i>								
Chicken Pox ...	12		1					13
Diphtheria ...	1							1
Enteric Fever ...	16			4				20
Filaria ...	2	4		1				7
Gonorrhœa ...	152	84	67	40	41	32	6	322
Influenza ...	95	21		148	75	22	11	371
Malaria ...	87	503	170	24	215	32	11	942
Measles ...						1		1
Pneumonia ...					23	3	1	27
Rheumatic Fever ...	1	6	8			30		45
Septicæmia ...			1				1	2
Syphilis ...	405	82	227	42	9	38	31	834
Tetanus ...	1	1		7		1		10
Tuberculosis Pul- monary ...	30	4	13	5	12	7	2	73
Tuberculosis other ...	3	1	2	1		1	2	10
Whooping Cough ...	6			2	80	3		91
Yaws ...	867	908	83	1,371	2,060	802		6,091
Other Infective Dis- eases ...	126	695		15	2	74	47	959
<i>General Diseases :—</i>								
Anæmia ...	55	16	61	143	6	27	1	309
Ankylostomiasis ...	511	9		25				545
Ascariasis ...	1,029	2,793	924	907	601	525	94	6,873
Diarrhœa in Children ...	105	223	80	364	273	40	15	1,100
Diarrhœa in Adults ...	50	64	12	56	161	13	3	359
Tumours ...	59	37	18	6	5	10		135
Other General Dis- eases ...	201	484	207	367	617	278	33	2,187
<i>Local Diseases :—</i>								
Diseases of Nervous System ...	61	115	193	64	32	122	15	602
Diseases of Eye ...	91	143	83	103	63	68	8	556
" " Ear and Nose ...	83	67	96	136	28	34		444
Diseases of Circula- tory System ...	118	131	78	121	109	147	23	727
Diseases of Respira- tory System ...	563	252	408	795	328	219	27	2,892
Diseases of Diges- tive System ...	619	577	390	621	144	230	54	2,635
Diseases of Lympha- tic System ...	175	64	33	59	13	22	16	382
Diseases of Urinary System ...	117	100	93	105	67	70	8	560
Diseases of Genera- tive System ...	170	330	214	192	85	42	19	1,052
Injuries ...	277	174	75	140	130	130		926
Ulcers (non specific) ...	249	169	275	365	145	154	56	1,413
Other Local Diseases ...	405	649	314	471	50	251	11	2,151
Total ...	6,742	8,708	4,126	6,700	5,274	3,429	498	35,477

# INFECTIVE AND PARASITIC DISEASES, 1932.

TOTAL INCIDENCE 17,165.



DEATHS 157.



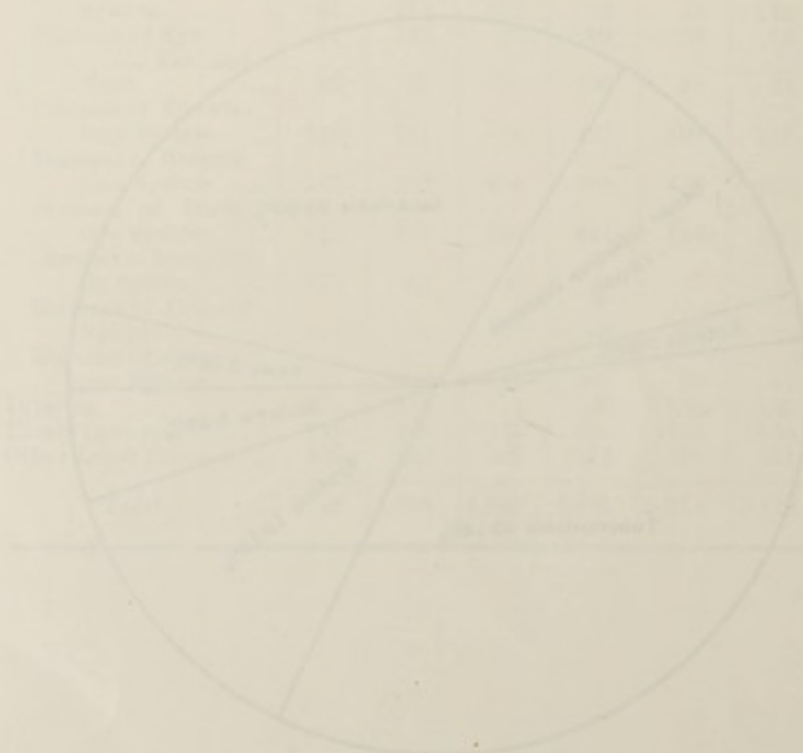


# INFESTIVE AND PARASITIC DISEASES 1932

TOTAL INCIDENCE 1932



DETAILED LIST OF DISEASES



Return of duties performed by the District Medical Officers during the year 1932.

	PRESCRIPTIONS.			NUMBER OF ATTENDANCES ON CASES.							VACCINATIONS.		Inquests.
	Free.	Payment.	Deferred.	Pauper.	Labourers' children under 10 years of age.	Labourers over 60 years.	Destitute women in child birth.	Police and prison-ers.	Labourers under scale of charges.	No. of successful vac-cinations.	No. of unsuc-cessful vac-cinations.		
District I	7,278	1,787	2	2,276	2,964	810	—	621	1,559	152	1	10	
" II (North)	5,463	594	107	2,933	2,231	257	—	2	701	134	9	1	
" II (South)	9,033	1,648	47	2,780	5,403	1,306	—	3	1,746	67	—	—	
" III	11,928	2,664	—	2,128	6,454	2,630	—	2	2,976	618	27	10	
" IV	2,553	496	105	868	2,137	657	2	6	632	219	—	1	
" V	1,830	423	173	887	1,163	435	2	3	737	149	62	—	
Grenadines	372	165	—	—	260	16	—	—	165	44	—	—	
	38,557	7,877	434	11,872	20,612	6,111	4	636	8,516	1,383	99	22	

Total No. of Prescriptions ... 46,868

Total attendances in Districts ... 47,751

# YAWS RETURNS, 1932.

	On list from 1931.		Cases added during 1932.		Total cases Treated.		Cases discharged Cured.		Defaulters at 31. 12. 31.		Remaining at 31. 12. 32.		No. of K.P.N. used.	No. of e. c. "Sobita" used.
	Adult.	Child.	Adult.	Child.	Adult.	Child.	Adult.	Child.	Adult.	Child.	Adult.	Child.		
January	—	—	518	846	479	770	79	138	39	76	439	708	1,942	3,208
February	—	—	153	230	471	737	144	192	111	201	448	746	2,721	3,679
March	—	—	157	285	455	710	148	242	150	321	457	789	1,399	3,419
April	—	—	177	288	501	812	116	238	135	271	520	845	1,385	3,384
May	—	—	160	273	588	891	162	284	92	237	518	834	1,588	2,984
June	—	—	198	341	587	871	101	155	129	304	615	1,020	1,768	3,366
July	—	—	253	422	762	1,210	161	230	106	232	707	1,212	2,539	4,200
August	—	—	282	428	836	1,235	204	373	153	405	785	1,267	2,184	4,013
September	—	—	294	475	903	1,457	244	473	176	285	835	1,269	2,412	4,604
October	—	—	299	411	897	1,265	157	272	237	415	977	1,408	2,458	4,742
November	—	—	261	461	1,049	1,497	358	476	189	372	880	1,393	2,023	3,322
December	—	—	236	399	1,116	1,792	1,116	1,792	—	—	—	—	2,929	3,379
Total	—	—	2,988	4,859	8,644	13,247	2,990	4,865	1,517	3,109	7,181	11,491	24,648	44,300

## SUMMARY COLONIAL HOSPITAL, 1932. No. of Injections given at Colonial Hospital during 1932=1,110.

		Patients.		Male.		Female.		Total.	
		Adults	Children	...	...	...	...	...	...
		...	...	101	90	191			
		...	...	51	37	88			
Total		...	...	152	127	279			

INJECTIONS:—Arsenical Preparations 333 doses of 3 gm.  
Bismuth " 2,010 e. c.



## METEOROLOGICAL INFORMATION FOR 1932.

Month.	Temperature.			Rainfall.		Wind.	
	Shade Max.	Shade Min.	Mean Range.	Inches.	Degree of Humidity.	General Direction.	Average force Miles per hour.
*January ...	—	—	—	4.48	73.7	E. & S.E.	7.0
February ...	83.0	72.3	10.7	3.26	68.9	N. & N.E.	7.27
March ...	84.4	74.4	10.0	3.46	69.9	E. & S.E.	7.32
April ...	85.5	77.5	8.0	2.98	79.5	E. & N.E.	10.79
May ...	84.7	76.6	8.1	6.61	72.7	E. & S.E.	9.59
June ...	85.0	76.7	8.3	12.32	76.3	S.E.	8.69
July ...	85.3	76.2	9.1	8.03	73.9	E. & S.E.	7.72
August ...	86.3	76.1	10.2	10.00	75.6	N.E. & E.	5.44
September ...	86.6	76.2	10.4	7.98	71.9	E.	6.2
October ...	86.7	76.0	10.7	12.06	80.3	E. & S.E.	4.83
November ...	85.6	75.3	10.3	11.95	75.7	S.E.	5.28
December ...	84.0	73.5	10.5	14.45	77.2	S.E. & N.E.	7.61
				97.58			

\* Thermometer out of order.

# METEOROLOGICAL INFORMATION FOR 1922

2012

Month	Temperature		Humidity		Average Rainfall
	Mean	Range	Mean	Range	
January	48.0	32.0 - 64.0	75.0	60.0 - 90.0	4.0
February	47.5	31.0 - 64.0	74.0	59.0 - 89.0	3.5
March	48.5	32.0 - 65.0	73.0	58.0 - 88.0	3.0
April	50.0	33.0 - 67.0	72.0	57.0 - 87.0	2.5
May	52.0	35.0 - 69.0	70.0	55.0 - 85.0	2.0
June	54.0	37.0 - 71.0	68.0	53.0 - 83.0	1.5
July	56.0	39.0 - 73.0	66.0	51.0 - 81.0	1.0
August	55.0	38.0 - 72.0	65.0	50.0 - 80.0	1.0
September	53.0	36.0 - 70.0	67.0	52.0 - 82.0	1.5
October	51.0	34.0 - 68.0	69.0	54.0 - 84.0	2.0
November	49.0	32.0 - 66.0	71.0	56.0 - 86.0	2.5
December	47.0	30.0 - 64.0	73.0	58.0 - 88.0	3.0
Yearly	50.0	30.0 - 73.0	70.0	50.0 - 90.0	2.5

\* Temperature not at night





