

REPORT
OF THE
HEALTH DEPARTMENT
OF
THE PANAMA CANAL

FOR THE
MONTH OF DECEMBER, 1917

ALBERT E. TRUBY,
Colonel, Medical Corps, United States Army
Chief Health Officer, Balboa Heights, Canal Zone

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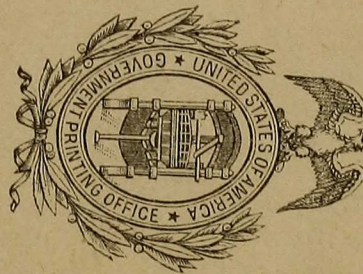
WASHINGTON
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LETTER OF TRANSMITTAL.

THE PANAMA CANAL, HEALTH DEPARTMENT,
Balboa Heights, Canal Zone, January 11, 1918.

HON. FRANK FEUILLE,
Acting Governor of the Panama Canal,

SIR: I have the honor to submit the following report of the operations of the Health Department for the month of December, 1917.

Respectfully,

ALBERT E. TRUBY,
Chief Health Officer.

GENERAL REMARKS.

The health of employees and nonemployees in the Canal Zone and terminal cities has continued good. The increased number of cases of malaria during the month of December, as well as during the other months of 1917, as compared with the same months of 1916, was due entirely to the camps established by the supply department in clearing pastures; this work has been very extensive throughout the Zone, and the camps have been situated far from sanitated areas. The actual number of malaria cases in December among employees from the sanitated areas was lower this year than for any previous year.

No diseases of a quarantinable nature originated on or were brought to the Isthmus during the month.

VITAL STATISTICS.

EMPLOYEES.

The following statistics are based upon the total number of names appearing on the pay rolls of The Panama Canal and the Panama Railroad Company for the preceding month, which was 29,685.

Admissions to hospitals and quarters numbered 781, giving a rate of 315.71,¹ as compared with 401.65 for the preceding month, and 327.91 for the corresponding month of last year.

The constantly noneffective rate was 9.30, as compared with a rate of 10.47 for the preceding month, and 8.86 for the corresponding month of last year.

Deaths from all causes numbered 19; of these, 14 were from disease, giving a rate of 5.66 from disease alone, as compared with a rate of 4.42 for the preceding month, and 5.94 for the corresponding month of last year.

Diseases causing the highest admission rates to hospitals, in the order of their numerical importance, were: (1) Venereal diseases, (2) malaria, (3) tuberculosis, (4) bronchitis, and (5) lymphadenitis. These five diseases caused 34 per cent of all admissions to hospitals, venereal diseases alone causing 14 per cent and malaria 11 per cent of all admissions.

The admission rate for malaria, hospitals, and quarters, was 16.17, as compared with 21.31 for the preceding month, and 8.39 for the corresponding month of last year. The constantly noneffective rate from malaria was 0.63, as compared with 0.67 for the preceding month, and 0.28 for the corresponding month of last year.

By race: For disease only, the admission rate to hospitals and the death rate for white employees were 218.63 and 0.00, respectively, as compared with 262.95 and 4.92 for the preceding month, and 253.70 and 5.07 for the corresponding month of last year. For black employees, for disease only, the admission rate to hospital and the death rate were 95.32 and 6.77, respectively, as compared with 115.84 and 4.33 for the preceding month, and 66.49 and 6.08 for the corresponding month of last year.

The constantly noneffective rates were 15.62 for whites and 8.06 for blacks.

The admission rate to hospitals and quarters for malaria was 9.83 for white and 17.42 for colored employees, as compared with 24.55 for white and 20.67 for colored employees for the preceding month and 22.83 for white and 6.08 for colored employees for the corresponding month of last year.

For American employees, the admission rate to hospitals from disease only was 164.19, as compared with 259.37 for the preceding month.

CANAL ZONE.

The civilian population of the Canal Zone, based on the police census taken as of June 10-30, 1917, is 24,038. From this population 16 deaths occurred during the month, 13 of which were from diseases, giving a rate of 6.49 from disease alone as compared with 9.98 for the preceding month and 8.12 for the corresponding month of last year.

Of the deaths from disease 38 per cent occurred among children under 5 years of age as compared with 25 per cent for last month.

Fifty-nine births were reported during the month, giving a rate of 29.45; of these births 18 were white and 41 colored.

¹ All morbidity and mortality rates are computed as equivalent annual per 1,000.

Two deaths occurred among children under 1 year of age, both colored, giving an infant mortality rate, based on the number of births reported for the month, of 0.00 for white and 49 for colored children, with a general average of 39.90 per 1,000 births.

Of the total births reported 3 per cent were stillbirths.

PANAMA CITY.

The population of the city, as shown by the Health Department census of June, 1917, is 61,369. In this population is included approximately 8,000 employees of The Panama Canal. From this population 136 deaths occurred during the month, 131 of which were from disease, giving a rate of 25.61 from disease alone, as compared with 29.13 for the preceding month and 28.83 for the corresponding month of last year.

Of the total deaths from disease 46 per cent occurred among children under 5 years of age as compared with 50 per cent for the preceding month.

The principal causes of death as compared with last month were as follows:

	Novem- ber.	Decem- ber.
Tuberculosis (various organs).....	21	28
Diarrhea and enteritis.....	32	19
Organic diseases of the heart.....	11	15

Two hundred and forty-seven births were reported during the month, giving a rate of 48.30. Fifty deaths occurred among children under 1 year of age, giving an infant mortality rate, based on the number of births reported for the month, of 202.43.

Of the total births reported 6 per cent were stillbirths.

COLON.

The population of Colon, as shown by the Health Department census of June, 1917, is 26,078. In this number is included approximately 7,000 employees of The Panama Canal. From this population 66 deaths occurred during the month, 64 of which were from disease, giving a rate of 29.45 from disease alone as compared with 23.93 for the preceding month and 25.76 for the corresponding month of last year.

Of the total deaths from disease 42 per cent occurred among children under 5 years of age as compared with 50 per cent for the preceding month.

The principal causes of death, as compared with the preceding month, were as follows:

	Novem- ber.	Decem- ber.
Tuberculosis (various organs).....	13	13
Diarrhea and enteritis.....	5	7
Pneumonia (including broncho).....	8	7

Ninety-four births were reported during the month, giving a rate of 43.26. Nineteen deaths occurred among children under 1 year of age, giving an infant mortality rate, based on the number of births reported for the month, of 202.13.

Of the total births reported 2 per cent were stillbirths.

DIVISION OF HOSPITALS.

ANCON HOSPITAL.

The total admissions to the hospital during the month numbered 809 as compared with 936 for the preceding month and 744 for the corresponding month of last year. The average number of patients constantly in the hospital during the month was 449 as compared with 514 for the preceding month and 429 for the corresponding month of last year.

The average length of stay in hospital for each employee admitted was 15.15 days.

The following units of the new administration and clinics building were occupied during the month: Superintendent's office, medical clinic, eye and ear clinic, and drug store. The library was also moved and at present is housed in a storage room of the basement, the library and reading room of the new building being as yet not ready for occupancy. Those parts of buildings Nos. 234 and 236, occupied by the above departments, were turned over to the Building Division to be razed. The X-ray department is the only department remaining to be moved, which will be effected within a week or ten days.

Building 238, steward's quarters, was also razed by Building Division for use as field office and storehouse.

New equipment.—The office floor of the administration building was equipped throughout with steel desks and filing equipment, the latter providing for the housing of all hospital charts, at present standing on open wooden shelves.

Transportation.—Ambulance body was removed from ambulance U. S. No. 305, chassis sent to Motor Car House for overhauling and subsequent delivery to district quartermaster for placing a hearse body on same.

Thirty-nine cases of measles were admitted as compared to 49 in November—19 of the cases admitted were received subsequent to to December 26.

Seven cases of diphtheria were admitted as against 3 in November; and 8 cases of chickenpox as against 2 in November.

Detailed statistics are shown in Tables VII, VIII, and XIII.

Corozal Hospital.—During the month 16 patients were admitted, 3 died, and 6 were discharged. Among the discharges are included 3 patients deported.

The average number of patients cared for during the month was 347, as compared with 341 for the preceding month, and 319 for the corresponding month of last year.

Board of Health Laboratory.—A report of routine operations is shown under Table XIII.

Chronic ward.—The average number of chronic patients cared for during the month was 26.45. Eleven patients were discharged or transferred from this ward during the month.

COLON HOSPITAL.

A total of 196 patients were admitted to the hospital during the month, as compared with 203 for the preceding month, and 139 for the corresponding month of last year. The average number of patients constantly in the hospital during the month was 58, as compared with 61 for the preceding month, and 44 for the corresponding month of last year.

The average length of stay in hospital for each employee admitted, was 8.17 days.

Detailed statistics are shown under Tables VII, VIII, and XIII.

PALO SECO LEPER ASYLUM.

The average number of patients in the asylum during the month was 67. There were no admissions, deaths, or discharges during the month.

SANTO TOMAS HOSPITAL.

A total of 880 patients were admitted to the hospital during the month, as compared with 850 for the preceding month, and 922 for the corresponding month of last year. The average daily number of patients in the hospital was 432, as compared with 438 for the preceding month, and 440 for the corresponding period of last year.

Eighty deaths occurred at the institution during the month, with (1) tuberculosis, (2) organic diseases of the heart, and (3) diarrhea and enteritis, the chief causes in the order named.

Detailed statistics are shown in Table XV.

DIVISION OF SANITATION.

The following table shows the average monthly admission rate from malaria among employees to both hospitals and quarters for the month of December, the percentages being based on the ratio

of the number of admissions from each district to the total number of employees residing therein:

District.	Number of employees.	Number of admissions from malaria during month.	Average monthly admission rate.
Balboa.....	2,668	1	0.037
Ancon-Carozal.....	1,151		
Pedro Miguel.....	1,352		
Paraiso.....	995	1	.101
West of Canal.....	367		
Gatum.....	1,136		
Cristobal.....	3,414	8	.234
Colon.....	7,115	1	.014
Panama.....	8,383	2	.024
Miscellaneous ¹	3,104	27	.870
Total.....	29,685	40	.135

¹ Employees engaged in pasture and jungle clearing, etc., outside of above sanitized areas.

CANAL ZONE.

During the month the usual sanitary measures have been observed. In addition, a certain amount of new work has been done in all districts, consisting mainly of laying tiling in seepage areas where anopheles breeding has been found. The malaria rate for the regularly sanitized districts has been very satisfactory, as shown by the fact that only 2 cases in employees have been reported, as compared with 7 for the corresponding month of last year. The total number of malarial cases among employees reported for the month was 40, as compared with 24 for the corresponding month of last year; for the present month they were distributed as follows:

Zone: From regularly sanitized areas, except Cristobal and Toro Point.....	2
From Cristobal and Toro Point.....	8
From miscellaneous camps, outside regularly sanitized areas....	27
From Panama and Colon.....	3
Total.....	40

This increase in the totals for the month over that of last year is due to difficulty in sanitating the district camps. It has been found that anopheles are breeding extensively in the wet areas in the pasture and land clearing camps and are evidently obtaining an abundant blood supply from the cattle, enabling them to propagate more than under the former jungle conditions when this blood supply was not available. While this available blood supply will lessen the tendency of these mosquitoes to make long flights in search of blood, it also tends to increase the propagation of anopheles mosquitoes and the danger to employees who sleep in the camps without

the protection of mosquito bars. The men in charge of the various camps should make it their duty to see that every employee in their respective camp is supplied with and uses a mosquito bar.

The tuberculosis problem within the Zone is very satisfactory, only one case having been reported outside of Cristobal.

The two cases of typhoid fever which occurred in Gatum are thought to be due to drinking water from seepage outcrops in the swampy areas.

All other communicable diseases are lower than for the previous month.

PANAMA.

In reviewing the work done by the Health Department in Panama for December, the large number of buildings inspected, and the number of permits issued to repair old buildings are prominent features. Practically all of the permits for repairs included provisions for the installation of windows with stationary lattice blinds for the purpose of providing the proper amount of light and fresh air in living rooms and tenement houses. This necessary work has been pushed continuously and already over 50 of the most insanitary houses in the city have either been improved or the work of improvement is now well under way.

The ditching gang has made a good showing, and it is proposed to continue this important work during the coming dry season, especially in that section of district No. 1 lying between Bella Vista and Sabanas police station.

A systematic inspection of all hotels and restaurants was carried out and written reports submitted. Comparisons were made with conditions shown by a previous inspection several months ago, and as a result one restaurant was closed.

Malaria.—The malarial rate for Panama is sufficiently low to require no special comment. We still have a few cases originating in the city but each month there are, in Santo Tomas Hospital, a number of cases in individuals who become infected outside the city limits.

HOSPITAL CASES OF MALARIA FROM CIVILIAN POPULATION AND EMPLOYEES LIVING IN PANAMA DISTRICT.

	1914	1915	1916	1917
January.....	319	127	39	17
February.....	111	67	16	12
March.....	123	68	19	24
April.....	107	57	15	11
May.....	194	50	9	14
June.....	137	50	11	22
July.....	179	71	30	10
August.....	274	36	16	41
September.....	168	21	27	21
October.....	254	19	14	5
November.....	167	20	20	6
December.....	121	28	19	4

Tuberculosis.—Antituberculosis measures have been pushed constantly and several additional educational articles have been published. One public talk has been given, and an educational pamphlet on prevention of tuberculosis is now being prepared for free distribution in the city. Beginning January 1, 1918, the public health nurse assigned to this office will begin the work of visitation and general supervision of all cases of tuberculosis reported.

Infant welfare work.—At the close of the month the health office turned over to the Panamanian Red Cross all baby welfare work. The infant death rate of 202.43 is the lowest in several months, and is a very creditable showing considering the present high cost of all foods, including milk.

Infectious diseases.—There has been a slight increase in the number of cases of measles reported. As several cases originated in one of the public schools, an inspection was made and all suspicious cases were sent home. The pupils were questioned as to history of coughs or colds and as to whether their eyes were sensitive to light. Besides this they were examined for nasal discharge or rash.

COLON.

The general health conditions continue to remain good in the Atlantic Terminal city. Despite the fact that the public schools have been in session several months the incidence of acute infectious diseases has not increased. All of the scholars were physically examined at Colon Hospital and with few exceptions were found to be in excellent health.

Malaria.—The greater number of the cases reported were from the coaling station (night workers). Thorough inspection in this vicinity revealed anopheles breeding over the greater part of the south half of the island, which has never been reclaimed. This is undoubtedly the source of infection of employees in the coaling station and Camp Bierd section. Antimalarial work will be resumed in drainage area No. 1, Margarita Road, on January 2, 1918.

Tuberculosis.—The incidence continues to increase; 21 cases were reported during the month with 13 deaths, as compared with nine cases for the previous month and five cases for the corresponding month of 1916. It is thought that a rigid compliance with the building regulations which provide for adequate light and ventilation is one of the best antituberculosis measures at our command at present. Each building from which a tuberculosis case has been reported will be inspected and the owner of said building compelled to provide adequate light and ventilation before it can be again occupied. As we carry out routine disinfection of unoccupied tuberculosis quarters, an educational campaign to enlighten the people to the dangers and outline ways and means to avoid contracting this disease is contemplated.

Diphtheria.—Only two cases were reported during the month.

Mount Hope.—Several mosquito breeding areas were eliminated during the month, notably in swamp Nos. 2 and 4, by the installation of drains and making several small fills.

Cristobal.—Sanitary improvements were made at the abattoir during the month by concreting a part of the road between the hog and cattle slaughter pens and a general clean-up around the place.

As a result of an examination by the veterinarian six horses from the Panama Railroad stables and private stables were condemned and disposed of in a humane manner.

QUARANTINE DIVISION.

Conditions generally, along the west coast of South America, show very little change. An increase in plague cases has been reported from Guayaquil, Ecuador, and a fresh outbreak of this disease in the coast towns in the Province of Manabi. The seasonal increase of yellow fever in Guayaquil has apparently been lower than usual. During the month an American consular agency was established at Buenaventura, Colombia, which also supervises outgoing quarantine measures; this will probably bring about an improvement over the former method of clearing ships from this port.

On the Atlantic side quarantine conditions in South and Central America show practically no change.

On December 5 the supervision of the abattoir and meat inspection at Cristobal, which has been under the quarantine division, was transferred to the health office, Cristobal-Colon, in order to consolidate work of this character under one head. Reports of cattle inspection, ante and post mortem, disinfection of hides, etc., will be made by that office.

The quarantine inspector for Cristobal-Colon returned during the month from escorting a number of insane patients to the Lesser Antilles, having left on this detail during the month of October. On his return voyage he stopped at Venezuelan ports, and was able to make a report upon general sanitary conditions. His report indicates that La Guayra, Venezuela, particularly, is in an insanitary condition.

The repair work on cabin building, Colon quarantine, and fill of the quarantine reservation, have been continued in a satisfactory manner.

Under Table XVII a statistical report of quarantine transactions for the month will be found.

DEPORTATIONS.

Six deportations were accomplished by the hospital authorities during the month, five employees and one nonemployee, all suffering from diseases.

In addition to the above 60 deportations were effected by the quarantine authorities.

TABLE I.—ADMISSIONS, DEATHS, AND NONEFFECTIVE RATES FOR EMPLOYEES.

ABSOLUTE NUMBERS.

	Number of employees.	Admissions to hospitals.			Deaths.			Noneffective from sickness.	
		Total.	Diseases.	External causes.	Total.	Disease.	External causes.	Days treated.	Constantly Non-effective.
December, 1917:									
White.....	4,885	109	89	20	1	.....	1	2,365	76.29
Colored.....	24,800	267	197	70	18	14	4	6,199	199.96
Total.....	29,685	376	286	90	19	14	5	8,564	276.25
November, 1917:									
White.....	4,883	120	107	13	2	2	.....	2,369	78.97
Colored.....	24,964	316	241	75	14	9	5	7,003	233.42
Total.....	29,847	436	348	98	16	11	5	9,372	312.39
December, 1916:									
White.....	4,730	125	100	25	4	2	2	2,746	88.59
Colored.....	29,597	252	164	88	18	15	3	6,686	215.67
Total.....	34,327	377	264	113	22	17	5	9,432	304.26

PROPORTIONATE NUMBERS.¹

December, 1917:									
White.....	4,885	267.76	218.63	49.13	2.46	.....	2.46	.....	15.62
Colored.....	24,800	129.19	95.32	33.87	8.71	6.77	1.93	.....	8.06
Total.....	29,685	151.99	115.61	36.38	7.68	5.66	2.02	.....	9.30
November, 1917:									
White.....	4,883	294.90	262.95	31.95	4.92	4.92	.....	.....	16.17
Colored.....	24,964	151.89	115.84	36.05	6.73	4.33	2.40	.....	9.35
Total.....	29,847	175.29	139.91	35.38	6.43	4.42	2.01	.....	10.47
December, 1916:									
White.....	4,730	317.12	253.70	63.42	10.15	5.07	5.07	.....	18.73
Colored.....	29,597	102.17	66.49	35.67	7.30	6.08	1.22	.....	7.29
Total.....	34,327	131.79	92.29	39.50	7.69	5.94	1.79	.....	8.86

¹ Annual average per 1,000 employees.

TABLE I-A.—DEATHS OF RESIDENTS OF THE CITIES OF PANAMA, COLON, AND THE CANAL ZONE.

	Popula- tion.	Deaths.			Annual average per 1,000 population.		
		Total.	Disease.	External causes.	Total.	Disease.	External causes.
December, 1917:							
Panama.....	61,369	136	131	5	26.59	25.61	0.98
Colon.....	26,078	66	64	2	30.37	29.45	.92
Canal Zone ¹	24,038	16	13	3	7.99	6.49	1.50
Total.....	111,485	218	208	10	23.46	22.39	1.07
November, 1917:							
Panama.....	61,369	154	149	5	30.11	29.13	.98
Colon.....	26,078	53	52	1	24.39	23.93	.46
Canal Zone ¹	24,038	25	20	5	12.48	9.98	2.50
Total.....	111,485	232	221	11	24.97	23.79	1.18
December, 1916:							
Panama.....	60,778	152	146	6	30.01	28.83	1.18
Colon.....	24,693	58	53	5	28.19	25.76	2.43
Canal Zone.....	31,048	26	21	5	10.05	8.12	1.93
Total.....	116,519	236	220	16	24.31	22.66	1.65

¹ Exclusive of military population.

TABLE II.—CAUSES OF DEATHS OF INFANTS,

Cause of death.	Sex.		Color.		-1 week.	+1 week -1 month.
	M.	F.	W.	B.		
Septicemia.....		1	1			
Tuberculosis of the lungs.....	1	1		2		
Tuberculous meningitis.....		1	1			
Miliary tuberculosis.....		1		1		
Disseminated tuberculosis.....		1		1		
Anemia.....	1			1		
Convulsions of infants.....	1			1	1	
Acute endocarditis.....	1	1	2			
Organic diseases of the heart.....		1		1		
Acute bronchitis.....	4	3		7		
Chronic bronchitis.....	1			1		
Bronchopneumonia.....	5	2	2	5		
Pneumonia (unqualified).....	1			1		
Pleurisy.....	1			1		
Acute gastritis.....	1		1			
Diarrhea and enteritis.....	8	7		15		
Colitis.....	3	1	1	3		
Acute hepatic congestion.....		1		1		
Acute nephritis.....	2		1	1		
Other diseases of the kidney and annexa.....		1		1		
Pyelitis.....	1			1		
Congenital malformations.....	1			1		
Premature birth.....	3	2		5	4	
Congenital debility.....	2	1		3	2	
Malnutrition.....	4	2		6	1	
Other causes peculiar to early infancy.....		3		3	3	
Total.....	41	30	9	62	11	

Infant mortality rate, based on number of births reported for the month (deaths
 Percentage of deaths under 1 year of age to total deaths for month.....

BY SEX, COLOR, AGE, AND PLACE OF RESIDENCE.

Age by months.											Place of residence.			
1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	Panama.	Colon.	Zone.	Total.
	1										1			1
		1								1	2			2
		1									1			1
		1									1			1
						1						1		1
						1						1		1
											1			1
	1	1									2			2
					1							1		1
3		2		1			1				3	4		7
				1								1		1
1	1		2			1		1		1	6	1		7
									1		1			1
									1			1		1
1											1			1
4	3	1	1					3	1	2	12	3		15
		1				1			1	1	4			4
1											1			1
	1		1								2			2
					1						1			1
				1									1	1
1												1		1
	1											5		5
		1									2		1	3
1	2	1			1						6			6
											3			3
12	10	10	4	3	3	4	1	4	4	5	50	19	2	71
under 1 year of age per 1,000 births)											202.43	202.13	33.90	177.50
											37	29	12	33

TABLE III.—DEATHS BY NATIONALITY.

Nationality.	Employees.		Nonemployees.		Totals.		Grand total.
	Male.	Female.	Male.	Female.	Male.	Female.	
Barbados.....	2		15	11	17	11	28
Bermuda.....			1	1	1	1	2
Canada.....				1		1	1
Chile.....			3		3		3
China.....			3	1	3	1	4
Colombia.....	1		6	2	7	2	9
Curacao.....				1		1	1
Dominica.....	1				1		1
England.....			1		1		1
Greece.....			2		2		2
Grenada.....	1		1	2	2	1	3
Guadeloupe.....	1			1	1	1	2
India.....			1		1		1
Jamaica.....	4		32	29	33	29	65
Martinique.....	1		3	1	4	1	5
Mexico.....	1			1	1	1	2
Montserrat.....			1	1	1	1	2
Nevis.....			1		1		1
Panama.....	1	1	30	29	31	30	61
St. Lucia.....	1		1	1	2	1	3
St. Vincent.....	1		1	1	2	1	3
St. Thomas.....				1		1	1
Spain.....	1		3	1	4	1	5
Trinidad.....	2		1	3	3	3	6
United States.....			7	2	7	2	9
Unknown.....			1		1		1
Total.....	18	1	114	89	132	90	222

TABLE IV.—BIRTHS AND BIRTH RATES IN THE CANAL ZONE AND THE CITIES OF PANAMA AND COLON.

	Popula- tion.	Births.			Rate per 1,000 popu- lation.		
		Total.	Alive.	Still- born.	Total.	Alive.	Still- born.
December, 1917:							
Panama.....	61,369	263	247	16	51.43	48.30	3.13
Colon.....	26,078	96	94	2	44.18	43.26	.92
Canal Zone ¹	24,038	61	59	2	30.45	29.45	1.00
Total.....	111,485	420	400	20	45.21	43.06	2.15
November, 1917:							
Panama.....	61,369	287	266	19	56.12	52.40	3.72
Colon.....	26,078	90	87	3	41.41	40.03	1.38
Canal Zone ¹	24,038	73	70	3	36.44	34.94	1.50
Total.....	111,485	450	425	25	48.44	45.75	2.69
December, 1916:							
Panama.....	60,778	256	226	30	50.54	44.62	5.92
Colon.....	24,693	94	90	4	45.68	43.74	1.94
Canal Zone.....	31,048	64	59	5	24.74	22.81	1.93
Total.....	116,519	414	375	39	42.64	38.62	4.02

TABLE IV-A.—INFANT MORTALITY RATES IN THE CANAL ZONE AND THE CITIES OF PANAMA AND COLON.

	Popula- tion.	Births.			Deaths among children under 1 year of age.	Death rate per 1,000 births.
		Male.	Fe- male.	Total.		
December, 1917:						
Panama.....	61,369	130	117	247	50	202.43
Colon.....	26,078	39	55	94	19	202.13
Canal Zone ¹	24,038	26	33	59	2	33.90
Total.....	111,485	195	215	400	71	177.50
November, 1917:						
Panama.....	61,369	129	139	268	66	246.26
Colon.....	26,078	41	46	87	17	195.40
Canal Zone ¹	24,038	29	41	70	4	57.14
Total.....	111,485	199	226	425	87	204.70
December, 1916:						
Panama.....	60,778	109	117	226	61	269.91
Colon.....	24,693	43	47	90	20	222.22
Canal Zone.....	31,048	32	27	59	5	84.75
Total.....	116,519	184	191	375	86	229.33

¹ Exclusive of military forces.

INFANT WELFARE WORK—PANAMA CITY.

Station work:

Total number of babies seen.....	236
Instructions given to mothers, total cases.....	125
Treatment given babies, total cases.....	46
Histories taken, total cases.....	28
Examination made, total cases.....	145

Outside work:

Total number of visits made.....	545
Number of cases not located.....	38
Number moved to Colon and Interior.....	61

General:

Number of breast-fed babies.....	255
Number of bottle-fed babies.....	27
Number of bottle and breast fed babies.....	65
Total number of babies seen.....	781
Number of destitute cases given assistance.....	2
Number of cases admitted to hospital.....	9
Number of cases treated at Santo Tomas Dispensary.....	25
Number of cases treated by physician at station.....	31

Defective conditions found:

Skin disease (rash).....	9
Whooping cough.....	3

Number of babies died.....	10
----------------------------	----

TABLE V.—CAUSES OF DEATHS OF EMPLOYEES, ARRANGED WITH

	Color.		Age (in years).						
	W.	B.	15-20	21-25	26-30	31-35	36-40	41-45	46-50
Apoplexy.....		1						1	
Other diseases of intestines.....		1	1						
Cirrhosis of the liver.....		1							
Heart, organic diseases of.....		2					2		
Intestinal obstruction.....		1							1
Nephritis, chronic.....		1					1		
Pleurisy.....		1							
Pneumonia, lobar.....		3		1			1		1
Tuberculosis of the lungs.....		2		1		1			
Tuberculosis, disseminated.....		1					1		
Traumatism by fall.....		1		1					
Traumatism by vehicles.....		1					1		
Traumatism by cutting or piercing instruments.....	1	1					1	1	
Other external violence.....		1						1	
Total.....	1	18	1	3		1	7	3	2

REFERENCE TO AGE AND LENGTH OF RESIDENCE ON ISTHMUS.

Age (in years)— Contd.		Length of residence on Isthmus (in years).											Total.
51-55	56-65	2-3	4-5	5-6	6-7	7-8	8-10	10-12	12-15	+15	Life.	Un- known.	
										1			1
											1		1
	1						1						1
		1										1	2
				1									1
1								1					1
				1				1				1	1
					1							1	3
					1							1	2
					1								1
						1							1
									1				1
							1	1					2
			1										1
1	1	1	1	2	2	1	2	3	1	1	1	4	19

TABLE V. —CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES
PLACE OF

Cause of death.	Sex		Color.			Age (in years).		
	M.	F.	W.	B.	Y.	—1 yr.	1-4	5-10
<i>General diseases.</i>								
Malarial fever, estivoautumnal.....	2	.....	2	.....	.....	.....	1	.....
Purulent infection and septicemia.....	.....	2	1	1	.....	1	.....	.....
Septicemia.....	.....	1	.....	1	.....	.....	.....	.....
Pyemia and septicæmia, pneumococcic.....	1	.....	.....	1	.....	.....	.....	.....
Pellagra.....	.....	4	.....	4	.....	.....	.....	.....
Tuberculosis of the lungs.....	19	16	5	29	1	2	1	.....
Acute military tuberculosis.....	.....	1	.....	1	.....	1	.....	.....
Tuberculous meningitis.....	1	1	2	.....	.....	1	1	.....
Abdominal tuberculosis.....	1	.....	.....	1	.....	.....	.....	.....
Disseminated tuberculosis.....	3	1	.....	4	.....	1	1	.....
Syphilis, period not stated.....	1	.....	.....	1	.....	.....	.....	.....
Anemia, primary, pernicious.....	1	.....	.....	1	.....	1	.....	.....
Alcoholism, chronic.....	.....	1	.....	1	.....	.....	.....	.....
Cerebral hemorrhage, apoplexy.....	4	4	1	7	.....	.....	.....	.....
Epilepsy.....	1	.....	.....	1	.....	.....	.....	1
Convulsions of infants (under 5 years of age).....	1	.....	.....	1	.....	1	.....	.....
Other diseases of the nervous system.....	1	.....	.....	1	.....	.....	.....	.....
<i>Diseases of the circulatory system.</i>								
Acute endocarditis.....	2	1	3	.....	.....	2	.....	.....
Organic diseases of the heart.....	14	9	3	18	2	1	.....	.....
Aneurysm.....	1	.....	.....	1	.....	.....	.....	.....
<i>Diseases of the respiratory system.</i>								
Acute bronchitis.....	6	4	.....	10	.....	7	3	.....
Chronic bronchitis.....	3	.....	.....	3	.....	1	2	.....
Broncho-pneumonia.....	7	4	2	9	.....	7	4	.....
Pneumonia (unqualified).....	3	.....	.....	3	.....	1	.....	.....
Lobar pneumonia.....	5	1	2	4	.....	.....	.....	.....
Pleurisy.....	1	.....	.....	1	.....	1	.....	.....
Gangrene of the lungs.....	1	.....	.....	1	.....	.....	.....	.....
<i>Diseases of the digestive system.</i>								
Acute gastritis.....	1	.....	1	.....	.....	1	.....	.....
Diarrhea and enteritis (under 2 years).....	9	10	.....	19	.....	15	4	.....
Colitis.....	4	2	1	5	.....	4	2	.....
Colitis.....	1	.....	1	.....	.....	.....	1	.....
Intestinal obstruction.....	1	.....	.....	1	.....	.....	.....	.....
Other diseases of the intestines.....	.....	1	.....	1	.....	.....	.....	.....
Acute yellow atrophy of the liver.....	.....	1	.....	1	.....	.....	.....	.....
Cirrhosis of the liver.....	3	1	1	3	.....	.....	.....	.....
Other diseases of the liver.....	.....	2	.....	2	.....	1	.....	.....
Abscess of liver (unqualified).....	.....	1	.....	1	.....	.....	.....	.....
Diseases of the spleen.....	.....	1	.....	1	.....	1	.....	.....
Simple peritonitis.....	.....	1	.....	1	.....	.....	.....	.....
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>								
Acute nephritis.....	4	.....	1	3	.....	2	.....	.....
Bright's disease (chronic nephritis).....	7	5	1	11	.....	.....	.....	.....
Other diseases of the kidney and annexa.....	1	.....	.....	1	.....	1	.....	.....

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES
PLACE OF

Cause of death.	Sex.		Color.			Age (in years).		
	M.	F.	W.	B.	Y.	-1 yr.	1-4	5-10
<i>The puerperal state.</i>								
Puerperal albuminuria and convulsions.....		1	1					
Eclampsia.....		2		2				
<i>Diseases of the skin and of the cellular tissue,</i>								
Elephantiasis.....		1		1				
<i>Malformations.</i>								
Congenital malformations (stillbirth not included).....	1			1		1		
<i>Diseases of early infancy.</i>								
Premature birth.....	3	2		4	1	5		
Congenital debility.....	2	1		3		3		
Malnutrition.....	4	3		7		6	1	
Other causes peculiar to early infancy.....		3		3		3		
<i>Affections produced by external causes.</i>								
Other suicides.....		1		1				
Burns (conflagration excepted).....	1		1				1	
Accidental drowning.....	1		1					
Traumatism by cutting or piercing instruments.....	1		1					
Traumatism by fall.....	1			1				
Traumatism by other crushings.....	2			2				
Homicide by firearms.....	2		1	1				
Homicide by cutting or piercing instruments.....	1			1				
Homicide by other means.....	1			1				
Other external violence.....	1			1				
<i>Ill-defined diseases.</i>								
Sudden death.....	1			1				
Cause of death not specified or ill-defined.....		1		1				
Total.....	132	90	32	186	4	71	22	1
Stillbirths.....	10	10	3	17				
Grand total.....	142	100	35	203	4	71	22	1

AND NONEMPLOYEES) AND MILITARY, BY SEX, COLOR, AGE, AND RESIDENCE—Continued.

Age (in years)—Continued.							Place of residence.			Total.
11-20	21-30	31-40	41-50	51-60	61-75	76-100	Panama.	Colon.	Canal Zone.	
		1							1	1
	1	1					1	1		2
	1						1			1
								1		1
								5		5
							2		1	3
							6		1	7
							3			3
		1					1			1
		1							1	1
		1							1	1
	1								1	1
	1	1					1	1		2
		2					1		1	2
			1				1			1
			1				1			1
			1					1		1
	1						1			1
		1					1			1
5	29	42	27	14	8	3	136	66	20	222
							16	2	2	20
5	29	42	27	14	8	3	152	68	22	242

TABLE VI-A,—DEATHS OF NONRESIDENTS.¹

Residence.	Nationality.	Color.	Sex.	Age.	Cause of death.
Interior of Panama...	Colombia..	Black...	Male....	32	Homicide by fire-arms.
Paja, Republic of Panama.	English...	White...	...do.....	46	Pulmonary tuberculosis.
Colombia, South America.	Colombia..	Black...	Female..	41	Dysentery.
Bocas del Toro, Republic of Panama.	Jamaica...	...do.....	Male....	57	Myocardial insufficiency.
Interior of Panama...	Colombia..	...do.....	Female..	49	Pulmonary tuberculosis.
Las Santos, Republic of Panama.	Panama...	...do.....	Male....	72	Lobar pneumonia.
Porto Bello, Republic of Panama.	...do.....	...do.....	...do.....	32	Accidental drowning.
Buenaventura, Colombia.	Spain.....	White...	...do.....	42	Organic heart disease.
Tapia, Republic of Panama.	Colombia..	Black...	...do.....	31	Pulmonary tuberculosis.
Interior of Panama...	Panama...	...do.....	...do.....	40	Do.
Nombre de Dios, Republic of Panama.	Jamaica...	...do.....	...do.....	34	Extensive burns, arms and body.
Bridgeport, Conn....	U. S. A...	White...	...do.....	67	Organic disease of the heart.

TABLE VII.—DISCHARGES AND DEATHS IN THE

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Americans.		Europeans.			Americans.		Europeans.				
	M.	F.	M.	F.		M.	F.	M.	F.			
<i>General diseases.</i>												
Typhoid fever.....	1	1										
Malaria fever:												
Estivo-autumnal.....	3		3		36							
Tertian.....		1			3							
Quartan.....					1							
Undetermined.....	1											
Measles.....			1		3							
Whooping cough.....												
Diphtheria and croup.....					1							
Influenza.....	5				6							
Disentery:												
Entamebic.....			2		1							
Bacillary.....	1											
Unclassified.....												
Dengue.....												
Chicken pox.....					1							
Yaws.....					1							
Purulent infection and septicemia.....												
Pyemia and septicemia, pneumo- coccic.....					1							
Pellagra.....												
Beriberi.....												
Tuberculosis of the lungs.....	1				3						1	
Pott's disease.....												
Disseminated tuberculosis.....											2	
Syphilis:												
Primary.....												
Secondary.....												
Tertiary.....	1		1		17	1						
Period not stated.....												
Gonococcus infection.....												
Gonorrhea.....	1		1		14							
Gonorrheal orchitis and epididy- mitis.....	1				1							
Gonorrheal ophthalmia.....					1							
Soft chancre.....					6							
Adenitis chancroidal.....	1				3							
Cancer and other malignant tumors of the stomach and liver.....					1							
Cancer and other malignant tumors of the female genital organs.....												
Other tumors (tumors of the female genital organs excepted).....												
Acute articular rheumatism.....												

¹ A.=American.

HOSPITALS OF THE PANAMA CANAL.

Nonemployees.												Nonresidents.								Total discharges.	Total deaths.
Discharges.						Deaths.						Discharges.				Deaths.					
White.				Black.		White.				Black.		White.		Black.		White.		Black.			
Soldiers.		Others.				Soldiers.		Others.													
A. ¹	P.R. ²	M.	F.	M.	F.	A. ¹	P.R. ²	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
			1																		
2	1	3	1	3	2			1				2									
8		1	1	1																	
3	1											1									
		10	12	2	1																
					1																
		2	2	2	1																
3			3																		
												1									
4																			1		
				2																	
		1																			
					2				2												
	4	1	1					1	1	1	2			1							
				1																	
					2																
2																					
3		2																			
3	2		1	2	6							2									
3																					
		1		1								1									
6												2									
1												1									
1																					
12												1									
		1		1																	
					2																
1				1																	
		1		1																	

² P. R.=Porto Rican.

TABLE VII.—DISCHARGES AND DEATHS IN THE

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Americans.		Europeans.			Americans.		Europeans.				
	M.	F.	M.	F.		M.	F.	M.	F.			
<i>General diseases—Continued.</i>												
Diabetes.....												
Glycosuria.....												
Exophthalmic goitre.....												
Other general diseases.....												
Alcoholism (acute or chronic).....												
Alcoholism acute.....												
Alcoholic psychosis.....												
<i>Diseases of the nervous system and of the organs of special sense.</i>												
Cerebral hemorrhage, apoplexy.....					1						1	
Paralysis without specified cause...												
Other forms of mental alienation.....												
Dementia præcox.....		1										
Hysteria.....			1									
Neuralgia.....												
Neuritis.....	2		1									
Other diseases of the nervous system												
Neurasthenia.....												
Diseases of the eyes and their annexa			2		7							
Diseases of the ears.....			1		1							
<i>Diseases of the circulatory system.</i>												
Organic diseases of the heart.....					3							
Angina pectoris.....	2											
Hemorrhoids.....					3							
Varices.....												
Varicocele.....	1				1							
Diseases of the lymphatic system (lymphangitis, etc.).	3											
Lymphadenitis (nonvenereal).....					4							
Hemorrhage: other diseases of the circulatory system.					1							
<i>Diseases of the respiratory system.</i>												
Diseases of the nasal fossæ.....	2				1							
Adenoid vegetations.....												
Myiasis of nasal fossæ and sinuses..												
Diseases of the thyroid body.....												
Acute bronchitis.....	4	3			2							
Chronic bronchitis.....												

¹ A.=American.

TABLE VII.—DISCHARGES AND DEATHS IN THE

Diseases.	Employees.													
	Discharges.						Deaths.							
	White.						White.						Black.	
	Americans.		Europeans.		Black.		Americans.		Europeans.					
	M.	F.	M.	F.			M.	F.	M.	F.	M.	F.		
<i>Diseases of the respiratory system—Continued.</i>														
Broncho-pneumonia.....														
Lobar pneumonia.....			2		3							1		
Pleurisy.....					2									
Asthma.....					3									
Abscess of lungs.....														
<i>Diseases of the digestive system.</i>														
Diseases of the mouth and annexa.....														
Diseases of the teeth and gums.....					2									
Stomatitis.....														
Diseases of the pharynx.....														
Follicular tonsilitis.....	3				3									
Ulcer of the stomach.....														
Acute gastritis.....					1									
Chronic gastritis.....														
Acute indigestion.....														
Diarrhea and enteritis (under 2 years).....														
Diarrhea and enteritis (2 years and over).....			4		3									
Colitis.....					2									
Ankylostomiasis.....					2									
Intestinal parasites.....														
Ascariasis.....														
Teniasis.....	1													
Acute appendicitis.....		1												
Chronic appendicitis.....					1									
Inguinal hernia.....	1				8									
Other hernias.....														
Intestinal obstruction.....												1		
Other diseases of the intestines.....	2	1	1		2							1		
Constipation.....			1											
Duodenal ulcer.....		1			1									
Cirrhosis of the liver.....			1									1		
Other diseases of the liver.....	1													
Cholecystitis.....														
Simple peritonitis (nonpuerperal).....														

¹ A. = American.

HOSPITALS OF THE PANAMA CANAL—Continued.

Nonemployees.												Nonresidents.								Total discharges.	Total deaths.
Discharges.						Deaths.						Discharges.				Deaths.					
White.				Black.		White.				Black.		White.		Black.		White.		Black.			
Soldiers.		Others.				Soldiers.		Others.				White.		Black.		White.		Black.			
A. ¹	P.R. ²	M.	F.	M.	F.	A. ¹	P.R. ²	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
					1																
			1	1		1															
				1																	
1			1		1																
1																					
1				3																	
				1																	
5		10	18	1	4																
1			1																		
2														1							
		1												1							
				1	2	1															
1								1													
2																					
		1			1																
1				1																	
3		2	3	3	2																
1																					
3		1	1	1										1							
				1																	
2			4																		
1																					
4		1	1		1								1								
			2																		
			1										1								

² P. R.=Porto Rican.

TABLE VII.—DISCHARGES AND DEATHS IN THE

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Americans.		Europeans.			Americans.		Europeans.				
	M.	F.	M.	F.		M.	F.	M.	F.		M.	F.
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>												
Acute nephritis.....												
Bright's disease (chronic nephritis).....	1		1		3				1			
Other diseases of the kidney and annexa.....					1							
Calculi of the urinary passages.....	1											
Cystitis.....	1		1									
Diseases of the urethra, urinary abscess, etc.....												
Stricture of the urethra, nonvenereal.....					2							
Acute prostatitis.....												
Nonvenereal diseases of the male genital organs.....					2							
Hydrocele.....					2							
Uterine hemorrhage (nonpuerperal).....												
Uterine tumor (noncancerous).....												
Other diseases of the uterus.....						1						
Metritis.....												
Salpingitis and other diseases of the female genital organs.....						1						
Nonpuerperal diseases of the breast (cancer excepted).....												
Benign tumor of breast.....												
<i>The puerperal state.</i>												
Normal labor.....												
Accidents of pregnancy.....												
Extra-uterine pregnancy.....												
Hyperemesis gravidarum.....												
Abortion.....												
Other accidents of labor.....												
Puerperal septicemia.....												
Puerperal albuminuria and convulsions.....												
Eclampsia.....												
Puerperal diseases of the breast.....												
<i>Diseases of the skin and the cellular tissue.</i>												
Gangrene.....												
Furuncle.....					1							
Acute abscess.....	2				3							

A. = American.

TABLE VII.—DISCHARGES AND DEATHS IN THE

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Americans.		Europeans.			Americans.		Europeans.				
	M.	F.	M.	F.		M.	F.	M.	F.		M.	F.
<i>Diseases of the skin and the cellular tissue—Continued.</i>												
Phlegmon and cellulitis.....	2				4							
Dhobie itch.....												
Ulcer of the skin.....			1		5							
Impetigo contagiosa.....					1							
Urticaria.....												
Other diseases of the skin and an- nexa.....	3				1							
<i>Diseases of the bones and the organs of locomotion.</i>												
Diseases of the bones (tuberculosis excepted).....					1							
Osteomyelitis.....					1							
Periostitis.....												
Diseases of the joints (tuberculosis and rheumatism excepted).....					1							
Arthritis.....												
Other diseases of the organs of loco- motion.....	2											
<i>Malformations.</i>												
Congenital malformations (still birth not included).....												
<i>Diseases of early infancy.</i>												
Newborn child.....												
Premature birth.....												
Malnutrition.....												
<i>Affections produced by external causes.</i>												
Poisoning by food.....	1				1							
Venomous bites and stings.....	1				1							
Burns (conflagration excepted).....	1				2							
Absorption of deleterious gases (conflagration excepted).....	2											
Traumatism by firearms.....												
Traumatism by cutting or piercing instruments.....	2		1		21				1			
Traumatism by fall.....		1			7							

¹ A. = American.

HOSPITALS OF THE PANAMA CANAL—Continued.

Nonemployees.												Nonresidents.								Total discharges.	Total deaths.
Discharges.						Deaths.						Discharges.				Deaths.					
White.				Black.		White.				Black.		White.		Black.		White.		Black.			
Soldiers.		Others.				Soldiers.		Others.													
A. ¹	P.R. ²	M.	F.	M.	F.	A. ¹	P.R. ²	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
1	3	2	1																		
1					2																
			1																		
2		3	4									1									
3																					
1																					
		1																			
1																					
6																					
2																					
		14	13	10	7																
		1	1		1						1		1								
		1			1			1		1											
2																					
2																					
2		1																			
		3	1	4	1									2							

² P. R.=Porto Rican.

TABLE VII.—DISCHARGES AND DEATHS IN THE

Diseases.	Employees.											
	Discharges.						Deaths.					
	White.				Black.	White.				Black.		
	Americans.		Europeans.			Americans.		Europeans.				
	M.	F.	M.	F.		M.	F.	M.	F.		M.	F.
<i>Affections produced by external causes—Continued.</i>												
Traumatism by machines.....					2							
Traumatism by other crushings, (vehicles, railroads, landslides, etc.).....	3				6							
Injuries by animals.....												
Homicide by cutting or piercing in- struments.....					1						1	
Fractures (cause not specified).....												
Dislocations.....												
Sprains.....					1							
Other external violence.....	3				35						1	
<i>Ill-defined diseases.</i>												
Infections of undetermined origin....		1										
No disease.....	2				2							
Total.....	65	11	26		264	3			2		9	1

¹ A. = American.

HOSPITALS OF THE PANAMA CANAL—Continued.

Nonemployees.												Nonresidents.								Total discharges.	Total deaths.
Discharges.						Deaths.						Discharges.				Deaths.					
White.				Black.		White.				Black.		White.		Black.		White.		Black.			
Soldiers.		Others.				Soldiers.		Others.													
A. ¹	P.R. ²	M.	F.	M.	F.	A. ¹	P.R. ²	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
																				2	..
2					1															12	..
1			1																	2	..
6			1		1							1								1	1
1		1																		9	..
1					1															2	..
2				1																3	..
																				41	1
8		1									1									10	1
5	2	6	8	3								2	1							31	..
184	9	91	164	58	104	...	2	4	3	6	9	31	1	1	...	1	...	...	1	1,012	38

² P. R. = Porto Rican.

TABLE VIII.—CONSOLIDATED HOSPITAL REPORT.

[A.=White Americans; F.=White foreign; B.=Blacks; P. C.=Panama Canal;
P. R. R.=Panama Railroad.]

	Remaining Dec. 1.			Admitted.			Died.			Dis- charged.		
	A.	F.	B.	A.	F.	B.	A.	F.	B.	A.	F.	B.
ANCON HOSPITAL.												
Panama Canal employees.....	16	10	72	41	18	103	...	...	4	51	10	104
Panama R. R. employees.....	6	9	95	4	12	123	...	...	5	3	13	129
Soldiers.....	95	...	...	142	...	...	2	...	...	183	...	...
Panama pay patients.....	...	...	...	...	...	1	...	...	...	...	...	...
Other pay patients.....	24	38	82	103	34	121	1	1	10	115	46	107
Charity patients.....	25	5	13	50	8	49	...	...	1	44	8	34
Total.....	166	62	262	340	72	397	3	1	20	396	77	374
COROZAL HOSPITAL (INSANE).												
Panama Canal employees.....	1	2	4	...	...	1	...	...	...	...	...	...
Panama R. R. employees.....	...	...	2	...	...	1	...	...	...	...	...	...
Soldiers.....	2	...	...	4	...	...	...	...	2	...	...	...
Panama pay patients.....	4	48	201	...	...	3	1	1	...	1	2	...
Other pay patients.....	...	2	5	...	1	2	...	1	...	1	...	...
Charity patients.....	...	9	64	...	...	5	...	...	...	1	...	...
Total.....	7	61	276	4	1	12	1	2	2	3	2	...
Grand total.....	173	123	538	344	73	409	3	2	22	398	80	376
COROZAL FARM (CRIPPLES).												
Panama Canal employees.....	...	8	51	...	1	...	...	...	...	...	...	...
CHRONIC WARD.												
Charity patients.....	...	...	34	...	...	...	...	...	...	...	1	...
COLON HOSPITAL.												
Panama Canal employees.....	2	...	5	18	5	16	...	...	15	...	12	...
Panama R. R. employees.....	2	3	17	7	4	23	1	2	6	4	22	...
Soldiers.....	4	...	...	6	...	...	...	...	8	...	...	...
Panama pay patients.....	...	...	2	...	4	8	1	2	...	1	2	...
Other pay patients.....	13	8	8	60	20	17	1	1	2	44	19	13
Charity patients.....	...	2	...	4	...	4	...	1	3	2	1	...
Total.....	21	13	32	95	33	68	1	3	7	75	27	50
PALO SECO LEPER ASYLUM.												
Panama pay patients.....	...	1	37	...	...	...	...	...	...	...	...	...
Charity patients.....	...	1	28	...	...	...	...	...	...	...	...	...
Total.....	...	2	65	...	...	...	...	...	...	...	...	...
GRAND TOTALS.												
Panama Canal employees.....	19	20	132	59	24	120	...	...	4	66	10	116
Panama R. R. employees.....	8	12	114	11	16	147	1	7	9	17	151	...
Soldiers.....	101	...	...	152	...	...	2	...	193	...	...	...
Panama pay patients.....	4	49	240	...	4	12	2	3	...	2	4	...
Other pay patients.....	37	48	95	163	55	140	2	2	13	159	66	120
Charity patients.....	25	17	139	54	8	58	...	2	47	11	36	...
Total.....	194	146	720	439	107	477	4	5	29	474	103	427

TABLE VIII.—CONSOLIDATED HOSPITAL REPORT.

[A.=White Americans; F.=White foreign; B.=Blacks; P. C.=Panama Canal;
P. R. R.=Panama Railroad.]

	Transferred.			Remain- ing Dec. 31.			Average number constantly sick.			
	A.	F.	B.	A.	F.	B.	A.	F.	B.	Total.
ANCON HOSPITAL.										
Panama Canal employees.....			1	6	18	66	12.97	14.61	62.64	90.22
Panama R. R. employees.....			2	7	8	82	6.65	9.94	84.16	100.75
Soldiers.....	4			48			71.33			71.38
Panama pay patients.....			1						.16	.16
Other pay patients.....		1	6	11	24	80	20.58	28.25	86.25	135.08
Charity patients.....			2	31	5	25	20.71	5.93	24.51	51.15
Total.....	4	1	12	103	55	253	132.29	58.73	257.72	448.74
COROZAL HOSPITAL (INSANE).										
Panama Canal employees.....				1	2	5	1.00	2.00	4.74	7.74
Panama R. R. employees.....						3			2.77	2.77
Soldiers.....				4			2.35			2.35
Panama pay patients.....			1	4	46	200	4.00	46.35	200.58	250.93
Other pay patients.....					2	6	.39	1.94	6.03	8.36
Charity patients.....					8	69		8.45	66.13	74.58
Total.....			1	9	58	283	7.74	58.74	280.25	346.73
Grand total.....	4	1	13	112	113	536	140.03	117.47	537.97	795.46
COROZAL FARM (CRIPPLES).										
Panama Canal employees.....					9	51		8.58	51.00	59.58
CHRONIC WARD.										
Charity patients.....			10			23			26.45	26.45
COLON HOSPITAL.										
Panama Canal employees.....	2	3	4	3	2	5	3.22	.80	6.10	10.12
Panama R. R. employees.....		2	7	3		9	3.03	1.74	10.87	15.64
Soldiers.....				2			1.80			1.80
Panama pay patients.....		2	4			2		.43	1.73	2.16
Other pay patients.....	8	4	5	20	4	5	15.97	2.90	7.03	25.90
Charity patients.....				1		2	1.10	.19	1.00	2.29
Total.....	10	11	20	29	6	23	25.12	6.06	26.73	57.91
PALO SECO LEPER ASYLUM.										
Panama pay patients.....					1	37		1.00	37.00	38.00
Charity patients.....					1	28		1.00	28.00	29.00
Total.....					2	65		2.00	65.00	67.00
GRAND TOTALS.										
Panama Canal employees.....	2	3	5	10	31	127	17.19	25.99	124.48	167.66
Panama R. R. employees.....		2	9	10	8	94	9.68	11.68	97.80	119.16
Soldiers.....	4			54			75.53			75.53
Panama pay patients.....		2	6	4	47	239	4.00	47.78	239.47	291.25
Other pay patients.....	8	5	11	31	30	91	36.94	33.09	99.31	169.34
Charity patients.....			12	32	14	147	21.81	15.57	146.09	183.47
Total.....	14	12	43	141	130	698	165.15	134.11	707.15	1,006.41

TABLE IX.—CONSOLIDATED DISPENSARY REPORT.

EMPLOYEES TREATED IN QUARTERS.

	Re- main- ing Dec. 1.		Ad- mitted.		Died.		Dis- charged.		Trans- ferred.		Re- main- ing Dec. 31.		Days lost.		
	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	Total.
Ancon.....	1	....	70	....	....	....	69	....	....	....	2	....	174	....	174
Balboa.....	6	1	135	24	....	....	135	17	3	6	3	2	288	111	399
Pedro Miguel...	....	....	12	....	....	....	10	....	....	....	2	....	16	....	16
Paraiso.....	....	3	6	9	....	....	5	11	1	1	....	....	11	27	38
Gamboa.....	....	....	1	1	....	....	1	1	....	....	....	....	1	1	2
Gatun.....	....	....	4	2	....	....	4	2	....	....	....	....	14	8	22
Colon.....	8	32	70	103	....	....	77	120	....	....	1	15	126	742	868
Total.....	15	36	298	139	....	....	301	151	4	7	8	17	630	889	1,519

ALL CASES TREATED BUT NOT EXCUSED.

	Employees.			Nonemployees.			Total.		
	W.	B.	Total.	W.	B.	Total.	W.	B.	Total.
Ancon.....	1,174	4,173	5,347	1,862	2,837	4,699	3,036	7,010	10,046
Balboa.....	3,790	4,358	8,148	4,418	2,366	6,784	8,208	6,724	14,932
Pedro Miguel....	1,156	1,821	2,977	1,122	761	1,883	2,278	2,582	4,860
Paraiso.....	491	2,023	2,514	536	757	1,293	1,027	2,780	3,807
Gamboa.....	168	472	640	116	396	512	284	868	1,152
Gatun.....	342	1,242	1,584	530	815	1,345	872	2,057	2,929
Colon.....	1,425	5,644	7,069	750	2,470	3,220	2,175	8,114	10,289
Total.....	8,546	19,733	28,279	9,334	10,402	19,736	17,880	30,135	48,015

TABLE IX-A.—CONSOLIDATED ADMISSION REPORT.

	White.	Black.	Total.
Admissions to hospitals, excluding Corozal farm and chronic ward.....	545	477	1,022
Admissions of employees to quarters.....	298	139	437
Total admissions to hospitals and quarters....	843	616	1,459
Less number of patients transferred between hospitals and from quarters to hospitals, whose admissions are duplicated in above figures.....	26	33	59
Net admissions to hospitals and quarters.....	817	583	1,400
EMPLOYEES.			
Employees admitted to hospitals.....	109	267	376
Employees admitted to quarters.....	298	139	437
Total admissions of employees.....	407	406	813
Less number transferred between hospitals, and from quarters to hospitals, whose admissions are duplicated in above figures.....	11	21	32
Net admissions of employees.....	396	385	781
Annual average per thousand of admissions of employees to hospitals and quarters.....	972.77	186.29	315.71

TABLE IX-B.—CONTAGIOUS AND INFECTIOUS DISEASES REPORTED DURING THE MONTH.

	Panama.	Colon.	Canal Zone.	Non-resident.	Total.
Beriberi.....	6		1		7
Chicken pox.....	4	1	2		7
Diarrhea.....			5		5
Diphtheria.....	2	2			4
Dysentery.....	4	1	1	3	9
Gonococcus infection.....		15	56		71
Hookworm disease.....			9		9
Malarial fever.....	4	1	53	3	61
Measles.....	19	3	42		64
Meningitis, tuberculous.....	2				2
Mumps.....	1				1
Ophthalmia, neonatorum.....		1	1		2
Pellagra.....	2				2
Pneumonia, acute.....	9	2	3	1	15
Syphilis.....		2	14		16
Tuberculosis.....	35	21	7	3	66
Typhoid.....	1	1	2		4
Whooping cough.....	3				3

TABLE X.—NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS AND QUARTERS.

	White.	Colored.	Total.
Hospitals:			
Ancon Hospital.....	47.17	154.31	201.48
Colon Hospital.....	8.79	16.97	25.76
Total.....	55.96	171.28	227.24
Quarters:			
Ancon.....	5.61		5.61
Balboa.....	9.29	3.58	12.87
Pedro Miguel.....	.53		.53
Paraiso.....	.36	.87	1.23
Gamboua.....	.03	.03	.06
Gatun.....	.45	.26	.71
Colon.....	4.06	23.94	28.00
Total.....	20.33	28.68	49.01

TABLE X-A.—AVERAGE NUMBER OF DAYS IN HOSPITAL OR QUARTERS FOR EACH ADMISSION OF SICK EMPLOYEE.

	White.	Black.	Total.
Hospitals:			
Ancon Hospital.....	14.08	15.49	15.15
Colon Hospital.....	5.30	10.19	8.17
Quarters:			
Ancon.....	2.17		2.17
Balboa.....	2.19	3.83	2.43
Pedro Miguel.....	1.33		1.33
Paraiso.....	1.83	5.41	4.22
Gamboua.....	1.00	1.00	1.00
Gatun.....	3.50	4.00	3.66
Colon.....	1.75	8.47	5.84

	Hospitals.	Quarters.	Total.
Average number of employees constantly sick:			
White.....	55.96	20.33	76.29
Black.....	171.28	28.68	199.96
Total.....	227.24	49.01	276.25
Average number of employees constantly sick per 1,000:			
White.....	11.46	4.16	15.62
Black.....	6.90	1.16	8.06
Total.....	7.65	1.65	9.30

TABLE XI.—DEATH RATES AMONG AMERICANS ON THE ISTHMUS CONNECTED WITH THE PANAMA CANAL.

	Annual death rate per 1,000 population.
White women and children from the United States:	
Disease.....	4.65
External causes.....	2.33
Total.....	6.98
White employees and their families from the United States:	
Disease.....	2.57
External causes.....	1.29
Total.....	3.86

TABLE XII.—FINANCIAL STATEMENT, DEPARTMENT OF HEALTH, NOVEMBER, 1917.

	November, 1917.	October, 1917.	November, 1916.
Administration, general expenses:			
Chief health office.....	\$1,116.50	\$664.53	\$1,282.84
Stock.....	¹ 256.40	¹ 2,436.25	.....
Suspense.....	¹ 92.56	185.12	.....
Reserve for new tools.....	.....	.....	2,176.75
Vacation pay.....	.....	.....	2,743.69
Total.....	767.54	¹ 1,586.60	6,203.28
Hospital division:			
Ancon Hospital.....	36,535.52	38,405.23	29,005.16
Corozal Hospital and farm.....	7,986.20	9,092.30	6,587.30
Colon Hospital.....	5,783.35	5,394.22	4,378.52
Palo Seco Leper Asylum.....	2,530.13	2,221.84	1,627.35
Santo Tomas Hospital.....	1,200.16	1,052.00	865.00
Medical storehouse.....	1,216.87	993.38	698.68
Total.....	55,252.23	57,158.97	43,162.01
Sanitary division:			
Health office, Panama.....	3,673.62	4,505.29	3,549.60
Street cleaning, Panama.....	4,694.62	4,815.64	3,870.82
Health office, Colon-Cristobal.....	3,112.12	2,864.10	2,676.67
Street cleaning, Colon-Cristobal.....	2,747.84	2,724.49	2,040.94
Zone sanitation.....	10,988.35	11,009.42	¹ 38.00
Total.....	25,216.55	25,918.94	12,100.03
Dispensaries.....	3,642.86	4,374.02	2,630.76
Quarantine division.....	5,452.42	6,265.36	5,072.86
RECAPITULATION.			
Administration, general expenses.....	767.54	¹ 1,586.60	6,203.28
Hospital division.....	55,252.23	57,158.97	43,162.01
Sanitary division.....	25,216.55	25,918.94	12,100.03
Dispensaries.....	3,642.86	4,374.02	2,630.76
Quarantine division.....	5,452.42	6,265.36	5,072.88
Total.....	90,331.60	92,130.69	69,168.96

¹ Credit.

TABLE XIII.—ANCON HOSPITAL.
REPORT OF DAYS LOST IN HOSPITAL.

Class.	American.	Foreign.	Black.	Total.
Hospital:				
Panama Canal employees.....	402	453	1,942	2,797
Panama R. R. employees.....	206	308	2,609	3,123
Army and Navy.....	2,213	.....	.....	2,213
Panama Government pay cases.....	.....	.....	5	5
Other pay patients.....	538	876	2,674	4,188
Charity cases.....	642	184	761	1,587
Total.....	4,101	1,821	7,991	13,913
Asylum:				
Panama Canal employees.....	31	62	147	240
Panama R. R. employees.....	.....	.....	86	86
Army and Navy.....	73	.....	.....	73
Panama Government pay cases.....	124	1,437	6,218	7,779
Other pay cases.....	12	60	187	259
Charity cases.....	.....	262	2,050	2,312
Total.....	240	1,821	8,688	10,749
Chronics.....	.....	.....	820	820
Cripples.....	.....	266	1,581	1,847
Grand total.....	4,341	3,908	19,080	27,329

Nonresidents, hospital..... 471
Nonresidents, asylum..... 1,846

Cost of subsistence per patient per day, \$0.2962.

WARD LABORATORY REPORT.

Blood examinations, total number.....	488
Estivoautumnal.....	24
Quartan.....	3
Tertian.....	8
Differential counts.....	46
Hemoglobin estimations.....	235
Leucocyte counts.....	119
Red blood counts.....	6
Stool examinations, total number.....	518
Ameba.....	1
Ascaris lumbricoides.....	6
Balantidium coli.....	0
Ciliated monads.....	6
Guaiac tests.....	10
Pus and blood.....	41
Strongyloides.....	27
Tenia saginata.....	1
Tricocephalus dispar.....	21
Uncinaria (ova).....	37
Urine examinations, total number.....	888
Albumin.....	386
Bile.....	2
Casts.....	375
Ciliated monads.....	4
Epithelia.....	460
Guaiac tests.....	10
Hemlin crystals.....	11
Indican.....	65
Pus and blood.....	938
Sugar (positive 12, negative 144).....	156

TABLE XIII —ANCON HOSPITAL—Continued.

Sputum examinations, total number.....	403
Positive for tubercle bacilli.....	44
Smear examinations, total number.....	35
Urethral.....	17
Vaginal.....	1
Eye.....	1
Spinal fluid.....	16

SURGICAL OPERATIONS PERFORMED DURING MONTH.

	Number.	Died.
Amputations:		
Digits, multiple.....	1	
Operations on bones:		
Wiring of fractures, compound.....	1	
Adenectomy:		
Inguinal, single.....	13	
Inguinal, double.....	4	
Herniotomy:		
Inguinal, single.....	6	
Gastro-urinary tract:		
Urethrotomy, internal.....	2	
Epididymotomy.....	1	
Amputation of scrotum.....	4	
Curettage uteri.....	7	
Perineoplasty.....	2	
Obstetrical:		
High forceps.....	1	
Low forceps.....	2	
Perineorrhaphy.....	1	
Thorax:		
Thoracotomy.....	3	1
Rectum:		
Hemorrhoids, radical cure.....	5	
Fistula in ano, excision of.....	1	
General:		
Thyroidectomy.....	1	
Varicose veins, excision of.....	1	
Tenorrhaphy.....	1	
Excision of surface neoplasms.....	2	
Plastic operation for congenital defect.....	2	
Plastic operation for effects of disease.....	3	
Laparotomy:		
For general peritonitis (not traumatic or appendicial).....	2	2
For intestinal obstruction.....	1	1
Appendectomy.....	11	
Appendectomy with local peritonitis.....	1	
Supravaginal hysterectomy.....	3	
Hysteromyomectomy.....	3	
Salpingo-cophorectomy.....	3	
Suspensio uteri.....	3	
For ectopic gestation.....	1	
For stab wound of abdomen.....	2	1
Minor operations, various.....	95	
Total.....	189	5

REPORT OF OPERATIONS, EYE AND EAR CLINIC.

Tonsillectomy.....	37
Adenoidectomy.....	30
Submucous resection.....	6
Pterygium transplantation.....	3
Turbinectomy.....	1
Minor operations.....	6
Total.....	83
Refractions.....	68

TABLE XIII.—ANCON HOSPITAL—Continued.

REPORT OF OUT-PATIENT DEPARTMENT.

Clinic.	Total visits.	New cases.	Pay cases.	Prescriptions.
Medical.....	272	205	41	216
Surgical.....	294	138	6	50
Eye and ear.....	301	180	1	100
Total.....	867	523	48	366

REPORT OF X-RAY DEPARTMENT—CLASSIFICATION REPORT OF CASES
FOR DECEMBER, 1917.

	Diseases.	Injuries.	Fleuroscopic.	Treatment.
Head.....	12	4		3
Spine.....		3		
Chest.....	5	3	2	
Abdomen.....	7			
Pelvis.....	9			
Gastro intestinal.....	14			
Dental.....	11			
Upper extremities.....	4	41		1
Lower extremities.....	4	45		
Total.....	66	96	2	4

REPORT OF VACCINATIONS.

Number of adults vaccinated.....	99
Number of takes.....	19

MONTHLY REPORT OF BOARD OF HEALTH LABORATORY,

JANUARY 2, 1918.

Bacteriological examinations:

Blood cultures (3 positive <i>B. typhosus</i> ; 1 positive <i>B. coli</i>).....	11
Agglutination reactions (1 positive <i>B. typhosus</i>).....	3
Throat cultures (7 new and 39 repeated positive for <i>B. diphtheria</i>).....	207
Stools.....	25
Urine (3 positive <i>Staphylococcus aureus</i> and 3 positive <i>B. coli</i>).....	30
Sputum (4 positive <i>B. tuberculosis</i>).....	20
Culture from surgical tissue (tonsils).....	1
Spinal fluid.....	4
Fluid from knee.....	1
Smears, vaginal.....	2
Smears, eye.....	7
Smears, urethral.....	1
Culture of pus from knee joint (positive <i>Streptococcus</i>).....	1
Blood smear for malaria.....	1
Culture from organs of cow.....	1
Smear of blood from horse.....	1
Bacterial counts of milk.....	28
Culture from pus from abscess of cow (for autogenous vaccine).....	1
Cultures of water from Balboa swimming pool.....	3
Examination of leper suspect (negative).....	1

TABLE XIII.—ANCON HOSPITAL—Continued.

Chemical examinations:	
Dairy milk from Corozal farm.....	2
Milk from supply department (Sheffield farm).....	1
Mother's milk.....	2
Urine.....	28
Porter, from Panama health office.....	2
Baking powder.....	1
"Cane sirup," from Panama health office.....	1
"Meat pickle," from Panama health office.....	1
Miscellaneous sausage.....	1
Chlorinated lime from medical storehouse.....	3
Pathological tissues prepared.....	70
Autopsies performed.....	20
Tissues reported, surgical.....	36
Autopsies, animal (chickens, 24).....	24
Rats examined (<i>mus musculus</i> , 1,266; <i>mus norvegicus</i> , 251; <i>mus alexan-</i> <i>drinus</i> , 19; <i>mus rattus</i> , 135).....	1,671
Undertaker:	
Cremations.....	21
Buried at Corozal.....	8
Embalmed.....	7
Bodies shipped to United States.....	7
Taken to Panama.....	4
Sent to Colon.....	2

MONTHLY REPORT FOR DECEMBER, 1917.

General:	
Wassermann reactions.....	791
Typhoid vaccinations.....	12
Smallpox vaccinations.....	5
Autogenous vaccines prepared.....	2

COROZAL HOSPITAL—STATEMENT OF COMMITMENTS, DISCHARGES, AND DEATHS.
COMMITMENTS.

	Male.	Female.
From Canal Zone, first admission.....	8	6
From Panama Government, first admission.....	1	1
Total.....	9	7

DISCHARGES.

	Well.		Improved.		Unimproved.	
	Male.	Female.	Male.	Female.	Male.	Female.
Australia.....					¹ 1	
India.....	1					
Jamaica.....				1		
Panama.....					¹ 1	
United States.....			¹ 1			
Venezuela.....	1					
Total.....	2		1	1	3	

¹ 1 deportation to Australia; 2 deportations to United States.

TABLE XIII.—ANCON HOSPITAL—Continued.

DEATHS.

Medical diagnosis.	Mental diagnosis.	Male.	Female.
Tuberculosis of the lungs.....	Dementia precox, catatonic.....	.....	1
Imbecility.....	Imbecility.....	1	.....
Pellagra.....	Toxic psychosis.....	.....	1

TABLE XIV.—COLON HOSPITAL.

REPORT OF DAYS LOST IN HOSPITAL.

Class.	American.	Foreign.	Black.	Total.
Panama Canal employees.....	100	25	189	314
Panama Railroad employees.....	94	54	337	485
Panama Government pay patients.....	.....	13	52	65
Soldiers.....	54	2	.....	56
Other pay patients.....	495	90	218	803
Charity patients.....	34	6	31	71
Total.....	777	190	827	1,794

LABORATORY REPORT.

Blood examinations.....	186
Estivo-autumnal.....	18
Tertian.....	2
Differential counts.....	18
White blood counts.....	14
Red blood counts.....	10
Hemoglobin estimations.....	19
Stool examinations.....	72
Oxyuris vermicularis.....	3
Strongyloides.....	2
Ciliated monads.....	3
Pus.....	21
Blood.....	10
Uncinaria duodenalis.....	1
Amœba.....	1
Urine examinations.....	233
Albumen.....	18
Pus.....	68
Blood.....	7
Casts.....	11
Bile.....	3
Sugar.....	2
Sputum examinations.....	33
Positive for tubercle bacilli.....	3
Smear examinations.....	11
Positive for gonorrhea.....	3
Autopsies.....	8

TABLE XIV.—COLON HOSPITAL—Continued.

SURGICAL OPERATIONS.

Operations on bones:	
Cranietomy, decompressive.....	1
Loosening of periosteum of left tibia.....	1
Adenectomy:	
Inguinal, single.....	5
Inguinal, double.....	2
Herniotomy:	
Inguinal, single.....	5
Inguinal, double.....	1
Genito-urinary tract:	
Varicocele, radical cure.....	3
Hydrocele, single, radical cure.....	1
Hydrocele, double, radical cure.....	1
Curettage uteri.....	1
Obstetrical:	
Cæsarian section, abdominal.....	12
Thorax:	
Excision of breast.....	1
Rectum:	
Hemorrhoids, radical cure.....	2
General:	
Aneurismorrhaphy.....	1
Varicose veins, excision of.....	1
Laparotomy:	
Exploratory.....	1
Appendectomy.....	5
Appendectomy with general peritonitis.....	1
Salpingectomy, single.....	1
Salpingectomy, double.....	1
Ovarian cystectomy.....	1
Oophorectomy.....	2
Suspensio uteri.....	2
Minor operations, various.....	14
Minor operations, various (dispensary).....	87
Normal deliveries.....	4

TABLE XV.—SANTO TOMAS HOSPITAL.

Class.	Remain- ing Dec. 1.	Ad- mitted.	Died.	Dis- charged.	Remain- ing Dec. 31.
Pay cases.....	40	118	1	127	30
Charity cases.....	382	762	79	675	390
Total.....	422	880	80	802	420

Class.	Number treated.	Americans.		Other nations.	
		White.	Black.	White.	Black.
Pay patients.....	158	3	.....	55	100
Charity patients.....	1,144	2	.....	132	1,010
Total.....	1,302	5	.....	187	1,110

Number of days relief furnished patients.....	13,415
Average number of patients constantly sick.....	432
Average number of days treatment for each patient admitted.....	10
Cost of subsistence per patient per day.....	\$0.56

¹ 1 died.

TABLE XV.—SANTO TOMAS HOSPITAL—Continued.

DISPENSARY REPORT.

Class.	White.	Black.	Total.
Natives treated.....	45	275	320
Foreigners treated.....	20	919	939
Total.....	65	1,194	1,259

	No. cases
Typhoid fever.....	1
Malaria.....	67
Measles.....	9
Diphtheria and croup.....	7
Influenza.....	9
Dysentery.....	3
Erysipelas.....	3
Other epidemic diseases.....	2
Purulent infection and septicemia.....	4
Pellagra.....	2
Beriberi.....	3
Tuberculosis of the lungs.....	10
Syphilis.....	26
Soft chancre.....	11
Gonococcus infection.....	40
Cancer and other malignant tumors of the peritoneum, intestines, rectum.....	1
Cancer and other malignant tumors of the breast.....	2
Cancer and other malignant tumors of the skin.....	1
Cancer and other malignant tumors of other organs and of organs not specified..	2
Other tumors.....	1
Acute articular rheumatism.....	12
Leukemia.....	1
Anemia, chlorosis.....	2
Other general diseases.....	1
Other chronic poisonings.....	1
Paralysis without specified cause.....	3
Other forms of mental alienation.....	2
Epilepsy.....	5
Neuralgia and neuritis.....	4
Other diseases of the nervous system.....	1
Other diseases of the eyes and their annexa.....	12
Diseases of the ears.....	3
Organic diseases of the heart.....	16
Diseases of the arteries.....	6
Diseases of the veins.....	5
Diseases of the lymphatic system.....	12
Hemorrhage, other diseases of the circulatory system.....	1
Diseases of the nasal fossae.....	3
Chronic bronchitis.....	9
Broncho-pneumonia.....	7
Pneumonia.....	3
Pleurisy.....	4
Asthma.....	1
Other diseases of the mouth and annexa.....	1
Diseases of the pharynx.....	19
Other diseases of the stomach.....	1
Diarrhea and enteritis.....	10
Diarrhea and enteritis (2 years and over).....	15
Ankylostomiasis.....	57
Intestinal parasites.....	10
Appendicitis and typhlitis.....	6
Hernias, intestinal obstructions.....	11
Diseases of the anus and fecal fistula.....	4
Other diseases of the intestines.....	4

TABLE XV.—SANTO TOMAS HOSPITAL—Continued.

	No. cases.
Cirrhosis of the liver.....	2
Other diseases of the liver.....	3
Bright's disease (chronic nephritis).....	14
Other diseases of the kidney and annexa.....	2
Diseases of the bladder.....	1
Diseases of the urethra.....	4
Nonvenereal diseases of the male genital organs.....	4
Metritis.....	4
Other diseases of the uterus.....	8
Salpingitis and other diseases of the female genital organs.....	7
Nonpuerperal diseases of the breast.....	3
Normal labor.....	81
Accidents of pregnancy.....	19
Furuncle.....	3
Acute abscess.....	14
Other diseases of the skin and annexa.....	28
Diseases of the bones.....	1
Diseases of the joints.....	2
Congenital malformations.....	4
Nurslings discharged from the hospital without disease.....	78
Burns.....	4
Traumatism by firearms.....	1
Traumatism by cutting or piercing instruments.....	9
Injuries by animals.....	1
Sprains.....	1
Fractures.....	10
Other external violence.....	17
Diseases not specified or ill defined.....	3
No disease.....	6
Alcoholism (acute or chronic).....	12
Total patients discharged during month.....	802
Deaths among patients.....	80
Patients remaining in hospital at end of month.....	420
Total number of patients treated during the month.....	1,302

SURGICAL OPERATIONS.

Adenectomy:	
Inguinal, single.....	8
Inguinal, double.....	3
Herniotomy:	
Inguinal, single.....	7
Inguinal, double.....	1
Ventral.....	2
Cystotomy, suprapubic.....	1
Urethrotomy:	
Internal.....	4
External.....	4
Hydrocele, single, radical cure.....	2
Circumcision.....	16
Orchidectomy.....	1
Curettage uteri.....	7
Vaginal section.....	2
Excision of breast.....	1
Hemorrhoids, radical cure.....	6
Fistula in ano, excision of.....	1
Skin graft.....	2
Appendectomy.....	11
Cholecystectomy.....	2
Abscess of liver:	
Laparo-hepatotomy for.....	1
Thoraco-hepatotomy for.....	1
Pan-hysterectomy.....	3
Hysteromyomectomy.....	1

TABLE XV.—SANTO TOMAS HOSPITAL—Continued.

	No. cases.
Salpingectomy:	
Single.....	1
Double.....	3
Salpingo-oophorectomy.....	3
Oophorectomy.....	1
Suspensio-uteri.....	7
Major operations, various other.....	2
Minor operations, various.....	253
Tonsillectomy.....	15
Pterygium.....	4
Total.....	376

LABORATORY REPORT.

Urine examinations.....	526
Albumen.....	147
Hyaline casts.....	34
Granular casts.....	26
Mucus and pus.....	28
Blood.....	7
Epithelium cells.....	6
Phosphates.....	7
Sugar.....	13
Stool examinations.....	880
Uncinaria.....	169
Strongyloides.....	15
Tricocephalus dispar.....	21
Ascarides.....	30
Mucus and pus.....	4
Ciliated monads.....	1
Blood.....	1
Sputum examinations.....	152
Positive for tubercle bacilli.....	32
Blood examinations.....	201
Tertian.....	5
Estivoautumnal.....	8
Myelocyte, leukemia.....	1
White blood counts.....	10
Wassermann reactions.....	177
Positive.....	27
Throat cultures.....	11
Positive for diphtheria.....	2
Widals reactions.....	5
Positive.....	1
Smears examined.....	5
Positive for gonococci.....	1
Blood cultures.....	1
Surgical tissues.....	2
Autopsies performed.....	53

TABLE XVI.—REPORT OF ROUTINE SANITARY WORK PERFORMED IN THE CANAL ZONE AND THE CITIES OF PANAMA AND COLON.

	Panama.	Colon.	Canal Zone.
Linear yards of new ditches constructed.....	3,680	2,985	.....
Linear yards of ditches maintained.....	30,583		.....
Acres of vegetation removed.....	73.6	100.4	.....
Number of garbage cans emptied daily.....			4,685
Cubic yards of garbage removed during month.....	9,745	3,839	.....
Square yards of streets cleaned daily.....	600,000	125,829	.....
Square yards of alleys cleaned daily.....		20,968	.....
Pit closets inspected during month.....			302
Closets disinfected during month.....			326
Number of water containers treated.....	9,628	110,910	.....
Number of mosquito breeding places destroyed.....	191	121	19
Number of containers found with stegomyia larvæ.....			1
Number of mosquitoes destroyed in dwellings:			
Anopheles.....		345	896
Stegomyia.....			230
Culex.....		787	5,399
Number of fly-breeding places destroyed.....	136	8	7
Number of rats destroyed.....	1,197	378	1,060
Private properties cleaned during the month.....	27	5,520	.....
Number of notices served to abate nuisances.....	346	1,001	.....
Convictions for violations of sanitary code.....	11	4	.....
Bills collected.....		123	.....
Houses disinfected or fumigated.....	17		41
Square yards of pools oiled.....	293,440	230,630	.....
Buildings inspected.....	5,636	10,880	5,530
Buildings, construction and repair:			
Plans for new buildings approved.....	4	2	.....
Permits issued to repair old buildings.....	97	50	.....
Buildings demolished.....	3		.....
Food inspection:			
Dairies, milk vendors, etc.....	8	1	.....
Bakeries, candy kitchens, ice-cream parlors.....	25	95	.....
Bottling works.....	3		.....
Hotels, clubs, restaurants.....		261	8
Markets, fruit stands, miscellaneous.....	66	1,124	70
Material used during the month:			
Crude oil, gallons.....	3,800	3,167	5,894
Larvacide, gallons.....	547	212	73
Kerosene, gallons.....	205		429

TABLE XVII.—CONSOLIDATED REPORT OF QUARANTINE TRANSACTIONS AT THE PORTS OF BALBOA-PANAMA AND COLON-CRISTOBAL.

Vessels inspected and passed.....	219
Vessels held in quarantine.....	3
Vessels inspected and transiting canal in quarantine.....	7
Vessels passed on medical officer's certificate.....	3
Total vessels entered.....	232
Supplemental inspections of detained vessels.....	9
Supplemental inspections of vessels at docks.....	69
Vessels fumigated on arrival.....	15
Vessels fumigated prior to departure.....	1
Bills of health issued.....	200
Bills of health vized.....	164
Crew inspected on arrival.....	9,007
Passengers inspected on arrival.....	3,362
Total persons inspected on arrival.....	12,369

TABLE XVII.—CONSOLIDATED REPORT OF QUARANTINE TRANSACTIONS AT THE PORTS OF BALBOA-PANAMA AND COLON-CHRISTOBAL—Continued.

Crew passed on medical officer's certificate.....	2,174
Supplementary inspections of passengers and crew.....	1,188
Persons vaccinated in port on arrival.....	148
Persons vaccinated in port of departure or en route.....	919
Total persons vaccinated.....	1,067
Persons detained at quarantine stations to complete period of incubation of yellow fever and bubonic plague.....	319
Persons detained on board vessels.....	2,120
Total persons detained in quarantine.....	2,439
Persons landed from foreign ports:	
Cabin.....	674
Steerage.....	264
Total.....	938
Persons arriving from coast towns in small launches and sailing craft.....	1,395
Persons departing for coast towns in small launches and sailing craft.....	1,561
Persons in transit passing through the canal.....	1,483
Persons in transit for Pacific ports not passing through canal on arriving vessels.....	186
Persons in transit for Atlantic ports.....	222
Immigrants rejected and deported.....	60

IMMIGRATION REPORT FOR THE PORTS OF COLON-CRISTOBAL AND BALBOA-PANAMA.

From—	Cabin.	Steerage.
United States.....	531	2
Europe.....	2	5
Cuba.....	9	16
Porto Rico.....	24	1
West Indies (not shown above).....	24	59
Costa Rica.....	14	33
Bocas del Toro, Republic of Panama.....	36	199
Nicaragua.....		4
Colombia.....	63	131
Venezuela.....	3	5
Ecuador.....	2	
Peru.....	1	8
Chile.....	1	
Total.....	710	463
	1,173	
Men.....		634
Women.....		350
Children.....		189
Total.....		1,173

QUARANTINE TRANSACTIONS AT THE PORT OF BOCAS DEL TORO
PANAMA.

Vessels inspected and passed.....	25
Crew inspected and passed.....	838
Passengers inspected and passed.....	164
Passengers, in transit, inspected and passed.....	414

No quarantinable disease has appeared in this port, and the health conditions of the port and surrounding territory continue good.

TABLE XVIII.—PERSONNEL REPORT.

	December, 1917.			November, 1917 (total employ- ees).	December, 1916 (total employ- ees).
	Gold employ- ees.	Silver employ- ees.	Total employ- ees.		
Chief health office.....	3	.....	3	3	3
Medical storehouse.....	5	4	9	8	8
Quarantine division.....	13	35	48	48	46
Health office, Panama.....	14	143	157	151	152
Health office, Colon.....	13	142	155	151	158
Ancon Hospital.....	117	211	328	336	¹ 370
Colon Hospital.....	19	26	45	47	43
Santo Tomas Hospital.....	6	.....	6	6	6
Palo Seco Leper Asylum.....	2	29	31	29	36
Zone sanitation.....	4	158	162	149	121
Corozal Hospital.....	18	100	118	116	² 68
Dispensaries:					
Balboa.....	6	4	10	8	8
Pedro Miguel.....	2	2	4	4	3
Paraiso.....	2	2	4	4	4
Gamboa.....	1	.....	1	1	1
Gatun.....	2	2	4	4	4
Total.....	227	858	1,085	1,065	1,031

¹ Includes Corozal Hospital.

² Corozal Hospital included above.



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