

REPORT
OF THE
HEALTH DEPARTMENT
OF
THE PANAMA CANAL

FOR
JANUARY, FEBRUARY, MARCH
1919

Gift of the Panama Canal Museum

H. C. FISHER

Colonel, Medical Corps, United States Army
Chief Health Officer

THE PANAMA CANAL PRESS
MOUNT HOPE, C. Z.
1920

THE PANAMA CANAL

HEALTH DEPARTMENT

Effective with this number, the quarterly report of the Health Department of The Panama Canal will be discontinued. You will be continued on our list for annual calendar year reports.

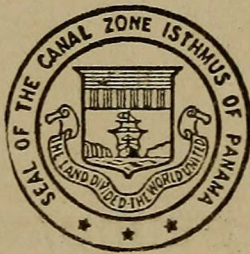
CHIEF HEALTH OFFICER.

REPORT
OF THE
HEALTH DEPARTMENT
OF
THE PANAMA CANAL
FOR
JANUARY, FEBRUARY, MARCH
1919

H. C. FISHER

Colonel, Medical Corps, United States Army
Chief Health Officer

THE PANAMA CANAL PRESS
MOUNT HOPE, C. Z.
1920



For additional copies of this publication address The Panama Canal, Washington, D. C., or Balboa Heights, Canal Zone.

CONTENTS.

	Page.
Letter of transmittal.....	5
General remarks.....	5
Vital statistics:	
Employees.....	6
Residents of the Canal Zone.....	7
Residents of the city of Panama.....	8
Residents of the city of Colon.....	8
Division of Sanitation: Canal Zone.....	9
Statistical tables:	
I. Discharges, deaths, and noneffective rates for employees.....	14
II. Deaths of employees by cause, color, age, and length of residence on Isthmus.....	15
III. Deaths of residents of the cities of Panama, Colon, and the Canal Zone..	17
IV. Deaths of civil population (employees and nonemployees), by cause, sex, color, age, and place of residence.....	18
IV.-A Deaths of nonresidents.....	24
V. Deaths by nationality or nativity.....	26
VI. Statistics re American employees and their families.....	27
VII. Births and birth rates in the Canal Zone and the cities of Panama and Colon.....	28
VIII. Infant mortality rates in the Canal Zone and the cities of Panama and Colon.....	29
IX. Deaths of infants by cause, sex, color, age, and place of residence.....	30
X. Births, classified by birthplace of parents.....	32
XI. Discharges and deaths in the hospitals of The Panama Canal, by cause, color, etc.....	34
XII. Consolidated hospital report.....	48
XIII. Consolidated dispensary report.....	50
XIV. Consolidated admission report, hospitals and quarters.....	51
XV. Number of employees constantly sick in hospitals and quarters.....	51
XVI. Average number of days in hospital or quarters for each admission of sick employee.....	52
XVII. Number of days hospital treatment furnished various classes of patients..	52
XVIII. Ward laboratory reports.....	53
XIX. Surgical operations performed.....	55
XX. Report of operations—eye and ear departments.....	57
XXI. Report of X-ray department, Ancon Hospital.....	59
XXII. Santo Tomas Hospital.....	60
XXIII. Corozal Hospital.....	63
XXIV. Board of health laboratory, report of operations.....	64
XXV. Contagious and infectious diseases.....	67
XXVI. Routine sanitary work performed in Panama, Colon, and the Canal Zone..	68
XXVII. Consolidated report of quarantine transactions.....	69
XXVIII. Immigration report.....	70
XXIX. Personnel report.....	70

LETTER OF TRANSMITTAL

THE PANAMA CANAL,
HEALTH DEPARTMENT,
Balboa Heights, April 29, 1919.

COL. CHESTER HARDING,
*Governor, The Panama Canal,
Balboa Heights, C. Z.*

SIR: I have the honor to submit the following report of the operations of the Health Department for the quarter January, February, and March, 1919.

Lieut. Col. A. T. McCormack, Chief Health Officer, was relieved from duty January 23, 1919, by War Department orders, and Maj. R. L. Loughran, Superintendent of Ancon Hospital, was made Acting Chief Health Officer, pending the arrival of the undersigned, who was appointed Chief Health Officer, effective March 31, 1919.

Respectfully,

H. C. FISHER,
Chief Health Officer.

PERSONNEL.

Many changes have occurred in the organization of the department during the quarter. When the Superintendent of Ancon Hospital was made Acting Chief Health Officer, January 24, 1919, the Chief of the Medical Clinic, Dr. R. C. Connor, was made Acting Superintendent; and the Assistant Chief of the Medical Clinic, Dr. F. F. Monroe, was designated Acting Chief of the Medical Clinic.

Other changes have been as follows: Capt. G. G. Marshall, M. C., Chief of the Eye and Ear Clinic, was relieved by Lieut. A. F. Ryan, M. C.; the position of Chief Sanitary Inspector was vacated by the Chief Health Officer's orders directing Capt. D. P. Curry, M. C., Chief Sanitary Inspector, to duty with the Eye and Ear Clinic; Lieut. C. M. Ming, M. C., Chief of X-ray Clinic, was relieved by Capt. L. S. Townsend, M. C.; Capt. W. L. McFarland, M. C., Chief of Board of Health Laboratory, was relieved by Capt. L. B. Bates, M. C., who was returned from the service of the Medical Department of the Army in the United States. In addition to this, many other changes have taken place among doctors, nurses, and sanitary inspectors.

GENERAL REMARKS.

The health in the Canal Zone and terminal cities has continued good, except for the usual increase in malaria, which occurs at this

time of the year, among the jungle-clearing gangs of the Cattle Industry.

The communicable diseases have been, in general, as follows:

Typhoid fever.—Three cases were admitted to hospital in January; 1 from Colon, traced to a carrier; 1 from the interior; and 1 from a ship passing through the Canal; no cases in February, and 2 in March.

Diphtheria.—Eight cases occurred in January, 7 of which were in Panama and 1 at Coco Solo; in February there were 5 cases in Panama, 3 in Cristobal, and 5 in Colon; in March, 1 case in Panama, 2 in Cristobal, and 2 in Colon.

Influenza.—A total of 188 cases for the quarter.

Pneumonia.—Twenty-eight cases were reported, of which 7 were from passing ships.

Meningitis.—Three cases reported, 1 from France Field, 1 from Las Cascadas; the third, a suspect, was not proven.

Mumps.—Twenty-three cases reported during the quarter.

Measles.—Twenty-one cases were reported.

Chickenpox.—Thirty-five cases reported.

Dysentery.—Thirty-two cases reported.

Leprosy.—Two cases were picked up and sent to the leper asylum.

Smallpox.—Forty-six cases admitted to hospital from Panama, Colon, and the interior. All but 10 cases have been discharged well, and those remaining in hospital are in good condition; no deaths.

Tetanus.—One case, which recovered, occurred in a boy living in Balboa.

There have been no cases reported of the following diseases: scarlet fever, German measles, pellagra, and beriberi.

Yellow fever.—One case was brought to the Isthmus from Guayaquil, Ecuador, January 30, 1919. The last case previously brought to the Isthmus was on December 10, 1915. The last case originating on the Isthmus occurred in November, 1905.

VITAL STATISTICS.

EMPLOYEES.

The following statistics are based upon the average number of names appearing on the pay rolls of The Panama Canal and the Panama Railroad Company for the three months ending March 31, 1919, which was 26,236, as compared with 25,122 for the preceding three months, and 28,349 for the corresponding three months of last year.

Admissions to hospitals and quarters numbered 3,330, giving an admission rate of 507.68,¹ as compared with 412.08 for the preceding three months, and 328.90 for the corresponding three months of last year.

The constantly noneffective rate was 16.74 as compared with a rate of 11.55 for the preceding three months, and 9.93 for the corresponding three months of last year.

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

Deaths from all causes numbered 46; of these, 40 were from disease, giving a rate of 6.08 from disease alone, as compared with a rate of 6.20 for the preceding three months and 5.64 for the corresponding three months of last year.

Diseases causing the highest admission rates to hospitals, in the order of their numerical importance, were (1) malaria, (2) venereal diseases, (3) influenza, (4) diseases of the eyes and their annexa, and (5) organic diseases of the heart. These five diseases caused 28 per cent of all admissions to hospitals, malaria alone causing 12 per cent and venereal diseases 8 per cent of total admissions.

The admission rate for malaria, hospitals and quarters, for the quarter year ending March 31, was 35.36, as compared with a rate of 18.31 for the preceding three months, and 16.79 for the corresponding three months of last year. The constantly noneffective rate from malaria for the quarter year ending March 31, was 5.20, as compared with a rate of 1.08 for the preceding three months and 0.85 for the corresponding three months of last year.

By race.—For disease only, the admission rate to hospitals and the death rate for white employees were 227.60 and 0.88, respectively, as compared with 227.03 and 4.52 for the preceding three months and 227.18 and 5.30 for the corresponding three months of last year. For black employees, for disease only, the admission rate to hospitals and the death rate were 185.92 and 7.20, respectively, as compared with 128.48 and 5.80 for the preceding three months and 106.45 and 5.71 for the corresponding three months of last year.

The constantly noneffective rates were 16 for whites and 16.90 for blacks.

The admission rate to hospitals and quarters for malaria was 15.72 for white and 39.52 for colored employees, as compared with 9.92 for white and 20.08 for colored employees for the preceding three months and 16.79 for white and 23.67 for colored employees for the corresponding three months of last year.

CANAL ZONE.

The civilian population of the Canal Zone, based on the police census, taken as of June 20–30, 1918, is 21,707. From this population, 41 deaths occurred during the three months' period ending March 31, 1919, 38 of which were from disease, giving a rate of 7 from disease alone, as compared with a rate of 8.12 for the preceding three months and 10.98 for the corresponding three months of last year.

Of the deaths from disease, 45 per cent occurred among children under 5 years of age, as compared with 34 per cent for the preceding three months.

One hundred and forty-one births were reported for the three months' period ending March 31, 1919, giving a birth rate of 26. Of these births 53 were white and 88 colored.

Eleven deaths occurred among children under 1 year of age, all colored, giving an infant mortality rate, based on the number of births reported, of 125 for colored children, with a general average of 78.02 for 1,000 births.

Of the total births reported, 7 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 278 deaths occurred during the three months' period ending March 31, 1919, 266 of which from disease, giving a rate of 17.32 from disease alone, as compared with a rate of 21.36 for the preceding three months and 18.51 for the corresponding period of three months of last year.

Of the total deaths from disease, 38 per cent occurred among children under 5 years of age, as compared with 44 per cent for the preceding three months.

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

	October- December, 1918.	January- March, 1919.
Tuberculosis (various organs).....	67	63
Pneumonia (broncho and lobar).....	38	35
Nephritis (acute and chronic).....	23	25
Diarrhea and enteritis.....	35	21
Organic heart disease.....	17	11

Five hundred and thirty-two births were reported during the three months' period ending March 31, giving a rate of 34.68.

Sixty-five deaths occurred among children under 1 year of age, giving an infant mortality rate, based on the number of births reported, of 122.18.

Of the total births reported, 5 per cent were stillbirths.

COLON.

The population of Colon, as shown by the health department census of June, 1917, is 26,078; in this population is included approximately 7,000 employees of The Panama Canal. From this population, 127 deaths occurred during the three months' period ending March 31, 1919, 117 of which were from disease, giving a rate of 17.96 from disease alone, as compared with a rate of 22.36 for the preceding three months, and 18.71 for the corresponding three months of last year.

Of the total deaths from disease, 32 per cent occurred among children under 5 years of age, the same percentage as for the preceding three months.

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

	October- December, 1918.	January- March, 1919.
Tuberculosis (various organs).....	29	28
Pneumonia (broncho and lobar).....	18	20
Diarrhea and enteritis.....	11	12
Nephritis (acute and chronic).....	12	11
Organic heart disease.....	9	10

One hundred and eighty-seven births were reported during the three months' period ending March 31, 1919, giving a rate of 28.68.

Twenty deaths occurred among children under 1 year of age, giving an infant mortality rate, based on the number of births reported, of 106.95.

Of the total births reported, 9 per cent were stillbirths.

DIVISION OF SANITATION.

ZONE SANITATION.

The usual activities in Zone sanitation, consisting largely of anti-mosquito work, have been vigorously pursued during the quarter. A number of tile and stone drains have been installed in the Pedro Miguel sanitary district, on the east side of the Pedro Miguel river and lake, also on the hillsides east of the main line of the Panama Railroad near Paraiso. This work has been almost entirely within the pastures of the Cattle Industry, and has had for its object the elimination of anopheles breeding areas which were being punched up by the cattle. The edges of the lakes about Pedro Miguel and Red Tank were cleared and cleaned on account of the anopheles breeding which was found at these places; for some reason, which was not entirely understood, these areas had not given much trouble until this year; larvæ had been found in a few isolated areas, but not so generally distributed as during this quarter. At present this is controlled by oiling and grass cutting about water line.

In the Ancon-Corozal district, considerable amount of new work has been done, consisting of straightening the stream which runs through the Corozal garden in its course between the new road and the Panama Railroad embankment.

On the flat just north of this stream, new tile drains were laid and several hundred feet of old 10-inch tile were taken out and replaced by 6-inch concrete tile. The stream which runs down in the section of this district between the upper and lower Corozal pastures, was straightened, graded, and lined with concrete.

In Espinosa's pasture (Corundu River section), the drainage is being taken care of by subsurface tiling.

Balboa district.—Very little permanent work has been done within the district proper. Considerable drainage work has been done at Farfan, in order to protect the men in the Cattle Industry jungle-clearing camp, also to eliminate the possible menace of mosquito flights from this area into Balboa.

In the Gatun district the work has been principally of a maintenance nature, except for straightening a great many of the old rock bed streams, in the old drainage systems. At Mindi swamp a rather extensive system of drains has been put in which has considerably improved this large swamp and which should help decrease the anopheles flight into Gatun.

In addition to the above, considerable time has been put in by the Division of Zone Sanitation in prophylactic work against smallpox. The villages of Arraijan, Escobal, New Providence, New Limon, and El Vigia (all points of ready access to the Canal Zone), have been inspected and about 1,000 people vaccinated. No active cases of smallpox were found in any of these places with the exception of Escobal, where 14 cases of mild smallpox were discovered.

The following is a tabulation of the malaria incidence for the quarter by locality and type, for employees only:

Number of employees admitted with each type.

From—	E. A.	Tertian.	Quartan.	Undetermined.	Clinical.	Total.
Regularly sanitated districts in Zone:						
Fort Amador.....		1				1
Balboa.....	3	2				5
Ancon.....		*2				2
Pedro Miguel.....				1		1
Paraiso.....	2			1		3
Culebra.....	1					1
Gamboa.....			1			1
Gatun.....	1	1	1	3		6
Cristobal.....	2			2		4
Total.....	9	6	2	7		24
From pastures camps and plantations:						
Farfan.....	51	11		14		76
Cardenas.....	1					1
Miraflores.....	1					1
Barunga.....	6	3		13		22
Summit.....	1			3		4
Limon.....	1					1
Darien.....	1	4				5
Darien No. 2.....	9	5		8		22
Frijoles.....	3	1		1		5
Bohio.....	28	8		10		46
Mount Hope.....		1				1
Total.....	102	33		49		184
Other miscellaneous cases from Zone:						
Corozal-P. Miguel road.....	1	1				2
Colon.....	5	1				6
Panama.....	10	†3				13
Las Savanas.....	1					1
Interior, Republic of Panama.....	1	1				2
Grand total.....	129	45	2	56		232

* Two recurrent.

† One recurrent.

The tabulation shows that the principal source of infection was without the regular sanitated areas. The incidence within the sanitated area was 18.6 per cent of the cases reported, with 81.4 per cent of cases reported coming from jungle camps or other points outside of the regularly sanitated areas.

PANAMA HEALTH OFFICE.

The last case of smallpox reported in the city was on March 11, 1919. There was a total of 37 cases during this quarter, as compared with 46 and 58 in the two preceding quarters. All cases were sent to Ancon Hospital.

During the quarter, 1,316 vaccinations have been made in the city. A general house-to-house vaccination is being done. This work is valuable in that it will, as time goes by, result in complete vaccination of all persons in the city, thereby preventing a recurrence of such an outbreak as that of last summer.

The veterinarian attached to this office is in every way qualified to do the milk and dairy inspection work, but his time is very much occupied with meat and cattle inspection, and it will not be possible for either the meat and cattle inspection work or the dairy and food inspection work, to be done properly. The need of another veterinarian is urgent.

The food inspection has been turned over temporarily to the district sanitary inspectors.

About 64,000 yards of ditches were cleaned in preparation for the rainy season. A large portion of this work was in the Savanas district where much ditching has been done, many water holes filled, and the portion which we have sanitated can be easily controlled hereafter.

In connection with the question of sanitation of the Savanas district, a comprehensive survey of this district is necessary in order that it may be thoroughly sanitated; this should be done on account of the great number of people who live there during about six months of the year. This district is responsible for a large number of malaria cases which can be easily eliminated in the future.

We have shortened many ditches, and filled a large number to a proper grade so that no water holes are left; this policy is being continuously pursued, and although our reports show that cleaning and oiling of the remaining ditches is done several times oftener than previously, a reduction in oil used has been made as follows:

Number of gallons of oil used during the first quarter of 1916, 6,530; 1917, 6,168; 1918, 2,400; 1919, 1,762.

Two hundred and forty fines were imposed during the quarter for violation of sanitary regulations. The imposition of these fines has a very marked effect upon maintaining sanitary conditions in the city, as threats do not avail, and the ordinary small fine imposed seems to be the best method of controlling the bulk of the population.

In the matter of building inspection, especial attention is being paid to overcrowding and its necessary sequence, ventilation. We have had little, if any, trouble in having the orders of our building

inspector carried out. Three buildings were condemned as unsafe and unfit for occupation, two of which were demolished. Plans for five new buildings were approved, and 141 permits were issued for repairs. The building inspector is now about completing a survey of all schools in the city. The survey to date shows much overcrowding and lack of proper ventilation. When this survey is completed, a personal inspection will be made and the number of pupils per school will be reduced so as to conform to the regulation of 300 cubic feet of space for each person therein.

The streets have been kept in uniformly good condition. A few hours overtime each day during the carnival were found necessary in order to take care of the unusually large amount of débris.

The hours of garbage collection have been changed a number of times at the request of the Municipal Engineering Division, who now have charge of the operation of the incinerator. At present the garbage collection begins at 8 p. m. This is too early to get the best results for the labor expended but we are endeavoring to comply with all requests made from the Municipal Engineering Division regarding the collection of garbage.

One additional street sweeper is needed within each district in the city; although the streets are now kept reasonably clean, the addition of one man per district would add much to the efficiency of the work.

COLON HEALTH OFFICE.

Antimalarial work has been extended in the Mount Hope district so as to include several large anopheles breeding areas, notably in pasture No. 12, which is located about three-fourths of a mile from Mount Hope railroad station, and the swamps in the vicinity of the hog farm. These swamps were drained during this quarter and good results are expected from this work. The large swamp located between G Street and New Cristobal is being filled and when completed mosquito breeding in Colon will be practically eliminated.

A permanent concrete drain, approximately 2,000 feet in length, is being installed across fill No. 2-A and 2-B, Mount Hope. We are using coarse coral rock and sand for this drain, instead of Gamboa gravel and sand. Several depressions in the Mount Hope scrap yard were filled during this quarter, and several remain to be filled. These depressions which were caused by the heavy scrap iron, etc., have been a constant source of mosquito breeding during the past, but with the removal of this scrap which is going on rapidly at present, these mosquito-breeding areas will soon be under control. The malarial rate in this district continues to remain low; only 10 cases among employees were reported during the quarter as compared with 8 cases for the corresponding period in 1918.

The large swamp south of the coaling station was filled during the quarter by the Dredging Division, thereby eliminating a large mosquito-breeding area.

There were 25 cases of tuberculosis reported during the quarter, as compared with 16 cases for the same period a year ago.

Ten cases of smallpox were reported from this district from September, 1918, to February 3, 1919. No cases have occurred since

the latter date. The entire population was vaccinated against small-pox during this quarter.

Inspection of meat and meat-food products at Cristobal has been carried on in the usual manner. It was thought advisable to make a careful post-mortem inspection of all viscera and this has necessitated an increase in the veterinary staff. The post-mortem inspection of the viscera has not been done here according to the Bureau of Animal Industry regulations, but with the increase in the staff our inspection will be more thorough than that required by these regulations.

The Colon prophylactic station which was established in June, 1918, was discontinued on January 15, 1919. About 100 registered prostitutes left Colon during the campaign. With this exception, prostitution remains about the same as it did before the campaign was started.

The public health nurse of this office made visits as follows: To tuberculosis patients, 13; home service instruction, 783; hospital clinic, 256; business, 56; She had a total of 159 patients under her care, in their homes.

Quarantines were imposed as follows: Pertusis, 28; measles, 6; mumps, 2; chickenpox, 7; diphtheria, 7; smallpox, 1.

Since February 18, 11 lectures have been given by the public health nurse to the midwives of Colon and Cristobal, the time of each lecture covering two hours.

Forty-five fines were imposed during this quarter for violation of Sanitary Rules and Regulations.

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

ABSOLUTE NUMBERS.

	Number of employees.	Discharges and deaths from hospitals.			Deaths.			Noneffective from sickness.	
		Total.	Disease.	External causes.	Total.	Disease.	External causes.	Days treated.	Constantly noneffective.
First quarter, 1919:									
White.....	4,573	285	260	25	1	1	.....	6,587	73.18
Colored.....	21,663	1,169	1,007	162	45	39	6	2,959	366.21
Total.....	26,236	1,454	1,267	187	46	40	6	39,546	439.39
Fourth quarter, 1918:									
White.....	4,421	277	251	26	5	5	.....	6,407	71.19
Colored.....	20,701	759	664	95	34	30	4	19,703	218.92
Total.....	25,122	1,036	915	121	39	35	4	26,110	290.11
First quarter, 1918:									
White.....	4,525	300	257	43	6	6	.....	6,521	72.46
Colored.....	23,824	837	634	203	45	34	11	18,825	209.16
Total.....	28,349	1,137	891	246	51	40	11	25,346	281.62

PROPORTIONATE NUMBERS.¹

First quarter, 1919:									
White.....	4,573	249.28	227.60	21.88	0.83	0.88	.....	.....	16.00
Colored.....	21,663	215.84	185.92	29.88	8.32	7.20	1.12	.....	16.90
Total.....	26,236	221.68	193.16	28.52	7.00	6.08	.92	.....	16.74
Fourth quarter, 1918:									
White.....	4,421	250.60	227.08	23.52	4.52	4.52	.....	.....	16.10
Colored.....	20,701	146.64	128.48	18.56	6.56	5.80	.76	.....	10.58
Total.....	25,122	164.96	145.68	19.28	6.90	5.56	.64	.....	11.55
First quarter, 1918:									
White.....	4,525	265.19	227.18	38.01	5.30	5.30	.....	.....	16.01
Colored.....	23,824	140.53	106.45	34.08	7.56	5.71	1.85	.....	8.78
Total.....	28,349	160.43	125.72	34.71	7.19	5.64	1.55	.....	9.93

¹ Annual average per 1,000 employees.

TABLE II.—CAUSES OF DEATHS OF EMPLOYEES, BY COLOR, AGE, AND LENGTH OF RESIDENCE ON ISTHMUS.

Causes of death.	Color.		Age (in years.)				
	W.	B.	15-20	21-25	26-30	31-35	36-40
Apoplexy.....		4				1	1
Abscess of the liver.....		1					1
Cerebrospinal fever.....		1			1		
Cirrhosis of the liver.....		1					
Embolism and thrombosis.....		1					
Gonococcus infection.....		1					
Meningitis, simple.....	1				1		
Nephritis, acute.....		4					3
Nephritis, chronic.....		3				1	
Organic disease of the heart.....		6					2
Peritonitis.....		2					1
Pneumonia, broncho.....		1				1	
Pneumonia, lobar.....		3			1	1	1
Syphilis.....		1				1	
Softening of the brain.....		1					
Septicemia.....		1		1			
Tuberculosis, pulmonary.....		8		1	1	5	
<i>External causes.</i>							
Drowning, accidental.....		1		1			
Traumatism by machine.....		1					1
Homicide by cutting or piercing instruments.....		2		1	1		
Starvation.....		1			1		
Other external violence.....		1		1			
Total.....	1	45		5	6	10	19

Cause of death.	Color.		Age (in years).			
	W.	B.	41-45	46-50	51-55	56-65
Apoplexy.....		4		1	1	
Abscess of the liver.....		1				
Cerebrospinal fever.....		1				
Cirrhosis of the liver.....		1				1
Embolism and thrombosis.....		1			1	
Gonococcus infection.....		1	1			
Meningitis, simple.....	1					
Nephritis, acute.....		4		1		
Nephritis, chronic.....		3	1		1	
Organic disease of the heart.....		6	1	2		1
Peritonitis.....		2		1		
Pneumonia, broncho.....		1				
Pneumonia, lobar.....		3				
Syphilis.....		1				
Softening of the brain.....		1	1			
Septicemia.....		1				
Tuberculosis, pulmonary.....		8		1		
<i>External causes.</i>						
Drowning, accidental.....		1				
Traumatism, by machine.....		1				
Homicide by cutting or piercing instruments.....		2				
Starvation.....		1				
Other external violence.....		1				
Total.....	1	45	4	6	3	2

TABLE II.—CAUSES OF DEATHS OF EMPLOYEES BY COLOR, AGE, AND LENGTH OF RESIDENCE ON ISTHMUS—Continued.

Cause of death.	Color.		Length of residence on Isthmus (in years).								
	W.	B.	Under 1.	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-10
Apoplexy.....		4									
Abscess of the liver.....		1							1		
Cerebrospinal fever.....		1					1				
Cirrhosis of the liver.....		1									
Embolism and thrombosis.....		1							1		
Gonococcus infection.....		1									
Meningitis, simple.....	1										
Nephritis, acute.....		4									
Nephritis, chronic.....		3						1			
Organic disease of the heart.....		6							1		
Peritonitis.....		2									1
Pneumonia, broncho.....		1									
Pneumonia, lobar.....		3									
Syphilis.....		1									1
Softening of the brain.....		1						1			
Septicemia.....		1									1
Tuberculosis, pulmonary.....		8		1							1
<i>External causes.</i>											
Drowning, accidental.....		1									
Traumatism by machine.....		1									
Homicide by cutting or piercing instruments.....		2			1						
Starvation.....		1									
Other external violence.....		1									
Total.....	1	45		1	1		1	2	3		4

Cause of death.	Color.		Length of residence on Isthmus (in years).				
	W.	B.	10-15	15	Life.	Un- known	To- tal.
Apoplexy.....		4	2	2			4
Abscess of the liver.....		1					1
Cerebrospinal fever.....		1					1
Cirrhosis of the liver.....		1				1	1
Embolism and thrombosis.....		1					1
Gonococcus infection.....		1	1				1
Meningitis, simple.....	1				1		1
Nephritis, acute.....		4	2	1	1		4
Nephritis, chronic.....		3	1	1			3
Organic disease of the heart.....		6	2	2	1		6
Peritonitis.....		2	1				2
Pneumonia, broncho.....		1	1				1
Pneumonia, lobar.....		3	3				3
Syphilis.....		1					1
Softening of the brain.....		1					1
Septicemia.....		1					1
Tuberculosis, pulmonary.....		8	4	1		1	8
<i>External causes.</i>							
Drowning, accidental.....		1				1	1
Traumatism by machine.....		1				1	1
Homicide by cutting or piercing instruments.....		2				1	2
Starvation.....		1	1				1
Other external violence.....		1	1				1
Total.....	1	45	19	7	3	5	46

TABLE III.—DEATHS OF RESIDENTS OF THE CITIES OF PANAMA, COLON, AND THE CANAL ZONE.

Place.	Popula- tion.	Deaths.			Annual rate per 1,000 population.		
		Total.	Disease.	External causes.	Total.	Disease.	External causes.
First quarter, 1919:							
Panama.....	61,369	278	266	12	18.12	17.32	0.80
Colon.....	26,078	127	117	10	19.48	17.96	1.52
Canal Zone.....	*21,707	41	38	3	7.56	7.00	0.56
Total.....	109,154	446	421	25	16.36	15.44	0.92
Fourth quarter, 1918:							
Panama.....	61,369	336	327	9	21.88	21.36	0.60
Colon.....	26,078	152	146	6	23.32	22.36	0.92
Canal Zone.....	*21,707	49	44	5	9.04	8.12	0.92
Total.....	109,154	537	517	20	19.68	18.96	0.72
First quarter, 1918:							
Panama.....	61,369	291	284	7	18.97	18.51	0.46
Colon.....	26,078	133	122	11	20.40	18.71	1.69
Canal Zone.....	*24,038	71	66	5	11.81	10.98	.83
Total.....	111,485	495	472	23	17.76	16.94	.82

*Exclusive of military population.

TABLE IV.—DEATHS OF CIVIL POPULATION (EMPLOYEES
PLACE OF

Cause of death.	Sex.		Color.			Age (in years).			
	M.	F.	W.	B.	Y.	Under 1 yr.	1-4	5-10	11-20
<i>General diseases.</i>									
Typhoid fever.....	1			1					
Malaria.....	1	1		2		1	1		
Malarial fever:									
Estivoautumnal.....	2	1		3		1	1		
Tertian.....	1			1			1		
Whooping cough.....		1		1			1		
Diphtheria and croup.....	3			3		1	1	1	
Leprosy.....	2		1	1					
Purulent infection and septicemia.....	2			2					
Septicemia.....	1	2		3		1			
Pellagra.....		2		2					
Tuberculosis of the lungs.....	48	39	6	81			3	1	4
Acute miliary tuberculosis.....	1			1					
Tuberculous meningitis.....		3		3			1		
Abdominal tuberculosis.....	3	1		4			1		
White swellings.....	1			1			1		
Disseminated tuberculosis.....	1			1					
Syphilis:									
Tertiary.....	1			1					
Period not stated.....	2	1		3		1	1		
Gonococcus infection.....	1			1					
Cancer and other malignant tumors of the stomach and liver.....	1	1		2					
Cancer and other malignant tumors of the female genital organs.....		3		3					
Cancer and other malignant tumors of the breast.....		1		1					
Cancer and other malignant tumors of other organs and of organs not specified.....	2	2	1	3				1	
Other tumors (tumors of the female gen- ital organs excepted).....		1		1			1		
Diabetes.....	1			1					
Leukemia.....		1		1			1		
Leukemia, lymphatic.....		1	1				1		
<i>Diseases of the nervous system and of the organs of special sense.</i>									
Simple meningitis.....	2	2	2	2		1		1	
Cerebro-spinal fever.....	1			1					
Other diseases of the spinal cord.....		1							
Cerebral hemorrhage, apoplexy.....	5	7	1	11					
Softening of the brain.....	1			1					
Paralysis without specified cause.....	3			3					
Other forms of mental alienation.....		1		1					
Convulsions of infants (under 5 years of age).....		1		1			1		
<i>Diseases of the circulatory system.</i>									
Acute endocarditis.....	2	2	1	3			1		
Organic disease of the heart.....	16	7	2	20	1				
Diseases of the arteries, atheroma, aneurysm, etc.....	1			1					
Aneurysm.....	1			1					
Arteriosclerosis.....		5	2	3					

AND NONEMPLOYEES) BY CAUSE, SEX, COLOR, AGE AND RESIDENCE.

Age (in years)—Continued.							Place of residence.			
21-30	31-40	41-50	51-60	61-75	76-100	Age un-known.	Pan-ama.	Colon.	Canal Zone.	Total.
1							1			1
							2			2
	1						2	1		3
								1		1
							1			1
							3			3
1	1						1		1	2
1	1							2		2
1	1						3			3
1	1						2			2
38	21	13	3	1	2	1	56	26	5	87
1							1			1
1							2		1	3
1	1	1					2	2		4
							1			1
1							1			1
		1					1			1
	1						2		1	3
		1						1		1
	1		1				1	1		2
	1	1	1				3			3
	1						1			1
1	1	1					2	1	1	4
							1			1
1							1			1
									1	1
									1	1
1	1						4			4
1							1			1
				1			1			1
1	4	3	1	3			7	4	1	12
		1						1		1
	1		2				1	1	1	3
	1						1			1
									1	1
	1	1	1				3	1		4
3	4	10	2	2	2		11	10	2	23
						1			1	1
			1						1	1
		2		2	1		4	1		5

TABLE IV.—DEATHS OF CIVIL POPULATION (EMPLOYEES AND RESIDENCE—

Cause of death.	Sex.		Color.			Age (in years).			
	M.	F.	W.	B.	Y.	Under 1 yr.	1-4	5-10	11-20
<i>Diseases of the circulatory system.—</i> Continued.									
Embolism and thrombosis.....	2			2					
Varicocele.....	1			1					
<i>Diseases of the respiratory system.</i>									
Acute bronchitis.....	6	5		11		7	4		
Chronic bronchitis.....	2			2		2			
Broncho-pneumonia.....	26	16	2	40		13	17	3	4
Pneumonia, unqualified.....	1	2		3			1		
Lobar pneumonia.....	9	4		13		1			
Gangrene of the lungs.....	1			1					
<i>Diseases of the digestive system.</i>									
Diarrhea and enteritis (under 2 years)...	23	12	1	33	1	25	10		
Colitis.....	1			1		1			
Diarrhea and enteritis (2 years and over)	3	1		4			3		
Colitis.....	1			1					
Ankylostomiasis.....		1		1					
Ascariasis.....		1	1						
Acute appendicitis.....		2	1	1				1	
Hernia, intestinal obstructions.....	1	1		2					
Intestinal obstructions.....	1			1					
Cirrhosis of the liver.....	1	1		2					
Biliary calculi.....		1		1		1			
Abscess of the liver entamebic.....	1			1					
Cholecystitis.....		1		1					
Simple peritonitis (nonpuerperal).....	8	4	1	11					1
<i>Nonvenereal diseases of the genito-urinary system and annexa</i>									
Acute nephritis.....	7	8	2	13		3	2	1	
Bright's disease (chronic nephritis)....	18	6	2	21	1		2		
Other diseases of the kidney and annexa...	2			2		1			1
Pyelo-nephrosis.....	1	1		2					
Salpingitis and other diseases of the fe- male genital organs.....		1		1					1
<i>The puerperal state.</i>									
Puerperal hemorrhage.....		1		1					
Puerperal septicemia.....		1		1					
Eclampsia.....		1		1					
<i>Malformations.</i>									
Congenital malformations (stillbirth not included).....	1	2	1	2		2	1		

NONEMPLOYEES) BY CAUSE, SEX, COLOR, AGE, AND PLACE OF
Continued.

Age (in years)—Continued.							Place of residence.			
21-30	31-40	41-50	51-60	61-75	76-100	Age un- known	Pan- ama.	Colon.	Canal Zone.	Total
1			1				1	1		2
1							1			1
							7	3	1	11
								2		2
1	1	2	1				26	13	3	42
	1			1			2	1		3
3	4	2	1	1	1		7	6		13
			1				1			1
							18	11	6	35
			1					1		1
		1					3			4
1							1			1
	1						1			1
	1						1			1
	1						1			1
	2						1			2
	1						1	1		2
			1		1		1			1
							2			2
							1			1
	1						1	1		1
1							1			1
1	5	2	3				7	4	1	12
4	3	2					9	3	3	15
	6	8	6	2			16	8		24
							2			2
1		1					2			2
							1			1
	1						1			1
1							1			1
1								1		1
							1	2		3

TABLE IV.—DEATHS OF CIVIL POPULATION (EMPLOYEES AND RESIDENCE—

Cause of death.	Sex.		Color.			Age (in years).			
	M.	F.	W.	B.	Y.	Under 1 yr.	1-4	5- 0	11-20
<i>Diseases of early infancy.</i>									
Newborn child.....	3	1	.....	4	.....	4	.....	.....	.....
Congenital debility, icterus, and sclerema.....	1	2	.....	2	1	3	.....	.....	.....
Premature birth.....	1	6	.....	7	.....	7	.....	.....	.....
Congenital debility.....	1	.....	.....	1	.....	1	.....	.....	.....
Malnutrition.....	6	5	.....	11	.....	9	2	.....	.....
Other causes peculiar to early infancy (including various consequences of labor).....	1	2	1	2	.....	3	.....	.....	.....
<i>Old age.</i>									
Senility.....	.....	1	.....	1	.....	.....	.....	.....	.....
<i>Affections produced by external causes.</i>									
Other acute poisonings.....	2	.....	.....	2	.....	2	.....	.....	.....
Burns (conflagration excepted).....	1	1	.....	2	.....	2	.....	.....	.....
Accidental drowning.....	3	.....	.....	3	.....	.....	.....	.....	.....
Traumatism by cutting or piercing in- struments.....	1	.....	1	.....	.....	.....	.....	.....	.....
Traumatism by fall.....	2	.....	.....	2	.....	.....	.....	2	.....
Traumatism by machines.....	1	.....	.....	1	.....	.....	.....	.....	.....
Traumatism by other crushings, (vehi- cles, railroads, landslides, etc.).....	3	.....	.....	3	.....	.....	.....	1	1
Starvation.....	1	.....	.....	1	.....	.....	.....	.....	.....
Homicide by firearms.....	1	.....	1	.....	.....	.....	.....	.....	.....
Homicide by cutting or piercing instru- ments.....	3	.....	.....	3	.....	.....	.....	.....	.....
Fractures (cause not specified).....	4	1	1	4	.....	.....	.....	2	.....
Other external violence.....	1	.....	.....	1	.....	.....	.....	.....	.....
<i>Ill-defined diseases.</i>									
Cause of death not specified or ill-defined.....	2	3	.....	5	.....	2	1	.....	1
Infections of undetermined origin.....	1	.....	.....	1	.....	1	.....	.....	.....
Total.....	263	183	32	410	4	96	60	14	14
Stillbirths.....	25	31	4	52	.....	.....	.....	.....	.....
Grand total.....	288	214	361	462	4	96	60	14	14

NONEMPLOYEES), BY CAUSE, SEX, COLOR, AGE, AND PLACE OF
—Continued.

Age (in years)—Continued.							Place of residence.			
21-30	31-40	41-50	51-60	61-75	76-100	Age un- known	Pan- ama.	Colon.	Canal Zone.	Total.
							4			4
							3			3
							4	3		7
							1			1
							8	1	2	11
							3			3
					1		1			1
							2			2
							1		1	2
1	1			1				2	1	3
								1		1
1							2			2
	1						1			1
				1			1	2		3
1								1		1
	1							1		1
2	1						1	2		3
3							4		1	5
1								1		1
					1		3	1	1	5
									1	1
81	75	53	26	16	9	2	278	127	41	446
							29	17	10	56
81	75	53	26	16	9	2	307	144	51	502

TABLE IV-A.—DEATHS

Cause of death.	Sex.		Color.		—I
	M.	F.	W.	B.	
Organic disease of the heart.....	1			1	
Anemia, chlorosis.....		1	1		
Abscess of the liver.....	2			2	
Dysentery.....	2			2	
Eclampsia.....		1		1	
Electrocution, accidental.....	1		1		
Cirrhosis of the liver.....		1		1	
Chronic nephritis.....	3	1	1	3	
Broncho-pneumonia.....	2		2	1	
Lobar pneumonia,.....	7		1	6	
Malaria.....	1		1		
Diarrhea and enteritis.....	1	2		3	
Pulmonary tuberculosis.....	9	2	3	8	
Empyema.....	1		1		
Typhoid fever.....	1			1	
Yellow fever.....	1		1		
Other diseases of the kidney and annexa.....	1			1	
Congenital malformation.....	1			1	1
Congenital debility.....		1		1	1
Leukemia lymphatic.....	1		1		
Acute appendicitis.....	1			1	
Injury by animals.....	1			1	
Accidental drowning.....	1			1	
Burns (conflagration excepted).....	1		1		
Other external violence.....	1			1	
Infections, undetermined origin.....	1			1	
Traumatism by fall.....	1		1		
Homicide by firearms.....	1		1		
Total.....	43	10	16	37	2

* Includes deaths of all nonresidents, off incoming ships, etc.

Deaths of nonresidents are not taken up in the statistical charts relating to Panama, Colon,

OF NONRESIDENTS.

Age (in years).									Total
1-4	5-10	11-20	21-30	31-40	41-50	51-60	61-75	Over 75 years.	
			1						1
					1				1
					1	1			2
				1		1			2
			1						1
			1						1
					1				1
					2	1		1	4
	1		2						3
		1	1	1	3		1		7
					1				1
			1		1		1		3
			3	5	2		1		11
			1						1
		1							1
					1				1
					1				1
									1
			1						1
				1					1
		1							1
			1						1
				1					1
				1					1
					1				1
				1					1
					1				1
0	1	3	13	11	16	3	3	1	53

and the Canal Zone.

TABLE V.—DEATHS BY NATIONALITY OR NATIVITY.

Nationality.	Employees.		Nonemployees.		Total.		Grand total.
	Male.	Female.	Male.	Female.	Male.	Female.	
Antigua.....	3		2		5		5
Barbados.....	17		37	27	54	27	81
British Guiana.....			1	1	1	1	2
Chile.....			1		1		1
China.....			5	1	5	1	6
Colombia.....	1		16	11	17	11	28
Costa Rica.....	1		1	1	2	1	3
Cuba.....			1		1		1
Demerara.....				1		1	1
Dominica.....	1				1	1	2
Ecuador.....			1	1	1	1	2
England.....			1	1	1	1	2
France.....				1		1	1
Grenada.....			2	3	2	3	5
Guadeloupe.....	1		5	2	6	2	8
Greece.....			1		1		1
Guatemala.....				1		1	1
Haiti.....	1				1		1
Ireland.....				1		1	1
Jamaica.....	11		45	47	56	47	103
Martinique.....	2		8	3	10	3	13
Mexico.....			1		1		1
Montserrat.....			1	1	1	1	2
Nicaragua.....	1			1	1	1	2
Panama.....	1		71	60	72	60	132
Peru.....			3	1	3	1	4
Porto Rico.....			1		1		1
Spain.....	1		4	2	5	2	7
St. Andrews.....				1		1	1
St. Kitts.....	1				1		1
St. Lucia.....	2		2	4	4	4	8
St. Thomas.....	1				1		1
St. Vincent's.....	1		1	1	2	1	3
Trinidad.....			5	3	5	3	8
United States.....				2		2	2
Venezuela.....			1	3	1	3	4
Virgin Islands.....				1		1	1
Total.....	46		217	183	263	183	446

TABLE VI.—STATISTICS RE AMERICAN EMPLOYEES AND THEIR FAMILIES.

	Annual death rate per 1,000 population.
White employees from the United States:	
Disease.....	0
External causes.....	0
Total.....	0
White women and children from the United States:	
Disease.....	1.92
External causes.....	0
Total.....	1.92
White employees from the United States and their families:	
Disease.....	1.12
External causes.....	0
Total.....	1.12
Number of American children born on Isthmus for three months ending March 31.....	38
Deaths among American children under 1 year of age.....	0
Infant mortality rate among American children (number of deaths per 1,000 births).....	0

TABLE VII.—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.
First quarter, 1919:							
Panama.....	61,369	561	532	29	36.56	34.68	1.88
Colon.....	26,078	204	187	17	31.28	28.68	2.60
Canal Zone.....	*21,707	151	141	10	27.84	26.00	1.84
Total.....	109,154	916	860	56	33.56	31.48	2.04
Fourth quarter, 1918:							
Panama.....	61,369	648	605	43	42.24	39.44	2.80
Colon.....	26,078	231	216	15	35.44	33.12	2.28
Canal Zone.....	*21,707	220	203	17	40.52	37.40	3.12
Total.....	109,154	1,099	1,024	75	40.28	37.52	2.76
First quarter, 1918:							
Panama.....	61,369	662	626	36	43.15	40.80	2.34
Colon.....	26,078	212	194	18	32.52	29.76	2.76
Canal Zone.....	*24,038	163	157	6	27.12	26.12	1.00
Total.....	111,485	1,037	977	60	37.21	35.05	2.16

* Exclusive of military population.

TABLE VIII.—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.		
First quarter, 1919;						
Panama.....	61,369	282	250	532	65	122.18
Colon.....	26,078	96	91	187	20	106.95
Canal Zone.....	*21,707	70	71	141	11	78.02
Total.....	109,154	448	412	860	96	111.63
Fourth quarter, 1918;						
Panama.....	61,369	313	292	605	121	200.00
Colon.....	26,078	126	90	216	36	166.66
Canal Zone.....	21,707	102	101	203	10	49.26
Total.....	109,154	541	483	1,024	167	163.08
First quarter, 1918;						
Panama.....	61,369	325	301	626	102	162.94
Colon.....	26,078	114	80	194	33	170.10
Canal Zone.....	*24,038	71	86	157	20	127.39
Total.....	111,485	510	467	977	155	158.65

*Exclusive of military population.

TABLE IX.—DEATHS OF INFANTS BY CAUSE, SEX.

Cause of death.	Sex.		Color.		—1 week.	+ 1 week — 1 month.
	M.	F.	W.	B.		
Malaria.....	..	1	...	1	...	...
Malaria fever, estivoautumnal.....	1	..	...	1	...	...
Syphilis.....	..	1	...	1	1	...
Simple meningitis.....	..	1	1	...	...	...
Acute bronchitis.....	4	3	...	7	1	...
Chronic bronchitis.....	2	..	...	2	...	...
Broncho pneumonia.....	7	6	1	12	...	2
Lobar pneumonia.....	1	..	...	1	...	...
Diarrhea and enteritis.....	15	11	1	25	2	1
Colitis.....	1	..	...	1	...	...
Biliary calculi.....	..	1	...	1	...	...
Acute nephritis.....	1	2	1	2	...	...
Other diseases of the kidney and annexa.....	1	..	...	1	...	...
Septicemia.....	..	1	...	1	...	...
Congenital malformations.....	1	1	1	1	...	1
Newborn child.....	3	1	...	4	2	1
Congenital debility, icterus, and sclerema.....	1	2	...	3	2	1
Premature birth.....	1	6	...	7	7	...
Congenital debility.....	1	..	...	1	...	1
Malnutrition.....	6	3	...	9	1	1
Other causes peculiar to early infancy.....	1	2	1	2	3	...
Other acute poisonings.....	2	..	...	2	...	...
Burns (conflagration excepted).....	1	1	...	2	...	...
Cause of death not specified or ill-defined.....	..	2	...	2	...	...
Infections of undetermined origin.....	1	..	...	1	...	...
Total.....	51	45	6	90	19	8

Infant mortality rate, based on the number of births reported for the quarter (deaths under 1
 Percentage of deaths under 1 year of age to total deaths) for 3 months ending March 31.

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.	Canal Zone.	Total.
						1					1			1
								1			1			1
											1			1
1											1			1
2						1	1			2	4	2	1	7
	1						1					2		2
1		1	1		1	2	1	1	2	1	9	4		13
	1										1			1
3	3	4	4	1	3		2	1	1	1	14	7	5	26
					1								1	1
	1										1			1
3											3			3
			1								1			1
1											1			1
							1				1	1		2
										1	4			4
											3			3
											4	3		7
											1			1
1	2	1	1					1	1		6	1	2	9
											3			3
1					1						2			2
					1				1		1		1	2
1										1	2			2
			1										1	1
14	8	6	8	1	7	4	6	4	5	6	65	20	11	96
year of age per 1,000 births).....											122.18	106.95	78.02	111.63
1919).....											23	16	27	22

TABLE X.—BIRTHS, CLASSIFIED

Birthplace of father.	Birthplace of mother.													
	Antigua.	Barbados.	Colombia.	China.	Costa Rica.	Demarara.	Egypt.	England.	Ecuador.	Finland.	France.	Germany.	Grenada.	Guadeloupe.
Antigua.....	4													
Barbados.....		129			1	4			1					
China.....				3					1					
Costa Rica.....														
Colombia.....			9		1									
Curacao, D. W. I.....														
Dominica.....														
Demarara.....						1								
Egypt.....							1							
Ecuador.....														
France.....											3	1		
Finland.....										1				
Greece.....														
Grenada.....		2											7	
Guadeloupe.....														2
Germany.....														
Ireland.....								1						
Italy.....														
Japan.....														
Jamaica.....	2	3	1		1								1	
Martinique.....		1												
Montserrat.....	1													
Panama.....		1	6		3	1								
Peru.....		1												
Porto Rico.....														
Russia.....														
Sweden.....														
St. Andrews.....			1											
St. Lucia.....					1									
St. Kitts.....														
St. Vincents.....		3												
Spain.....														
Trinidad.....		2				1								
United States.....			1		1	1		1	1					
Venezuela.....														
Others.....		1												
Total.....	7	143	18	3	8	8	1	2	3	1	3	1	8	2

BY BIRTHPLACE OF PARENTS.

Birthplace of mother—Continued.

Guatemala.	Italy.	Jamaica.	Mexico.	Martinique.	Montserrat.	Panama.	Porto Rico.	Russia.	Sweden.	St. Andrews.	St. Thomas.	St. Lucia.	St. Vincent.	Spain.	Trinidad.	United States.	Venezuela.	Others.	Total.
		2				1						1							8
		16		2	1	11													165
		4				8				1									17
		1				5													6
		2				15												1	23
					1	4											1		6
												2							2
		2				1												1	5
						2													1
		1				6									1				2
						3												1	12
		2				2						2			1				16
			1					1											2
																			2
	3	1				2												1	7
						1													1
		183			1	14				1		1							208
		1		10		1						2							15
		2																	3
1		7		1		193										1	1		215
						5											1		7
						1	10												11
								1	1										2
									1										1
		2		1		2						6							2
		1									1								12
		2				1						1	2						2
	1					9								4					9
		4		1								1	2		7				14
		2				7										27			18
		1				4											2		41
						3													6
																			8
1	4	236	1	15	3	302	10	2	2	2	1	16	4	4	9	28	5	7	860

TABLE XI.—DISCHARGES AND DEATHS IN THE HOSPITALS OF
AND MARCH

Diseases.	Employees.							
	Discharges.				Deaths.			
	White.		Black.		White.		Black.	
	M.	F.	M.	F.	M.	F.	M.	F.
<i>General diseases.</i>								
Typhoid fever.....								
Paratyphoid fever.....			1					
Malaria.....	1							
Malarial fever:								
Estivoautumal.....	13	2	92	4				
Tertian.....	11	1	17	9				
Quartan.....	1		1					
Undetermined.....	3		29	14				
Clinical.....	1			1				
Cachexia.....			1					
Hemoglobinuric fever, malarial.....								
Smallpox.....	1		3					
Varioloid.....	1							
Vaccinia.....								
Measles.....				1				
Diphtheria and croup.....								
Diphtheria bacillus carrier.....								
Influenza.....	30	2	32					
Dysentery, entamebic.....	1							
Yellow fever.....								
Leprosy.....								
Chicken pox.....			9					
German measles.....								
Mumps.....								
Filariasis.....								
Purulent infection and septicemia.....			2					
Septicemia.....							1	
Pellagra.....								
Beriberi.....								
Tuberculosis of the lungs.....	3		14	1			7	
Tuberculous meningitis.....								
Abdominal tuberculosis.....								
Pott's disease.....								
Rickets.....								
Syphilis:								
Primary.....			1	2				
Secondary.....	1		1	1				
Tertiary.....	6		50	4				
Hereditary.....								
Period not stated.....								
Gonococcus infection.....							1	
Gonorrhea.....	2		13	9				

THE PANAMA CANAL FOR THE MONTHS OF JANUARY, FEBRUARY, 1919.

Nonemployees.										Nonresidents.								Total discharges.	Total deaths.
Discharges.					Deaths.					Discharges.				Deaths.					
White.			Black.		White.			Black.		White.		Black.		White.		Black.			
Soldiers.	Others.				Soldiers.	Others.													
M.	M.	F.	M.	F.	M.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
				2						2								4	
																		1	
	2																	3	
69	10	9	7	13						2								221	
24	5	2	3	7				1		2								81	1
3																		5	
10		2	3	1														62	
6		1		1														10	
																		1	
	1	1																1	
		1	16	22														44	
		1	1															3	
			2															2	
		1	3	1														6	
	1	1	1					1										3	1
	2	1		1														4	
28	5	8	2	1						47								155	
6		1		1						1								10	
														1					1
														1				1	
2		1	2	3														17	
				1														1	
6		1	1							1								9	
1																		1	
1		1							1									4	1
									1										2
1				1														2	
				1														1	
13	1	2	2	6		1		3	10	1					1		1	43	23
								1	2										3
								1											1
		1								1								2	
			1															1	
1				1						1								6	
4	1			2						6								16	
19	5		4	11				1		8		1						108	1
	1																	1	
4			1							2								7	
1			1	1						2								5	1
12	1	1		1						9								48	

TABLE XI.—DISCHARGES AND DEATHS IN THE HOSPITALS OF THE
AND MARCH,

Diseases.	Employees.							
	Discharges.				Deaths.			
	White.		Black.		White.		Black.	
	M.	F.	M.	F.	M.	F.	M.	F.
<i>General diseases.—Continued.</i>								
Gonorrheal arthritis.....				3				
Gonorrheal orchitis and epididymitis.....	1		17	5				
Soft chancre.....	2		19	12				
Adenitis chancreoidal.....			3					
Cancer and other malignant tumors of the female genital organs.....								
Cancer and other malignant tumors of the breast.....								
Cancer and other malignant tumors of other organs and of organs not specified.....								
Other tumors (tumors of the female genital organs excepted).....	1		4					
Acute articular rheumatism.....	1		1					
Chronic rheumatism and gout.....								
Scurvy.....								
Leukemia.....								
Leukemia lymphatic.....								
Hodgkin's disease.....								
Anemia, chlorosis.....								
Chlorosis.....								
Anemia, secondary, cause not determined.....	1							
Other general diseases.....	2							
Alcoholism, acute.....	4							
Alcoholic psychosis.....								
<i>Diseases of the nervous system and of the organs of special sense.</i>								
Cerebrospinal fever.....							1	
Locomotor ataxia.....	1		1					
Cerebral hemorrhage, apoplexy.....			1				3	
Softening of the brain.....							1	
Paralysis without specified cause.....			2					
General paralysis of the insane.....								
Other forms of mental alienation.....	1							
Dementia precox.....			1					
Epilepsy.....			2					
Convulsions (under five years).....								
Chorea.....								
Hysteria.....								
Neuralgia.....	1		1					
Neuritis.....	3			1				
Other diseases of the nervous system.....	2		2					

PANAMA CANAL FOR THE MONTHS OF JANUARY, FEBRUARY, 1919.—Continued.

[illegible]

TABLE XI.—DISCHARGES AND DEATHS IN THE HOSPITALS OF
AND MARCH,

Diseases.	Employees.							
	Discharges.				Deaths.			
	White.		Black.		White.		Black.	
	M.	F.	M.	F.	M.	F.	M.	F.
<i>Diseases of the nervous system and of the organs of special sense.—Continued.</i>								
Tumor of the brain.....								
Neurasthenia.....	1	2						
Diseases of the eyes and their annexa.....	3		47					
Follicular conjunctivitis.....	2	1	2					
Diseases of the ears.....	2		1					
<i>Diseases of the circulatory system.</i>								
Pericarditis.....								
Organic diseases of the heart.....	1		28				6	
Angina pectoris.....	1							
Aneurysm.....			3					
Embolism and thrombosis.....							1	
Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....			5					
Hemorrhoids.....	6		7					
Varices.....	1							
Varicocele.....	1		6					
Phlebitis.....								
Diseases of the lymphatic system (lymphangitis, etc.).....		4						
Lymphadenitis (nonvenereal).....	2		15					
Hemorrhage; other diseases of the circulatory system.....	1							
<i>Diseases of the respiratory system.</i>								
Diseases of the nasal fossae.....	9		3					
Myiasis of nasal fossæ and sinuses.....								
Diseases of the thyroid body.....								
Acute bronchitis.....	10	2	5					
Chronic bronchitis.....			1					
Broncho-pneumonia.....			1					
Pneumonia (unqualified).....			1					
Lobar pneumonia.....			4				3	
Pleurisy.....			3					
Empyema.....								
Asthma.....	1		1					
Other diseases of the respiratory system (tuberculosis excepted).....								
Abscess of lungs.....								

THE PANAMA CANAL FOR THE MONTHS OF JANUARY, FEBRUARY, 1919.—Continued.

[illegible]

TABLE XI.—DISCHARGES AND DEATHS IN THE HOSPITALS OF
AND MARCH,

Diseases.	Employees.							
	Discharges.				Deaths.			
	White.		Black.		White.		Black.	
	M.	F.	M.	F.	M.	F.	M.	F.
<i>Diseases of the digestive system.</i>								
Diseases of the mouth and annexe			1					
Diseases of the teeth and gums	2		2					
Stomatitis								
Diseases of the pharynx								
Pharyngitis		1	7					
Follicular tonsillitis	13	3	11					
Foreign body in the esophagus								
Ulcer of the stomach	2							
Other diseases of the stomach (cancer excepted)	4	2	1					
Acute gastritis								
Chronic gastritis	1							
Acute indigestion		2	2					
Diarrhea and enteritis (under 2 years)								
Colitis								
Diarrhea and enteritis (2 years and over)	4	1	2					
Colitis			1					
Ankylostomiasis	2		1					
Intestinal parasites			1					
Ascariasis								
Teniasis			1					
Acute appendicitis	1		2	1				
Chronic appendicitis	1	1						
Hernia, intestinal obstructions								
Inguinal hernia	13		203				1	
Other hernias			2					
Intestinal obstruction								
Other diseases of the intestines	1		2					
Constipation			2					
Duodenal ulcer	5		2					
Cirrhosis of the liver								
Biliary calculi		2						
Other diseases of the liver	1							
Abscess of liver (unqualified)								
Abscess of the liver, entamebic							1	
Cholecystitis	1		2					
Diseases of the spleen								
Simple peritonitis (nonpuerperal)		1					2	
Other diseases of the digestive system (cancer and tuberculosis excepted)								

TABLE XI.—DISCHARGES AND DEATHS IN THE HOSPITALS OF
AND MARCH.

Diseases.	Employees.							
	Discharges.				Deaths.			
	White.		Black.		White.		Black.	
	M.	F.	M.	F.	M.	F.	M.	F.
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>								
Acute nephritis.....							3	
Bright's disease (chronic nephritis).....			9				1	
Other diseases of the kidney and annexa			2					
Pyelo-nephrosis.....			1					
Calculi of the urinary passages.....	2							
Diseases of the bladder.....								
Cystitis.....	1							
Diseases of the urethra, urinary abscess, etc.....	2		8					
Stricture of the urethra, nonvenereal			7					
Acute prostatitis.....			1					
Abscess of the prostate.....								
Nonvenereal diseases of the male genital organs... ..	4		10					
Hydrocele.....			71					
Uterine hemorrhage (nonpuerperal).....								
Uterine tumor (noncancerous).....				1				
Other diseases of the uterus.....								
Metritis.....								
Cysts and other tumors of the ovary.....								
Salpingitis and other diseases of the female genital organs		1						
Nonpuerperal diseases of the breast (cancer excepted)								
Benign tumor of breasts.....								
<i>The puerperal state.</i>								
Normal labor.....								
Accidents of pregnancy.....								
Extra-uterine pregnancy.....								
Hyperemesis gravidarum.....								
Abortion.....								
Puerperal hemorrhage.....								
Other accidents of labor.....								
Puerperal albuminuria and convulsions.....								
Eclampsia.....								
Puerperal diseases of the breast.....								
<i>Diseases of the skin and cellular tissue.</i>								
Gangrene.....								
Furuncle.....	3							
Carbuncle.....	2							

THE PANAMA CANAL FOR THE MONTHS OF JANUARY, FEBRUARY,
1919.—Continued.

Nonemployees.										Nonresidents.										Total discharges.	Total deaths.
Discharges.					Deaths.					Discharges.					Deaths.						
White.			Black.	White.			Black.	White.			Black.	White.			Black.						
Soldiers.	Others.			Soldiers.	Others.			Soldiers.	Others.			Soldiers.	Others.			Soldiers.	Others.				
	M.	M.			F.	M.			M.	F.			M.	M.			F.	M.	M.		
1				1				1	2									2	6		
3	1	1		1		1		1										15	3		
		3		1		1												6	1		
1	1	4							1						1			7	2		
1		1								2								6			
		1																1			
2		1		1														5			
3										1								14			
1																		8			
	1									1								2			
	7			2						1								1			
5				1						1								26			
																		78			
		2																2			
		10		9														12			
		4		11														21			
				9														13			
				1														1			
		3		13														17			
		2		4														7			
				2														2			
		56		15														71			
		3		3														6			
				2														2			
		2		3														5			
		22		4														26			
		1		1														2			
		1		1														3			
		1																1			
		1							1									1	1		
				1														1			
1																		1			
1				1														4			
				1														4			

TABLE XI.—DISCHARGES AND DEATHS IN THE HOSPITALS OF THE MARCH.

Diseases.	Employees.							
	Discharges.				Deaths.			
	White.		Black.		White.		Black.	
	M.	F.	M.	F.	M.	F.	M.	F.
<i>Diseases of the skin and cellular tissue.—</i>								
Continued.								
Acute abscess.....			14					
Phlegmon and cellulitis.....	8	1	4					
Trichophytosis.....								
Scabies.....	1		2					
Ground itch.....								
Dhobie itch.....			1					
Ulcer of the skin.....			25	1				
Impetigo contagiosa.....								
Urticaria.....	1							
Ingrowing nail.....		1						
Other diseases of the skin and annexa.....	3	2	3					
<i>Diseases of the bones and of the organs of locomotion.</i>								
Diseases of the bones (tuberculosis excepted).....			1					
Mastoid abscess.....			1					
Osteomyelitis.....								
Periostitis.....								
Diseases of the joints (tuberculosis and rheumatism excepted).....			1					
Arthritis.....			8					
Synovitis.....	1							
Amputations.....	1		6					
Other diseases of the organs of locomotion.....	7	2	2					
<i>Malformations.</i>								
Congenital malformations (stillbirth not included).....	1		13					
<i>Diseases of early infancy.</i>								
Newborn child.....								
Congenital debility, icterus, and sclerema.....								
Premature birth.....								
Malnutrition.....								
<i>Affections produced by external causes.</i>								
Suicide by firearms.....								
Poisoning by food.....	1							
Other acute poisonings.....								
Conflagration.....			1					

PANAMA CANAL FOR THE MONTHS OF JANUARY, FEBRUARY, AND 1919.—Continued.

Nonemployees.										Nonresidents.								Total discharges.	Total deaths.
Discharges.					Deaths.					Discharges.				Deaths.					
White.			Black.		White.			Black.		White.		Black.		White.		Black.			
Soldiers.	Others.				Soldiers.	Others.				M.	F.	M.	F.	M.	F.	M.	F.		
M.	M.	F.	M.	F.	M.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
6	1	2	6	4						4								37	
4		1	4					1		1								23	1
2																		2	
																		3	
1																		1	
1				2														4	
		1	2	4														33	
		1																1	
1		1																3	
4		2																7	
8	1	4		3						4								28	
3	1																	5	
	1			2														4	
		1																1	
3																		3	
1	1	1		1														5	
1	2		2	4						2		1						20	
	1																	2	
5	1	1		1						2								7	
																		21	
5	7		6			1		1		2								34	2
	29	28	4	4						1								65	1
		1																1	
	2	2	1							1								5	1
			1	2				5										3	5
1						1													1
1	1		2															2	
																		4	
																		1	

TABLE XI.—DISCHARGES AND DEATHS IN THE HOSPITALS OF THE MARCH.

Diseases.	Employees.							
	Discharges.				Deaths.			
	White.		Black.		White.		Black.	
	M.	F.	M.	F.	M.	F.	M.	F.
<i>Affections produced by external causes.—</i>								
Continued.								
Burns (conflagration excepted).....			4					
Traumatism by firearms.....			3					
Traumatism by cutting or piercing instruments...	1		37					
Traumatism by fall.....	4		16					
Traumatism by machines.....	3		4				1	
Traumatism by other crushings (vehicles, landslides, etc.).....	2		11					
Railroad traumatism.....	1		5					
Dynamite traumatism.....	1							
Injuries by animals.....			1					
Starvation.....							1	
Homicide by cutting or piercing instruments.....							2	
Fractures (cause not specified).....	1		7					
Dislocations.....	2		2					
Sprains.....	2		4					
Other external violence.....	6	1	67				1	
<i>Ill-defined diseases.</i>								
Ill-defined organic disease.....	1							
Infections of undetermined origin.....	1		2					
No disease.....	3	1	6					
Total.....	253	32	1062	70			37	

PANAMA CANAL FOR THE MONTHS OF JANUARY, FEBRUARY, AND
1919.—Continued.

Nonemployees.										Nonresidents.								Total discharges.	Total deaths.
Discharges.					Deaths.					Discharges.				Deaths.					
White.			Black.		White			Black.		White.		Black.		White		Black.			
Soldiers.	Others.				Soldiers.	Others.													
M.	M.	F.	M.	F.	M.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
2			1	3				1		2				1				12	2
8			2			1				3								16	1
7	3		3	1		1				2								54	1
4	4	2	3	1						5				1				39	1
			1							3								11	1
5	1		1	1				1										21	1
			1															7	
2																		1	
																		3	
																			1
10	1		1					1		1								21	1
			1	1														6	
3										1								10	
12	2	1	4	1														94	1
1																		2	
6	1	2	2	1		1				2	1							18	1
13	6	27	8	24						2	1							91	
681	189	343	171	334	4	9	3	27	31	190	6	7	2	8	1	1		3340	121

TABLE XII.—CONSOLIDATED HOSPITAL REPORT.
[A. = White Americans; F. = White foreigners; B. = Black.]

	Remain- ing January 1.			Admitted.			Died.			Discharged.		
	A.	F.	B.	A.	F.	B.	A.	F.	B.	A.	F.	B.
Ancon Hospital:												
Employees.....	23	9	225	160	55	964	1	31	164	53	931	
Soldiers.....	103			550			3		589			
Panama pay patients.....						2						
Other pay patients.....	41	36	50	323	196	374	3	11	31	327	198	320
Charity patients.....	12	2	14	40	18	111	2	4	45	17	83	
Total.....	179	47	289	1,073	269	1,451	6	14	66	1,125	268	1,334
Corozal Hospital (insane):												
Employees.....	1	2	14			3				1	1	
Soldiers.....	9			7					12			
Panama pay patients.....	3	59	222		8	17	3	8		6	11	
Other pay patients.....		3	2			9		2			1	
Charity patients.....		13	70	1		5		2		3	2	
Total.....	13	77	308	8	8	34	3	12	12	10	15	
Grand total.....	192	124	597	1,081	277	1,485	6	17	78	1,137	278	1,349
Corozal Farm (cripples):												
Employees.....		7	44		4	4				2	4	
Chronic ward:												
Charity patients.....			26			1						
Colon Hospital:												
Employees.....	1	3	10	60	16	296		5	52	16	221	
Soldiers.....	7	1		80	19		1		68	15		
Panama pay patients.....		1	2		2	5	2				2	
Other pay patients.....	9	8	14	71	63	92		12	71	47	68	
Charity patients.....	4		1	12	2	15			16	1	11	
Total.....	21	13	27	223	102	408	1	2	17	207	79	302
Palo Seco Leper Asylum:												
Panama pay cases.....		2	43			3		1			4	
Charity patients.....			31			1					1	
Total.....		2	74			4		1			5	
Grand total:												
Employees.....	25	21	293	220	75	1,267	1	36	216	72	1,157	
Soldiers.....	119	1		637	19		4		669	15		
Panama pay patients.....	3	62	267		10	27	5	9		6	17	
Other pay patients.....	50	47	66	394	259	475	3	11	45	398	245	389
Charity patients.....	16	15	142	53	20	133	2	6	61	21	97	
Total.....	213	146	768	1,304	383	1,902	7	19	96	1,344	359	1,660

TABLE XII.—CONSOLIDATED HOSPITAL REPORT.—Continued.
[A. = White Americans; F. = White foreigners; B. = Black.]

	Transferred.			Remain- ing March 31.			Average number con- stantly sick.			
	A	F.	B	A.	F.	B.	A.	F.	B.	Total.
Ancon Hospital:										
Employees.....			11	19	10	216	22.46	9.01	205.82	237.29
Soldiers.....	8			53			81.81			81.81
Panama pay patients.....			2						.10	.10
Other pay patients.....			12	34	23	61	39.98	28.37	57.08	125.43
Charity patients.....	1		15	6	1	23	10.78	2.25	19.05	32.08
Total.....	9		40	112	34	300	155.03	39.63	282.05	476.71
Corozal Hospital (insane):										
Employees.....				1	1	16	1.00	1.14	15.78	17.92
Soldiers.....				4			5.32			5.32
Panama pay patients.....			1	3	58	219	3.00	57.55	219.10	279.65
Other pay patients.....					3	8		3.00	6.82	9.82
Charity patients.....				1	10	71	.11	11.21	70.81	82.13
Total.....			1	9	72	314	9.43	72.90	312.51	394.84
Grand total.....	9		41	121	106	614	164.46	112.53	594.56	871.55
Corozal Farm (cripples):										
Employees.....					9	44		9.03	45.57	54.60
Chronic ward:										
Charity patients.....			1			26			25.73	25.73
Colon Hospital:										
Employees.....	2	2	29	7	1	51	4.04	2.29	37.93	44.26
Soldiers.....	7	3		11	2		8.96	2.11		11.07
Panama pay patients.....			5		1			1.03	.17	1.20
Other pay patients.....	2	21	14	7	3	12	6.98	5.60	11.24	23.82
Charity patients.....		1	5				1.66	.12	.67	2.45
Total.....	11	27	53	25	7	63	21.64	11.15	50.01	82.80
Palo Seco Leper Asylum:										
Panama pay cases.....					2	41		2.00	42.09	44.09
Charity patients.....						31			31.21	31.21
Total.....					2	72		2.00	73.30	75.30
Grand total:										
Employees.....	2	2	40	27	21	327	27.50	21.47	305.10	354.07
Soldiers.....	15	3		68	2		96.09	2.11		98.20
Panama pay patients.....	4		8	3	61	260	3.00	60.58	261.46	325.04
Other pay patients.....	2	21	26	41	29	81	46.96	36.97	75.14	159.07
Charity patients.....	2	1	21	7	11	151	12.55	13.58	147.47	173.60
Total.....	25	27	95	146	124	819	186.10	134.71	789.17	1,109.98

TABLE XIII.—CONSOLIDATED DISPENSARY REPORT.

EMPLOYEES TREATED IN QUARTERS.

	Re- main- ing Jan. 1.		Ad- mitted.		Died.		Dis- charged.		Trans- ferred.		Re- main- ing Mar. 31.		Days lost.		
	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	W.	B.	Total
Ancon.....	8	...	260	203	...	...	245	169	8	12	15	22	566	872	1,438
Balboa.....	2	6	451	15	...	...	439	9	3	6	11	6	1,084	75	1,159
Pedro Miguel....	...	...	39	21	...	...	39	18	...	...	...	3	83	17	100
Gatun.....	...	...	35	50	...	...	28	41	7	6	...	3	89	448	537
Cristobal.....	7	43	197	600	...	...	195	569	...	9	9	65	546	5,535	6,081
Total.....	17	49	982	889	...	...	946	806	18	33	35	99	2,368	6,947	9,315

ALL CASES TREATED BUT NOT EXCUSED.

	Employees.			Nonemployees.			Total.		
	W.	B.	Total.	W.	B.	Total.	W.	B.	Total.
Ancon.....	1,943	12,873	14,816	3,049	4,763	7,812	4,992	17,636	22,628
Balboa.....	12,558	4,500	17,058	10,232	2,966	13,198	22,790	7,466	30,256
Pedro Miguel...	4,702	6,214	10,916	4,050	4,100	8,150	8,752	10,314	19,066
Gatun.....	873	2,571	3,444	1,074	1,337	2,411	1,947	3,908	5,855
Cristobal.....	2,612	11,961	13,673	3,109	3,476	6,585	5,721	14,537	20,258
Total.....	22,688	37,219	59,907	21,514	16,642	38,156	44,202	53,861	98,063

TABLE XIV.—CONSOLIDATED ADMISSION REPORT.

	White.	Black.	Total.
Admissions to hospitals, excluding Corozal farm and chronic ward.....	1,683	1,897	3,580
Admissions of employees to quarters.....	982	889	1,871
Total admissions to hospitals and quarters.....	2,665	2,786	5,451
Less number of patients transferred between hospitals and from quarters to hospitals, whose admissions are duplicated in the above figures.....	70	128	198
Net admissions to hospitals and quarters.....	2,595	2,658	5,253
EMPLOYEES.			
Employees admitted to hospitals.....	291	1,262	1,553
Employees admitted to quarters.....	982	889	1,871
Total admissions of employees.....	1,273	2,151	3,424
Less number transferred between hospitals and from quarters to hospitals, whose admissions are duplicated in the above figures.....	22	72	94
Net admissions of employees.....	1,251	2,079	3,330
Annual admission rate per thousand employees to hospitals and quarters.....	1,094.24	383.88	507.68

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

	White.	Black.	Total.
Hospitals:			
Ancon Hospital.....	33.61	221.08	254.69
Colon Hospital.....	6.33	37.93	44.26
Total.....	39.94	259.01	298.95
Quarters:			
Ancon.....	6.29	9.67	15.96
Balboa.....	12.04	.83	12.87
Pedro Miguel.....	.92	.19	1.11
Gatun.....	.99	4.98	5.97
Colon.....	6.07	61.50	67.57
Total.....	26.31	77.17	103.48
	Hospitals.	Quarters.	Total.
Average number of employees constantly sick:			
White.....	39.94	26.31	66.25
Black.....	259.01	77.17	336.18
Total.....	298.95	103.48	402.43
Average number of employees constantly sick per 1,000:			
White.....	8.73	5.75	14.48
Black.....	11.95	3.56	15.51
Total.....	11.40	3.94	15.34

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

	White.	Black.	Total.
Hospitals:			
Ancon Hospital.....	13.13	18.20	17.26
Colon Hospital.....	7.44	12.36	11.28
Total (average).....	11.72	16.98	15.97
Quarters:			
Ancon.....	2.32	5.13	3.48
Balboa.....	2.41	5.35	2.50
Pedro Miguel.....	2.27	3.66	2.71
Gatun.....	2.60	9.58	6.64
Colon.....	2.83	11.82	9.52
Total (average).....	2.47	10.01	5.97

TABLE XVII.—NUMBER OF DAYS HOSPITAL TREATMENT FURNISHED VARIOUS CLASSES OF PATIENTS.

Class.	American.	Foreign.	Black.	Total.
Ancon Hospital:				
Panama Canal employees.....	2,021	812	18,514	21,347
Army and Navy patients.....	7,398			7,398
Panama Government pay patients.....			2	2
Other pay patients.....	3,595	2,564	5,148	11,307
Charity patients.....	956	203	1,727	2,886
Total.....	13,970	3,579	25,391	42,940
Corozal Hospital (insane):				
Panama Canal employees.....	90	103	1,374	1,567
Army and Navy patients.....	498			498
Panama Government pay patients.....	270	5,209	19,709	25,188
Other pay patients.....		270	531	801
Charity patients.....	5	1,073	6,386	7,464
Total.....	863	6,655	28,000	35,518
Corozal Farm (injured employees): Panama Canal employees.....		814	4,105	4,919
Chronic ward: Charity patients.....			2,315	2,315
Colon Hospital:				
Panama Canal employees.....	365	207	3,393	3,965
Army and Navy patients.....	811	190		1,001
Panama Government pay patients.....		93	16	109
Other pay patients.....	627	507	1,013	2,147
Charity patients.....	150	11	59	220
Total.....	1,953	1,008	4,481	7,442
Palo Seco Leper Asylum (lepers):				
Panama Government pay patients.....		90	3,878	3,968
Charity patients.....			2,809	2,809
Total.....		90	6,687	6,777

TABLE XVIII.—WARD LABORATORY REPORTS.

	Ancon Hospital.	Colon Hospital.	Santo Tomas Hospital.
Blood examinations (total number).....	1,861	213	527
Estivoautumnal.....	203	12	127
Quartan.....	9		
Tertian.....	75	7	68
Filaria.....	1		
Differential counts.....	146	8	2
Hemoglobin estimates.....	947		
Red blood counts.....	47		5
White blood counts.....	262	99	12
Stool examinations (total number).....	1,936	12	1,963
Ameba.....	34		15
Ascaris lumbricoides.....	57		113
Ciliated monads.....	26		5
Guaiac tests.....	40		
Pus and blood.....	59		
Strongyloides.....	91		82
Tenia saginata.....	4		
Tricocephalus dispar.....	171		102
Uncinaria (ova).....	350		485
Cercomonas, intestinalis.....	2		
Entameba (histolytica and tetragena).....	6		18
Mucus and blood.....	26		
Blood.....			17
Mucus and pus.....			14
Urine examinations (total number).....	5,073	795	1,384
Albumen.....	1,366	115	348
Bile.....	16		
Casts.....	854	81	281
Ciliated monads.....	17		
Epithelia.....	1,072		16
Guaiac tests.....	24		
Hemin crystals.....	8		
Indican.....	68		
Pus and blood.....	1,831	59	
Sugar.....	854	5	10
Mucus and pus.....			129
Phosphates.....			18
Urates.....			8
Motile bacteria.....			1
Acetone.....		7	
Pus.....		36	
Sediment.....		23	
Sputum examinations (total number).....	1,455	8	351
Positive for tubercle bacilli.....	117	5	102

TABLE XVIII.—WARD LABORATORY REPORTS.—Continued.

	Ancon Hospital.	Colon Hospital.	Santo Tomas Hospital.
Smear examinations (total number).....	251	1	
Urethral.....	115		
Vaginal.....	30		
Spinal fluid.....	103		
Eye.....	2		
Functional kidney test.....	1		
Positive for gonococci.....		1	1,075
Positive for B. Koch-Weeks.....			8
Positive for pneumococci.....			8
Positive for leprosy.....			2
Positive for diphtheria.....			6
Wassermann reactions (total number).....			625
Positive.....			246
Throat cultures.....			75
Blood cultures.....			4
Widals reactions.....			15

TABLE XIX.—SURGICAL OPERATIONS PERFORMED.

	Ancon Hospital.		Colon Hospital.		Santo Tomas Hospital.
	Num-ber.	Died.	Num-ber.	Died.	Num-ber.
Amputations:					
Thigh.....	1		1	1	1
Digits, single.....	8				
Digits, multiple.....	1		2		7
Leg.....					1
Foot.....					1
Resection of ankle.....					1
Operations on bones:					
Laminectomy.....					1
Craniectomy, decompressive.....			1	1	
Ostectomy.....			3		1
Excision of maxilla.....	1				
Resection of elbow.....	2				
Wiring of fractures, simple.....	2				
Wiring of fractures, compound.....	1				
Nailing of fractures, simple.....	2				
Lane plate of humerus.....			1		
Adenectomy:					
Inguinal, single.....	41				37
Inguinal, double.....	8				7
Femoral.....	4				
Cervical.....					3
Herniotomy:					
Inguinal, single.....	74	1	103		25
Inguinal, double.....	6		34		6
Ventral.....	3		4		2
Strangulated.....	2	1	2		2
Femoral.....	1		2		
Genito-urinary tract:					
Urethrotomy, internal.....					19
Urethrotomy, external.....	2				8
Varicocele, radical cure.....	13		13		1
Hydrocele, single, radical cure.....	27		49		5
Hydrocele, double, radical cure.....	3		1		
Amputation of scrotum.....	5				2
Curettage uteri.....	41		3		25
Orchidectomy.....			4		4
Cystotomy, suprapubic.....					2
Trachelorrhaphy.....			2		2
Epididymotomy.....	4				
Perineoplasty.....	2				
Nephrotomy.....	2				
Nephrectomy.....	1				
Vaginal sections.....					1
Obstetrical:					
Low forceps.....	2		1		
Perineorrhaphy.....	4				
Cæsarian section, abdominal.....	2		1	1	
Version.....			1		
Circumcision.....	96				63
Thorax:					
Excision of breast.....	1		2		1
Thoracotomy.....	2				1

TABLE XIX.—SURGICAL OPERATIONS PERFORMED—Continued.

	Ancon Hospital.		Colon Hospital.		Santo Tomas Hospital.
	Num-ber.	Died.	Num-ber.	Died.	Num-ber.
Rectum:					
Hemorrhoids, radical cure.....	40		6		24
Fistula in ano, excision of.....	1		4		10
Prolapsus rectum, radical cure.....	1		2		
General:					
Thyroidectomy.....	2				1
Varicose veins, excision of.....	8		4		
Excision of surface neoplasms.....	6		3		
Gunshot wounds of soft parts, operation for..	1		3		1
Plastic operations for severe injuries.....	1				1
Skin graft.....	1		2		3
Plastic operations for effects of disease.....	1		9		
Stab. wounds of soft parts, operations for.....			5	3	
Extensive injuries to soft parts, operation for..	1	1	1		
Laparotomy:					
Entero-enterostomy.....	1				
Appendectomy.....	35		33	1	37
Appendectomy with local peritonitis.....	4		4		1
Appendectomy with general peritonitis.....	1	1	4	1	2
Colostomy.....	1	1			
Cholecystotomy.....	3		1		5
Hysteromyomectomy.....	5				12
Salpingo-oophorectomy.....	3		12		45
Suspensio-uteri.....	12		12		19
For general peritonitis.....	1		1	1	
Exploratory.....	3		1		6
Splenectomy.....	2	2			1
Pan-hysterostomy.....	1				30
For ectopic gestation.....	1		1		
Abscess of liver, thoraco-hepatotomy.....	1		1		1
Supravaginal hysterectomy.....	10		14		10
For intestinal obstruction.....			1	1	2
Salpingectomy, single.....					8
Salpingectomy, double.....			7		16
Oophorectomy.....					13
Ovarian cystectomy.....			4		
Gastro-enterostomy.....			1		2
Enterectomy.....			1		
Minor operations, various.....	480		30		124
Major operations, various.....	4				
Total.....	1,096	7	397	10	603

TABLE XX.—REPORT OF OPERATIONS, EYE AND EAR DEPARTMENTS.

ANCON HOSPITAL.

Operations performed:

Adenoidectomy.....	74
Cataract extraction.....	7
Cauterization of cornea.....	1
Cauterization turbinates.....	6
Chalazion, removal of.....	8
Foreign body from ear, removal of.....	1
Ethmoid sinus, curettement of.....	2
Frontal sinus, drainage of.....	2
Maxillary sinus, perforation and drainage.....	2
Incision and drainage of abscess of ear.....	3
Iridectomy.....	1
Mastoidectomy.....	6
Nasal polyp, removal of.....	7
Enucleation of eye.....	1
Needling of eye.....	9
Evisceration of eye.....	1
Peritonsillar abscess, incision of.....	12
Paracentesis ear drum.....	2
Pterygium transplantations.....	13
Plastic eyelid (skin graft).....	1
Rhinoplasty.....	3
Submucous resection.....	28
Turbinectomy.....	10
Tonsillectomy.....	124
Total.....	324
Refractions.....	486

SANTO TOMAS HOSPITAL.

Ear:

Furunculosis of canal.....	18
Otitis media, chronic.....	123
Otitis media, acute.....	32
Foreign bodies.....	11
Polyps of canal.....	10
Cerum of canal.....	3
Perforation of drum.....	41
Mastoiditis.....	8
Celositis.....	13

Eye:

Gonorrheal ophthalmia.....	17
Enucleation.....	1
Foreign bodies.....	10
Conjunctivitis.....	182
Follicular conjunctivitis.....	9
Phlyctenular conjunctivitis.....	5
Tracom.....	27
Eye examinations.....	25
Corneal ulcer.....	114
Keratitis.....	130
Iritis.....	297
Blepharitis.....	6
Hordeolum.....	10
Dacralitis.....	10
Chalazion.....	13
Pterygium.....	13
Cataract.....	148
Chosoiditis.....	14
Refractions.....	7
Optic nerve atrophy.....	8

Nose and throat:

Tonsillitis.....	187
Turbineotomy.....	5
Sinusitis.....	129
Hypertrophy of turbinates.....	61
Rhinitis.....	47
Foreign bodies.....	12
Deflected septum.....	33
Screw-worm infection.....	3
Abscess of septum.....	2
Hypertrophied tonsils.....	16
Pharyngitis.....	24
Atrophic catarrh.....	15
Laryngitis.....	29
Peritonsillar abscess.....	7
Adenoidectomy.....	18
Tonsillectomy.....	21
Operations:	
Cataract.....	17
Iridectomy.....	14
Pterygium.....	20
Ectropion.....	1

TABLE XXI.—REPORT OF THE X-RAY DEPARTMENTS.

	Ancon Hospital.	Santo Tomas Hospital.
Nature of examinations:		
Arm and forearm.....	60	15
Chest.....	101	
Dental.....	69	33
Elbow.....	18	6
Foot and ankle.....	83	14
Foreign bodies.....	4	
Gall-bladder.....	9	2
Hand.....	38	7
Head.....	14	6
Hip.....	12	22
Jaw.....	10	7
Kidney.....	31	
Knee.....	29	7
Leg.....	19	3
Liver.....	2	15
Pelvis.....	4	8
Ribs.....	8	
Shoulder.....	26	7
Sinus.....	25	
Spine.....	8	5
Spleen.....		2
Stomach.....	85	34
Thigh.....	13	5
Thorax.....		9
Treatment.....	44	10
Wrist.....	21	
Total number of cases treated.....	733	217

CLASSIFICATION OF PLATES USED.

Ancon Hospital.

6½ by 8½.....	326
8 by 10.....	767
10 by 12.....	427
14 by 17.....	253
8 by 10 X-ray films.....	116
Dental films.....	251
Total.....	2,140

TABLE XXII.—SANTO TOMAS HOSPITAL.

PATIENTS TREATED.

Class.	Remaining Jan. 1.	Admit- ted.	Died.	Dis- charged.	Remaining March 31.
Pay cases.....	29	271	9	252	39
Charity cases.....	473	2,176	190	1,986	473
Total.....	502	2,447	199	2,238	512

Class.	Number treated.	American.		Other nations.	
		White.	Black.	White.	Black.
Pay cases.....	364	3	.....	108	253
Charity cases.....	3,564	8	.....	262	3,294
Total.....	3,928	11	.....	370	3,547

Number of days relief furnished patients.....	43,706
Average number of patients constantly sick.....	486
Average number of days treatment for each patient admitted.....	11
Cost of subsistence per patient, per day.....	\$0.21

DISPENSARY REPORT.

Class.	White.	Black.	Total.
Natives treated.....	67	4,187	4,254
Foreigners treated.....	98	1,350	1,448
Total.....	165	5,537	5,702

DISEASES TREATED.

General diseases:	
Typhoid fever.....	2
Malaria.....	230
Smallpox.....	3
Measles.....	2
Whooping cough.....	1
Diphtheria and croup.....	13
Influenza.....	33
Dysentery.....	22
Leprosy.....	2
Erysipelas.....	1
Other epidemic diseases.....	13
Purulent infection and septicemia.....	36
Beriberi.....	1
Tuberculosis of the lungs.....	21
Acute miliary tuberculosis.....	1
Tuberculous meningitis.....	1
White swelling.....	1
Tuberculosis of other organs.....	4
Syphilis.....	71
Soft chancre.....	20
Gonococcus infection.....	203
Cancer and other malignant tumors of the buccal cavity.....	1
Cancer and other malignant tumors of the stomach and liver.....	3

DISEASES TREATED.—Continued.

Cancer and other malignant tumors of the peritoneum etc.....	1
Cancer and other malignant tumors of the female genital organs.....	4
Cancer and other malignant tumors of the breast.....	1
Cancer and other malignant tumors of the skin.....	3
Cancer and other malignant tumors of the organs not specified.....	2
Other tumors (tumors of the female genital organs excepted).....	2
Acute articular rheumatism.....	4
Diabetes.....	2
Anemia, chlorosis.....	5
Other general diseases.....	16
Alcoholism (acute or chronic).....	23
Simple meningitis.....	2
Other diseases of the spinal cord.....	2
Paralysis without specified cause.....	3
Other forms of mental alienation.....	18
Epilepsy.....	5
Hysteria.....	3
Neuralgia and neuritis.....	23
Other diseases of the nervous system.....	4
Other diseases of the eyes and their annexa.....	13
Follicular conjunctivitis.....	13
Diseases of the ear.....	1
Organic diseases of the heart.....	23
Diseases of the arteries, atheroma.....	8
Diseases of the veins.....	21
Diseases of the lymphatic system.....	40
Hemorrhage, diseases of the circulatory system.....	2
Diseases of the nasal fossæ.....	2
Diseases of the larynx.....	1
Diseases of the thyroid body.....	2
Chronic bronchitis.....	15
Broncho-pneumonia.....	3
Pneumonia.....	6
Pleurisy.....	8
Asthma.....	4
Other diseases of the respiratory system.....	1
Diseases of the teeth and gums.....	3
Other diseases of the mouth and annexa.....	1
Diseases of the pharynx.....	51
Ulcer of the stomach.....	1
Other diseases of the stomach.....	6
Diarrhea and enteritis (under 2 years).....	4
Diarrhea and enteritis (2 years and over).....	16
Ankylostomiasis.....	110
Intestinal parasites.....	14
Appendicitis and typhlitis.....	27
Hernias, intestinal obstructions.....	34
Diseases of the anus and fecal fistula.....	12
Other diseases of the intestines.....	10
Cirrhosis of the liver.....	4
Biliary calculi.....	1
Other diseases of the liver.....	7
Diseases of spleen.....	6
Nephritis, acute.....	6
Bright's disease.....	35
Diseases of the bladder.....	10
Diseases of the urethra.....	28
Diseases of the prostate.....	1
Nonvenereal diseases of the male genital organs.....	20
Uterine tumor.....	6
Metritis.....	8
Other diseases of the uterus.....	33
Cysts and other tumors of the ovary.....	5
Salpingitis and other diseases of the female genital organs.....	35
Nonpuerperal diseases of the breast.....	3
Normal labor.....	218
Accidents of pregnancy.....	49

DISEASES TREATED—Continued.

Other diseases of labor.....	1
Puerperal septicemia.....	1
Furuncle.....	3
Acute abscess.....	33
Scabies.....	12
Other diseases of the skin and annexa.....	99
Diseases of the joints.....	4
Diseases of the bones.....	8
Amputations.....	1
Other diseases of the organs of locomotion.....	2
Congenital malformations.....	13
Nursling discharged from hospital.....	212
Senility.....	2
Suicides.....	1
Acute poisonings.....	1
Poisoning by food.....	1
Burns.....	6
Traumatism by cutting or piercing instruments.....	12
Traumatism by firearms.....	3
Traumatism by crushing.....	3
Dislocations.....	4
Fractures.....	19
Sprains.....	3
Other external violence.....	21
Diseases not specified or ill-defined.....	3
No disease.....	4
Total.....	2,207
Deaths among patients.....	199
Remaining in hospital March 31, 1919.....	512
Total treated.....	2,918

TABLE XXIII.—COROZAL HOSPITAL FOR THE INSANE IN STATEMENT OF COMMITMENTS, DISCHARGES, AND DEATHS.

COMMITMENTS.

	Male.	Female.
From Canal Zone:		
First admission.....	17	8
From Panama Government:		
First admission.....	16	6
Second admission.....	2	
Totals.....	35	14

DISCHARGES.

	Well.		Improved.		Unimproved.	
	Male.	Female.	Male.	Female.	Male.	Female.
Barbados.....	1	1				
China.....			1			
Colombia.....						1
Grenada.....	1					
India.....			1			
Jamaica.....			¹ 1	⁴ 1	¹ 1	
Mexico.....				1		
Martinique.....			¹ 5	¹ 1		
Nicaragua.....				⁶ 1		
Porto Rico.....	1				1	
Panama.....				2	1	
Spain.....	1					
Turk's Island.....	⁷ 1					
United States.....			¹ 9	¹ 1	¹ 1	¹ 1
Venezuela.....			1			
Totals.....	5	1	18	7	4	2

¹ Soldiers transferred to U. S. A. ² Deported to U. S. A. ³ Deported to Martinique. ⁴ Deported to Jamaica. ⁵ Eloped. ⁶ Deported to Nicaragua. ⁷ Patient not insane.

DEATHS.

Medical diagnosis.	Mental diagnosis.	Male.	Female.
Pulmonary tuberculosis.....	Imbecility.....	1	
Pulmonary tuberculosis.....	Dementia precox.....		2
Ascariasis.....	Toxic psychosis.....		1
Tuberculosis of the lungs.....	Dementis precox paranoid.....	1	
Pulmonary tuberculosis.....	General paresis.....	1	
Pulmonary tuberculosis.....	Alcoholic psychosis.....	1	
Infection psychosis, exhaustive.....	Infection exhaustive psychosis with pellagra.....		1
Tuberculosis meningitis.....	Dementia precox.....	1	
Pyelo nephrosis.....	Psychosis with epilepsy.....		1
Broneho-pneumonia.....	General paralysis of insane.....	1	
Psychosis with organic brain diseases.....	Psychosis with organic brain disease.....	1	
Chronic interstitial nephritis, organic brain disease.....	Senile dementia.....	1	
Syphilis nephritis.....	Dementia precox.....		1
Pulmonary tuberculosis.....	Infection exhaustive psychosis.....		1
Total.....		8	7

TABLE XXIV—REPORT OF BOARD OF HEALTH LABORATORY.

Bacteriological examinations:

Autogenous vaccines prepared.....	2
Blood agglutinations.....	8
Blood cultures.....	24
Blood smears examined for malarial parasites (25 positive for E. A. malaria, 27 positive for Tertian malaria, 2 positive for Quarten malaria).....	152
Blood smears for differential count.....	5
Blood smears examined for anemia (1 positive).....	1
Conjunctival smears (4 positive for Garm-negative intracellular diplococci, 1 positive for gonococci).....	40
Cultures from tonsils.....	13
Dark field examination for spiroecheta pallida.....	9
Smears examined for leprosy (2 positive for B. leprae).....	4
Smears examined for leprosy at Palo Seco asylum.....	44
Smear examined for Rigg's disease.....	1
Miscellaneous smears.....	6
Nasopharyngeal smears.....	3
Pleural fluid, cultured.....	1
Skin lesions examined (1 positive for trychophyton).....	2
Spinal fluids, cultured.....	21
Sputum cultures (from influenza patients, 16).....	22
Sputum, examined for tuberculosis (1 positive).....	34
Stools, cultures (3 positive for B. Paratyphesus).....	33
Stools, examined for ameba (5 positive).....	10
Stools, examined for intestinal parasites (Positive for tricocephalus dispar, 5; positive for uncinaria, 11; positive for strongyloides, 8; positive for ascaris, 4; positive for ciliated monads, 2).....	56
Synovial fluid.....	7
Plural effusions.....	2
Throat cultures (positive for B. diptheriae 13).....	241
Throat smears, examined for Vincent's angina (11 positive).....	19
Urines cultured.....	25
Urethral smears.....	4
Autopsy specimens.....	8
Blood smears examined for filaria.....	1
Smears examined for Gonnococci.....	4
Milk examination:	
Corozal hospital farm.....	38
Mindi farm dairy.....	46
Panama dairies, bacteriological count.....	12
Vincent's angina examinations (2 positive).....	5
Pathological examinations:	
Tissues prepared, autopsy.....	139
Tissues prepared, surgical.....	105
Tissues prepared, animal.....	3
Autopsies performed, human: as follows:	71
Diseases—	
Starvation; contributory, paralysis of muscles of deglutition.....	1
Perinephritic abscess.....	1
Organic heart disease.....	5
Yellow fever.....	1
Malnutrition.....	4
Bright's disease.....	1
Tuberculosis of the lungs.....	12
Acute nephritis.....	3
Pulmonary carcinomatosis.....	1
Acute lymphatic leukemia.....	1
Cerebro-spinal fever.....	1
Concussion of the brain.....	1
Acute general peritonitis.....	2
Ruptured aneurysm of the ascending aorta.....	1
Sarcomatosis.....	3
Exhaustive psychosis.....	1
Tuberculous meningitis.....	3
Hydrocephalus.....	1

Autopsies performed, human—Continued:

Diseases—Continued:

Malformation of intestinal tract.....	1
Broncho pneumonia.....	5
Phlegmonous cellulitis.....	1
Convulsions of children (under 5 years).....	1
Abscess of liver.....	3
Lobar pneumonia.....	4
Pyelo-nephrosis.....	1
Septicemia.....	1
Paralysis without specified cause.....	1
Traumatism by fall.....	1
Diphtheria.....	1
Cerebro syphilis.....	1
Apoplexy.....	2
Softening of the brain.....	1
Rupture of ascending aorta.....	1
Ascariasis.....	1
Diarrhea and enteritis (under 2 years).....	2

Animal autopsies: (1 pig from Corozal farm, 1 alligator)..... 2

Rats examined: (Mus-musculus, 3,223; Mus-Norwegious, 22; Mus-Alexandrix, 399; Mus-Ratus, 376)..... 4,020

General:

Wasserman reactions.....	3,078
Cattle ears examined for anthrax (4 positive).....	4
Examination of blood of native cattle for trypanosomes.....	3
Imported cattle injected with blood of native animals for "tick fever" immunization (3 deaths).....	43
Examinations of cattle blood for piroplasmata after immunization (32 positive).....	43
Blood smears from Army mules.....	2
Examination of cattle spleen for anthrax (5 positive).....	9
Ear of horse examined for anthrax.....	1
For murrina (2 horses and 1 mule).....	3

Chemical examinations:

Blood analysis for sugar, N. P. Nitrogen.....	1
Urine.....	27
Urine complete, 24 hours.....	1
Stomach contents.....	4
Milk, Sheffield.....	19
Milk (complete analysis) (condensed, 2).....	13
Mother's milk (complete analysis).....	2
Potatoes for water content.....	2
Aspirin tablets for glass.....	10
Powder for cocaine.....	2
Feces.....	1
Medicinal preparation for alcohol.....	1
Soft drinks for alcohol.....	9
Bleaching powder.....	1
Bay rum.....	1
Examination of canned salmon for the Army.....	48
Molasses for sucrose.....	2
Cherries for coloring.....	2
Substance for narcotics (police department).....	2
Coffee for adulteration.....	1
Stomach contents of dog for poison.....	1
Ensilage, Mindi farm.....	1
Cocoa butter (as to purity).....	1
Cotton seed oil (as to purity).....	1
Rum (as to purity).....	1
Dairy feed, Corozal farm.....	3
Miscellaneous.....	4

Spinal fluids, for January, not reported

Colloidal gold test.....	40
Butyric acid test.....	42
Ammonium sulphate test.....	42
Phenol test.....	42

Spinal fluids, for February:

Colloidal gold.....	57
Butyric acid.....	55
Ammonium sulphate.....	55
Phenol.....	52
Gum test.....	29

Entomological examinations:

Identification of mosquitoes, adults:

Culicini—

Anopheles albimanus.....	2,961
Anopheles tarsimaculata.....	61
Anopheles pseudopunctipennis.....	142
Anopheles malefactor.....	22

Total Anopheles.....	3,278
Culex supp.....	358
Mansonia titillans.....	652
Mansonia nigricans.....	25
Aedes calopus.....	52
Aedes specified.....	9
Aediomyia squanipennis.....	3

Total Culicini non-anopheles..... 1,099

Sabeithini—

Wyeomia specified.....	5
------------------------	---

Total mosquitoes..... 4,382

Undertaking Department:

Bodies cremated.....	50
Bodies embalmed.....	14
Bodies shipped to United States.....	10

TABLE XXV.—CONTAGIOUS AND INFECTIOUS DISEASES.

(Reported during the three-month period ending March 31, 1919.)

	Pana- ma.	Colon.	Canal Zone.	Non- resident.	Total.
Chickenpox.....	21	12	2	.....	35
Chancroids.....	.....	.....	3	.....	3
Diphtheria.....	13	7	6	.....	26
Dysentery.....	17	2	10	3	5
Gonococcus infection.....	32	197	85	18	332
Influenza.....	43	38	60	47	188
Leprosy.....	1	1	.....	.....	2
Malarial fever.....	44	21	428	163	656
Measles.....	2	17	2	.....	21
Meningitis.....	.....	.....	2	.....	2
Mumps.....	.....	10	13	.....	23
Ophthalmia neonatorum.....	.....	1	.....	.....	1
Pneumonia.....	9	6	1	12	28
Syphilis.....	9	19	16	.....	44
Smallpox.....	37	8	.....	1	46
Tetanus.....	.....	.....	1	.....	1
Tuberculosis.....	79	25	5	.....	109
Typhoid fever.....	1	3	1	.....	5
Whooping cough.....	1	43	15	.....	59
Yellow fever.....	.....	.....	.....	1	1

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

	Canal Zone.	Panama.	Colon.*
Linear yards of new ditches constructed.....	7,085	3,520	45,072
Acres of vegetation removed.....	189	86	172
Number of garbage cans emptied.....	10,080	.....	66,922
Cubic yards of garbage removed.....	.....	11,520	11,030
Square yards of streets kept clean.....	.....	600,000	281,718
Square yards of alleys cleaned daily.....	.....	.....	21,811
Pit closets inspected during month.....	761	.....	.....
Closets disinfected during month.....	1,001	.....	3,923
Number of water containers treated.....	600	17,519	222,814
Number of mosquito-breeding places destroyed.....	86	655	117
Mosquitoes destroyed in dwellings:			
Anopheles.....	12,783	.....	183
Stegomyia.....	1,267	.....	.....
Culex.....	9,288	.....	4,898
Number of fly-breeding places destroyed.....	20	521	495
Number of rats destroyed.....	3,879	3,036	2,008
Private properties cleaned.....	.....	103	11,345
Number of notices served to abate nuisances.....	31	1,083	1,075
Convictions for violation of sanitary code.....	.....	240	51
Houses disinfected or fumigated.....	.....	71	15
Square yards of pools oiled.....	187,864	27,895	232,901
Buildings inspected.....	6,787	19,570	42,219
Buildings, construction and repairs:			
Plans for new buildings approved.....	.....	5	7
Permits issued to repair old buildings.....	.....	141	185
Buildings condemned.....	.....	4	2
Buildings demolished.....	.....	2	.....
Food inspection:			
Dairies, milk vendors, etc.....	.....	246	26
Bakeries, ice cream parlors, etc.....	.....	243	336
Bottling works, saloons, etc.....	.....	60	402
Hotels, clubs, restaurants, etc.....	39	517	723
Markets, fruit stands, miscellaneous.....	190	145	3,249
Material used during month:			
Crude oil..... gallons..	6,083	1,762	2,593
Larvacide..... gallons..	10,049	726	908
Kerosene..... gallons..	442	117	.....
Number of hides disinfected.....	.....	8,405	4,050
Number of skins disinfected.....	.....	11,166	.....
Number of cattle inspected.....	.....	2,050	9,848
Number of swine inspected.....	.....	1,033	4,238
Number of goats inspected.....	.....	3	287

* Includes Cristobal and Mount Hope, Canal Zone.

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

(For the three months' period ending March 31, 1919.)

Vessels inspected and passed.....	642
Vessels held in quarantine.....	22
Vessels inspected and transiting the Canal in quarantine.....	28
Total vessels entered.....	692
Supplemental inspections of detained vessels.....	22
Supplemental inspections of vessels at docks.....	303
Vessels fumigated on arrival.....	42
Vessels fumigated prior to departure.....	11
Bills of health issued.....	625
Bills of health viséed.....	477
Crew inspected on arrival.....	32,541
Passengers inspected on arrival.....	7,850
Total persons inspected on arrival.....	40,391
Crew passed on medical officer's certificate.....	22,191
Supplementary inspections of passengers and crew.....	4,203
Persons vaccinated at port of arrival.....	577
Persons vaccinated at port of departure or en route.....	807
Total persons vaccinated.....	1,384
Persons detained at quarantine stations to complete the period of incubation of yellow fever and bubonic plague.....	861
Persons held in quarantine aboard vessels.....	5,220
Total persons detained in quarantine.....	6,081
Persons in transit passing through the Canal.....	12,702
Persons in transit from Pacific ports and passing through the Canal on arriving vessels..	900
Passengers in transit for Atlantic ports.....	1,252
Immigrants rejected and deported.....	147

TABLE XXVIII.—IMMIGRATION REPORT FOR THE PORTS OF BALBOA-PANAMA, AND CRISTOBAL-COLON FOR THREE MONTHS ENDING MARCH 31, 1919.

	Cabin.	Steerage.
United States.....	1,345	314
Europe.....	15	1
Porto Rico.....	10	.....
West Indies.....	51	191
Venezuela.....	11	4
Colombia.....	32	145
Cuba.....	2	128
Costa Rica.....	53	14
Bocas del Toro.....	3	384
Total.....	1,522	1,181
Grand total.....		2,703

TABLE XXIX.—PERSONNEL REPORT OF HEALTH DEPARTMENT.

	EMPLOYEES.			Dec. 31, 1918.	March 31, 1918.
	March 31, 1919.				
	Gold.	Silver.	Total.		
Chief health office.....	4	.....	4	5	3
Medical storekeeper.....	5	6	11	9	8
Quarantine service.....	9	37	46	47	44
Health office, Panama.....	13	140	153	159	157
Health office, Colon.....	17	141	158	156	153
Ancon Hospital.....	143	243	386	342	333
Colon Hospital.....	21	34	55	49	49
Santo Tomas Hospital.....	7	.....	7	6	6
Palo Seco Leper Asylum.....	2	39	41	34	32
Zone sanitation.....	4	213	217	168	150
Corozal Hospital and farm.....	16	110	126	120	113
Balboa dispensary.....	4	4	8	9	8
Gatun dispensary.....	2	2	4	4	4
Pedro Miguel dispensary.....	3	2	5	5	4
Total.....	250	971	1,221	1,113	1,064



UNIVERSITY OF FLORIDA



3 1262 08896 2211