Annual departmental report by the Director of Medical and Health Services / Hong Kong.

HONG KONG

ANNUAL REPORT

OF THE

DIRECTOR OF MEDICAL SERVICES

FOR THE PERIOD

1ST JANUARY, 1948 TO 31ST MARCH, 1949.

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CONTENTS

I.—ADMINISTRATION.

A. General.

In this report the text will refer to the period January 1st, 1948 to March 31st, 1949, but all statistical tables will refer to the calendar year 1948. Any discrepancies between text and tables are explained by this arrangement. It is proposed in future years that the text should refer to the financial year i.e. April 1st to the following March 31st, while statistical tables will refer to the calendar year as before. The period of fifteen months covered by the text this year being due to the fact that it is the transitional stage.

2. During the period under review the tendency was for the departmental activities to approach steadily the more normal peace time routine.

3. In the latter part of the year the office of the Principal Almoner was moved from the Queen Mary Hospital, where it had been since the beginning of the Almoners sub-department in 1939, to the Medical Department headquarters. The work of the sub-department has developed to such an extent that the Principal Almoner's duties are no longer specially concerned with the Queen Mary Hospital.

4. In January 1949 the Royal Naval Hospital evacuated the remaining wards occupied by them at the Queen Mary Hospital and as many of these wards as could be equipped and staffed were put into operation.

5. In a number of administrative matters concerning the medical profession as a whole, the advice of the Hong Kong & China Branch of the British Medical Association and the Hong Kong Chinese Medical Association was sought and their helpful co-operation was appreciated.

6. The chart in Annexure A shows the system of decentralization in the department. Maps showing the position of medical institutions in the Colony are shown in Annexure B.

B. Boards.

7. *The Medical Advisory Board to His Excellency the Governor.* This Board consists of representatives of the three Services and the British and Chinese Medical Association with the Deputy Director of Medical Services as Secretary. It met regularly during the early and latter part of the period under review but meetings were not held during the absence on leave of the Director of Medical Services. The community owes a debt of gratitude to the members of this Board who give so much of their valuable time to this work.

8. *Medical Board.* The Medical Board consisting of the senior Naval and Military doctors for the time being in the Colony, two registered medical practitioners and three other persons appointed by the Governor, is responsible for the control of admissions to the Medical Register and for dealing with matters of professional ethics among medical practitioners in the Colony.

9. *Dental Board.* The Dental Board consisting of the Government dental surgeon, two medical practitioners and two dental surgeons appointed by the Governor, carries out the same responsibilities for dental practitioners as does the Medical Board for the doctors.

10. *Nurses Board.* The Nurses Board consisting of the Principal Matron, one member appointed by the University and four members appointed by the Governor, is responsible for controlling admissions to the nurses register and for the qualifying examinations for nurses throughout the Colony. Candidates for these examinations come from seven approved training schools, two of which are Government hospitals and the remaining five private institutions.

11. *Midwives Board.* The Midwives Board consists of eight persons two of whom must be certified enrolled midwives appointed by the Governor. This Board is responsible for the Midwives register and for qualifying examinations and discipline among Midwives as is the Nurses Board for nurses.

12. The Director of Medical Services is *ex officio* Chairman of these Boards.

C. Staff.

13. In May the Director of Medical Services went on leave and Dr. Thomas O.B.E., M.D. (Hong Kong) acted as Director of Medical Services until December 17th, when the Director of Medical Services returned. This was the first occasion on which a local officer has taken charge of a major Government department.

14. As in most other parts of the world great difficulty has been experienced in completing the establishment of the professional and technical staff. Among the doctors barely one third are expatriate officers and the department, therefore, depends greatly on a steady production of doctors by the University. Unfortunately considerable difficulties have been experienced by the University in getting into full swing after the Japanese occupation and, while a certain number of doctors have graduated each year, the full output cannot be expected until 1952. As a consequence, in order to maintain the medical services, it has been necessary to appoint, on a purely temporary basis, doctors who have qualified in China and other parts of the world, but who are not eligible for registration in Hong Kong. The policy is to replace these doctors by those eligible for registration when the opportunity arises.

15. Annexure C shows the establishment as it was on March 31st, 1949.

D. Legislation.

16. The following legislation affecting public health was enacted during the year 1948:—

Dangerous Drugs (Amendment) Ordinance, No. 5 of 1948.

Births & Deaths Registration Amendment Ordinance, No. 10 of 1948.

Public Health (Food) Amendment Ordinance, No. 19 of 1948.

Penicillin Ordinance, No. 21 of 1948.

Public Health (Sanitation) Amendment Ordinance, No. 45 of 1948.

The Hong Kong Anti-Tuberculosis Association Incorporation Ordinance, No. 55 of 1948.

Medical Registration Amendment Ordinance No. 12 of 1949.

Orders, Rules, Regulations and By-laws:—

Public Health (Sanitation) Ordinance, 1935 (By-laws for Dangerous & Offensive Trades) G.N. A.17 of 1948.

Public Health (Food) Ordinance, 1935 (By-laws for Roast (or Cooked) Meat shops.) G.N. A.37 of 1948.

Births and Deaths Registration Ordinance, 1934 (Amendment of First Schedule) G.N. A.65 of 1948.

Public Health (Food) Ordinance, 1935 (Amendment of By-laws re Markets) G.N. A.74 of 1948.

Public Health (Sanitation) Ordinance, 1935. (Amendment of By-laws re Laundries) G.N. A.105 of 1948.

Public Health (Food) Ordinances, 1935 (Amendment of By-laws re Sale of Milk generally and Dairies & Milk Shops) G.N. A.125 of 1948.

Dangerous Drugs Ordinance, 1935 (Addition of Certain Drugs to the Schedule) G.N. A.125 of 1948.

Births & Deaths Registration, 1934 (Additions to lists of Birth Register Offices) G.N. A.143 of 1948.

Public Health (Food) Ordinance, 1935 (By-laws for Shops for the Sale of Salted or Dried Fish or Sharks Fins) G.N. A.149 of 1948.

Quarantine & Prevention of Disease Ordinance, 1936 (Declaration of "poliomyelitis" as a notifiable disease) G.N. A.199 of 1948.

Public Health (Food) Ordinance, 1935 (Amendment of By-laws re Restaurants, Eating Houses and Food Stalls) G.N. A.204 of 1948.

Public Health (Food) Ordinance, 1935 (Amendment of By-laws re Sale of Milk generally and Dairies and Milk Shops). G.N. A.213 of 1948.

New Territories Regulation Ordinance (N.T. Offensive Trade Rules) G.N. A.223 of 1948.

Births & Deaths Registration Ordinance, 1934 (Regulations re Births Registration—Special Registers) G.N. A.248 of 1948.

Adulterated Food and Drugs Ordinance, 1935 (Amendment of Regulations) G.N. A.262 of 1948.

Hawkers Ordinance, 1935 (Amendments of By-laws) G.N. A.267 of 1948.

Public Health (Food) Ordinance 1935 (Amendment of By-laws re Markets) G.N. A.280 of 1948.

Pharmacy & Poisons Ordinance, 1937 (Amendment of Regulations) G.N. A.289 of 1948.

Births & Deaths Registration Ordinance, 1934 (Amendment of Medical Certificate of the Cause of Death) G.N. A.318 of 1948.

The following legislation was enacted during the period January 1st, 1949 to March 31st, 1949.

Public Health (Animals & Birds) Ordinance, 1935 (Order re prohibition of importation of equines into the Colony) G.N. A.4 of 1949.

Public Health (Food) Ordinance 1935 (Amendment of By-laws re Markets) G.N. A.14 of 1949.

Public Health (Sanitation) Ordinance 1935 (Amendments of By-laws re Mosquito Prevention) G.N. A.19 of 1949.

Pharmacy & Poisons Ordinance 1937 (Amendment of Regulations) G.N. A.54 of 1949.

II.—PUBLIC HEALTH.

General Remarks.

17. The health of the Colony during the 15 months under review was good, whether judged by standards of nutrition or by the statistics of morbidity and mortality.

18. Living conditions remained very much the same as in 1947. It seems likely that there was a slight increase in the population, but this was not sufficient to affect appreciably the standards of living or the degree of overcrowding.

19. Once again there was no smallpox or cholera epidemic, no case of cholera being reported at all and only a few isolated cases of smallpox which did not give rise to secondary cases.

20. A combined medico-social survey was carried out during the summer months under the chairmanship of Professor Robertson, Professor of Economics at the University. A block of 40 flats containing about 1,800 people was chosen for investigation. At the time of writing this report results are being analysed by the Government Statistician and it is hoped the report will be available during the coming months.

III.—VITAL STATISTICS.

A. Population.

21. As was the case in 1947 there is a considerable discrepancy between the estimated population and that obtained by extrapolation methods. The table 1 set out below gives the population figures from 1920 until 1948 (Excluding the period of occupation by the Japanese).

TABLE 1

Year	(1) Estimated Population	(2) Estimated Population
1920	648.150	547.350
1921	625.116	585.880
1922	638.300	578.200
1923	667.900	597.300
1924	695.500	714.500
1925	725.100	786.920
1926	710.100	786.920
1927	740.300	894.400
1928	766.700	979.440
1929	802.900	1.047.260
1930	838.800	1.047.400
1931	840.473	878.947
1932	900.812	900.812
1933	922.643	922.643
1934	944.492	944.492
1935	966.341	966.341
1936	988.190	988.190
1937	1.281.982	1.006.982
1938	1.478.619	1.028.619
1939	1.750.256	1.050.256
1940	1.821.893	1.071.893
1941	1.639.357	1.039.357
1942 - 1944	Not available (Japanese Occupation)	Not available
1945 (Sept.)	Under 600.000	"
1946	1.500.000-1.600.000	1.168.815
1947	1.750.000	1.214.762
1948	1.800.000	1.126.316

(1) Official estimate published by the Department of Statistics in the Government Gazette, Supplement No. 4 of March 4th, 1949.

(2) Estimated by extrapolation methods from the previous census, or by other methods.

B. Births.

22. Table 2 shows the number of births recorded with the birth rate per mille according to the population estimates from 1934, when the present Births and Deaths Registration Ordinance was introduced, until 1948.

TABLE 2

Year	No. of Births Registered	Birth rate using estimated population (1)	Birth rate using estimated population (2)
1934	20.886	22.11	22.11
1935	25.037	25.9	25.9
1936	27.383	27.8	27.8
1937	32.303	25.19	32.1
1938	35.893	24.3	34.9
1939	46.675	26.7	44.4
1940	45.064	24.73	41.9
1941	45.000	27.44	43.29
1942	10.343	Not available (Japanese occupation)	Not available
1943	20.732	..	..
1944	13.687	..	..
1945	3.712	..	..
1946	31.098	20.1	26.6
1947	42.473	24.3	35
1948	47.475	26.4	42.2

23. In addition 1022 post registered births were recorded.

24. Legislation was introduced in December, 1947 to permit re-registration of births recorded in the registers which were destroyed or lost during the Japanese occupation. A total of 438 births were registered under this Ordinance.

C. Deaths.

25. The following table shows the deaths registered and the death rate per mille based on the estimated population.

TABLE 3

Year	No. of Deaths Registered	Death rate using estimated population (1)	Death rate using estimated population (2)
1926	12,516	17.62	15.9
1927	14,761	19.93	16.5
1928	14,735	19.21	15.06
1929	17,565	21.89	16.77
1930	16,268	19.4	15.14
1931	18,797	22.36	24.08
1932	19,829	24.74	24.74
1933	18,161	22.11	22.11
1934	19,766	20.93	20.93
1935	22,133	22.90	22.90
1936	26,356	26.60	26.60
1937	34,635	27	34.4
1938	38,818	26.25	37.7
1939	48,283	27.6	46
1940	61,010	33.48	56.9
1941	61,324	37.4	59
1942	83,435	Not available (Japanese occupation)	Not available (Japanese occupation)
1943	40,117	"	"
1944	24,936	"	"
1945	23,089	"	"
1946	16,653	10.7	14.2
1947	13,231	7.6	10.9
1948	13,434	7.5	11.9

26. The remarkable fall in the death rate in the post war years is in keeping with similar changes in many other parts of the world. Local explanations for this fall are probably the definite improvements in the nutritional standards in the " under privileged " members of the community and the extensive inoculation and vaccination campaigns which have played some part in keeping the Colony free from cholera and smallpox during 1947-48.

27. In December 1947 legislation was introduced to permit re-registration of deaths recorded in the lost registers as was done in the case of births and 11 deaths were registered under this Ordinance.

28. The Post registered deaths for 1948 amounted to 80.

29. The graph in Annexure D shows a comparison between the deaths at different ages with the age distribution found in the censuses of 1921 and 1931.

D. Infant Mortality.

30. The table below shows the number of infant deaths per thousand live births for the years 1928 to 1948.

TABLE 4

Year	Infant Mortality Rate
1928	458
1929	662.9
1930	557.5
1931	617.42
1932	525.28
1933	454.89
1934	347.34
1935	316.36
1936	372.42
1937	376
1938	343
1939	345
1940	327
1941	Not available
1942 to 1945	Not available (Japanese occupation)
1946	89.1
1947	102.3
1948	91.1

31. As in the case of the general death rate, the infant mortality rate has been considerably lower in post war years than in any previous year for which records are available.

32. The figures now published for 1946 and 1947 differ from those published in previous reports. It was found that an error had been introduced in the method of computing these figures in post war years and this has now been adjusted.

33. Table 5 shows the infant and neo-natal deaths also the neo-natal deaths per thousand live births.

TABLE 5

Age Period	1946	1947	1948
0 - 1 day	174	273	221
1 - 7 days	264	376	467
1 - 4 weeks	563	814	745
4 weeks - 3 months	771	981	900
3 - 6 months	462	750	665
6 - 9 months	367	731	775
9 - 12 months	169	421	551
Total under 1 year	2.770	4.346	4.324
Infant Mortality rate	89.1	102.3	91.1
No. of deaths under 4 weeks	1.001	1.463	1.433
Neo-natal Mortality rate	32.2	34.4	30.2

34. The numbers for still births for the years 1947 and 1948 were 1348 and 1251 giving a still birth rate per thousand total births of 30.8 and 25.7.

E. Maternal Mortality.

35. Table 6 shows the causes of death ascribed to pregnancy and child birth excluding abortions for the years 1946 to 1948.

TABLE 6

International No.	Causes of Death	1946	1947	1948
142	Ectopic gestation	1	8	16
143	Haemorrhage of pregnancy	1	6	9
144	Toxaemias of pregnancy:—			
	(a, b) Eclampsia, Albuminuria	6	12	10
	(c) Acute yellow atrophy	—	—	1
	(d) Others in 144	3	3	4
145	Other diseases and accidents of pregnancy	1	2	—
146	Haemorrhage of childbirth and puerperium	9	17	13
147	Infection during childbirth and puerperium	4	4	6
148	Puerperal toxaemias:—			
	(a, b) Eclampsia, Albuminuria	2	1	—
	(c) Acute Yellow atrophy	—	—	1
	(d) Others in 148	1	—	—
149	Other accidents of childbirth	4	15	5
150	Other conditions of childbirth and puerperium:—			
	(a) Mastitis	—	—	—
	(b) Puerperal psychosis	—	—	—
	(c) Others in 150	—	—	—
142-150	TOTAL	32	68	65

36. Table 7 shows the maternal mortality for 1946—1948 with rates per thousand live and stillbirths.

TABLE 7

Year	Live Births	Still Births	Total Live & Still Births	Pregnancy & Child-bearing (Nos. 142-150 of International List)		Abortion (Nos. 140-141 of International List)		Maternal Mortality Rate	
				Nos. of Deaths	Rate per 1,000 Births	Nos. of Deaths	Rate per 1,000 Births	Nos. of Deaths	Rate per 1,000 Births
1946	31,098	685	31,783	32	1.01	7	0.22	39	1.23
1947	42,473	1,348	43,821	68	1.55	3	0.07	71	1.62
1948	47,475	1,251	48,726	65	1.33	7	0.14	72	1.47

F. Principal Causes of Death.

37. Table 8 shows the principal causes of death during the years 1946, 1947 and 1948.

TABLE 8

Causes of death (classified by 1938 Revision of International List)	Number of Deaths		
	1946	1947	1948
Smallpox	1.306	129	2
Cerebrospinal fever	85	137	19
Beri-Beri	1.318	312	140
Diphtheria	62	52	49
Malaria	765	253	193
Tuberculosis of respiratory system	1.475	1.420	1.443
Other forms of tuberculosis	343	443	518
Syphilitic diseases	42	93	85
Influenza	243	35	25
Cancer, malignant disease	277	304	397
Intracranial lesions of vascular origin	189	264	275
Other diseases of nervous system and sense organs	132	180	95
Diseases of the heart	379	514	572
Other diseases of circulatory system	44	39	67
Bronchitis	839	529	419
Pneumonia (all forms)	4.129	3.464	3.157
Other diseases of respiratory system	197	139	125
Enteritis and diarrhoea	1.235	1.179	1.757
Other diseases of digestive system	337	361	318
Non-venereal diseases of genito-urinary system	226	341	350
Premature births, congenital malformations and diseases of early infancy	982	1.289	1.214
Other defined diseases	786	445	517
Old age, senility	142	101	113
Violence (accidents, suicide, homicide, etc.)	631	686	781
Ill-defined causes	489	522	803
TOTAL	16.653	13.231	13.434

38. Annexure E shows the number of cases of notifiable diseases with the deaths at all ages for the years 1946, 1947 and 1948, also the age groups of diseases notified for 1948 and the notifications, deaths and deaths per 100 notifications for cerebro spinal meningitis, cholera, diphtheria, enteric fever and smallpox since 1928.

(*a*) *Tuberculosis (all forms).*

39. This disease gives rise to the second largest number of deaths for any single disease for all ages but is the chief cause of death among adults. A report on the tuberculosis service is given in Annexure F.

(*b*) *Enteric Fever.*

40. There was an increase in the number of cases of enteric fever in 1948 as compared with 1946 and 1947, but the death rate per 100 notifications has steadily fallen. The cases were sporadic and widespread throughout the Colony and at no time was it possible to identify any single source of infection.

(*c*) *Smallpox.*

41. The number of cases of smallpox recorded for 1948 was the lowest since records were kept.

(*d*) *Measles.*

42. Table 9 shows the notifications and deaths according to age groups for measles during the years 1946, 1947 and 1948.

TABLE 9

AGE GROUP	1946		1947		1948	
	Notifications	Deaths	Notifications	Deaths	Notifications	Deaths
0 to 5 years	135	20	63	7	98	6
5 to 15 years	148	6	68	1	69	—
15 to 25 years	25	—	15	—	11	—
25 to 35 years	5	—	12	—	10	—
35 to 45 years	2	—	1	—	1	—
45 to 55 years	1	—	1	—	1	—
55 to 65 years	1	—	—	—	—	—
65 to 75 years	—	—	—	—	—	—
75 & over	—	—	—	—	—	—
Unknown	—	—	—	—	—	—
TOTAL	317	26	160	8	190	6
Deaths per 100 notifications	8		5		3	

(*e*) *Pneumonia (all forms).*

43. As in previous post war years pneumonia claims the greatest number of deaths taking all ages into account. There has, however, been a steady fall in the deaths recorded with the result that the deaths in 1948 from this cause were only a little over three quarters of those in 1946.

44. The majority of these deaths were among infants and were due to lack of adequate medical attention. Investigations into the cause of infant mortality made by a committee under the chairmanship of Dr. Lee Hah Liong showed that in only two and a half per cent of infant deaths recorded had the child been seen by a doctor for longer than twenty four hours before death (See annexure G).

(f) Cancer.

45. Table 10 shows the deaths and death rate for cancer as a whole for the years 1946, 1947 and 1948 and table 11 shows the number of deaths and the death rate per total cancer deaths according to site and sex for the same period.

TABLE 10

Year	Estimated Population (1)	Estimated Population (2)	Number of Deaths			Death rate per million using estimated population (1)			Death rate per million using estimated population (2)		
			M.	F.	T.	M.	F.	T.	M.	F.	T.
1946	1,500,000 -1,600,000	1,168,815	114	163	277	73.5	105.2	178.7	97.5	139.5	237
1947	1,750,000	1,214,762	126	178	304	72	101.7	173.7	103.7	146.5	250.2
1948	1,800,000	1,126,316	169	228	397	93.9	126.7	220.6	150	202.4	352.4

TABLE 11

International No.	Sites	No. of Deaths Registered						Per 1,000 Total Cancer Deaths					
		1946		1947		1948		1946		1947		1948	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
45	Buccal cavity and Pharynx	20	13	23	15	36	29	175	80	182	84	213	126
46	Digestive organs and peritoneum	73	54	79	51	101	71	640	331	627	286	597	315
47	Respiratory system	5	6	5	7	9	3	44	37	40	40	53	13
48	Uterus	—	54	—	63	—	85	—	331	—	354	—	372
49	Other female genital organs	—	4	—	7	—	5	—	25	—	39	—	22
50	Breast	—	21	—	21	—	23	—	129	—	118	—	100
51	Male genital organs	3	—	5	—	3	—	26	—	40	—	18	—
52	Urinary organs	1	1	3	1	2	1	9	6	24	6	12	4
53	Skin (Scrotum excepted)	1	—	2	3	2	2	9	—	16	17	12	9
54	Brain and other parts of the nervous system	1	2	3	2	2	2	9	12	24	11	12	9
55	Other and unspecified organs ...	10	8	6	8	14	7	88	49	47	45	83	30
	ALL SITES	114	163	126	178	169	228	1,000	1,000	1,000	1,000	1,000	1,000

(*g*) *Enteritis and Diarrhoea.*

46. There has been a considerable increase in the number of cases recorded in 1948 as compared with 1946 and 1947. As in the case of pneumonia, the majority of these deaths occurred in infants. The relatively high figure of 1214 deaths included in Table 8 under the heading premature births, congenital malformation and diseases of early infancy is due to the high number of deaths recorded in the first of these categories in some of the foundling homes. (See Annexure G).

IV.—HYGIENE & SANITATION.

(i) General Measures.

(*a*) *Organisation.*

47. The urban health work is carried out under the following Ordinances:—

1. Public Health (Sanitation) Ordinance.
2. Public Health (Food) Ordinance.
3. Adulterated Food & Drugs Ordinance.
4. Quarantine & Prevention of Disease Ordinance.
5. Public Health (Animals & Birds) Ordinance.
6. Hawkers Ordinance.

48. To deal with this work Hong Kong, Kowloon and New Kowloon are divided into 5 Health Districts, three in Hong Kong and two in Kowloon, each with a Health Officer and a Senior Health Inspector. Each district is then sub-divided into sections under the care of a Health Inspector. There are 43 sections in all—25 in Hong Kong and 18 in Kowloon and New Kowloon.

49. In addition to district duties, other health inspectors are employed on conservancy, refuse collection and disposal, control of hawkers, markets and slaughter houses, meat and food inspection and sampling and cemeteries.

50. Rodent Control is under a specially appointed officer.

(*b*) *Sanitation.*

51. The sanitation of the urban area is under the control of the Urban Council with a Chief Health Inspector in charge.

52. There are two systems of night soil removal in operation:—by water carriage sewerage and by bucket conservancy. Bucket conservancy is forced on the Colony by old types of houses, water scarcity and flush restricted areas. 10% of the 155 tons of human waste collected daily were transported to maturing tanks at Castle Peak. Experiments are being carried out to find out how far maturation helps in rendering this material safe for use as a fertiliser.

(*c*) *Housing.*

53. The shortage of houses continued with the resulting gross over-crowding. Newcomers of the poorer classes flocking to the Colony have found accommodation in huts and hovels on every available hillside and on the remaining sites of bombed and ruined buildings and have even established huge colonies on the roofs of tenement houses in the centre of the city. Surveys of this squatter population show that in June of 1948 the approximate number was 30,000. It is estimated that this number was doubled by the end of the year.

54. These squatter communities are herded closely together with a complete absence of any form of sanitation or water supply and thus form a continuous threat to public health. The type of hut or hovel, generally made of wood with bamboo matting or oiled paper, creates an ever present fire risk and in fact caused five fires during the year which resulted in the destruction of several hundreds of squatters homes and in one case the fire spread to adjacent domestic buildings.

55. In August a committee was formed and special legislation was introduced to deal with this problem, since then progress has been made in effecting a clearance in the central area.

(*d*) *Water supply.*

56. The main water supply in the urban area is piped and of excellent quality. Many wells exist on the mainland and these are a source of anxiety, particularly during periods of epidemic intestinal disease. The supply of potable water was good during the dry season and few restrictions were imposed. During 1948 consumption was 11,098 million gallons, just under 20 gallons per head per day, 2,437 samples from the public supply were examined bacteriologically and 689 chemical (or physical) examinations were made.

(*e*) *Rural Health.*

57. The title refers to Public Health in the New Territories including the remote islands. A Medical Officer of Health is resident there, with 6 Health Inspectors.

58. New legislation, revising the health rules, is slowly being introduced. The new drafts contain much on subjects not previously dealt with; such as slaughter houses, control of markets and conservancy.

59. A set of rules on Offensive Trades became law in September.

60. The work of the Health Staff has been directed chiefly to improvement of hygiene in licensed premises such as restaurants, eating houses, food preparing establishments and food factories and to the control of markets and hawkers and to schemes for village planning and better housing. Marked improvements have taken place in Shek Wu Hui and Shatin. The condition of markets is improving rapidly.

61. There are nine Government Dispensaries giving free medical treatment to the villagers at Tai Po, Fanling, Sha Tau Kok, Un Long, San Hui, Sai Kung, Cheung Chau, Sham Tseng and Tai O. These Dispensaries have also a few beds for maternity cases. Midwives attend maternity cases in the villages as well. The medical needs of smaller villages which can be reached by road are provided by two travelling dispensaries. A launch carrying medical supplies makes frequent trips to the more remote islands. In January 1949 the Sham Tseng Dispensary reverted to private control.

62. In May a successful Health Week was held. Steady education of the people is being maintained in health matters. The cinema van visited three times and helped particularly in the vaccination campaign. This van proved very popular.

63. There is every reason to believe that the preventive aspect of health work is developing and that the people welcome the teaching. The purely curative aspect of Dispensaries is necessary and serves as a means of establishing friendly contact with the people and of getting in touch with the progressive elements in the population who appreciate the results. The combination works well and preventive measures are well received and supported by village elders.

(ii) **Anti-epidemic.**

64. This branch of the work is controlled from a central office and is carried out by all Health Officers, Dispensaries, Hospitals, School Medical Officers and the Port Health Office. In addition there is a mobile unit attached to the central office. The main work is devoted to the control of smallpox and cholera epidemics and attention was concentrated in the first place on the squatters, who were considered the most likely focus of disease.

Table 12 shows the number of vaccinations and inoculations done each month.

TABLE 12

Month 1948	Anti-Smallpox Vaccinations	Anti-Cholera inoculations	Anti-Diphtheria inoculations	Anti-Typhoid inoculations	Anti-Plague inoculations	No. of persons treated with anti-rabies inoculations	Anti-Typhus inoculations	Anti-Tetanus inoculations
January	95.276	5.692	4.204	737	285	75	644	199
February	89.363	3.542	3.596	463	135	108	710	218
March	134.423	9.652	6.408	1.139	208	82	1.437	305
April	46.773	54.318	738	914	179	194	1.612	686
May	18.097	86.138	5	942	376	219	1.485	708
June	15.623	88.549	499	1.178	205	212	1.542	567
July	14.424	49.910	25	868	182	223	770	663
August	14.074	35.599	—	667	112	203	633	598
September	14.776	26.052	1.530	1.219	9	160	429	575
October	149.930	7.162	2.670	940	6	187	785	218
November	169.437	6.043	1.586	876	1	171	559	490
December	127.146	6.667	2.442	891	3	240	560	634
Total	889.342	379.324	23.703	10.834	1.701	2.074	11.196	5.861

65. Rodent control is under the administration of a Rodent Control officer and forms an integral part of the anti-epidemic work. The systematic destruction and control of rats was carried out on the general principles laid down in the "Control of Infestation" of H.M.S.O. of 1946, and adapted to the circumstances and conditions in the Colony. Block control was aimed at by using prebaiting followed by poison and post baiting to detect the presence of survivors. Minor infestations are dealt with by trapping. Rats caught by trapping are chloroformed and examined for fleas which are counted and classified for information on the prevailing flea index. All rats collected are examined microscopically, and a microscopic examination is made for signs of plague.

66. *R. Norvegicus* is the more common type of rat found in the tenement houses. *R. Rattus* is more common in ships but is also found in tenement houses. The final disposal of all rats is by burial.

67. In addition to these more specific measures, the Health Inspectorate conduct routine activities such as the prevention of sale of cut fruit, shell fish and ice cream products made by unlicensed factories. All food factories, restaurants, eating houses are inspected regularly and there is frequent sampling of milk and ice cream.

(iii) Health Propaganda.

68. This important branch of the Health Services is being developed steadily. In order to stimulate interest among the population and to obtain their co-operation a Health Week was again held in May. It was on similar lines to that of 1947. Six subjects were chosen as follows: Maternity and Infant Welfare, Flies, Mosquitoes and Malaria, Spitting and Tuberculosis, War against rats, and a review of the services provided for prevention of disease and the part every citizen can play. Posters were prepared and posted in prominent places, a school competition was organised and the public address systems and the cinema van was in constant action. Wireless talks were given to link up with the subjects treated on that particular day by the posters, newspaper articles and talks. The publicity was given in both Chinese and English. This week was a success but it was felt that in future years the tendency should be rather to concentrate on steady work all the year round and to retain the Health Week as an infrequent spurt. With this in mind, five films have been made by local talent and these have been shown steadily by the cinema van. Other films are in course of preparation. Use has been made of the van in stimulating vaccination by showing pictures and thus giving the publicity and providing the vaccination service on the spot.

69. The cinema van consists of an adaption of an army vehicle fitted with a generator and projector and so arranged as to throw the pictures on the reverse side of a screen fitted at the

back of the vehicle, and so shaded as to allow an audience to see the pictures during daylight. In addition an amplifier is fitted with a microphone for direct speech, or a wire recorder can be fitted so that any special propaganda may be repeated again and again from the same recording. This provides much needed relief for the broadcaster.

70. In a more routine manner vaccination and inoculation are stimulated by the notices in the local press showing where these immunisations may be done free. Vaccination and inoculation have now become a condition of licence in eating houses and factories.

71. Spitting in the streets was less noticeable except for a period when the many newcomers from China were unaware of Hong Kong laws. A short notice warning the public of the dangers is shown at every performance in the cinemas. This has had an excellent effect.

72. On one day in every week a special patrol is on the look-out for spitting offenders. These are arrested at once and fines up to $25 have been imposed.

(iv) Port Health Work.

73. The activities of the Port Health Office cover work at the sea-port, the railway terminus and the air-port.

74. The staff of the Port Health Office consists of a Port Health Officer, a Second Port Health Officer, seven Assistant Port Health Officers, three registered midwives and eight public vaccinators. Additional staff of twenty-two temporary public vaccinators was needed during periods of high pressure of work.

75. The Port Health Office was transferred from King's Building to the Marine Department building in May. This juxtaposition with the Marine Department has resulted in much closer and more efficient co-operation.

76. On the 1st July, the second quarantine anchorage at Kowloon Bay was opened for ships entering the harbour from the eastern entrance. The original anchorage at Stonecutters for ships coming in at the western entrance was continued as well.

77. Further progress was made in the scheme to establish a quarantine station at Junk Bay in the old Rennie's mills site, tentative plans have been drawn up and have been considered by the Port Executive Committee.

78. During the year 4,326 vessels with 195,038 passengers and 212,354 crew were examined at the quarantine anchorages. Three ships had infectious disease on board, the motor vessel Ruys and the S.S. General Meigs each with three cases of smallpox and the motor vessel Purea with one case of smallpox.

79. Owing to an outbreak of smallpox in Canton inspection of passengers arriving by train was carried out from 5th January, 1948 to 10th March, 1948. 168,752 passengers were examined and 85,565 were vaccinated at the station, nine cases of leprosy were discovered in the course of inspection.

80. 56,926 emigrants and 16,512 crew from 133 emigrant ships were examined. There were 42 rejects.

81. 2,468 Bills of Health were issued, 2,436 to Merchant ships, 30 to H.M. ships and 2 to U.S. warships. The anticipated reduction in the demand for bills of health did not take place, there being 221 more issued this year than last year.

82. 63 ships from plague infected ports were examined, cargoes being inspected and the degree of rat infestation being investigated and dealt with where necessary.

83. Three vaccination and inoculation centres at the Fire Brigade Building, Harbour Office, and the Tsim Sha Tsui Health Centre were maintained during the year.

84. 3,064 river vessels were inspected and 1,248 ferry launches. 337 water boats were examined and 356 samples of water taken. All wharves along the Hong Kong water front are inspected daily.

85. 2,577 aircraft from infected ports were inspected, with 37,562 passengers and 9,927 crew. Of these 2,149 aircraft were from plague infected ports and carried 37,531 passengers and 9,898 crew. The hand baggage of all passengers was treated with A.L.63. 35 radio pratiques were issued by the Port Health Officer. 124 ships were fumigated with a total tonnage of 204,051 and 1,720 rats were recovered. Sulphur fumigation was used in the early part of the year but after 10th July, 1948 cyanide fumigation was also used.

86. On 1st September, 1948 the International type of certificate for vaccination and inoculation was adopted, previously a modification of this had been used.

87. After 1st June, 1948 arrangements were made for the Port Health Officer to authenticate signatures of private practitioners in Hong Kong. A total of 2,830 certificates were authenticated. On 17th February, 1948 Dr. P. M. Kaul, Director of the Singapore Office of the World Health Organisation and Dr. L. Nicholls, former acting Director of the same office visited Hong Kong and were shown the work of the Port Health Office.

(v) School Hygiene.

88. The staff of the School Hygiene Branch consists of one medical officer in charge; four assistant medical officers, one nursing sister, four nurses, two health inspectors and clerical staff. In addition to this full time staff there is a part time staff consisting of two Ophthalmic surgeons and an Ear Nose and Throat surgeon.

89. The main duties of this staff are to advise the Education Department in matters relating to the health of school children and the health requirements in schools and to undertake the medical inspection of individual pupils who come under the Schools Medical Service Scheme.

90. Of a total in December, 1948 of 797 schools in the Colony with 117,435 pupils the following categories of schools came under the Schools Medical Service.

(*a*) 5 Government schools with a total of 787 pupils, mostly Europeans.

(*b*) 21 Grant in Aid schools numbering 6,096 pupils and mostly Chinese.

(*c*) 52 Subsidized schools numbering 9,224 pupils mostly Chinese.

(*d*) 2 Private vernacular schools with 218 pupils.

making a total of 80 schools and 16,325 pupils.

91. The number of medical inspections undertaken in these schools with the results are shown in Annexure H.

92. Owing to the shortage of accommodation a two session system is adopted in many school premises.

93. With a few exceptions, Government and Grant in Aid Schools are conducted in buildings specially planned for school purposes and the premises are generally satisfactory. The vast majority of subsidized and private schools, however, are conducted in tenement flats or in buildings that were never intended to be used as schools. While regulations to safe-guard hygiene have been laid down in the Education Ordinance and which must be complied with before registration is granted, this type of school suffers from lack of proper facilities for physical exercise and is generally situated in a thickly congested urban area.

94. All proposed school buildings and all existing school premises in the urban area were inspected regularly. During the year 2,092 school inspections were carried out as follows:—

New applications for day schools	80
,, ,, ,, night schools	129
Applications for extension	54
Proposed Government school	1
Routine inspection	1,826
Unregistered schools	2

95. Of the premises inspected five were refused permits as being unsuitable. Defects found in existing schools are shown in Annexure H.

96. Prophylactic immunisations against diphtheria and vaccination against smallpox was carried on throughout the year in all schools in the Colony. 9925 pupils received the first and second doses of alumn-precipitated toxoid and a further 3012 received the first dose only. 90,932 staff and pupils were inoculated against cholera and 39,842 were vaccinated against smallpox.

97. The pupils and staff received their inoculation either in the schools themselves or in the health centres in the vicinity.

98. In the schools coming under the School Medical Service the following categories of pupils were examined:—

(*a*) all new entrants.

(*b*) Routine examination of all pupils falling under the age groups—5, 10, 12, 15 and 18 years.

(*c*) All children placed under observation as a result of routine examinations, and those referred to doctors for special examination.

(*d*) All children for an annual check up of vision and teeth.

99. Pupils found to be suffering from defects requiring treatment are instructed to attend one of the school clinics and a report on the child's condition is forwarded to the principal of the school concerned with the request that it should be forwarded to the guardian of the pupil.

100. General school clinics are held in three centres:—the Harcourt Health Centre, the Ellis Kadoorie school building, and the Kowloon Hospital out-patient department. Special eye clinics, dental clinics and ear, nose and throat clinics were held in the Harcourt Health Centre and Kowloon Hospital out-patient department.

101. Pupils requiring surgical attention could go to the Kowloon and Queen Mary Hospitals and all cases of suspected pulmonary tuberculosis were referred to the Tuberculosis Clinic at the Harcourt Health Centre.

102. Attendances at these Clinics were as follows:—

TABLE 13

	General School Clinic	Eye Clinics	Dental Clinics	E.N.T. Clinics
New	5.530	886	4.411	249
Revisits	6.255	595	1.315	62
Total	11.785	1.481	5.726	311

103. The optical workshop supplied 804 pairs of spectacles to pupils during the year.

104. 120 visits were made by school nurses to the homes of school children who were in serious need of medical attention, but whose attendance at the clinics had been unsatisfactory.

(vi) Nutrition.

105. Until the end of February, 1948 the rationed quantity of rice remained at 5.6 taels a day or 3½ catties for a period of

10 days at a cost of 48 cents a catty. The flour ration was 1.6 taels a day or one catty for 10 days at the cost of 44 cents a catty. On March 1st the price of rice was increased to 54 cents a catty and flour at 56 cents, but the rationed quantities remained the same. Flour ration remained in this position until September 15th when it was de-rationed. On August 1st the rice ration was increased to 7.2 taels a day or 4½ catties for 10 days, the price remaining at 54 cents a catty. This was the position at the end of the year.

106. As in 1947 the general standard of nutrition was good with little evidence of gross under-nourishment or malnutrition. The two factors which appear to have contributed most to this improved nutrition standard is the considerable post war increase in wages in the labour and artisan classes and the limited ration of rice available which has resulted in a greater variety in the diet.

107. Deaths from nutritional diseases recorded during the year were 1 death from Barlows disease (infantile scurvy) and 140 from Beri-Beri. This latter figure compares with 312 in 1947 and 7229 in 1940, the last year before hostilities when these figures were available.

108. Hopes for the appointment of a nutrition officer were doomed to disappointment and at the end of the period under review there was still no officer in the department whose duties were primarily concerned with nutrition.

(vii) Social Hygiene.

109. The Health Officer Social Hygiene has a staff of 5 doctors to assist him, 1 technical assistant, 8 dressers and 17 nurses. There are five Government clinics:—Queen's Road West, (male and female), Wanchai (female), and the Harcourt Health Centre (male) on the Island, and in Kowloon one at Ashley Road (male) and one at Tsim Sha Tsui Health Centre (female). In addition to these centres, there is a small hospital at the Wanchai Social Hygiene centre which has 16 beds for women and four cots. There are also six male beds and two female beds in the Queen Mary Hospital. Attendances at these clinics are shown in Table 14.

TABLE 14

Clinic	Male		Female		Total	
	New	Old	New	Old	New	Old
Queen's Rd. W.	1,979	25,950	1,187	23,317	3,166	49,267
Wanchai	2,824	26,411	2,211	23,911	5,035	50,322
Tsim Sha Tsui	3,139	25,388	2,877	30,791	6,016	56,179
Total	7,942	77,749	6,275	78,019	14,217	155,768

110. The number of new cases and the total attendances at the out-patient clinics is shown monthly below:—

TABLE 15

Monthly.	*New Cases.*	*Total Attendances.*
January	976	10,793
February	812	7,716
March	1,256	11,832
April	1,475	13,534
May	1,360	14,023
June	1,520	16,132
July	1,278	15,587
August	1,247	14,609
September	1,102	13,651
October	1,167	13,740
November	972	12,070
December	1,052	12,081
	14,217	155,768

111. A total of 149 cases of congenital Syphilis were treated during the year.

112. Home visiting is carried out by the nurses at the various clinics where attendance for treatment is irregular and attempts are made to persuade the patients to attend more regularly.

113. Proclamation No. 28 of the 21st March, 1946 giving powers for compulsory treatment of certain classes of cases lapsed at the end of 1947, but notifications of sources of infection are still being made and health visitors who subsequently get in touch with such girls have proved successful in persuading them to attend for treatment without the aid of legal powers of compulsion.

114. Tables 16 to 18 show the average number of attendances at the different clinics for cases of syphilis for the years 1946, 1947 and 1948. The low average of attendances at the Ashley Road Clinic is due to the high proportion of transients, such as seamen, who attend there.

TABLE 16

1946	Clinic	Cases of Syphilis	Attendances	Average Number
Male	Ashley Road	728	5.671	7.79
,,	Queen's Road West	897	7.002	7.8
,,	Wanchai	821	8.584	10.45
Female	Tsim Sha Tsui ...	1.205	10.899	9.04
,,	Queen's Road West	731	5.874	8
,,	Wanchai	791	8.203	10.37
	Total	5.173	46.233	8.94

TABLE 17

1947	Clinic	Cases of Syphilis	Attendances	Average Number
Male	Ashley Road	1,129	8,164	7.23
,,	Queen's Road West	686	7,472	10.9
,,	Wanchai	803	9,943	12.38
Female	Tsim Sha Tsui ...	883	9,160	10.37
,,	Queen's Road West	435	5,572	12.8
,,	Wanchai	777	7,941	10.22
	Total	4,713	48,252	10.24

TABLE 18

1948	Clinic	Cases of Syphilis	Attendances	Average Number
Male	Ashley Road	1,025	7,314	7.135
,,	Queen's Road West	754	9,843	13.06
,,	Wanchai	993	9,926	10.00
Female	Tsim Sha Tsui ...	832	8,996	10.81
,,	Queen's Road West	475	8,391	17.66
,,	Wanchai	812	8,724	10.74
	Total	4,891	53,194	10.87

V.—MATERNITY AND CHILD WELFARE.

(*a*) *Centres.*

115. There are three Maternity and Child Welfare Centres, one at Tsim Tsa Tsui in Kowloon and one each at the Harcourt and Western Centres on the Island. Besides ante-natal and neo-natal clinics there are clinics for the care of babies up to 2 years of age. Test feeding and supplementary feeding where necessary is carried out and an extra meal of congee, meat and vegetables is given to mothers who need it. Home visits are paid by the Health Nurses. Considerable attention has been concentrated on the instruction of mothers and classes of instruction and the showing of films, lantern slides and other methods of demonstration were employed on the principle of instructing certain selected more intelligent mothers with the idea that they would in turn talk to and instruct their friends. Table 19 shows the attendances at the Infant Welfare Centres:—

TABLE 19

	New	Revisits	Total
Harcourt Centre	2,534	31,913	34,447
Kowloon Centre	2,897	33,654	36,551
Western Centre	2,407	41,196	43,603
Total	7,838	106,763	114,601

5,781 mothers and children were given diet supplements of congee or milk at the feeding centres.

116. 3,476 domiciliary visits were paid by the nurses. Of a total of 114,601 babies attending the centres, 38,733 were classified as healthy. This tendency for large numbers of infants to be brought because of actual illness is being discouraged and in January 1949, sick children clinics were opened in the public dispensaries and out-patient clinics and sick children attending the Infant Welfare clinics have since then been referred to these special sick children clinics. This has resulted in considerable increase in the time available for the educational and preventative aspects of the work at the Infant Welfare Clinics. The number of ante-natal attendances at the 3 centres is shown in table 20 below:—

TABLE 20

	New	Revisits	Total
Harcourt Centre	330	529	859
Kowloon Centre	387	702	1,089
Western Centre	177	435	612
Grand Total	894	1,666	2,560

(*b*) *Maternity Hospitals and Homes.*

117. There are two maternity hospitals, Tsan Yuk Hospital with 62 beds and the Eastern Maternity Hospital with 28 beds. In addition maternity cases are admitted to the Queen Mary Hospital, Kowloon Hospital and Cheung Chau Hospital, making a total of 180 beds available for maternity cases.

118. Besides these hospitals there are 15 centres in the urban and rural areas where maternity service is provided free. In 9 of these there are from three to six beds for in-patients and in all centres there is a domiciliary service.

119. A total of 3336 cases were treated by these centres.

(*c*) *Maternity Homes.*

120. There were 99 maternity homes registered during the year. Table 21 shows details and size and situation. These homes were regularly inspected by the Supervisor of Midwives.

TABLE 21

Number of beds in each Home	2	3	4	5	6	7	Total
Number of Homes in Hong Kong	10	17	19	3	—	—	49
„ „ „ „ Kowloon ...	16	19	8	3	2	2	50
Grand Total	26	36	27	6	2	2	99
Number of beds	52	108	108	30	12	14	324

121. There were 740 midwives registered, but of these only 173 were in active practice. 78 new registrations were made during the year and this figure included 59 new graduates and 19 re-registrations.

122. Table 22 shows the births attended by Doctors and Midwives for the years 1946, 1947 and 1948.

TABLE 22

	1946	1947	1948
Queen Mary Hospital	117	398	719
Kowloon Hospital	979	1.261	1.189
Tsan Yuk Hospital	2.645	3.826	4.458
Eastern Maternity Home	868	1.633	1.831
Private Hospitals	4.058	9.066	12.161
Govt. Dispensaries (Attended by Midwives)	640	1.260	1.582
Private Maternity Homes	9.586	13.150	14.324
Total births delivered in hospitals and maternity homes	18.893	30.594	36.264
Domiciliary cases delivered by Midwives	5.628	9.237	10.120
Total No. of births attended	24.521	39.831	46.384
Total No. of births	31.098	42.473	47.475
Percentage of births attended ...	78.9%	93.8%	97.7%

VI.—HOSPITALS & DISPENSARIES.

123. Annexure I gives a summary of the cases treated in the Government and Government assisted hospitals, clinics and dispensaries.

124. Annexure J shows cases treated at Government and Government assisted hospitals and the total deaths in the Colony for 1947 and 1948 by diseases.

(*a*) *Queen Mary Hospital.*

125. This is the largest hospital in the Colony containing 550 beds. The Royal Navy which occupied part of the upper two floors moved to their own hospital on 14th January, thus releasing the whole hospital for civilians for the first time since the re-occupation of the Colony. The Hong Kong University reorganized its clinical units with the appointment of a Professor of Surgery in August and a Professor of Medicine in October. Apart from the University work the main mass of patients admitted at the Hospital were emergencies of all kinds, accidents, police cases and Government servants.

126. There is no general out-patient department at this hospital which is situated four miles out from the centre of the town but a large out-patient clinic held at Sai Ying Pun is directly linked with it and special clinics are held there by the staff of the Queen Mary Hospital.

127. All admissions to the hospital are screened by the Almoners Department as to their ability to pay fees and where necessary their home conditions are investigated and additional food or other assistance provided.

128. Private consultations with members of the staff for both Government servants and the general public are arranged through the Almoners Department.

129. During the year 7,099 in-patients were treated of which 760 were maternity cases. There was a total of 446 deaths. 4,258 operations were performed.

130. Physical examination of Government servants for employment to the permanent establishment number 2,271 for new appointments and 154 for confirmation to the permanent establishment.

(*b*) *Kowloon Hospital.*

131. This hospital consists of 182 beds and is the emergency hospital for the mainland and, with the exception of the University cases, deals with similar cases to those at the Queen Mary Hospital. During the year a special block was built containing 15 beds for patients in police custody. The whole hospital was rehabilitated for the first time since the reoccupation and the last traces of the war years have been removed.

132. Owing to the rapid growth of the Colony, the hospital is now quite inadequate for the needs of the mainland and in the latter part of the period under review, plans were made for placing 80 beds at Lai Chi Kok Hospital at the disposal of the staff of the Kowloon Hospital. During 1948 5,025 in-patients were treated including 1,352 maternity cases with 208 deaths two of which were maternity cases. 1,761 operations were performed.

133. There is a large out-patient department attached to the hospital where a total of 68,522 cases attended.

(*c*) *Mental Hospital.*

134. This hospital has accommodation for 123 patients. The average number of in-patients was 95. Out of 482 patients treated, 201 were discharged, 140 were transferred to Canton and 23 died. By agreement with the Canton authorities cases were transferred to the Canton Municipal Mental Hospital where those who have had more than 3 months residence in Hong Kong are supported by the Hong Kong Government.

135. The building is old and in unsuitable surroundings but has been rehabilitated throughout and with the appointment of a psychiatrist in October, to take charge of it, considerable advance has been made in the treatment available for the patients.

(*d*) *Sai Ying Pun Hospital.*

136. This hospital continued to be used as the infectious diseases hospital on the Island with accommodation for 100 beds capable of being increased to 150. A total of 557 cases were treated during the year and of these 88 died.

137. In the same compound though not associated with the infectious diseases hospital is the Sai Ying Pun Out-patient department. A total of 80,754 new cases were treated in the department with a total of 157,105 attendances.

(*e*) *Lai Chi Kok Hospital.*

138. This hospital consists of two sections. The lower section with 290 beds is used as an infectious diseases hospital and for tuberculosis cases, the upper block containing 180 beds is used partly for convalescent cases from Kowloon and Queen Mary Hospitals and partly as an annex to the Kowloon Hospital. This arrangement of beds became possible in the latter part of the period under review as a result of extensive repairs to the building. During the year a total of 1,324 cases were treated in the hospital made up as follows:—

260 infectious disease cases.
339 Tuberculosis cases.
725 General cases.

(*f*) *North Point Convalescent Home.*

139. Consists of a number of wooden huts with accommodation for about 200 beds for convalescent cases from Queen Mary Hospital and Kowloon Hospital.

140. Owing to the poor structural condition of these huts, it was decided to close the hospital in May and patients were transferred to Lai Chi Kok Hospital. A total of 272 cases were treated during the period it remained open.

(*g*) *Felix Villas. Tuberculosis Sanatorium.*

141. This Sanatorium consisted of a block of 9 converted houses. It was well situated and had accommodation for 33 patients, but was not very suitable as a sanatorium. At the end of March 1948 the sanatorium was closed and the patients transferred to Lai Chi Kok Hospital. A total of 77 patients were treated during the period it was open.

(*h*) *St. John Hospital—Cheung Chau.*

142. Government continued to maintain this hospital which was built by, and before the war was run by, St. John Ambulance Association. It has accommodation for 76 patients including 31 beds for tuberculosis cases and 12 maternity cases. A total of 1049 patients were treated in this hospital of which 663 were general cases, 69 were cases of tuberculosis and 317 were maternity cases.

143. Attendances at the out-patients were 5,129 new cases with a total attendance of 9,869.

144. The tuberculosis cases admitted to this hospital were convalescent cases needing a period of additional rest before completing their hospital treatment.

(*i*) *Hong Kong Prison Hospital.*

145. This hospital which is part of Stanley prison consists of three wards, each containing 16 beds and 6 isolation cells. There were 818 admissions to the hospital and the daily average prisoners in hospital was 46. 13,068 prisoners reported sick during the year. The total number of prisoners admitted to the prison during the year was 13,446. There were 8 deaths of which 7 were due to pulmonary tuberculosis.

(*j*) *Tsan Yuk Hospital.*

146. This hospital containing 62 beds is the largest maternity hospital in the Colony. It has been constantly overcrowded during the year dealing with some 400 cases per month. Annexure K gives a summary of the cases dealt with during the year.

(*k*) *Government Assisted Hospitals.*

147. There are five of these hospitals which receive considerable grants from Government. Three of them known as the Chinese Hospitals comprise the Tung Wah Hospital with 467 beds, the Kwong Wah Hospital with 340 beds and the Tung Wah Eastern Hospital with 230 beds. The other two assisted hospitals are Nethersole & Affiliated Hospital under the aegis of the London Mission Society with 131 beds and the Hong Kong Anti-tuberculosis Association's Ruttonjee Sanatorium with 115 beds which was opened on the 24th February, 1949.

The Chinese Hospitals.

148. These hospitals are under the control of a medical committee consisting of members representing the Tung Wah Board of Advisers, the Tung Wah Board of Directors with the three Medical superintendents under the Chairmanship of the Director of Medical Services.

149. They provide hospital treatment primarily for the sick and poor, but have a few private wards.

The Nethersole Hospital.

150. The Nethersole Hospital caters in the main for patients who can pay a very small amount towards their treatment.

The Ruttonjee Sanatorium

151. The Ruttonjee Sanatorium staffed by the St. Columban Mission of Eire among whom are registered doctors, nurses and pharmacists, caters for tuberculosis cases only and all treatment is free. In general, early open cases are admitted and there is a close liaison between the Sanatorium doctors and the Government tuberculosis clinic at the Harcourt centre which makes selection of this type of case possible. As this hospital was not open during the calendar year 1948, it will be excluded from all statistical reports.

Violet Peel Polyclinic.

152. The building which houses this clinic was a health centre before the war, but was badly damaged and looted during hostilities. Reconstruction and rehabilitation was completed in October, 1948 but in the meantime the Harcourt Health Centre, situated in the same neighbourhood, had made its reopening as a health centre superfluous. It was therefore decided to use it partly as a polyclinic and partly as an ophthalmic hospital. The Polyclinic, the only large clinic of its kind in this area, was opened on the 1st November. Owing to staff difficulties it was necessary to postpone opening of the ophthalmic hospital. Weekly attendances at this Clinic grew from 725 for the first week to double this number by the end of the year.

Chinese Public Dispensaries.

153. There are 9 public dispensaries distributed throughout the urban area of the Mainland and Island. They provide primarily an out-patient service and a maternity service, including in some cases a few maternity beds, but in all cases a domiciliary service. In addition during the peak periods of anti-epidemic work the dispensaries form centres for propaganda and for vaccination and inoculation campaigns.

154. In January 1949 special clinics for sick children were opened each morning in these dispensaries, and the result has been a very rapid rise in children's attendances from approximately 3,000 in January to 13,000 in March. Table 23 set out below summarises the work done at these dispensaries.

TABLE 23

Public Dispensaries	Out-Patients		Deliveries		Vaccinations	Inoculations
	New cases	Attendances	In-patients	Domiciliary		
Central	24.209	43.433	—	—	8.837	1.069
Eastern	30.882	45.813	1.831	—	24.866	2.762
Western	15.982	24.099	—	—	8.810	687
Aberdeen	14.055	20.739	—	330	2.714	208
Hunghom	15.006	21.993	—	—	3.657	64
Shaukiwan	31.730	50.346	—	349	5.442	728
Yaumati	43.366	72.463	—	77	11.365	1.069
Shamshuipo	37.051	72.958	—	278	30.771	1.370
Stanley	6.403	12.236	97	19	840	449
Total	218.684	364.080	1.928	1.053	97.302	8.406

New Territories Medical Centres & Maternity Homes.

155. There are 10 fixed medical centres operating in the New Territories together with two mobile units. The work of these fixed and mobile dispensaries is co-ordinated by an officer combining the functions of a medical officer and medical officer of health. The following table gives a summary of the work done by these units.

TABLE 24

Dispensaries	Out-Patients		Deliveries	
	New Cases	Attendances	In-Patients	Domiciliary
Tai Po	12,179	24,740	424	16
Ho Tung	1,605	3,631	60	91
Shataukok	1,473	6,809	69	40
Un Long	12,746	27,639	407	98
Ruttonjee	1,539	2,741	28	11
San Hui	2,108	4,634	—	137
Sai Kung	3,352	5,744	65	52
Tai O	5,912	14,776	134	37
Mobile (East)	3,848	7,687	—	—
Mobile (West)	1,969	3,361	—	—
Silver Mine Bay	290	560	—	—
Ping Shan (South) ...	1,632	3,560	—	—
Total	48,653	105,882	1,187	482

156. In October 1948 it was decided to reorganize the Ho Tung Dispensary to enable a small number of general in-patients to be admitted, primarily for members of the Police Force who would otherwise be "sick in quarters".

157. The Ruttonjee Dispensary which was originally presented to the Government by Mr. J. H. Ruttonjee, C.B.E. was formally handed back to him in January, 1949.

Ambulance Service.

158. The Medical Department provides an ambulance service for all parts of the Colony for cases other than accidents and street emergencies which are dealt with by the Fire Brigade. This service is provided free of charge for all patients. There are 17 ambulances in use, 10 in Hong Kong, 5 in Kowloon and 2 in the

New Territories. Between them these ambulances covered 103,252 miles and have carried a total of 26,639 patients, 16,606 in Hong Kong and 10,033 in Kowloon.

Blood Bank.

159. In May 1948 the local Toc H Group approached the Medical Department with an offer to help in organizing a blood donor service. Efforts had been made during the previous 20 years with only a very limited success to develop a service of this kind and this offer was therefore welcomed and steps were at once taken to put it into effect. It was decided that for the time being it should be limited to the two Government Hospitals dealing with emergencies, that is, the Queen Mary Hospital and Kowloon Hospital, with the collecting centre to be at the Queen Mary Hospital. Influencing this decision was the fact that as much as a dollar per cubic centimetre of blood was being offered in other hospitals in the Colony not under Government control, and it was felt that this service should be on a strictly voluntary basis.

160. In March 1949 a special Sister was assigned to this work and a start was made in building up a blood bank as opposed to a blood donor service. The panel of donors reached the figure of 200, 32 of whom were Chinese. 102 transfusions have been given.

X-ray Department.

161. This department was shared with the Royal Navy until January 1949 when they moved to their own hospital thus making it possible for the Physiotherapy department to move back to its pre-war quarters. The work in the Department shows a further increase over previous years and table 25 is a summary of the work done.

TABLE 25

	Kowloon Hospital		Queen Mary Hospital
Chests	2,655		7,386
Bones	2,314		3,050
Abdomen	437		561
Barium Meals	171		307
Intravenous Pyelography	24		116
Cholecystography	12		41
Lipiodol	8	(includes bronchography)	19
Cystography	8		—
Salpingography	—		44
Myelography	—		4
Ventriculography	—		3
Teeth	133		293
	6,262		11,824
		Miniature Chests	31,082
		(R.N.H. cases large films	2,370
		Miniature Chests	5,798)

162. During the year visits to do X-ray work were paid to the Kwong Wah Hospital and the Tung Wah Eastern Hospital and for part of the time screening work was done at the Harcourt Tuberculosis Clinic. Deep X-ray therapy was not available during the year but a small quantity of radium recovered from Japan was in constant use.

163. A miniature X-ray outfit, the property of the Hong Kong Anti-tuberculosis Association, was used at the Queen Mary Hospital for surveys and routine chest work.

164. The Physiotherapy department is under the administration of the Government Radiologist and a summary of the work done is set out below:—

TABLE 26

	In-patients	Treatments	Out-patients	Treatments
Kowloon Hospital ...	284	2,157	1,500	14,124
Queen Mary Hospital	464	3,522	779	7,076
Royal Naval Hospital Cases	205	2,458	—	—

VII.—DENTAL CLINICS.

165. There are three Government Dental Clinics. One at Sai Ying Pun Health Centre, one at Harcourt Health Centre and one at the Kowloon Hospital. Owing to shortage of staff only one of these centres, that at Sai Ying Pun was working full time, but during the latter part of the period under review whole time dentists became available and all three clinics were in full operation.

166. The dental facilities available were quite inadequate to deal with all the demands made on them. The work was concentrated on certain groups. In the first group were Government servants and their families who were entitled to conservative treatment as well as extractions. In the second group were the children included in the schools medical service who were entitled to extractions only, but with the appointment of a whole time dentist at the Harcourt Health Centre some conservative work for these children became possible. The third group consists of a small number of members of the general public who were in urgent need of dental treatment. Table 27 shows the total number of visits paid by these different categories in all clinics.

TABLE 27

	Harcourt Health Centre	Kowloon Hospital	Sai Ying Pun Hospital
Government servants	531	406	1,985
Families	317	235	932
School children ..	4,153	1,570	541
General Public ..	289	2,820	6,058
	5,290	5,031	9,516

167. Two Dental Inspectors were employed during the year to inspect premises of registered dentists and investigate cases of un-registered dental practice. A number of police prosecutions resulted.

VIII.—PHARMACEUTICS.

168. Mr. T. P. Mahon arrived in the Colony in January 1948 as chief pharmacist replacing Mr. L. J. Morley who had retired.

169. During the year 89 institutions were supplied from two distributing dispensaries, one in Hong Kong and one in Kowloon.

170. An excellent surgical instrument repair service has been built up by the Stores department and a large number of unserviceable instruments have been repaired.

171. Supplies from the United Kingdom have been slow to arrive and in some cases without any apparent reason. Much surgical equipment ordered more than two years ago is still outstanding.

172. In October 1947 a Streptomycin Committee was appointed with the Senior Medical Officer as Chairman, and 8 members representing the University and the Government.

173. This Committee controlled the treatment of all cases receiving streptomycin in Government institutions, and was responsible for the selection of the cases and the standardising of records. In March 1949 cases requiring treatment with streptomycin in the Ruttonjee Sanatorium also came under the control of this Committee as the Streptomycin was obtained from Government sources. 164 cases in all have been treated by this Committee.

IX.—MEDICO SOCIAL WELFARE ACTIVITIES.

174. At the end of the financial year ending April 1948, the relief section of the Medical Department was handed over to the Social Welfare Officer and the welfare activities of the Medical Department were confined to medico social work under the direction of the Principal Almoner with a staff of 3 Almoners and 7 Probationer Assistant Almoners and 3 students in training.

175. The members of the Almoners Department are placed at the following institutions:—

Medical Headquarters—Government Supervisor	1	(Principal Almoner)
Queen Mary Hospital	4	
Kowloon Hospital	3	
Harcourt Tuberculosis Clinic	3	
Sai Ying Pun Centre	1	
Violet Peel Polyclinic	1	
Lai Chi Kok (Post vacant, Visiting Almoners only)		

176. Advice and material assistance was given to patients in need in the following ways:—

a. Repatriation to the country.
b. Supply of artificial limbs and other surgical appliances.
c. Recommendation for hawker licences.
d. Maintenance of children in homes, crêches etc.
e. Temporary financial assistance and the supply of clothes and food.
f. Communication with relatives of patients in other territories.
g. Advice on employment etc.

177. Close co-operation with other social welfare work in other Government departments was maintained and reports on all industrial accidents admitted to the hospitals or treated in the out-patients were made to the Labour Office. Road accidents were similarly reported to the Police Department.

178. Close co-operation was also maintained with the non-Government welfare organisations such as the Families Welfare Society and Salvation Army. Reference to the special work associated with the Tuberculosis Clinic will be found in Annexure F.

179. An attempt has been made to institute an after-care system for patients discharged from the Mental Hospital and efforts have also been made to place mentally defective women in suitable institutions.

180. At the end of the period under review, Miss M. S. Watson, M.B.E., Principal Almoner, who built up the Almoners sub-department from its beginning, resigned on marriage.

X.—TRAINING OF PERSONNEL.

181. It is the aim of the Medical Department to train its own technical officers as far as possible up to the standards set in the United Kingdom. In some cases reciprocity has been achieved and in others it is hoped that reciprocity will not be long delayed.

182. Table 28 sets out the various technical groups who have received training from the department with their relative strengths:—

TABLE 28

	Appointments	Resignations	Strength at 31.3.49
Probationer Masseuses	2	—	2
„ Radiographic Assistants	—	1	2
Probationer Dispensers	5	—	15
„ Laboratory Assistants	1	—	2
Probationer Health Inspectors ...	20	—	20
„ Assistant Almoners (Students in training)	4	3	8
Probationer Nurses	23	16	84
„ Midwives	22	15	21
„ Dressers	17	6	30

183. The training of dressers and nurses was continued but only one nurse and one dresser passed the final qualifying examination. This small number was due to the fact that those who were probationers in training before the war have now completed their course and the post-war group have not yet reached the stage of sitting for their final examination.

184. 22 Midwives, 16 of whom were registered nurses passed the final examination.

185. A number of health inspectors sat for examinations held by the Board of Examiners of the Royal Sanitary Institute (Hong Kong Centre) and of them 14 qualified for the Sanitary Inspectors Certificate and 19 for the Certificate in Tropical Hygiene.

186. One dispenser and one pharmacist qualified during the period under review.

187. Arrangements were made during the year with the Society of Radiographers by which they recognised training given to Radiographic Assistants in the medical department and agreed that examinations for the membership of the Society of Radiographers might be held in Hong Kong.

188. Negotiations with the Society of Medical Laboratory Technicians for similar recognition to be accorded to locally trained laboratory assistants unfortunately broke down but it is hoped at a later date that it may be possible to take this matter up again.

I. Newton,
Director of Medical Services.

July, 1949.

ANNEXURE "A"

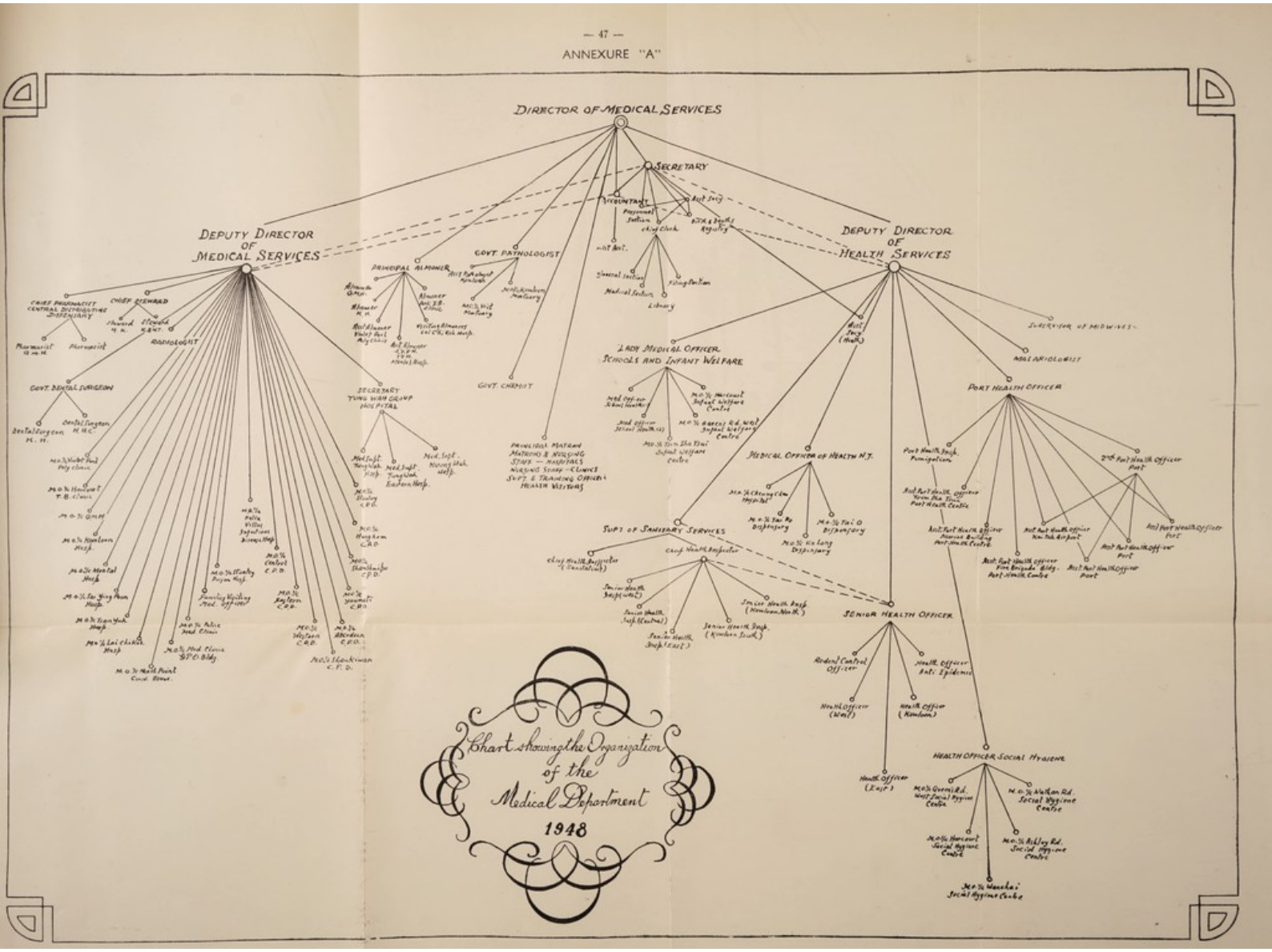
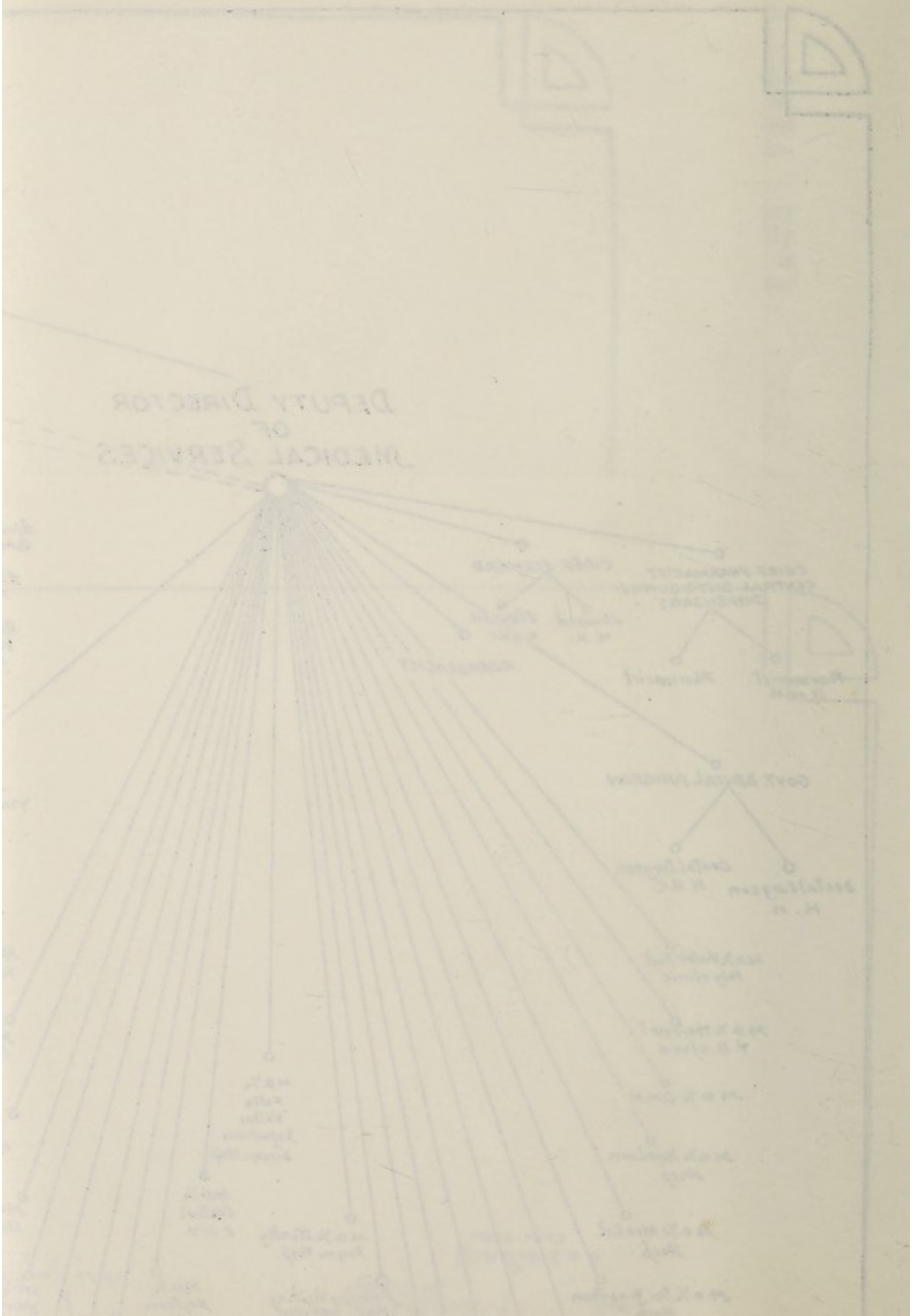
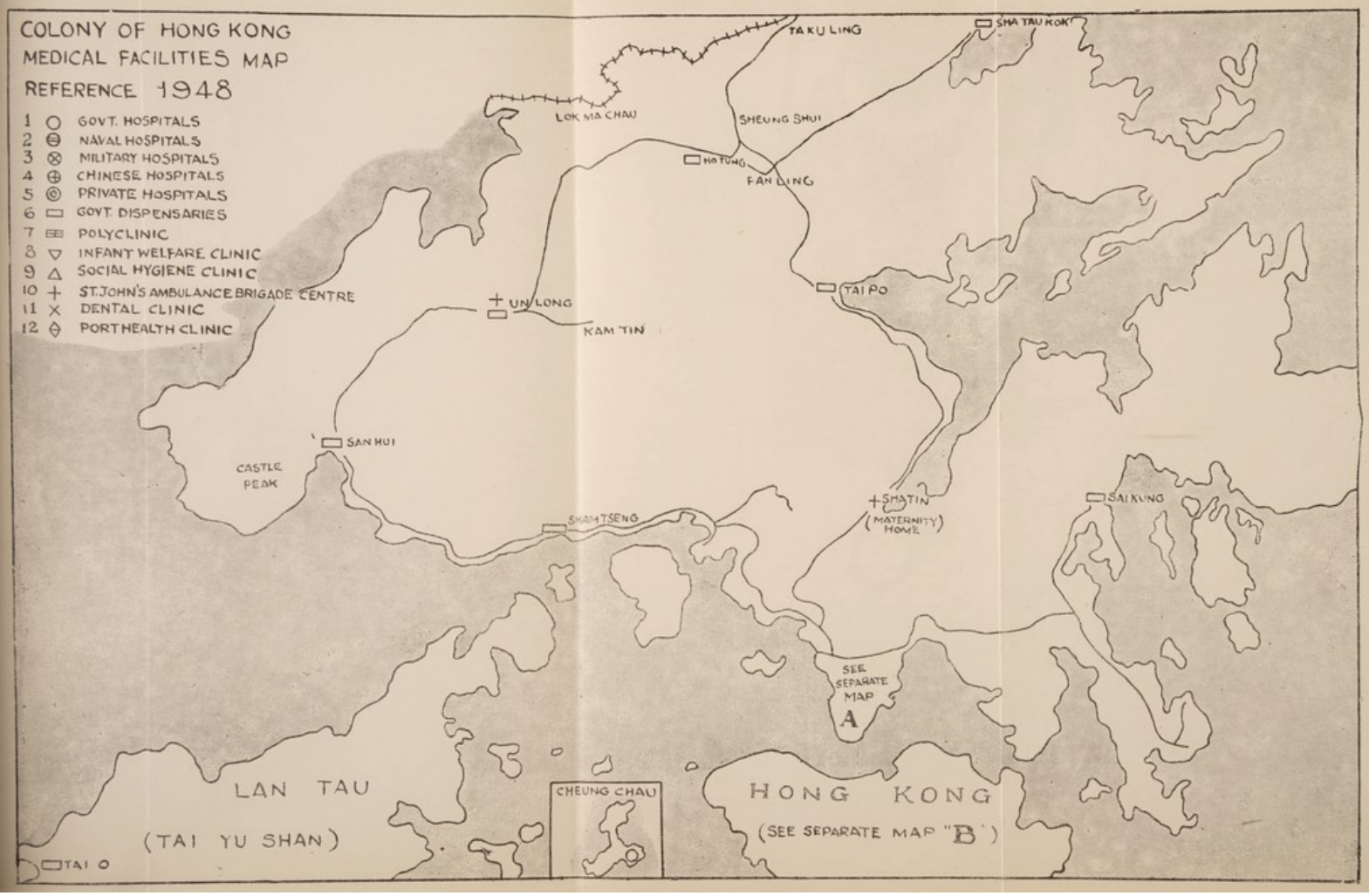


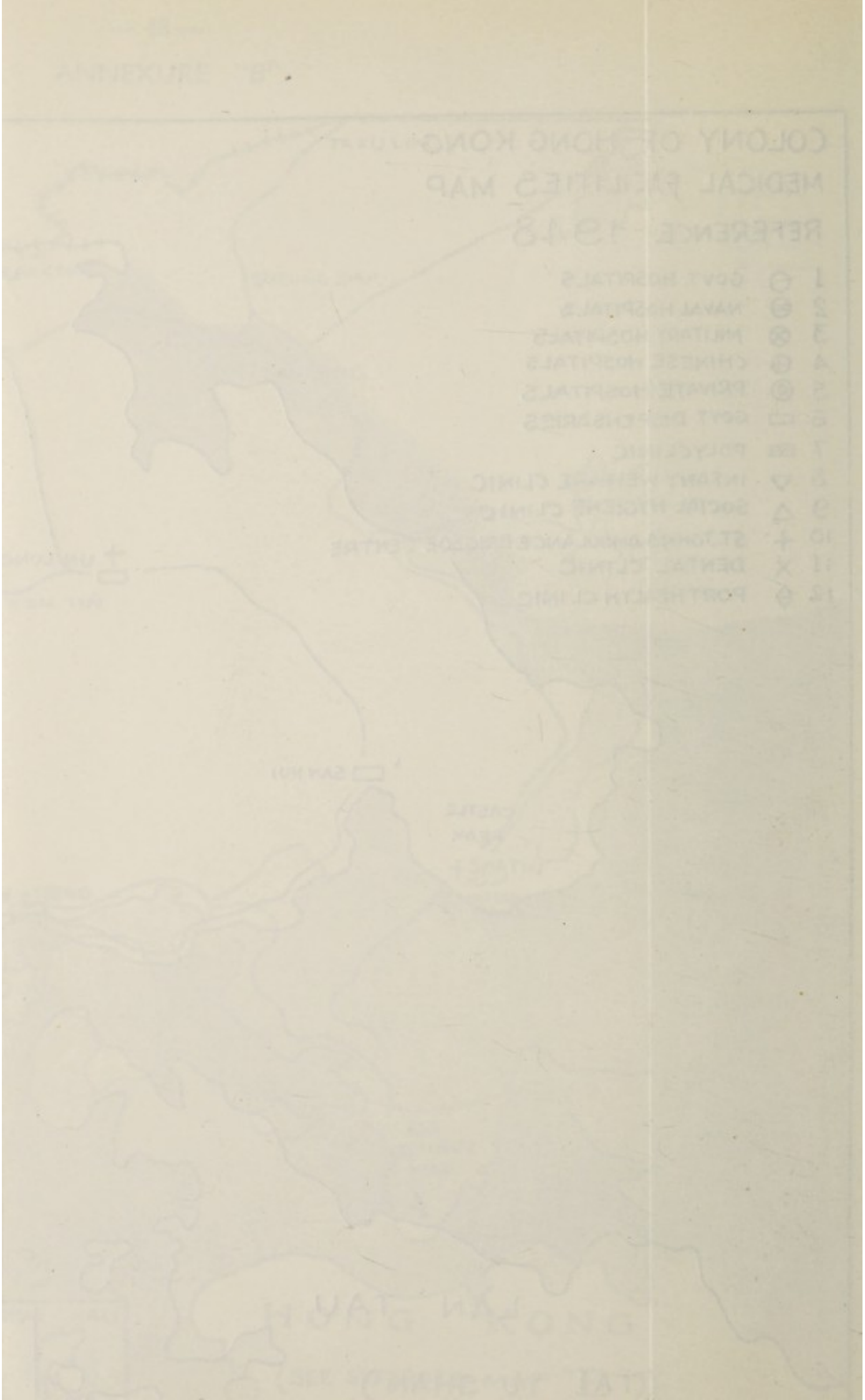
Chart showing the Organization of the Medical Department

1948

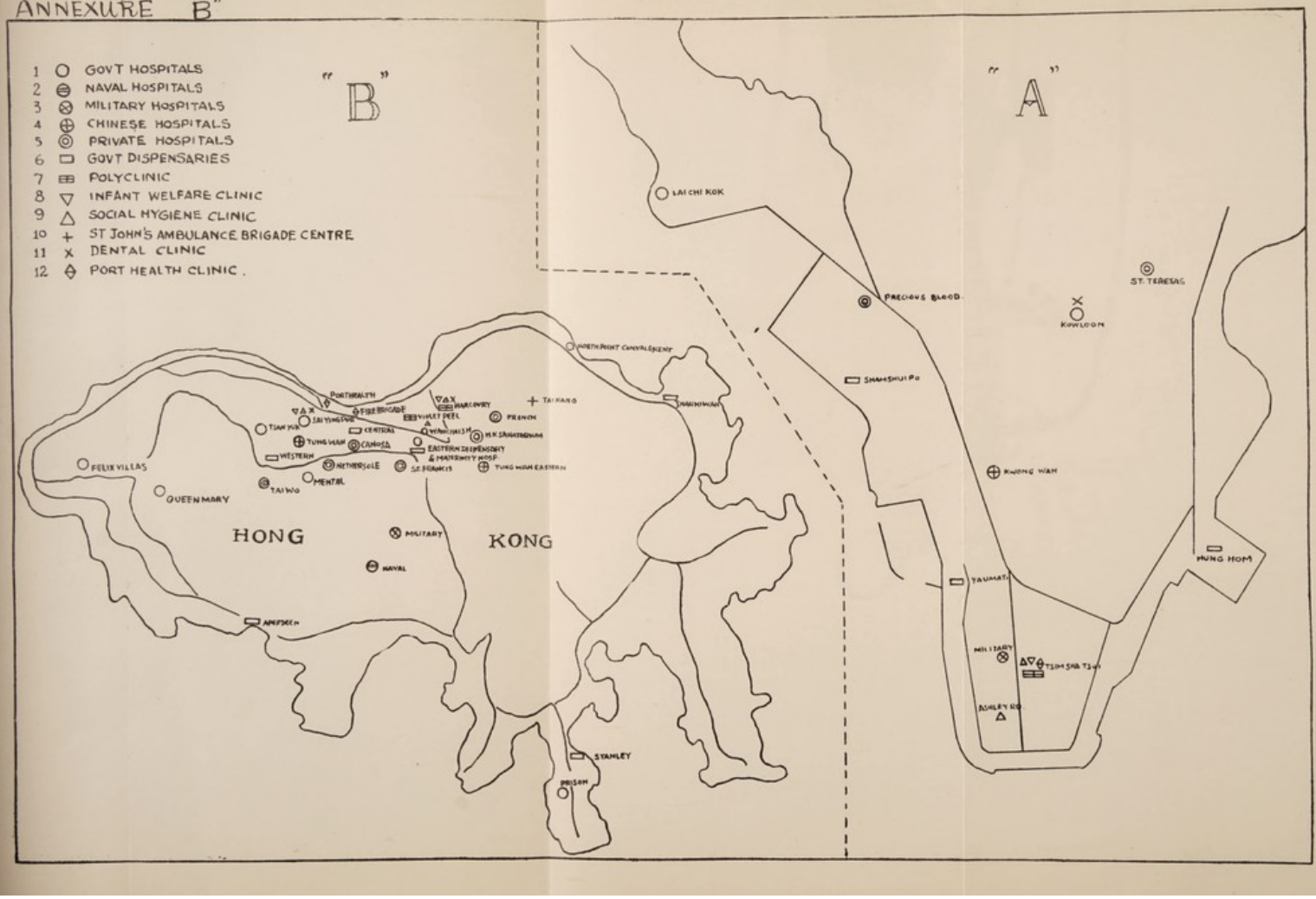


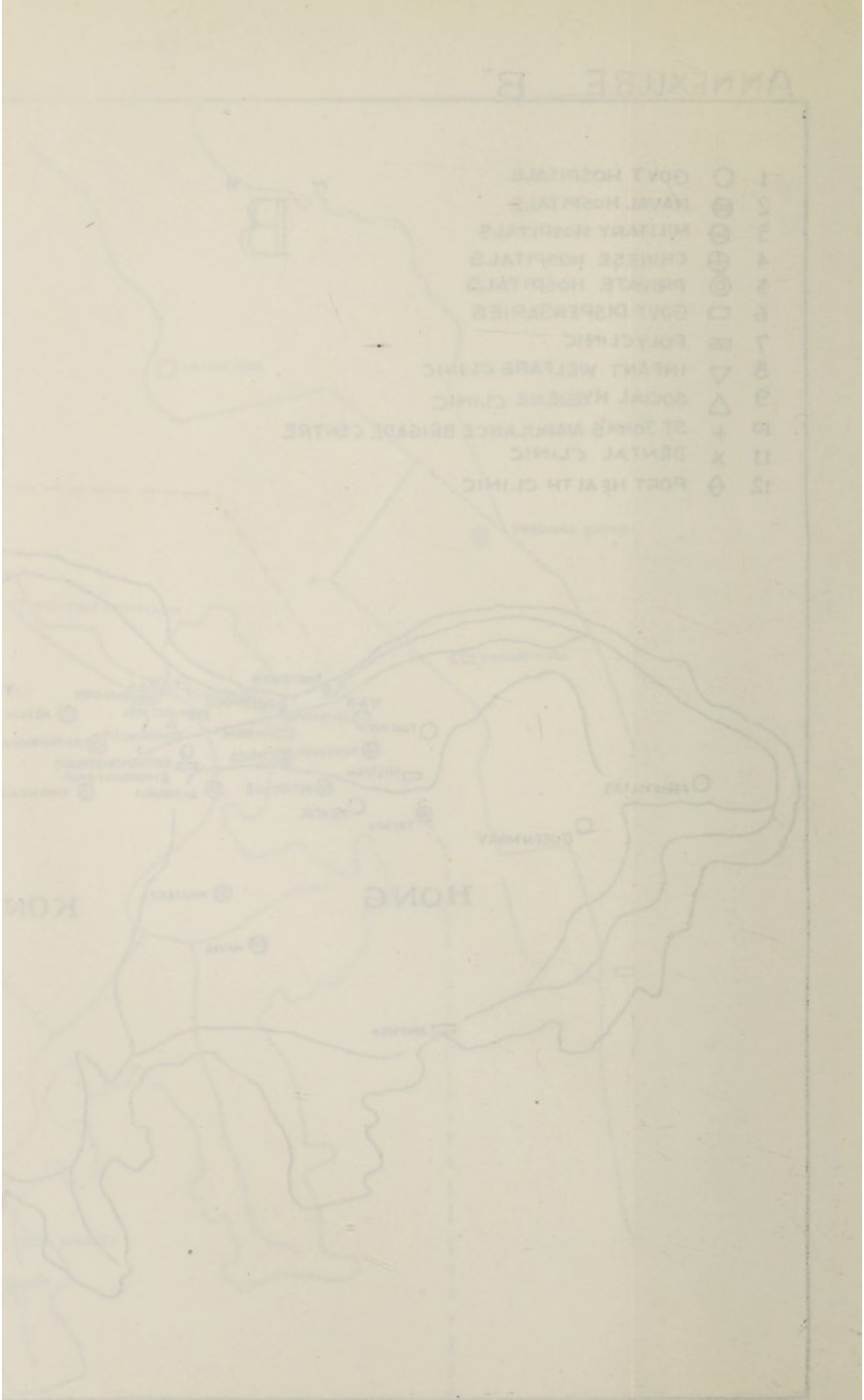
ANNEXURE "B"


COLONY OF HONG KONG
MEDICAL FACILITIES MAP
REFERENCE 1948
1 GOVT. HOSPITALS
2 NAVAL HOSPITALS
3 MILITARY HOSPITALS
4 CHINESE HOSPITALS
5 PRIVATE HOSPITALS
6 GOVT. DISPENSARIES
7 POLYCLINIC
8 INFANT WELFARE CLINIC
9 SOCIAL HYGIENE CLINIC
10 ST. JOHN'S AMBULANCE BRIGADE CENTRE
11 DENTAL CLINIC
12 PORT HEALTH CLINIC
TA KU LING
SHA TAU KOK
LOK MA CHAU
SHEUNG SHUI
HA TUNG
FAN LING
TAI PO
UN LONG
KAM TIN
SAN HUI
CASTLE PEAK
SHAM TSENG
SHATIN (MATERNITY HOME)
SAI KUNG
SEE SEPARATE MAP A
LAN TAU
(TAI YU SHAN)
CHEUNG CHAU
HONG KONG
(SEE SEPARATE MAP "B")
TAI O



ANNEXURE B"


1 GOVT HOSPITALS
2 NAVAL HOSPITALS
3 MILITARY HOSPITALS
4 CHINESE HOSPITALS
5 PRIVATE HOSPITALS
6 GOVT DISPENSARIES
7 POLYCLINIC
8 INFANT WELFARE CLINIC
9 SOCIAL HYGIENE CLINIC
10 ST JOHN'S AMBULANCE BRIGADE CENTRE
11 DENTAL CLINIC
12 PORT HEALTH CLINIC.
"B"
"A"
HONG
KONG
LAI CHI KOK
PRECIOUS BLOOD
ST. TERESAS
KOWLOON
SHAMSHUI PO
KWONG WAH
HUNG HOM
NORTH POINT CONVALESCENT
PORT HEALTH
FIRE BRIGADE
HARCOURY
TAI KANG
WANCHAI
FRENCH
TSAN YUK
CENTRAL
HK SANATORIUM
TUNG WAH
WESTERN
EASTERN DISPENSORY & MATERNITY HOSP
CANOSA
NETHERSOLE
ST FRANCIS
TUNG WAH EASTERN
FELIX VILLAS
MENTAL
TAI WO
QUEEN MARY
MILITARY
NAVAL
AMPTHILL
TAUMAT
MILITARY
ASHLEY RD
STANLEY
PRISON



ANNEXURE C.

STAFF OF MEDICAL DEPARTMENT

AS AT 31.3.49.

Director of Medical Services	1
Deputy Director of Medical Services	1
Deputy Director of Health Services	1
Senior Medical Officer	1
Senior Health Officer	1
Radiologist	1
Malariologist	1
Government Pathologist	1
Pathologist	1
Government Chemist	1
Chemist	2
Dental Surgeon	1
Medical Officers & Health Officers etc.	104
Nursing Staff	528
Executive Officers	6
Health Staff	129
Clerical Staff	148
Pharmaceutical Staff	36
Laboratory Staff	12
X-Ray Staff	14
Massage Staff	5
Dental Staff	7
Stewards	3
Vaccinators	39
Almoners	13
Others	1824
Total	2881

ANNEXURE D.

AGE DISTRIBUTION AS FOUND IN 1921 AND 1931 CENSUSES.

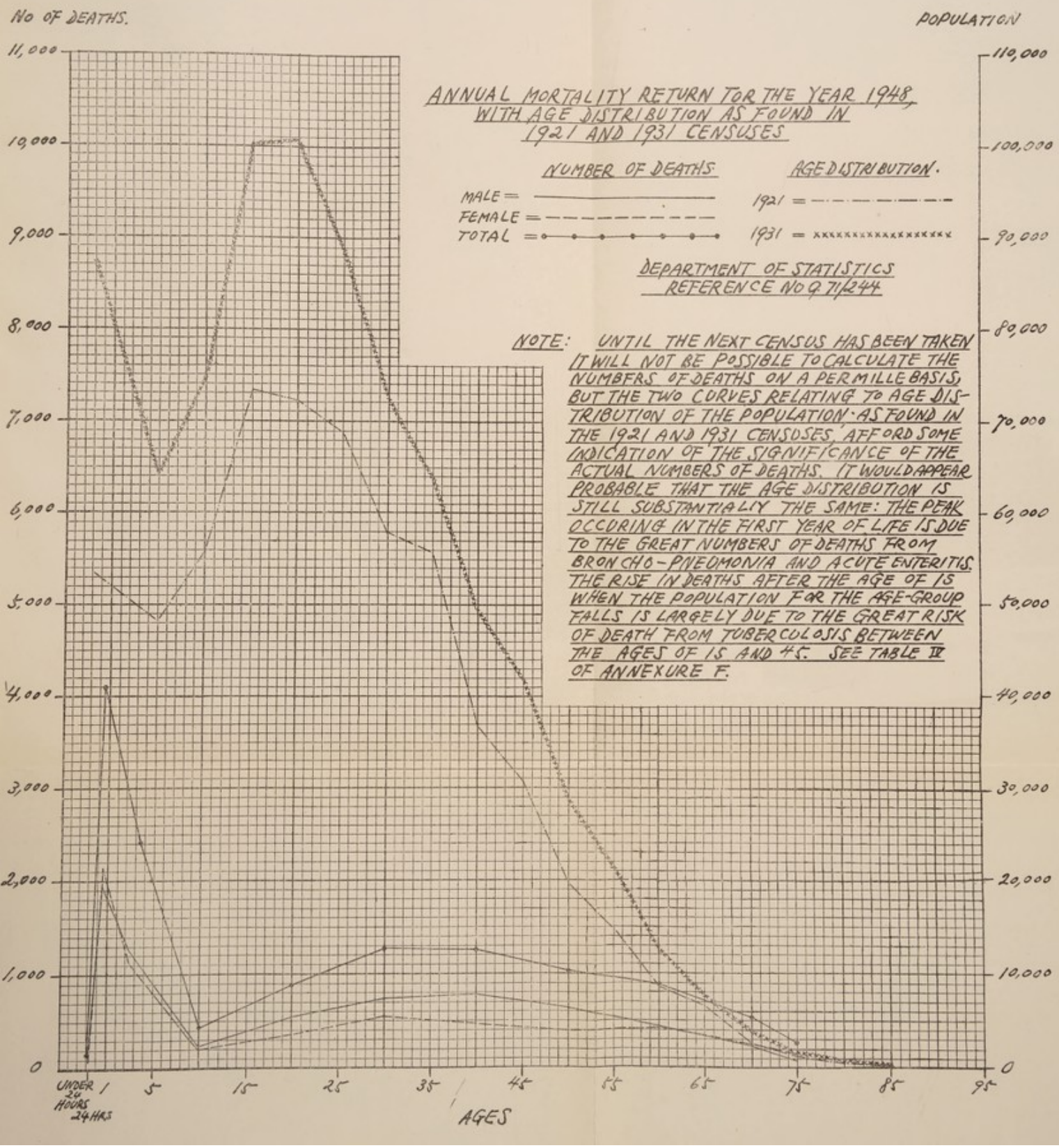
Years	1921 Males	1921 Females	1921 Total	1931 Males	1931 Females	1931 Total
0 - 5	27,296	26,451	53,747	43,539	43,695	87,234
6 - 10	23,413	24,736	48,149	32,436	31,734	64,170
11 - 15	30,151	25,736	55,887	40,676	34,270	74,946
16 - 20	50,216	23,242	73,458	64,665	35,648	100,313
21 - 25	49,785	22,608	72,393	63,289	37,410	100,699
26 - 30	45,303	23,596	68,899	52,162	36,413	88,575
31 - 35	37,950	20,080	58,030	42,870	29,268	72,138
36 - 40	36,050	19,580	55,630	36,935	26,579	63,514
41 - 45	24,231	12,754	36,985	28,890	20,374	49,264
46 - 50	19,297	11,301	30,598	23,976	17,797	41,733
51 - 55	12,310	7,145	19,455	16,492	12,266	28,758
56 - 60	8,268	6,310	14,578	11,110	10,059	21,169
61 - 65	4,450	3,773	8,223	6,538	6,247	12,785
66 - 70	3,792	2,594	6,386	3,455	4,032	7,487
71 - 75	1,126	1,600	2,726	1,584	2,228	3,812
76 - 80	463	847	1,310	598	1,226	1,824
81 - 100	235	485	720	266	677	943
Unknown	—	—	—	1,936	89	2,025

ANNUAL MORTALITY RETURN FOR 1948.

	Male	Female	Unknown	Total
Under 24 hours	121	99	1	221
24 hours - 1 year	1,961	2,140	2	4,103
1 - 5 years	1,267	1,147	—	2,414
5 - 15 „	229	201	—	430
15 - 25 „	537	359	—	896
25 - 35 „	745	549	—	1,294
35 - 45 „	785	488	—	1,273
45 - 55 „	625	406	—	1,031
55 - 65 „	439	423	—	862
65 - 75 „	266	271	—	537
75 and over	82	168	—	250
*Unknown age	47	18	—	65
* „ Sex & Age	—	—	—	58
			Total	13,434

* The majority of these bodies were removed from the Wing On fire.

ANNEXURE D.



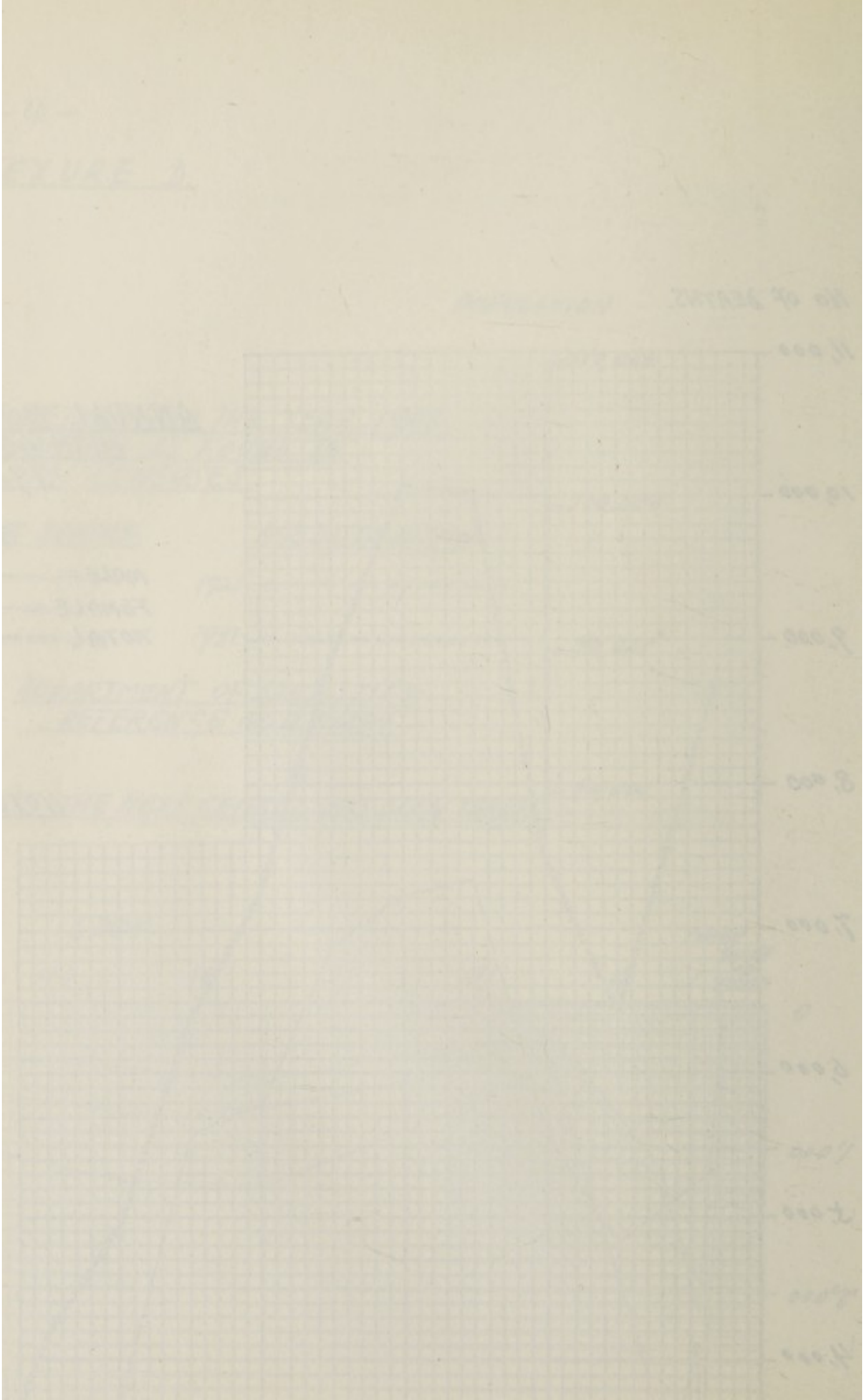
ANNUAL MORTALITY RETURN FOR THE YEAR 1948, WITH AGE DISTRIBUTION AS FOUND IN 1921 AND 1931 CENSUSES

NUMBER OF DEATHS:
MALE =
FEMALE =
TOTAL =

AGE DISTRIBUTION.
1921 =
1931 =

DEPARTMENT OF STATISTICS
REFERENCE No Q 71/244

NOTE: UNTIL THE NEXT CENSUS HAS BEEN TAKEN IT WILL NOT BE POSSIBLE TO CALCULATE THE NUMBERS OF DEATHS ON A PER MILLE BASIS, BUT THE TWO CURVES RELATING TO AGE DISTRIBUTION OF THE POPULATION AS FOUND IN THE 1921 AND 1931 CENSUSES, AFFORD SOME INDICATION OF THE SIGNIFICANCE OF THE ACTUAL NUMBERS OF DEATHS. IT WOULD APPEAR PROBABLE THAT THE AGE DISTRIBUTION IS STILL SUBSTANTIALLY THE SAME: THE PEAK OCCURING IN THE FIRST YEAR OF LIFE IS DUE TO THE GREAT NUMBERS OF DEATHS FROM BRONCHO-PNEOMONIA AND ACUTE ENTERITIS. THE RISE IN DEATHS AFTER THE AGE OF 15 WHEN THE POPULATION FOR THE AGE-GROUP FALLS IS LARGELY DUE TO THE GREAT RISK OF DEATH FROM TUBERCULOSIS BETWEEN THE AGES OF 15 AND 45. SEE TABLE IV OF ANNEXURE F.



ANNEXURE E.

NOTIFIABLE DISEASES.

Notifications & Deaths—1946 to 1948.

Diseases	Total No. of Notifications			Total No. of deaths at all ages		
	1946	1947	1948	1946	1947	1948
C. S. M.	293	566	69	85	137	19
Chickenpox	123	116	146	1	—	3
Cholera	514	6	—	246	—	—
Diphtheria	161	122	140	62	52	49
Dysentery	172	158	183	60	18	25
Enteric Fever	221	246	311	115	61	69
Malaria	2,422	608	—	765	253	193
Infantile Paralysis ...	—	—	1	1	3	3
Measles	317	160	190	26	8	6
Plague	—	—	—	—	—	—
Puerperal Fever	6	7	12	4	4	5
Rabies Human	2	4	2	2	4	2
„ Animal	—	1	3	—	1	3
Relapsing Fever	77	25	—	31	6	—
Scarlet Fever	2	1	1	—	—	—
Smallpox	1,998	214	8	1,306	129	2
Tuberculosis	2,801	4,855	6,279	1,818	1,863	1,961
Typhus Fever	42	19	5	2	—	1
Yellow Fever	—	—	—	—	—	—
Whooping Cough	—	2	21	5	4	—

NOTE:—Malaria not notified after May, 1948.

Whooping Cough and Infantile Paralysis notifiable diseases since 23.10.47 and 30.7.48 respectively.

ANNEXURE E.

AGE GROUP OF NOTIFIABLE DISEASES

1948.

Diseases	0 - one year			1 yr. to 3 yrs.			3 yrs. to 7 yrs.			7 yrs. to 14 yrs.			Over 14 yrs.			Total		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
Cerebro-spinal Meningitis	7	4	11	2	—	2	7	4	11	7	9	16	14	15	29	37	32	69
Chickenpox	12	24	36	24	16	40	14	18	32	12	11	23	11	4	15	73	73	146
Diphtheria	7	3	10	10	26	36	29	30	59	7	15	22	4	9	13	57	83	140
Dysentery:																		
Amoebic	—	—	—	—	1	1	—	—	—	4	3	7	82	28	110	86	32	118
Bacillary	1	1	2	4	1	5	—	1	1	2	—	2	40	12	52	47	15	62
Clinical	—	—	—	—	—	—	—	—	—	—	—	—	2	1	3	2	1	3
Enteric Fever	—	—	—	2	1	3	5	4	9	26	17	43	161	95	256	194	117	311
Measles	10	16	26	35	28	63	21	18	39	12	26	38	15	9	24	93	97	190
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	12	12	—	12	12
Rabies:																		
Human	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	1	1	2
Animal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Scarlet Fever	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	1	1
Smallpox	—	2	2	—	2	2	—	1	1	1	—	1	1	1	2	2	6	8
Tuberculosis	139	95	234	165	128	293	116	77	193	164	119	283	3,365	1,911	5,276	3,949	2,330	6,279
Typhus Fever	—	—	—	—	—	—	—	—	—	1	—	1	2	2	4	3	2	5
Whooping Cough	—	4	4	3	5	8	3	3	6	3	—	3	—	—	—	9	12	21
Infantile Paralysis	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	1	1
TOTAL	176	149	325	245	208	453	195	158	353	239	200	439	3,698	2,100	5,798	4,553	2,815	7,371

Nil return for Cholera, Plague, Relapsing Fever & Yellow Fever.

ANNEXURE E.

Year	Cerebro-spinal-Meningitis (Meningococcal)			Cholera			Diphtheria			Enteric Fever			Smallpox		
	Notifications	Deaths	Deaths per 100 Notifications	Notifications	Deaths	Deaths per 100 Notifications	Notifications	Deaths	Deaths per 100 Notifications	Notifications	Deaths	Deaths per 100 Notifications	Notifications	Deaths	Deaths per 100 Notifications
1928	21	16	76				90	27	30	240	74	31	616	304	49
1929	25	20	80				140	64	46	207	61	29	977	854	87
1930	20	13	65	Figures prior			95	41	43	221	79	36	270	249	92
1931	25	16	64				231	57	25	214	70	33	15	8	53
1932	207	122	59	to 1937 not			205	81	40	202	83	41	212	175	83
1933	191	118	62				122	81	66	207	64	31	566	433	77
1934	246	125	51	available.			162	83	51	212	65	31	153	104	68
1935	110	54	49				226	136	60	319	95	30	61	44	72
1936	123	65	53				375	214	57	418	136	33	23	16	70
1937	157	88	56	1,690	1,082	64	308	148	48	464	176	38	129	94	73
1938	483	223	46	547	363	66	319	147	46	539	187	35	2,327	1,833	79
1939	488	214	44	708	448	63	N.A.	142	N.A.	N.A.	385	N.A.	198	153	77
1940	N.A.	N.A.	N.A.	945	626	66	N.A.	130	N.A.	N.A.	324	N.A.	335	270	81
1946	293	85	29	514	246	48	161	62	39	221	115	52	1,998	1,306	65
1947	566	137	24	6	—	—	122	52	43	246	61	25	214	129	60
1948	69	19	28	—	—	—	140	49	35	311	69	22	8	2	25

N.A.=Figures not available.

NOTE:—Figures for war years 1941 to 1945 are not available.

ANNEXURE F.

REPORT ON THE TUBERCULOSIS SERVICE.

Tuberculosis, accounting as it does for 14.6% of all deaths in the Colony, is probably the most important single health problem facing the Government today. The problem is extremely complex and offers no easy solution. The population, as a result of the present economic and political conditions in China, is grossly inflated resulting in appalling conditions of overcrowding affecting all classes, but more particularly the working classes for whom little, if any, additional housing has been built during the past decade. The type of house in almost general use, a single large room occupying a whole floor and divided by 6 foot partitions into cubicles, some as small as 36 square feet, and housing a whole family, while ideal from the point of view of ventilation, lends itself to easy spread of infection. To add to the existing difficulties numbers of tuberculosis sufferers travel fairly considerable distances to the Colony from neighbouring areas being attracted by the prospect of free treatment. It is a tribute to the resistance of the population that the deaths from pulmonary tuberculosis are maintained at their present level. Should any deterioration in the local economic conditions occur, without a compensatory fall in the population, the tuberculosis deaths are likely to return to the high level observed before the war.

For various reasons reliable statistics are not available. In the first place, no recent census figures are available. The last census was taken in 1931, since when the population has doubled, halved, and doubled again, according to estimates. Nor is information available on the age and sex distribution of the population, an important feature in the analysis of statistics relating to tuberculosis. It is quite usual to encounter individuals who work in the Colony and maintain their wives and families in their native villages. Thus the preponderance of males in the community is likely to be exaggerated—a probability which was confirmed in the 1931 census returns.

On the other hand, information in relation to tuberculosis is not satisfactory on account of incomplete notification. Numerous individuals attend the public clinics giving a history of having received private treatment yet never having been notified. Out of a total of 6279 notifications recorded during the year 537 were made by private practitioners, an average of 1.5 notifications per practitioner per year. The patient himself is far from anxious to have the knowledge of his disease made public on account of the social repercussions that are liable to ensue. One can only guess how much deliberately concealed tuberculosis exists.

The figures recorded for deaths due to tuberculosis are surprisingly low and in keeping with the low figures recorded for deaths from all causes. It is known that a number of advanced cases do return to China to die but how much influence this has on the general figure is not yet known. The ratio of deaths to notifications of tuberculosis is low compared to the findings in other parts of the world and indicate a high natural resistance to the disease. This high resistance is apparent in the response to hospital treatment, and in the number of healed lesions—often extensive—which are found on routine examinations and which so far as can be ascertained gave rise to no symptoms. For example a survey of 4515 Government servants carried out during the year showed the following results.

Active tuberculosis	89
Healed ,, ...	497
Suspicious	121
Not tuberculous	3808

The following table shows the figures of known cases and rates based on the accepted figure for population on

(*a*) Estimated population (1)
(*b*) Estimated population (2)

TABLE I
TUBERCULOSIS (ALL FORMS)
NOTIFICATIONS AND DEATHS.

Year	Population		Notification	Deaths	D/N Ratio	Death Rates per 100.000 pop.	
	Estimated (1)	Estimated (2)				Estimated (1)	Estimated (2)
1928	766.700	979.440	Not Notifiable	2.537		330.9	259
1929	802.900	1.047.260		2.158		268.7	200
1930	838.800	1.047.400		1.994		237.7	190.3
1931	840.473	878.947		1.983		235.9	225.6
1932	900.812	900.812		2.042		226.6	226.6
1933	922.643	922.643		2.225		241.2	241.2
1934	944.492	944.492		2.179		230.7	230.7
1935	966.341	966.341		2.237		231.5	231.5
1936	988.190	988.190		2.416		244.5	244.5
1937	1.281.982	1.006.982		4.028		314.2	400.0
1938	1.478.619	1.028.619		4.920		332.7	478.3
1939	1.750.256	1.050.256	7.591	4.443	1 to 1.7	253.8	423.0
1946	1.600.000	1.168.815	2.801	1.752	1 to 1.6	109.50	149.8
1947	1.750.000	1.214.762	4.855	1.861	1 to 2.6	106.3	153.2
1948	1.800.000	1.126.316	6.279	1.961	1 to 3.2	108.9	174.1

It will be seen from the above that the progressive reduction in the tuberculosis death rate evident from 1928 onwards showed a marked adverse tendency from 1937 onwards accompanied by a sudden rise in the population due to the influx of war refugees from China. The outstanding feature of the table, however, is the drop in the figures for 1946—48 which, though increasing slightly over the period, have remained relatively steady. In consideration of the rate as a whole some comfort can be obtained from the fact that even considering the local conditions the figure is only double that shown in U.K. where social conditions are immeasurably better, where relief is available for all and where a comprehensive scheme for the diagnosis and treatment of tuberculosis has been in existence for many years. The second outstanding feature is the improvement of the deaths/notification figures again exhibiting the resistance of the population to the disease. This recovery power is apparent in the shortness of the period of hospitalisation required to stabilise patients. This tendency is apparent in the local population only and is not true of Europeans in whom the disease runs an expected course; it must, however, be emphasised that this is merely an impression gained from limited observation and that it is not yet backed statistically.

One very disquieting feature of the tuberculosis picture is the very high and increasing number of deaths from tubercular meningitis. This rising figure is out of all proportion to the smaller increase in the deaths from tuberculosis (all forms) and shows a progressive reduction in the age at death. This is a measure of the deterioration in the social conditions and indicates an increase in the intensity of infection. The rise may be due to an increase in the number of younger children at risk but is more probably a true increase, as it is not apparent in the other forms of tuberculosis.

TABLE II
TUBERCULAR MENINGITIS
Deaths 1946—48.

	1946			1947			1948		
	M.	F.	Total	M.	F.	Total	M.	F.	Total
– 5	63	48	111	110	106	216	163	132	295
–15	18	10	28	16	13	29	17	19	36
–25	11	5	16	3	1	4	2	4	6
–35	3	4	7	5	3	8	5	—	5
–45	3	2	5	1	2	3	2	1	3
–55	1	1	2	1	2	3	1	1	2
–65	—	—	—	1	—	1	—	—	—
–75	—	—	—	—	—	—	—	—	—
–75 + ...	—	—	—	—	—	—	—	—	—
Unknown	—	—	—	—	—	—	—	—	—
Total	99	70	169	137	127	264	190	157	347

It will be seen that while deaths from tuberculosis (all forms) have risen by 5% over 1947 the tuberculous meningitis deaths have risen by 31%. Furthermore 85% of these deaths occurred before the age of 5 years as against 81% and 66% in 1947 and 1946 respectively.

Deaths from tuberculosis (other forms) have remained fairly steady over the past 3 years and have not shared the rise shown in the meningitis deaths nor is there any significant alteration in the age of incidence. It is of interest to note that the deaths from tuberculosis (other forms) constitute 8.7% of all tuberculosis deaths, about the same proportion as is shown in the figures for United Kingdom. The origin of these infections is highly unlikely to be from milk in view of the small amount of milk consumed in the Colony. There is no specialised service for dealing with non pulmonary disease and little accurate information is available on the subject.

TABLE III
DEATHS FROM TUBERCULOSIS (OTHER FORMS) 1946—1948.

	1946			1947			1948		
	M.	F.	Total	M.	F.	Total	M.	F.	Total
– 5	54	37	91	71	49	120	68	48	116
–15	19	18	37	25	14	39	17	10	27
–28	9	5	14	4	4	8	4	5	9
–35	7	7	14	2	5	7	4	6	10
–48	8	5	13	1	2	3	3	3	6
–58	—	3	3	2	—	2	2	1	3
–68	2	—	2	—	—	—	—	—	—
–75	—	—	—	—	—	—	—	—	—
–75 + ...	—	—	—	—	—	—	—	—	—
Unknown	—	—	—	—	—	—	—	—	—
Total	99	75	174	105	74	179	98	73	171

Deaths from pulmonary tuberculosis have remained fairly constant over the past 3 years when considered numerically in spite of the deterioration in social condition. Based on the estimated population (1) the rate has fallen steadily 92, 81, 80 per 100,000 in 1946, 1947 and 1948 respectively. Based on the estimated population (2) the figures for the same years are 126, 117 and 128 per 100,000. In consideration of the fact that the two sets of figures show different tendencies it would be futile to draw conclusions. It is obvious, however, that these figures do not reflect the increases apparent in the meningitis deaths. It would appear therefore that the increased intensity of infection has been, to some extent at least, offset by the improved economic conditions resulting in improved resistance in adults.

The very substantial increases in the number of cases of pulmonary tuberculosis notified can be accounted for by several considerations. In the first place the settling of conditions generally has resulted in more stabilised and organised medical services. Secondly, efforts are being made to ensure that all diagnosed cases are notified. Thirdly, the government has established a diagnostic service available to all without charge with the result that a large number of individuals who would otherwise be denied treatment on economic grounds are now being seen and notified. The principal feature of interest is the preponderance of male cases in all except the 65-75 age groups. How much of this preponderance is due to an increased morbidity rate and how much is due to variation in the sex distribution is difficult to determine exactly though it is thought likely that adult males outnumber females in the same age groups on account of the attractions in the nature of employment offered by the Colony. In the 1931 census it was found that males constituted about 60% of the population between the ages of 11 and 55 years. Assuming that conditions are now relatively the same, as would appear likely we have the explanation of the apparent higher morbidity in males. On the other hand the case mortality which is lowest in the 35-45 age groups is higher in females until this age after which the rates are fairly similar.

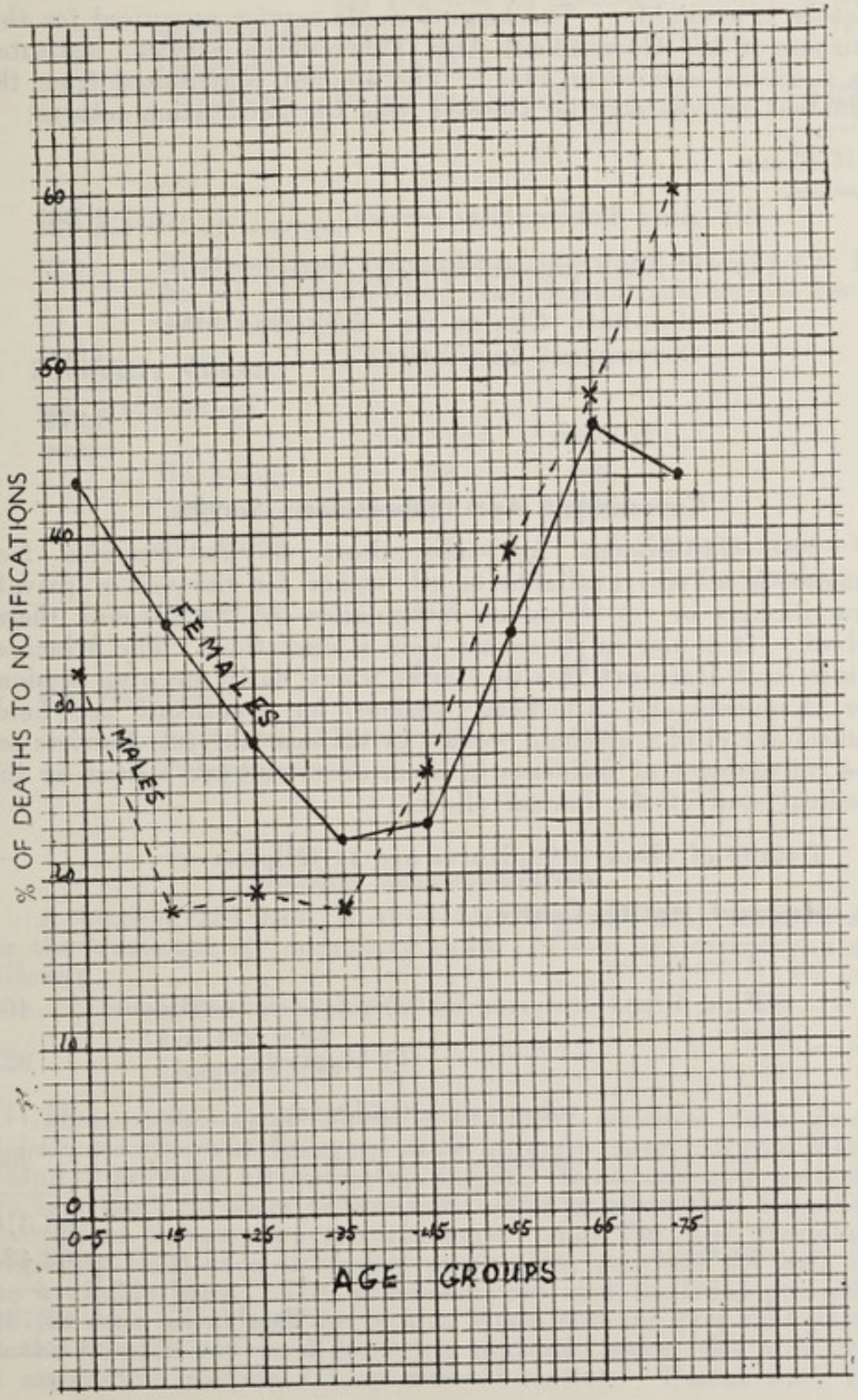
TABLE IV

PULMONARY TUBERCULOSIS

Deaths and Notifications.

Age Groups	Deaths (Pulmonary)									Notifications (Pulmonary)		
	1946			1947			1948			1948		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
0– 5	69	60	129	28	23	51	41	33	74	128	77	205
5–15	19	20	39	9	13	22	17	19	36	95	54	149
–25	143	88	231	133	87	220	126	84	210	651	299	950
–35	256	151	407	266	172	438	242	155	397	1,342	689	2,031
–45	247	101	348	236	116	352	222	116	338	856	508	1,364
–55	146	69	215	154	65	219	144	92	236	367	269	636
–65	49	35	84	53	41	94	59	59	118	121	128	249
–75	12	8	20	7	12	19	18	12	30	30	28	58
–75 + ...	2	—	2	2	3	5	1	2	3	3	3	6
Unknown	—	—	—	—	—	—	1	—	1	—	—	—
TOTAL	943	532	1,475	888	532	1,420	871	572	1,443	3,593	2,055	5,648

Graph showing ratio of deaths to notifications in males and females expressed as a percentage and set out in age groups.



Facilities for diagnosis and treatment are fairly widely scattered. A number of the Chinese hospitals run special out-patient clinics for the purpose and much of the work is done privately. Very little information in these services of a statistical nature is available. The largest single service organised for this purpose is the Government Anti Tuberculosis Service, instituted as a special service in 1947. The amount contributed from the different sources may be assessed from the notification returns.

From

(*a*)	Anti Tuberculosis service	2,736
(*b*)	Private practitioners	537
(*c*)	Hospitals, Clinics etc., including other Government Institutions	3,006
		6,279

Government Anti Tuberculosis Service.

The Government Anti-tuberculosis service provides free diagnostic service available to all, either for the use of private practitioners or for voluntary attendance by the patients themselves. It is now in its second year of operation. The principal clinic is at Harcourt Health Centre where daily morning sessions for diagnosis and afternoon sessions for treatment are held. Subsidiary clinics are held weekly in various outlying districts for the convenience of residents in these areas and are visited by the medical staff of the central clinic.

Details of clinic attendances are as follows:—

A. Harcourt Health Centre.

(*a*) *Attendances.*

First Visits—referred by (*a*) private practitioners		468
	(*b*) hospitals	927
	voluntary attendances	11,717
	contacts	204
		13,316
Re-visits		52,423
	Total	65,739

(*b*) *Condition on first attendance.*

Not tuberculosis	3,344
Tuberculosis (1) Active	3,107
(2) Inactive or healed	2,484
Suspicious	1,161
Diagnosis not completed (patients did not re-attend)	3,220
	13,316

(*c*) *Extent of disease.*

Bilateral cases outnumbered unilateral cases by 2 to 1. As yet no established classification scheme has been introduced.

B. Subsidiary Clinics.

(*a*) *Attendances.*

	1st Visit	*Re-visit*	
Un Long	158	335	
Taipo	129	235	
Sai Kung	20	6	(In operation only a few weeks)
Aberdeen	170	337	
	477	913	

(*b*) *Diagnosis.*

Free from tuberculosis	290
Tuberculosis	187
	477

Hospital Accommodation.

A total of 281 beds is available in government institutions for the treatment of pulmonary cases. These are distributed as follows:

Queen Mary Hospital	46
Lai Chi Kok ,,	204
Cheung Chau ,,	31

These beds, upon whom government servants have prior claims, are otherwise being set aside for early cases. Queen Mary Hospital provides all necessary surgical treatment and patients are kept there for short periods only being transferred to the other institutions to complete convalescence. Lai Chi Kok Hospital, originally built as a temporary institution, provides the bulk of the available beds. The accommodation and facilities provided are far from ideal and the lack of space and the fact that parts of the hospital are used for other purposes makes the provision of sanatorium routine a very difficult matter. Useful work is,

however, being done and some improvement in the conditions can be reported. The policy adopted of admitting early cases only was gradually introduced in the latter part of the year and the general outlook of patients and staff has improved.

Cheung Chau Hospital is used for convalescent cases in the main although some treatment cases are admitted. The treatment is carried out by a medical officer from the central clinic, but the general care and day to day requirements are undertaken by the medical officer in charge.

The Tung Wah Group of hospitals have been most co-operative in disposal of patients, and particularly in taking care of the advanced and ill cases.

The total number of beds available in the Colony for treatment of tuberculosis, calculated either on the standard of one bed per thousand population or one bed per tuberculosis death per year, falls very far short of the requirement but, under the circumstances hospital beds for the tuberculous will always be in short supply as the greater the provision, the greater the demand through the arrival of tuberculous individuals from other areas.

The known number of beds reserved exclusively for cases of tuberculosis is 427 distributed as follows:—

Government Anti Tuberculosis service	281	—Government Servants and early cases.
Tung Wah Hospital	40	—Advanced cases.
Kwong Wah Hospital	40	— do.
Ruttonjee Sanatorium	66	—Early cases in adults & children. In process of expansion. Working in co-operation with Government service.

Results of treatment.

In the absence of any system of classification of cases, the results of treatment are impossible to assess and present, but, generally speaking, the response to treatment is highly satisfactory.

Radiological examination.

All X-ray work in connection with the clinic is carried out at the Queen Mary Hospital. First examinations are done on miniature films and thereafter according to request. The absence of an X-ray unit in the clinic occasions some delay in diagnosis and disposal of patients, but this deficiency is being kept in mind in future planning. The radiologist has been most helpful and co-operative in the formulation and furthering of measures introduced in efforts to decrease these delays and reduce inconvenience to patients to a minimum. In view of the distance at which the X-ray unit is situated from the clinic transport to and fro is provided.

Bacteriological.

All bacteriological work done in connection with the tuberculosis service is carried out at the Government Pathological Institute. Details of examinations carried out on behalf of the clinic are as follows:—

	Positive	*Negative*	*Total*
Sputum	958	2,229	3,187
Gastric contents	81	812	893
Pleural fluid	18	94	112
Kahn test	1,782	211	1,993

Tuberculosis Visitors.

During the year a course was instituted for the training of health visitors for the tuberculosis service. Ideally such visitors should have nursing training before undertaking such a course, but, due to the lack of trained nurses, it has been necessary to select individuals and train them specifically for the post of health visitors in the tuberculosis service and to instil some knowledge of nursing, hygiene and social welfare work during this training. The services of these visitors are utilised as follows:—

(*a*) Feeding scheme.
(*b*) Education of patients on domiciliary treatment.
(*c*) Bringing up for examination and treatment patients who have failed to attend the clinic.
(*d*) Contact examination.

The contact examination scheme has only recently been introduced and promises to be a considerable success. It is so organised that the necessity for patients to attend the clinic is as far as possible abolished, having in mind the fact that the clinic is already overcrowded and symptomless contacts are not anxious to spend a complete morning among known infectious cases. At present only children under 8 years of age need attend and this only for tuberculin testing at a session held specifically for this purpose. The proportion of early cases so discovered promises to be high.

Social Provisions.

Gradual extension of social provisions has taken place during the period. Assistance is now provided both in cash and in kind.

Cash provisions are limited to cases who, because of financial difficulties, would be unable to accept hospital treatment when offered, on account of family commitments. A maintenance grant is provided for dependents during the patient's stay in hospital. Financial assistance is occasionally provided where a case intends to return to his native village.

Assistance in kind is provided by the department in the form of dietetic supplements. These supplements are not intended purely as a feeding scheme, but the diet is carefully chosen to provide items which would be likely to be lacking in the patient's normal diet and can be provided in a palatable form. The food is distributed by means of a specially fitted van, hot and ready for consumption, and delivered near the patients' homes. This scheme was started experimentally in November on the island, and met with a limited though increasing success, and has since been extended to the mainland, where the food is supplied at feeding centres kindly loaned for the purpose by the Social Welfare Officer.

Further assistance in kind is available for patients in the form of dried milk powder, which is distributed at the clinic weekly.

Such medicines as are required are distributed free.

Difficulty is experienced in placing tuberculosis sufferers in employment following discharge from hospital. Considerable prejudice is encountered against such individuals but some success has been achieved by the Almoner's Department in finding suitable employment for a few ex-patients.

Propaganda.

One of the local problems on the preventive side is the illiteracy of the population. It has been estimated that almost 90% of the patients attending the public clinics are unable to read. It is, therefore, extremely difficult to get health propaganda across to these individuals. An anti-spitting campaign was introduced and very considerable improvements in the habits of the general population in this connection are apparent. Health education including information on tuberculosis is also disseminated by cinema vans using locally produced as well as imported films. The long term effects of this campaign can only be guessed but good results are hoped for. A number of posters are also widely distributed in public places.

Surveys.

The use of mass radiography is not immediately contemplated on account of the comparative youth of the tuberculosis service and the lack of trained personnel available to deal with the resulting situation.

Streptomycin.

This drug is readily available on the open market at reasonable price. Its use in Government hospitals is prohibited except on the authority of a committee formed for the control of the use of the drug. Each case is assessed on its merits and ample supplies are available for approved cases free of charge.

(*Sgd.*) A. S. Moodie,
M.O. in-charge T.B. Clinic.

ANNEXURE G.

REPORT OF INFANT MORTALITY INVESTIGATION COMMITTEE.

Director of Medical Services.

In March 1948, you appointed a Committee consisting of Dr. Lee Hah Liong as Chairman, Dr. R. K. W. Yang, Dr. K. T. Loke and Dr. Uttley as Secretary, to investigate the causes of Infant Mortality and to make recommendations for the reduction of the high mortality rate.

Right from the beginning of the investigation, it was evident that there would be considerable difficulties in getting enough scientific data on which to base any conclusions. To collect any valid group of data would take two to three years. Deductions based on statistical evidence alone may be misleading, unless the numbers are sufficiently large, properly collected, and carefully and logically used. Although information such as could be supplied by the two best hospitals in the Colony, the Queen Mary and Kowloon Hospitals, might be useful, it was realised that cases going there are not necessarily the type of cases that the Committee wanted to investigate, and it was also felt that such cases were not a true cross section of the population with which the Committee was concerned. On the other hand, charity hospitals have plenty of good material, but no records. The above mentioned difficulties prevented any statistical survey being made and the Committee adopted a more practical method namely the interviewing of doctors and the investigation of post-mortem records and death certificates. Even with these limitations, it is the Committee's opinion that their recommendations are based on the actual prevailing conditions.

The Committee met a number of times and interviewed doctors and other workers when the following facts were brought to light:—

(*a*) A steady fall in infant mortality had taken place from 660 per 1,000 in 1929 to 120 per 1,000 in 1947.

We believe that the following influences have been at work over the years which will tend to modify conclusions:—

(1) Improvement in the standard of living and in the wage earning power of the poorer classes.

(2) Better supervision in the public health services in recent years.

(3) A steadily improving accuracy in the returns of births and deaths especially in later years.

(4) Better appreciation of food values. Beri-beri, which used to take such a heavy toll of infant lives, is not commonly seen nowadays.

(*b*) The main killing diseases in order of their importance are:—

(1) Bronchopneumonia which is the cause of half of the mortality at these ages.

(2) Gastro-enteritis.

(3) Prematurity.

The Committee feels, however, that these names are labels rather than accurate diagnosis. In an interview with one of the doctors, we discovered that most of the infants at an institution accepting moribund babies were given the diagnosis of prematurity without sufficient scientific evidence to confirm the diagnosis. We feel that this applies to many other cases as well.

(*c*) Other diseases which influence the high mortality are:—

(1) *Tuberculosis.* This is another important factor in the high mortality rate. This is to be expected in a society where the tuberculous infection is so prevalent. In addition, we feel that many cases that die, and are certified as marasmus, malnutrition, unspecified meningitis and bronchopneumonia were due to tuberculosis.

(2) *Syphilis.* It was agreed that syphilis is a major indirect cause of death in the case of prematurity, miscarriages and abortions. Doctors emphasized the fact that, for obvious reasons, congenital syphilis was not commonly given as a cause of death on certificates.

(*d*) The following are important general factors in the high infantile mortality rate:—

(1) *Overcrowding, bad ventilation and sanitation, and poverty.*

These factors, which were found to have a great bearing on the high mortality rate in all big overcrowded cities in England some fifty years ago, are very much worse in Hong Kong today.

(2) *Belief in aged and harmful customs, superstitions and Chinese medicine:*

The importance of these cannot be overestimated. The great majority of the poor, and to a lesser extent the rich, when a child is ill, either seeks the advice of a friendly neighbour, or rushes straight to a Chinese medicine shop to accept the advice of the man behind the counter, or consults a herbalist and many womenfolk seek temple advice. It is only late in the course of the disease that a western trained doctor is consulted. There is still a wide belief that Chinese medicine is good for internal diseases, especially for measles, bronchitis and influenza.

(3) *Ignorance of the importance of fresh air:*

The majority of Chinese do not realise the value of fresh air, either in health or sickness. They do not ventilate their rooms enough. Whenever there is sickness in the family, especially with fever, all windows are immediately closed and the patient is covered with layers and layers of clothes and blankets. All practitioners are familiar with the picture that is associated with the physical examination of a baby. If there is any window or door that is open, it is immediately fully closed. There is no such thing as taking off the clothes so that the doctor may make a thorough examination. The great heaps of clothes are merely pulled outwards and a little upwards and the doctor has to slip his stethoscope way up in order to listen to the chest. Any part of the abdomen that is uncovered by such a procedure, is immediately covered by the anxious mother or amah. They fear the exposure and the catching of a cold. Further, in such diseases as measles, whooping cough, and bronchopneumonia, where fresh air and oxygen form an essential part of western treatment it is contra-indicated in Chinese therapeutics. One can understand their objections to direct draught, but to prevent draught is one thing and to stop entirely fresh air from entering the sick room is another. This single factor is one of the most important causes of respiratory diseases, directly or indirectly.

(4) *Improper feeding:*

There is an increasing tendency among the upper classes to substitute artificial feeding for breast feeding. Mothers of the poorer class, however, are quite eager to suckle their offspring, but, through force of circumstances, have to give up entirely or give partial feeding only. As cows' milk in any form is beyond their means, starch, congee or potatoes are given as early as two to three months of age, very often with mouth to mouth feeding or by premastication by the mother. Of those that have breast milk, over-feeding in the early months is common, and breast feeding is frequently carried on for unduly prolonged periods, sometimes for much longer than one year. Improper feeding undoubtedly is an important cause of gastroenteritis.

(5) *Female Labour.*

This causes the mother to discontinue breast feeding and to neglect the baby.

(6) *Over-clothing.*

With the exception of the very poor who are under-clothed in winter, most Chinese tend to over-clothe their babies in all seasons.

(7) *Excessive fondling and carrying of the baby.*

This occurs both in health and in sickness. The popular conception among the Chinese is that too much crying may produce a hoarse voice which may last throughout life. It may weaken the abdominal wall and produce umbilical hernia. What is most

feared is that it may even produce a lax or enlarged scrotum which is considered injurious to the future health of the male. In a place like Hong Kong where tuberculosis and other respiratory diseases are so prevalent this excessive carrying of babies in the arms is very conducive to the spread of these diseases.

(8) *Notification of Infectious Diseases.*

It must be pointed out that there are many cases of bronchopneumonia following measles, and these usually are brought to a western trained doctor late in the course of the disease, because of the fear of the health measures that may follow the notification of the disease. The same applies to complications of other infectious diseases.

(9) *Anaemia of Pregnant Mothers.*

It is estimated that 20% of the ante-natal cases at Tsan Yuk Hospital have anaemia. This is due to the restriction of diet, especially during the last three months of pregnancy, and is caused by (*a*) ignorance, (*b*) custom, (*c*) poverty and (*d*) vomiting of pregnancy. The bad custom of completely eliminating vegetables at this period, for fear of developing diarrhoea with consequent onset of premature labour is most injurious.

(10) *Malnutrition in infancy.*

This is still considered by some to be common, but it is a general malnutrition rather than one connected with any particular vitamin.

RECOMMENDATIONS.

I. *Propaganda and Education.*

While improvements in housing, sanitation and the standard of living take time, propaganda and education emphasising the following can be undertaken forthwith.

(1) The value of fresh air and proper ventilation.

(2) Personal habits and hygiene.

(3) The importance of breast feeding.

(4) Proper methods of infant feeding.

(5) The erroneous belief in the efficacy of Chinese medicine.

Unlike western medicine which has advanced by leaps and bounds during recent years, Chinese medicine, not only has made no progress but actually has retrogressed. Although it may not be advisable, at this juncture, to speak directly of the error of the belief in Chinese medicine and the dangers associated with herbalist practice, we could achieve our aim by making known to the Chinese public the recent advances of western medicine, emphasizing the preventives and specific curatives which we

now have, especially for diseases such as broncho-pneumonia, miliary tuberculosis, diphtheria and measles. Bronchopneumonia and miliary tuberculosis at present, cause about half the mortality in infancy. We should also emphasize the importance of bringing the baby early to the doctor in cases of illness. The Death certificates of 1947 show that only 2½% had been seen by the doctor for more than one day prior to death.

(6) To implement No. (5) above, we advise, (*a*) the registration of herbalists, as has been done in China, (*b*) the control of their advertisements in the Chinese press.

II. *Education and Propaganda through the following channels:—*

(1) Through boys and girls of school leaving classes; and in the case of girls, special attention to be paid to the art of mothercraft.

(2) Through regular home visits to the new-born by trained nurses or health officers for a certain period.

(3) Through lectures and films on street corners.

(4) Through ante-natal clinics, infant welfare centres, children's clinics, children's hospitals, and other social, charitable or educational institutions.

(5) Through midwives and private nurses.

III. *To Provide Facilities for the care of babies through the Establishment of*

(1) Ante-natal clinics.

(2) Infant Welfare Centres.

(3) Creches.

(4) Children's Clinics.

(5) Children's Hospitals. The Committee feels that the number of children's beds available in the Colony is hopelessly inadequate, and that the building of a children's hospital should be given first priority—at least it should take precedence over the building of a mental hospital.

IV. *Co-ordination of all aspects of child health work—educational, preventive and curative,* and the Provision of facilities for the training of staff for this work.

V. *Infectious diseases and their notification.*

Except for the more important infectious diseases such as cholera, smallpox and one or two others, the Committee felt that it was unwise to insist on the routine health measures normally enforced by the health authorities consequent on the notification of the diseases. These measures defeat their own purpose by making the great majority of Chinese refuse to go to a western trained doctor until it is too late for him to cure the disease.

VI. *Tuberculosis.*

The Committee recommends that this disease should be notifiable, but that no action be taken by the Health Department even for 'open cases'. It may be left to the practitioner if he takes upon himself the duty, to use his personal influence with the patient to point out to him the dangers of infecting others, especially babies and small children, and to advise him to take precautionary measures.

Except with the poorest class, most of the babies of Chinese families are taken care of partly or entirely by amahs. They have the closest contact with the babies and handle all their food. The importance of these amahs being carriers of diseases, especially tuberculosis cannot be over-estimated. Some means may be devised to educate these amahs in personal habits and hygiene, infant feeding and the care of babies, and to induce their employers to have them checked up before engaging them for babies.

LEE HAH LIONG,
Chairman,

Infant Mortality Investigation Committee.

ANNEXURE H.

SCHOOL HEALTH SERVICE

RESULTS OF MEDICAL INSPECTION OF PUPILS.

Schools	Number of medical inspections undertaken	Number of pupils with no apparent defect	Number of Pupils with Defects Requiring Attention							
			Observation	Treatment at General Clinics	Treatment at Eye Clinics	Treatment at Dental Clinics	Treatment at Ear, Nose and Throat Clinic	Treatment at Surgical Clinics	Treatment at Anti-tuberculosis Clinics	Admitted to Hospital
'A' type	1,102	309	613	76	76	124	29	—	—	—
= 5		=28.03%	55.62%	6.89%	6.89%	11.25%	2.63%	—	—	—
'B' type	8,736	1,898	4,594	1,615	1,038	2,067	152	10	13	1
=21		=21.72%	52.58%	18.48%	11.88%	23.66%	1.73%	0.11%	0.14%	0.01%
'C' type	13,744	2,890	6,346	4,001	700	4,531	298	15	13	—
=52		=21.02%	46.17%	29.11%	5.09%	32.96%	2.16%	0.1%	0.09%	—
'D' type	283	78	195	96	30	94	4	—	—	—
= 2		=27.56%	68.9%	33.92%	10.6%	33.21%	1.41%	—	—	—
Total	23,865	5,175	11,748	5,788	1,844	6,816	483	25	26	1
=80		=21.68%	49.22%	24.25%	7.72%	28.56%	2.02%	0.1%	0.1%	.004%

ANNEXURE H.

DEFECTS FOUND IN SCHOOLS.

Schools	Number of school premises inspected	Number found with defects	Details of Defects found									
			Ventilation	Lighting	Latrines	Doors & Windows	Blackboards not matt surfaced	Water Closets	Windows	Seats without backrests	White washing required	General repair required
Government	16	8	—	—	2	1	7	2	3	2	1	3
Grant-Aid	19	11	—	—	8	—	—	7	—	1	—	1
Subsidized Hong Kong	26	6	—	—	3	1	—	1	—	2	—	1
Subsidized Kowloon	11	2	—	—	1	—	—	1	—	—	—	—
Private Hong Kong	144	23	—	—	11	1	—	4	2	1	1	5
Private Kowloon	126	18	1	—	3	1	2	5	1	4	1	7
TOTAL	342	68	1	—	28	4	9	20	6	10	3	17

ANNEXURE I.

OUT-PATIENTS—1948

TOTAL ATTENDANCES AT GOVERNMENT AND GOVERNMENT ASSISTED HOSPITALS, CLINICS AND DISPENSARIES.

Institution	Casualties	Dressings	General Out-Patients	Babies Clinics	Ante-Natal	Post-Natal	Gynaecological	Social Hygiene	Eye	Ear, Nose & Throat	Anti-Tuberculosis	TOTAL
Hospitals:—												
Queen Mary	10,582	—	—	—	1,477	—	384	—	1,049	597	—	14,089
Kowloon	4,835	25,145	62,180	—	6,293	859	1,492	—	18,849	303	—	119,956
Sai Ying Pun	—	46,903	81,396	—	1,487	—	967	—	24,606	1,746	—	157,105
Tsan Yuk	—	—	—	—	10,776	—	—	—	—	—	—	10,776
Stanley Prison	718	22,180	18,178	—	—	—	—	2,092	—	—	—	43,168
Cheung Chau	35	2,898	6,394	526	16	—	—	—	—	—	—	9,869
Clinics & Dispensaries:—												
Violet Peel	—	1,248	7,675	—	—	—	—	—	503	—	—	9,426
Harcourt Tuberculosis	—	—	—	—	—	—	—	—	—	—	88,843	88,843
Social Hygiene	—	—	—	—	—	—	—	155,768	—	—	—	155,768
9 Public Dispensaries	2	70,758	238,274	45,304	—	—	9,235	—	—	—	507	364,080
12 New Territories Disps.	1,931	48,315	54,292	461	—	—	—	—	—	—	883	105,882
Family Clinic	—	—	5,602	—	—	—	—	—	—	—	—	5,602
Police Medical Post	—	3,685	8,157	—	—	—	—	—	—	—	—	11,842
Victoria Remand Prison	—	806	6,590	—	—	—	—	—	—	—	—	7,396
Matauchung Camp	—	336	1,152	—	—	—	—	—	—	—	—	1,488
Health Centres:—												
Western	—	—	—	—	612	—	720	—	—	—	—	1,332
Kowloon (Tsimshatsui)	—	—	—	—	1,089	—	2,425	—	—	—	—	3,514
Harcourt	—	—	—	—	859	—	2,278	—	—	—	—	3,137
Total of Govt. institutions	18,103	222,274	489,890	46,291	22,609	859	17,501	157,860	45,007	2,646	90,233	1,113,273
Tung Wah Group	354	23,733	61,152	23,401	—	—	4,556	—	6,841	—	—	120,037
Nethersole Hospital	—	—	39,438	3,792	4,344	678	15,376	—	—	—	—	63,628
Grand Total	18,457	246,007	590,480	73,484	26,953	1,537	37,433	157,860	51,848	2,646	90,233	1,296,938

ANNEXURE I.

OUT-PATIENTS—1948

NEW CASES AT GOVERNMENT & GOVERNMENT ASSISTED HOSPITALS, CLINICS & DISPENSARIES.

Institution	Casualties	Dressings	General Out-Patients	Babies Clinics	Ante-Natal	Post-Natal	Gynaecological	Social Hygiene	Eye	Ear, Nose & Throat	Anti-Tuberculosis	TOTAL
Hospitals:—												
Queen Mary	9,091	—	—	—	262	—	190	—	372	313	—	10,228
Kowloon	4,835	3,683	50,292	—	1,610	606	617	—	6,717	162	—	68,522
Sai Ying Pun	—	17,915	57,008	—	614	—	532	—	3,981	704	—	80,754
Tsan Yuk	—	—	—	—	5,540	—	—	—	—	—	—	5,540
Stanley Prison	718	9,214	7,240	—	—	—	—	28	—	—	—	17,200
Cheung Chau	35	1,234	3,572	282	6	—	—	—	—	—	—	5,129
Clinics & Dispensaries:—												
Violet Peel	—	384	3,957	—	—	—	—	—	281	—	—	4,622
Harcourt Tuberculosis	—	—	—	—	—	—	—	—	—	—	26,420	26,420
Social Hygiene	—	—	—	—	—	—	—	14,217	—	—	—	14,217
9 Public Dispensaries	—	62,122	124,061	28,302	—	—	4,029	—	—	—	170	218,684
12 New Territories Disps.	1,198	15,348	31,612	188	—	—	—	—	—	—	307	48,653
Family Clinic	—	—	958	—	—	—	—	—	—	—	—	958
Police Medical Post	—	3,685	2,502	—	—	—	—	—	—	—	—	6,187
Victoria Remand Prison	—	806	1,941	—	—	—	—	—	—	—	—	2,747
Matauchung Camp	—	236	878	—	—	—	—	—	—	—	—	1,114
Health Centres:—												
Western	—	—	—	—	177	—	313	—	—	—	—	490
Kowloon (Tsimshatsui)	—	—	—	—	387	—	521	—	—	—	—	908
Harcourt	—	—	—	—	330	—	840	—	—	—	—	1,170
Total of Govt. institutions	15,877	114,627	284,021	28,772	8,926	606	7,042	14,245	11,351	1,179	26,897	513,543
Tung Wah Group	354	7,733	25,876	11,320	—	—	2,209	—	1,891	—	—	49,383
Nethersole Hospital	—	—	10,033	1,218	1,739	678	5,059	—	—	—	—	18,727
Grand Total	16,231	122,360	319,930	41,310	10,665	1,284	14,310	14,245	13,242	1,179	26,897	581,653

ANNEXURE I.

IN-PATIENTS TREATED IN GOVERNMENT AND GOVERNMENT ASSISTED HOSPITALS 1948.

	1	2	3	4	5	6
Name	General Cases	Infectious Cases Other Than Tuberculosis	Tuberculosis	Maternity Cases	Mental Cases	TOTAL I-V
Queen Mary Hospital	5,789	144	353	760	53	7,099
Sai Ying Pun Hospital	281	274	2	—	—	557
Tsan Yuk Hospital	714	—	9	5,267	—	5,990
Eastern Maternity Hospital	—	—	—	1,901	—	1,901
Wanchai Social Hygiene Hospital	623	—	—	—	—	623
Mental Hospital	—	—	—	—	482	482
Kowloon Hospital	3,520	49	93	1,352	11	5,025
Lai Chi Kok Hospital	725	260	339	—	—	1,324
Cheung Chau Hospital	659	4	69	317	—	1,049
Felix Villas	—	—	77	—	—	77
North Point Camp	268	1	3	—	—	272
Stanley Prison Hospital ...	557	216	42	—	3	818
Total Government Hospital	13,136	948	987	9,597	549	25,217
New Territories Dispensaries	20	—	1	1,323	—	1,344
Tung Wah Group	15,210	343	1,906	11,437	—	28,896
Nethersole	3,041	46	145	1,144	—	4,376
Grand Total	31 407	1,337	3,039	23,501	549	59,833

ANNEXURE J.

CASES TREATED IN GOVERNMENT AND GOVERNMENT ASSISTED HOSPITALS AND TOTAL DEATHS IN THE COLONY.

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
I.—Infective & Parasitic Diseases.						
Typhoid fever	119	139	39	30	39	22
Paratyphoid fevers	4	10	1	—	—	—
Plague:—						
(a) Bubonic, septicaemic and secondary pulmonary plague (infection by fleas or other biting insects)	—	—	—	—	—	—
(b) Primary pneumonic plague (infection through respiratory tract)	—	—	—	—	—	—
(c) Unspecified plague	—	—	—	—	—	—
Cholera	—	—	—	—	—	—
Carried forward	123	149	40	30	39	22

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	123	149	40	30	39	22
I.—Infective & Parasitic Diseases,—*Contd.*						
Undulant fever (Brucellosis):—						
(a) Infection by Brucella melitensis (Melitococcus)	—	—	—	—	—	—
(b) Infection by Brucella abortus Bang	—	—	—	—	—	—
(c) Unspecified	—	—	—	—	—	—
Cerebro-spinal meningococcal meningitis	50	13	10	9	74	63
Malignant pustule and anthrax (Bacillus anthracis):—						
(a) Malignant pustule	—	—	—	—	—	—
(b) Septicaemic and visceral anthrax	—	—	—	—	—	—
(c) Unspecified anthrax	—	—	—	—	—	—
Scarlet fever	1	—	—	—	—	—
Whooping-cough	13	2	—	—	3	1
Diphtheria	109	2	26	23	24	28
Erysipelas	2	6	2	1	—	1
Tetanus	37	13	51	19	31	16
Carried forward	335	185	129	82	171	131

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	335	185	129	82	171	131
I.—Infective & Parasitic Diseases,—*Contd.*						
Tuberculosis of the respiratory system (including mediastinal glands):—						
(a) With mention of occupational disease of lung	—	—	—	—	—	—
(b) Without mention of occupational disease of lung	989	1,178	864	571	887	531
(c) Tuberculosis of unspecified site	3	540	7	1	1	1
Tuberculosis of the meninges and central nervous system:—						
(a) Meninges	84	122	190	157	137	127
(b) Other sites	2	59	—	—	—	—
Tuberculosis of the intestines and peritoneum (including mesenteric and retroperitoneal glands):—						
(a) Intestines	8	16	1	5	5	1
(b) Other sites	19	2	17	9	5	6
Tuberculosis of the vertebral column	49	22	3	4	5	4
Carried forward	1,489	2,124	1,211	829	1,211	801

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	1,489	2,124	1,211	829	1,211	801
I.—Infective & Parasitic Diseases,—*Contd.*						
Tuberculosis of the bones and joints (excluding vertebral column):—						
(a) Bones (except vertebral column)	16	23	3	—	—	—
(b) Joints	43	40	6	3	4	5
Tuberculosis of the skin and subcutaneous cellular tissue	5	2	—	—	—	—
						—
Tuberculosis of the lymphatic system (excluding mediastinal (13), mesenteric and retroperitoneal (15) glands)	42	29	4	8	3	—
Tuberculosis of the genito urinary system	20	2	2	—	1	1
Tuberculosis of other organs:—						
(a) Addison's disease specified as tuberculous ...	1	—	—	—	3	—
(b) Others	6	3	1	1	1	—
Carried forward	1,622	2,223	1,227	841	1,223	807

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	1,622	2,223	1,227	841	1,223	807
I.—Infective & Parasitic Diseases.—*Contd.*						
Disseminated tuberculosis:—						
(a) Acute generalized miliary tuberculosis	13	—	38	27	16	19
(b) Chronic generalized tuberculosis	1	—	4	7	16	10
(c) Unspecified	1	50	19	9	46	28
Leprosy	19	8	1	1	—	—
Purulent infection and septicaemia (not associated with pregnancy, childbirth or the puerperium):—						
(a) Septicaemia	7	3	5	6	6	—
(b) Pyaemia	2	3	7	7	3	5
(c) Gas gangrene	—	—	—	—	—	—
(d) Generalized infection by Bacillus coli	2	—	—	—	—	—
Gonococcal infections (all sites)	465	6	—	—	—	1
Other bacterial diseases (dysentery excepted):—						
(a) Glanders	—	—	—	—	—	—
(b) Tularaemia	—	—	—	—	—	—
(c) Others	—	—	—	—	—	—
Carried forward	2,132	2,293	1,301	898	1,310	870

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	2.132	2.293	1.301	898	1.310	870
I.—Infective & Parasitic Diseases,—*Contd.*						
Dysentery:—						
(a) Bacillary dysentery	35	18	8	2	6	2
(b) Amoebic dysentery	59	57	3	7	7	—
(c) Other protozoal dysentery	—	—	—	—	—	—
(d) Other or unspecified forms of dysentery ...	2	8	3	2	1	2
Malaria:—						
(a) Benign tertian	127	90	9	3	5	3
(b) Quartan	10	2	1	2	1	—
(c) Tropical (malignant) tertian (including blackwater fever)	62	204	29	10	13	12
(d) Other or unspecified malaria	143	281	91	48	120	94
Other diseases due to parasitic protozoa (except spirochaetes)	4	—	1	—	—	—
Syphilis:—						
(a) Locomotor ataxia (tabes dorsalis)	4	19	2	—	3	1
(b) General paralysis of the insane	27	3	5	—	6	1
(c) Aneurysm of the aorta	16	—	23	3	19	4
Carried forward	2.621	2.975	1.476	975	1.496	939

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	2,621	2,975	1,476	975	1,496	989
I.—Infective & Parasitic Diseases,—*Contd.*						
(d) Other forms of syphilis:—						
(a) Congenital syphilis	57	61	24	17	23	25
(b) Syphilis of nervous system (except tabes and general paralysis of the insane)	10	9	5	2	5	—
(c) Syphilis of the circulatory system (except aneurysm of the aorta)	2	27	—	—	1	—
(d) Other or unspecified forms of syphilis ...	390	104	5	—	4	1
Relapsing fever:—						
(a) Epidemic louse-borne (Sp. obermeieri)	—	—	—	—	—	—
(b) Transmitted by other vectors (Sp. duttoni)	—	—	—	—	—	—
(c) Unspecified	1	1	—	—	6	—
Other diseases due to spirochaetes:—						
(a) Spirochaetosis icterohaemorrhagica (Weil's disease)	—	—	—	—	—	—
(b) Others	2	1	—	1	—	—
Carried forward	3,083	3,178	1,510	995	1,535	1,015

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	3,083	3,178	1,510	995	1,535	1,015
I.—Infective & Parasitic Diseases,—*Contd.*						
Influenza:—						
(a) With respiratory complications specified ...	11	—	2	—	2	2
(b) Without respiratory complications specified	74	204	13	10	13	18
Smallpox:—						
(a) Variola major	—	—	—	—	—	—
(b) Variola minor (alastrim)	—	—	—	—	—	—
(c) Unspecified	7	—	—	2	65	64
Measles	124	2	4	2	4	4
Acute poliomyelitis and polioencephalitis	6	2	1	2	3	—
Acute infectious encephalitis (lethargic or epidemic):—						
(a) Acute lethargic (or epidemic) encephalitis ...	—	4	—	—	1	—
(b) Sequelae of encephalitis lethargica (Parkinsonism, post-encephalitic Parkinsonian syndrome)	1	—	—	—	—	—
(c) Unspecified encephalitis lethargica	4	—	—	—	—	—
Carried forward	3,310	3,390	1,530	1,011	1,623	1,103

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	3,310	3,390	1,530	1,011	1,623	1,103
I.—Infective & Parasitic Diseases,—*Contd.*						
Other diseases due or attributed to viruses:—						
(a) Yellow fever	—	—	—	—	—	—
(b) Rabies	6	—	1	1	—	4
(c) Herpes zoster (Zona)	1	—	—	—	—	—
(d) German measles	6	—	—	—	—	—
(e) Varicella (Chicken pox)	95	—	—	3	—	—
(f) Others	4	3	—	—	—	—
Typhus and typhus-like diseases (Rickettsioses):—						
(a) Louse-borne exanthematic typhus	1	—	—	—	—	—
(b) Typhus-like diseases transmitted by other vectors	4	—	—	—	—	—
(c) Other and unspecified typhus-like diseases	1	—	—	1	—	—
Ankylostomiasis	53	177	9	15	3	5
Hydatid diseases:—						
(a) Hydatid disease of liver	—	—	—	—	—	—
(b) Hydatid disease of other and unspecified organs	—	—	—	—	—	—
Carried forward	3,481	3,570	1,540	1,031	1,626	1,112

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	3,481	3,570	1,540	1,031	1,626	1,112
I.—Infective & Parasitic Diseases.—*Contd.*						
Other diseases due to helminths	157	300	3	—	2	—
Mycoses	2	1	—	—	—	—
Other infective or parasitic diseases:—						
(a) Venereal diseases (other than syphilis and gonorrhoea)	17	1	—	—	—	—
(b) Pernicious lymphogranulomatosis (Hodgkin's disease)	1	—	—	1	—	—
(c) Mumps	25	1	1	—	—	—
(d) Other infective or parasitic diseases	9	1	—	—	1	—
II.—Cancer and other Tumours.						
Cancer and other malignant tumours of the buccal cavity and pharynx:—	1	—	—	1	—	—
(a) Lips	1	—	1	—	3	—
(b) Tongue	26	36	35	28	20	15
(c) Other and unspecified sites						
Carried forward	3,720	3,910	1,580	1,061	1,652	1,127

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	3.720	3.910	1.580	1.061	1.652	1.127
II.—Cancer and other Tumours,—*Contd.*						
Cancer and other malignant tumours of the digestive organs and peritoneum:—						
(a) Oesophagus	2	1	7	1	1	1
(b) Stomach & duodenum	16	74	47	30	27	25
(c) Intestines other than duodenum or rectum	10	9	8	14	10	4
(d) Rectum	14	8	5	6	2	5
(e) Liver and biliary passages	10	39	32	17	35	15
(f) Pancreas	—	—	—	—	4	1
(g) Peritoneum	1	—	1	3	—	—
(h) Other or unspecified digestive organs	4	8	1	—	—	—
Cancer and other malignant tumours of the respiratory system:—						
(a) Larynx and trachea	1	—	1	—	—	—
(b) Bronchi, lungs and pleura	6	—	8	3	5	7
(c) Unspecified respiratory organs	2	20	—	—	—	—
Cancer and other malignant tumours of the uterus:—						
(a) Cervix uteri	60	121	—	23	—	19
(b) Other or unspecified sites	1	—	—	62	—	44
Carried forward	3.847	4.190	1.690	1.220	1.736	1.248

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	3.920	4.303	1.699	1.253	1.749	1.282
II.—Cancer and other Tumours,—*Contd.*						
Cancer and other malignant tumours of other or unspecified organs:—						
(a) Adrenal glands	—	1	—	—	—	—
(b) Bones	11	—	3	1	1	—
(c) Thyroid gland	3	—	4	1	—	—
(d) Other and unspecified organs	32	26	7	5	5	8
Non-malignant tumours (including dermoid cysts):—						
(a) Ovaries	54	40	—	1	—	3
(b) Uterus	13	30	—	—	—	1
(c) Other female genital organs	8	58	—	1	—	—
(d) Brain and other parts of the nervous system	3	1	—	1	—	—
(e) Other and unspecified organs	81	12	—	1	2	2
Tumours of undetermined nature:—						
(a) Ovaries	6	—	—	1	—	—
(b) Uterus	2	7	—	7	—	—
(c) Other female genital organs	2	—	—	—	—	—
(d) Brain and other parts of the nervous system	4	—	—	—	2	—
(e) Other and unspecified organs	14	11	—	—	1	—
Carried forward	4.153	4.489	1.713	1.272	1.760	1.296

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	3,847	4,190	1,690	1,220	1,736	1,248
II.—Cancer and other Tumours,—*Contd.*						
Cancer and other malignant tumours of other female genital organs	10	47	—	5	—	7
Cancer and other malignant tumours of the breast	32	38	—	23	—	21
Cancer and other malignant tumours of the male genital organs:—						
(a) Scrotum	1	—	—	—	—	—
(b) Prostate	1	—	1	—	3	—
(c) Other or unspecified male genital organs ...	1	4	2	—	2	—
Cancer and other malignant tumours of the male and female urinary organs	1	—	2	1	3	1
Cancer and other malignant tumours of the skin (scrotum excepted—51a)	21	19	2	2	2	3
Cancer and other malignant tumours of the brain and other parts of the nervous system:—						
(a) Glioma (not specified as benign)	2	—	2	—	1	1
(b) Sarcoma	1	—	—	1	—	—
(c) Other and unspecified malignant tumours ...	3	5	—	1	2	1
Carried forward	3,920	4,303	1,699	1,253	1,749	1,282

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	4,153	4,489	1,713	1,272	1,760	1,296
III.—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, Other General Diseases and Vitamin deficiency Diseases.						
Rheumatic fever:—						
(a) Acute rheumatic pericarditis	3	—	—	—	—	—
(b) Acute rheumatic endocarditis	7	2	2	5	3	9
(c) Acute rheumatic myocarditis	—	—	—	—	—	—
(d) Other forms, including acute articular rheumatism and rheumatic pleurisy	6	22	—	2	4	6
Chronic rheumatism and other rheumatic diseases:—						
(a) Rheumatoid arthritis	—	—	—	—	—	—
(a) Chronic rheumatic polyarthritis	25	154	—	—	—	—
(b) Arthritis deformans	—	96	—	—	—	—
(c) Others	4	31	1	—	1	3
(b) Other forms of chronic articular rheumatism	21	—	1	1	—	—
(c) Other forms of chronic rheumatism	8	93	—	—	1	2
Gout	1	—	1	—	—	—
Carried forward	4,228	4,887	1,718	1,280	1,769	1,316

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	4,228	4,887	1,718	1,280	1,769	1,316
III.—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, Other General Diseases and Vitamin deficiency Diseases,—*Contd.*						
Diabetes mellitus	13	19	11	6	12	2
Diseases of the pituitary gland	—	—	—	—	—	—
Diseases of the thyroid and parthyroid glands:—						
(a) Simple goitre	26	1	—	—	—	—
(b) Exophthalmic goitre	33	9	—	7	—	2
(c) Myxoedema and cretinism	1	—	—	1	—	—
(d) Other diseases of the thyroid gland	7	5	—	—	—	—
(e) Diseases of the parathyroid glands	2	1	—	—	—	—
Diseases of the thymus, including hypertrophy (status lymphaticus)	1	—	—	—	—	—
Diseases of the adrenal glands (not described as tuberculosis):—						
(a) Addison's disease, not specified as tuberculous	—	1	—	—	—	—
(b) Others	6	—	—	1	—	—
Carried forward	4,317	4,923	1,729	1,295	1,781	1,320

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	4.317	4.923	1.729	1.295	1.781	1.320
III.—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, Other General Diseases and Vitamin deficiency Diseases,—*Contd.*						
Other general diseases:—						
(a) Osteomalacia	—	—	—	—	—	—
(b) Other general diseases	4	—	25	17	39	23
Scurvy:—						
(a) Infantile scurvy (Barlow's disease)	—	—	—	1	—	2
(b) Other forms	2	1	—	—	—	—
Beri-beri	8	112	70	70	184	128
Pellagra	2	6	—	—	—	—
Rickets	1	—	—	—	1	—
Other vitamin-deficiency diseases	24	16	—	—	1	2
IV.—Diseases of the Blood and Blood-Forming Organs.						
Haemorrhagic conditions:—						
(a) Primary purpura	4	3	2	3	1	2
(b) Haemophilia	1	—	1	1	1	1
(c) Other and unspecified haemorrhagic conditions	2	—	—	—	—	—
Carried forward	4.365	5.061	1.827	1.387	2.008	1.478

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	4.365	5.061	1.827	1.387	2.008	1.478
IV.—Diseases of the Blood and Blood-Forming Organs,—*Contd.*						
Anaemias (excluding splenic anaemia—75a):—						
(a) Pernicious anaemia	2	82	5	4	2	—
(b) Other hyperchromic anaemias	—	6	—	—	—	—
(c) Hypochromic anaemias	2	—	1	—	—	—
(d) Other and unspecified anaemias	30	185	8	7	19	19
Leukaemias and aleukaemias:—						
(a) Leukaemia	9	1	7	1	1	—
(b) Aleukaemia	—	4	—	—	—	—
Diseases of the spleen:—						
(a) Splenic anaemia	3	—	1	1	—	—
(b) Banti's disease	—	1	1	—	—	—
(c) Other diseases of the spleen	31	34	10	6	18	5
Other diseases of the blood and blood-forming organs:—						
(a) Agranulocytosis	—	—	—	—	2	—
(b) Erythrocytosis	—	—	—	—	—	—
(c) Haemoglobinaemia	—	—	—	—	—	—
(d) Other diseases	1	8	—	—	—	1
Carried forward	4.443	5.382	1.860	1.406	2.050	1.503

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	4.443	5.382	1.860	1.406	2.050	1.503
V.—Chronic Poisoning & Intoxication.						
Chronic or acute alcoholism (ethylism):—						
(a) Acute alcoholism	45	—	—	—	—	—
(b)Chronic alcoholism	1	—	—	—	—	—
(c) Unspecified alcoholism	14	2	1	—	1	—
Lead poisoning:—						
(a) Specified as occupational	1	—	—	—	—	—
(b) Not specified as occupational	1	—	—	—	—	—
Chronic poisoning by other mineral and organic substances:—						
(a) Occupational poisoning	2	5	—	—	—	—
(b) Poisoning by narcotic and soporific drugs:—						
(a) Narcotics	42	3	—	—	—	—
(b) Soporifics	—	3	—	—	—	—
(c) Other non-occupational poisoning	—	—	—	—	—	1
(d) Unspecified poisoning	—	2	—	—	—	—
Carried forward	4.549	5.397	1.861	1.406	2.051	1.504

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	4.549	5.397	1.861	1.406	2.051	1.504
VI.—Diseases of the Nervous System and Sense Organs.						
Encephalitis (non-epidemic):—						
(a) Intra-cranial abscess	3	—	5	—	1	2
(b) Other forms	1	7	5	3	4	2
Meningitis (non-meningococcal):—						
(a) Simple meningitis	20	4	24	18	67	61
(b) Acute cerebro-spinal meningitis (not due to meningococcus)	42	61	1	—	—	—
Diseases of the medulla and spinal cord, other than locomotor ataxia (30a) and disseminated sclerosis (87d)	3	9	1	1	2	—
Intra-cranial lesions of vascular origin:—						
(a) Cerebral haemorrhage (not due to injury at birth—160a)	15	113	141	82	144	82
(b) Cerebral embolism and thrombosis	10	13	13	14	11	13
(c) Softening of the brain	1	—	—	—	—	—
Carried forward	4.644	5.604	2.051	1.524	2.280	1.664

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	4.644	5.604	2.051	1.524	2.280	1.664
VI.—Diseases of the Nervous System and Sense Organs,—*Contd.*						
Intra-cranial lesions of vascular origin,—*Contd.*:—						
(d) Hemiplegia and other paralyses of unstated origin	28	132	13	6	6	6
(e) Other intra-cranial effusions	5	—	4	2	1	1
Mental disorders and deficiency (excluding general paralysis of the insane—30b):—						
(a) Mental deficiency	32	1	1	—	—	2
(b) Schizophrenia (dementia praecox)	186	—	—	—	2	2
(c) Manic-depressive psychosis	3	—	1	—	—	—
(d) Other mental disorders	203	3	8	2	4	4
Epilepsy	33	28	3	—	7	4
Convulsions in children under 5 years of age	7	1	5	2	2	2
Other diseases of the nervous system:—						
(a) Chorea	13	—	—	—	—	—
(b) Neuritis (non-rheumatic)	17	72	—	1	3	3
(c) Paralysis agitans (Parkinson's disease)	2	4	1	—	—	—
(d) Disseminated sclerosis	1	1	—	—	—	—
(e) Others	27	85	3	3	1	—
Carried forward	5.201	5.931	2.090	1.540	2.306	1.688

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	5,201	5,931	2,090	1,540	2,306	1,688
VI.—Diseases of the Nervous System and Sense Organs,—*Contd.*						
Diseases of the organs of vision (including trachoma)	197	181	—	—	—	—
Diseases of the ear and of the mastoid process:—						
(a) Otitis and other diseases of the ear, without mention of mastoid (antrum) disease	27	39	—	3	—	2
(b) Diseases of the mastoid process	34	22	4	—	3	—
VII.—Diseases of the Circulatory System.						
Pericarditis (including chronic rheumatic pericarditis):—						
(a) Chronic pericarditis specified as rheumatic	1	—	6	1	—	—
(b) Others	4	13	7	1	9	5
Acute endocarditis (excluding rheumatic endocarditis—58b):—						
(a) Acute bacterial endocarditis	2	6	6	5	1	5
(b) Sub-acute bacterial endocarditis	3	1	7	4	2	1
(c) Other forms of acute or sub-acute endocarditis (excluding arteriosclerotic endocarditis)	5	34	18	16	18	15
Carried forward	5,474	6,227	2,138	1,570	2,339	1,716

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	5,474	6,227	2,138	1,570	2,339	1,716
VII.—Diseases of the Circulatory System,—*Contd.*						
Chronic affections of the valves & endocardium:—						
(a) Aortic valvular disease unassociated with mitral disease	24	8	33	6	22	10
(b) Other specified valvular disease (including sequelae of rheumatic fever)	44	227	47	72	57	66
(c) Unspecified valvular lesions or endocarditis	4	199	65	65	20	13
Diseases of the myocardium, including aneurysm of the heart:—						
(a) Acute myocarditis	—	26	4	2	—	—
(b) Chronic myocarditis specified as rheumatic	1	1	19	24	3	7
(c) Myocardial degeneration, infarction and sclerosis, and other chronic myocarditis, not specified as rheumatic	—	78	52	38	56	65
(d) Myocarditis not specified as acute or chronic	2	27	16	25	50	50
Diseases of the coronary arteries and angina pectoris:—						
(a) Diseases of the coronary arteries	6	1	13	1	8	6
(b) Angina pectoris without mention of coronary disease	—	4	1	2	2	4
Carried forward	5.555	6.798	2.388	1.805	2.557	1.937

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	5,555	6,798	2,388	1,805	2,557	1,937
VII.—Diseases of the Circulatory System,—*Contd.*						
Other diseases of the heart:—						
(a) Functional heart disease without mention of organic lesion	7	6	5	5	3	12
(b) Heart diseases specified as rheumatic but otherwise undefined	4	1	2	—	1	1
(c) Other and unspecified diseases of the heart	21	28	3	1	—	2
Aneurysm, except of heart (93) and aorta (30) ...	2	1	—	—	—	—
Arteriosclerosis, excluding diseases of the coronary arteries (94), renal sclerosis (13 1b) and cerebral haemorrhage (83)	3	9	17	12	7	1
Gangrene	6	3	2	—	5	2
Other diseases of the arteries	8	3	3	—	1	1
Diseases of the veins (varices, haemorrhoids, phlebitis, etc.):—						
(a) Varices	58	29	—	—	1	—
(b) Other diseases of the veins	84	165	1	—	—	—
Diseases of the lymphatic system (lymphangitis, etc.)	39	15	1	1	—	—
Carried forward	5,787	7,058	2,422	1,824	2,575	1,956

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	5,787	7,058	2,422	1,824	2,575	1,956
VII.—Diseases of the Circulatory System,—*Contd.*						
High blood pressure (idiopathic)	34	28	16	7	13	7
Other diseases of the circulatory system (including hypotension)	8	9	1	6	—	1
VIII.—Diseases of the Respiratory System (Not Specified as Tuberculous).						
Diseases of the nasal fossae and annexa:—						
(a) Diseases of the nasal fossae	20	33	—	—	—	—
(b) Others, including sinusitis (state site)	79	5	—	—	—	—
Diseases of the larynx	21	17	4	—	1	1
Bronchitis:—						
(a) Acute	77	123	69	100	142	132
(b) Chronic	107	411	36	33	42	34
(c) Not distinguished as acute or chronic	84	472	81	100	94	85
Broncho-pneumonia, including capillary bronchitis	178	1,752	1,228	1,243	1,390	1,203
Lobar (pneumococcal) pneumonia	90	507	331	228	395	228
Pneumonia (unspecified), including acute congestion of the lung	27	146	67	60	134	114
Carried forward	6,512	10,561	4,255	3,601	4,786	3,761

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	6.512	10.561	4.255	3.601	4.786	3.761
VIII.—Diseases of the Respiratory System (Not Specified as Tuberculous),—*Contd.*						
Pleurisy (not specified as tuberculous):—						
(a) Empyema	13	35	18	9	14	12
(b) Other or unspecified forms of pleurisy	34	72	9	4	22	15
Congestion (chronic or unspecified), oedema, embolism, haemorrhagic infarction and thrombosis of the lungs:—						
(a) Haemorrhagic infarction of the lung (including pulmonary embolism)	—	—	2	—	2	1
(b) Acute oedema of the lung	—	—	—	—	—	—
(c) Chronic or unspecified congestion of the lung	—	3	9	10	8	5
Asthma	65	237	32	15	33	17
Pulmonary emphysema	1	2	—	1	—	—
Other diseases of the respiratory system (except tuberculosis—13):—						
(a) Silicosis	2	—	—	—	—	—
(b) Other occupational respiratory diseases	1	—	1	1	—	—
(c) Gangrene of the lung	6	1	—	4	1	—
(d) Abscess of the lung	6	5	3	2	3	3
(e) Other diseases of the respiratory system not specified as occupational	35	6	1	—	1	—
Carried forward	6.675	10.922	4.330	3.647	4.870	3.814

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	6,675	10,922	4,330	3,647	4,870	3,814
IX.—Diseases of the Digestive System.						
Diseases of the buccal cavity and annexa, and of the pharynx and tonsils (including adenoid vegetations):—						
(a) Diseases of the teeth and gums	193	23	3	2	5	4
(b) Septic sore throat	13	6	—	2	3	2
(c) Other diseases of the pharynx and tonsils ...	263	133	13	6	6	3
(d) Diseases of other and unspecified sites	21	13	1	—	1	2
Diseases of the oesophagus	6	1	2	—	—	—
Ulcer of the stomach or duodenum:—						
(a) Stomach	114	215	52	11	44	24
(b) Duodenum	37	30	8	2	4	2
Other diseases of the stomach (except cancer, other malignant tumours)	91	422	4	2	5	3
Diarrhoea and enteritis (under 2 years of age) ...	79	1,562	747	719	341	369
Carried forward	7,492	13,327	5,160	4,391	5,279	4,223

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	7,492	13,327	5,160	4,391	5,279	4,223
IX.—Diseases of the Digestive System,—*Contd.*						
Diarrhoea, enteritis and ulceration of the intestines (2 years of age and over):—						
(a) Diarrhoea and enteritis	382	548	159	132	279	190
(b) Ulceration of the intestines (except duodenum)	7	1	—	—	—	—
Appendicitis	237	151	19	10	16	4
Hernia, intestinal obstruction:—						
(a) Hernia	118	95	10	3	4	3
(b) Intestinal obstruction	23	45	17	25	17	9
Other diseases of the intestines (including intestinal infection by B. coli):—						
(a) Diverticulitis	2	—	1	—	—	—
(b) Other diseases of the intestines	108	158	3	1	19	17
Cirrhosis of the liver:—						
(a) With mention of alcoholism	2	1	9	—	1	—
(b) Without mention of alcoholism	27	99	43	12	60	13
Carried forward	8,398	14,425	5,421	4,574	5,675	4,459

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	8,398	14,425	5,421	4,574	5,675	4,459
IX.—Diseases of the Digestive System,—*Contd.*						
Other diseases of the liver:—						
(a) Acute yellow atrophy (not associated with pregnancy (144c) or the puerperium (148c)	2	3	1	1	7	3
(b) Other diseases of the liver	35	62	6	11	14	7
Biliary calculi	18	3	4	—	—	1
Other diseases of the gall-bladder and bile-ducts:—						
(a) Cholecystitis without record of biliary calculi	29	8	3	1	4	2
(b) Others	20	14	3	3	2	—
Diseases of the pancreas (other than diabetes—61)	4	1	—	1	2	1
Peritonitis without stated cause	35	45	16	7	30	17
X.—Diseases of the Urinary and Genital Systems (not Venereal, or connected with Pregnancy or the Puerperium).						
Acute nephritis	21	103	30	31	16	11
Carried forward	8,562	14,664	5,484	4,629	5,750	4,501

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	8,562	14,664	5,484	4,629	5,750	4,501
X.—Diseases of the Urinary and Genital Systems (not Venereal, or connected with Pregnancy or the Puerperium),—*Contd.*						
Chronic nephritis:—						
(a) Secondary to acute nephritis	24	25	3	—	—	—
(b) Arteriosclerotic kidney	1	—	1	—	2	1
(c) Chronic nephritis not otherwise specified ...	32	327	102	93	91	99
Nephritis not stated to be acute or chronic	52	224	28	29	45	33
Other diseases of the kidneys and ureters (not connected with pregnancy):—						
(a) Pyelitis, pyelonephritis and pyelocystitis ...	30	42	9	3	5	8
(b) Others	37	25	1	1	—	1
Calculi of the urinary passages:—						
(a) Calculi of the kidneys and ureters	43	10	1	1	1	1
(b) Calculi of the bladder	40	30	1	—	1	1
(c) Calculi of unstated site	3	3	—	—	—	—
Diseases of the bladder (except tumours):—						
(a) Cystitis	14	48	—	—	3	1
(b) Other diseases of the bladder	9	27	2	—	—	1
Carried forward	8,847	15,425	5,632	4,756	5,898	4,647

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	8,847	15,425	5,632	4,756	5,898	4,647
X.—Diseases of the Urinary and Genital Systems (not Venereal, or connected with Pregnancy or the Puerperium),—*Contd.*						
Diseases of the urethra, urinary abscess, etc.:—						
(a) Stricture of the urethra	31	16	—	—	1	—
(b) Others	28	14	—	1	1	—
Diseases of the prostate:—						
(a) Hypertrophy of the prostate	12	—	3	—	3	—
(b) Others	6	1	1	—	1	—
Diseases of other male genital organs (not specified as venereal)	162	161	—	—	—	—
Diseases of the female genital organs (not specified as venereal, or connected with pregnancy or the puerperal state):—						
(a) Diseases of the ovaries, Fallopian tubes and parametria	85	120	—	7	—	9
(b) Diseases of the uterus	246	734	—	1	—	3
(c) Diseases of the breast	50	14	—	—	—	2
(d) Other diseases of the female genital organs	44	45	—	1	—	—
Carried forward	9,511	16,530	5,636	4,766	5,904	4,661

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	9,511	16,530	5,636	4,766	5,904	4,661
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State.						
Post-abortive infection:—						
(a) Spontaneous, therapeutic or of unspecified origin:—						
(a) With mention of pyelitis	1	1	—	—	—	—
(b) Without mention of pyelitis	36	2	—	1	—	1
(b) Abortion induced for reasons other than therapeutic:—						
(a) By the woman herself	—	—	—	—	—	—
(b) By other persons	2	—	—	—	—	—
(c) By persons unknown or unstated	—	—	—	—	—	—
Abortion without mention of septic conditions:—						
(a) Spontaneous, therapeutic or of unspecified origin:—						
(a) With record of haemorrhage, trauma or shock	10	—	—	4	—	2
(b) Without record of haemorrhage, trauma or shock	86	39	—	2	—	—
Carried forward	9,646	16,572	5,636	4,773	5,904	4,664

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	9,646	16,572	5,636	4,773	5,904	4,664
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State,—*Contd.*						
(b) Abortion induced for reasons other than therapeutic	32	406	—	—	—	—
(a) By the woman herself	—	—	—	—	—	—
(b) By other persons	—	—	—	—	—	—
(c) By persons unknown or unstated	—	—	—	—	—	—
Ectopic gestation:—						
(a) With mention of infection	2	—	—	1	—	1
(b) With mention of haemorrhage but not of infection	11	36	—	4	—	3
(c) Other cases	13	8	—	11	—	4
Haemorrhage of pregnancy:—						
(a) Haemorrhage from placenta praevia	26	—	—	1	—	3
(b) Haemorrhage from premature separation of placenta and other accidental haemorrhage during pregnancy (except with abortion—141)	20	38	—	1	—	—
(c) Other and unspecified haemorrhages of pregnancy	8	2	—	7	—	3
Carried forward	9,758	17,062	5,636	4,798	5,904	4,678

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	9,758	17,062	5,636	4,798	5,904	4,678
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State.—*Contd.*						
Toxaemias of pregnancy:—						
(a) Eclampsia of pregnancy	7	16	—	8	—	12
(b) Albuminuria and nephritis of pregnancy ...	16	7	—	2	—	—
(c) Acute yellow atrophy of liver associated with pregnancy	1	—	—	1	—	—
(d) Other toxaemias of pregnancy	154	79	—	4	—	3
Other diseases and accidents of pregnancy:—						
(a) Normal labour	8,220	12,472	—	—	—	2
(b) Other than normal labour	533	129	—	—	—	—
Haemorrhage of childbirth and the puerperium:—						
(a) Haemorrhage from placenta praevia during childbirth	2	29	—	—	—	3
(b) Haemorrhage from premature separation of placenta during childbirth	1	4	—	—	—	—
(c) Other haemorrhages during childbirth	4	5	—	—	—	—
(d) Other haemorrhages after childbirth	71	22	—	13	—	14
Carried forward	18,767	29,825	5,636	4,826	5,904	4,712

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	18,767	29,825	5,636	4,826	5,904	4,712
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State,—*Contd.*						
Infection during childbirth and the puerperium:—						
(a) General or local puerperal infections (including puerperal tetanus) with mention of pyelitis	2	—	—	—	—	—
(b) General or local puerperal infections (including puerperal tetanus) without mention of pyelitis	13	1	—	5	—	4
(c) Puerperal thrombophlebitis	—	—	—	—	—	—
(d) Puerperal embolism and sudden death	—	1	—	1	—	—
Puerperal toxaemias:—						
(a) Puerperal eclampsia	8	9	—	—	—	1
(b) Puerperal albuminuria and nephritis	32	3	—	—	—	—
(c) Acute yellow atrophy of liver (post-partum)	1	—	—	1	—	—
(d) Other puerperal toxaemias	5	7	—	—	—	—
Carried forward	18,828	29,846	5,636	4,833	5,904	4,717

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	18,828	29,846	5,636	4,833	5,904	4,717
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State,—*Contd.*						
Other accidents of childbirth:—						
(a) Laceration, rupture during parturition or other trauma of pelvic organs (without mention of haemorrhage)	267	3	—	1	—	6
(b) Other accidents of childbirth	3	19	—	4	—	9
Other or unspecified diseases of childbirth and the puerperium:—						
(a) Mastitis during the puerperium & lactation	24	—	—	—	—	—
(b) Puerperal psychoses	—	1	—	—	—	—
(c) Other and unspecified diseases	111	1	—	—	—	—
XII.—Diseases of the Skin and Cellular Tissue.						
Carbuncle, boils	142	96	8	5	2	2
Cellulitis, acute abscess	283	1,339	14	11	13	7
Other diseases of the skin and annexa, and of the cellular tissues	241	717	—	3	2	4
Carried forward	19,899	32,022	5,658	4,857	5,921	4,745

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	19,899	32,022	5,658	4,857	5,921	4,745
XIII.—Diseases of the Bones and Organs of Movement.						
Osteomyelitis and periostitis:—						
(a) Acute	10	23	1	1	—	—
(b) Chronic	21	14	—	1	1	1
(c) Unspecified	51	18	1	—	4	1
Other diseases of the bones, except tuberculosis (16, 17)	27	21	—	—	3	2
Diseases of the joints and other organs of movement:—						
(a) Diseases of the joints (except tuberculosis —17b, and rheumatism—58, 59)	28	128	—	—	—	—
(b) Diseases of other organs of movement	30	30	2	2	—	—
Carried forward	20,066	32,256	5,662	4,861	5,929	4,749

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	20,066	32,256	5,662	4,861	5,929	4,749
XIV.—Congenital Malformations.						
Congenital malformations:—						
(a) Congenital hydrocephalus	9	11	9	7	10	9
(b) Spina bifida and meningocele	11	9	—	4	—	—
(c) Congenital malformation of heart	10	7	5	4	5	6
(d) Monstrosities	6	2	4	2	2	—
(e) Congenital pyloric stenosis	3	1	—	—	2	—
(f) Cleft palate, harelip	47	—	—	—	—	—
(g) Imperforate anus	8	1	4	1	5	—
(h) Cystic disease of kidney	—	—	1	—	—	—
(i) Other stated congenital malformation:—						
(a) Central nervous system	—	—	3	—	2	—
(b) Circulatory system	2	—	—	—	—	—
(c) Digestive system	6	—	1	1	1	—
(d) Genito-urinary system	6	—	—	—	—	—
(e) Other sites	14	15	—	3	—	1
(j) Unspecified congenital malformations	7	6	2	—	—	—
Carried forward	20,195	32,308	5,691	4,883	5,956	4,765

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	20.195	32.308	5.691	4.883	5.956	4.765
XV.—Diseases Peculiar to the First Year of Life.						
Congenital debility	5	66	120	217	149	198
Premature birth (still-births excluded)	315	181	361	353	350	393
Injury at birth (still-births excluded):—						
(a) Intra-cranial or spinal haemorrhage due to injury at birth:—						
(a) With mention of operation	1	—	—	—	1	1
(b) Without mention of operation	8	—	2	—	7	4
(b) Other intra-cranial or spinal injuries at birth:—						
(a) With mention of operation	—	—	—	—	—	—
(b) Without mention of operation	—	—	—	—	1	—
(c) Other birth injuries:—						
(a) With mention of operation	—	—	—	—	—	—
(b) Without mention of operation	1	—	3	1	4	2
Carried forward	20.525	32.555	6.177	5.454	6.468	5.363

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	20,525	32,555	6,177	5,454	6,468	5,363
XV.—Diseases Peculiar to the First Year of Life,—*Contd.*						
Other diseases peculiar to the first year of life:—						
(a) Asphyxia during or after birth, atelectasis	241	7	38	34	26	32
(b) Intoxication due to maternal toxaemia	1	—	—	—	—	—
(c) Infections of the new-born, including non-syphilitic pemphigus	—	2	5	3	2	2
(d) Melaena neonatorum	—	1	6	2	—	1
(e) Other specified diseases (including gangrene or haemorrhage of umbilicus, icterus neonatorum, acute catarrhal hepatitis)	6	75	13	5	11	17
XVI.—Senility, Old Age.						
Senility, old age:—						
(a) Old age	1	121	3	4	33	37
(b) Senility with mention of senile dementia ...	6	—	4	5	—	—
(c) Senility without mention of senile dementia	4	—	33	64	14	17
Carried forward	20,784	32,761	6,279	5,571	6,554	5,469

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	20,784	32,761	6,279	5,571	6,554	5,469
XVII.—Violent or Accidental Deaths.						
Suicide or attempted suicide by poisoning:—						
(a) By solid or liquid toxic or corrosive substances:—						
(a) By corrosive substances	126	3	16	21	8	3
(b) By analgesic and narcotic drugs	11	1	1	2	9	15
(c) By soporific drugs (not liquid anaesthetics)	44	—	—	—	—	—
(d) By other or unspecified solid or liquid poisons	42	—	3	2	2	—
(b) By poisonous gas:—						
(a) By coal-gas, including other gases in domestic use	—	—	—	—	—	—
(b) By motor exhaust gases	—	—	—	—	—	—
(c) By other poisonous gases	—	—	—	—	—	—
(c) Opium addiction	—	—	—	—	—	—
Carried forward	21,007	32,765	6,299	5,596	6,573	5,487

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	21,007	32,765	6,299	5,596	6,573	5,487
XVII.—Violent or Accidental Deaths,—*Contd.*						
Other forms of suicide or attempted suicide:—						
(a) By hanging or strangulation	4	—	8	9	13	7
(b) By drowning	40	—	—	—	—	—
(c) By fire-arms and explosives	4	—	—	—	—	—
(d) By cutting or piercing instruments	11	—	3	—	—	1
(e) By jumping from high places	22	—	—	—	3	—
(f) By crushing:—						
(a) Suicide or attempted suicide on railways	—	—	—	—	—	—
(b) Other suicide or attempted suicide by crushing	—	—	—	—	—	—
(g) Suicide or attempted suicide by other or unspecified means	2	—	—	—	—	—
Infanticide or attempted infanticide (infants under 1 year)	1	—	—	—	1	1
Carried forward	21,091	32,765	6,310	5,605	6,590	5,496

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	21.091	32.765	6.310	5.605	6.590	5.496
XVII.—Violent or Accidental Deaths,—*Contd.*						
Homicide or attempted homicide by fire-arms (ages 1 year and over)	66	—	—	—	1	—
Homicide or attempted homicide by cutting or piercing instruments (ages 1 year and over) ...	64	—	—	—	—	—
Homicide or attempted homicide by other or unspecified means (ages 1 year and over)	111	—	—	—	—	1
Accidents on railways (and on tramways circulating on special tracks not on roads or streets), including pedestrians killed by trains and victims of collisions between trains and road vehicles (motor vehicles excepted—170a)	79	—	—	—	—	—
Automobile accidents:—						
(a) Collisions with trains	15	—	—	—	—	—
(b) Collisions with trams	8	—	—	—	—	—
(c) Other automobile accidents	1.076	—	—	—	2	1
Carried forward	22.510	32.765	6.310	5.605	6.593	5.498

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	22,510	32,765	6,310	5,605	6,593	5,498
XVII.—Violent or Accidental Deaths,—*Contd.*						
Other road transport accidents, excluding automobile accidents (170):—						
(a) Tramway accidents (on roads)	37	—	—	—	—	—
(b) Other road transport accidents	155	—	—	—	—	—
Water transport accidents, including all accidents on or from vessels or boats of any description (except seaplanes), whether at sea, on inland waterways, in harbours or along the coast	28	—	—	—	—	—
Air transport accidents, including all accidents due to aviation	3	—	—	—	—	—
Accidents in mines and quarries	35	—	—	—	—	—
Agricultural and forestry accidents:—						
(a) Accidents from farm machinery and vehicles (excluding road accidents)	7	—	—	—	—	—
Carried forward	22,775	32,765	6,310	5,605	6,593	5,498

Diseases	Cases Treated, 1948		Deaths, 1948		Deaths, 1947	
	Government Hospitals	Government Assisted Hospitals	Male	Female	Male	Female
Brought forward	22,775	32,765	6,310	5,605	6,593	5,498
XVII.—Violent or Accidental Deaths.—*Contd.*						
Agricultural and forestry accidents,—*Contd.*						
(b) Injuries by animals in farming, etc.:—						
(a) By venomous animals	3	—	—	—	—	—
(b) By other animals	1	29	—	—	—	—
(c) Other agricultural and forestry accidents ...	—	—	—	—	—	—
Accidents caused by machinery, excluding accidents due to transport (169 to 173), agricultural or forestry machinery (175), or in mines or quarries (174)	71	—	—	—	—	—
Food poisoning	19	1	2	—	2	1
Accidental absorption of poisonous gases	9	—	1	—	4	—
Other acute accidental poisoning (not by gas) ...	32	—	—	3	—	—
Conflagration	64	3	2	1	73	54
Carried forward	22,974	32,798	6,315	5,609	6,672	5,553

Diseases	Cases Treated, 1948		Deaths, 1948			Deaths, 1947		
	Government Hospitals	Government Assisted Hospitals	Male	Female	Unknown Sex	Male	Female	Unknown Sex
Brought forward	22,974	32,798	6,315	5,609	—	6,672	5,553	—
XVII.—Violent or Accidental Deaths,—*Contd.*								
Accidental burns (conflagration excepted)	255	66	76	47	51	18	4	—
Accidental mechanical suffocation	7	—	11	11	—	8	3	—
Accidental drowning	40	9	86	105	—	68	42	—
Accidental injury by firearms	96	3	20	2	—	22	1	—
Accidental injury by cutting or piercing instruments	133	84	3	1	—	7	—	—
Accidental injury by fall, crushing landslide, etc.	868	74	173	63	—	210	59	—
Cataclysm	6	—	—	—	—	—	—	—
Injury by animals	5	33	—	—	—	—	—	—
Hunger or thirst	—	—	—	—	—	—	1	—
Excessive cold	—	—	—	—	—	—	—	—
Carried forward	24,384	33,072	6,684	5,841	51	7,005	5,663	—

Diseases	Cases Treated, 1948		Deaths, 1948			Deaths, 1947		
	Government Hospitals	Government Assisted Hospitals	Male	Female	Unknown Sex	Male	Female	Unknown Sex
Brought forward	24,384	33,072	6,684	5,841	51	7,005	5,663	—
XVII.—Violent or Accidental Deaths,—*Contd.*								
Excessive heat	3	3	—	—	—	1	—	—
Lightning	1	—	1	—	—	—	—	—
Other accidents due to electric currents	6	—	3	—	—	5	—	—
Attack by venomous animals	3	—	—	—	—	—	1	—
Other accidents:—								
(a) Vaccina and other sequelae of vaccination against smallpox	13	—	—	—	—	—	—	—
(b) Other accidents due to medical or surgical intervention:—								
(a) Anaesthetic accidents	—	—	3	1	—	—	1	—
(b) Other accidents	2	—	—	—	—	—	—	—
(c) Lack of care of the new-born	—	—	—	—	—	—	—	—
(d) Other and unspecified accidents	286	—	23	5	—	10	8	—
Carried forward	24,698	33,075	6,714	5,847	51	7,021	5,673	—

Diseases	Cases Treated, 1948		Deaths, 1948			Deaths, 1947		
	Government Hospitals	Government Assisted Hospitals	Male	Female	Unknown Sex	Male	Female	Unknown Sex
Brought forward	24,698	33,075	6,714	5,847	51	7,021	5,673	—
XVII.—Violent or Accidental Deaths.—*Contd.*								
Injuries of persons in military service during operations of war:—								
(a) From poison gas	5	—	—	—	—	—	—	—
(b) From wounds	33	—	—	—	—	—	—	—
(c) From other or unspecified causes	—	—	1	—	—	—	1	—
Injuries of civilians due to operations of war:—								
(a) From poison gas	—	—	—	—	—	—	—	—
(b) From wounds	—	—	—	—	—	—	—	—
(c) From other or unspecified causes	—	—	—	—	—	—	—	—
Legal executions	—	—	18	—	—	14	—	—
XVIII.—Ill-defined Causes.								
Sudden death	—	—	—	—	—	—	3	—
Carried forward	24,736	33,075	6,733	5,847	51	7,035	5,677	—

Diseases	Cases Treated, 1948		Deaths, 1948			Deaths, 1947		
	Government Hospitals	Government Assisted Hospitals	Male	Female	Unknown Sex	Male	Female	Unknown Sex
Brought forward	24,736	33,075	6,733	5,847	51	7,035	5,677	—
XVIII.—Ill-defined Causes,—*Contd.*								
Causes unstated or ill-defined:—								
(a) Ill-defined causes	144	39	343	400	—	178	181	—
(b) Found dead, cause unknown	—	—	17	19	—	81	53	—
(c) Other deaths from unknown or unspecified causes	—	1	11	3	10	—	—	26
XIX.—Miscellaneous.								
Under observation	336	157	—	—	—	—	—	—
Malingering	1	—	—	—	—	—	—	—
Persons accompanying patients	—	—	—	—	—	—	—	—
Total	25,217	33,272	7,104	6,269	61	7,294	5,911	26

ANNEXURE K.

OBSTETRIC REPORT ON THE TSAN YUK HOSPITAL FOR THE YEAR 1948.

The following statistical summary shows the amount of work done in the Tsan Yuk Hospital for the year 1948:—

	Booked	*Unbooked*	*Total*
Adult Patients admitted	3,699	1,131	4,830
Patients delivered in hospital: ...	3,491	1,058	4,549
Primiparae	1,124	281	1,405
Multiparae	2,367	777	3,144
Patients admitted after delivery (B.B.A.)	6	2	8
Primiparae	1	1	2
Multiparae	5	1	6
Total patients delivered	3,497	1,060	4,557
Abortions	0	0	0
Patients transferred	2	2	4
Patients discharged undelivered ...	202	70	272
Maternal deaths	0	2	2
Maternal death rate (per 1,000 live and stillbirths)	0	1.9	0.4
Infants born in hospital	3,524	1,069	4,593
Infants born before admission (B.B.A.)	6	2	8
Total infants born	3,530	1,071	4,601
Infants transferred	1	1	2
Stillbirths (including macerated foetus)	74	61	135
Stillbirth rate (per 1,000 live and stillbirths)	21.00	57.06	29.39
Neonatal deaths	34	27	61
Neonatal death rate (per 1,000 live births)	9.86	26.79	13.68
Other infant deaths	0	0	0

The following points of interest are noted:—

Pre-eclampsia. There were 110 cases with no maternal death and 6 stillbirths and 3 neo-natal deaths.

Eclampsia. There were 8 cases with no maternal death, 1 stillbirth and 1 neo-natal death.

Placenta Praevia. There were 25 cases with no maternal death, 5 stillbirths and 4 neo-natal deaths.

Accidental Haemorrhage. There were 15 cases with one maternal death and 7 stillbirths.

Abnormal Presentations were as follows:—

Presentations	*Total Number*	*Maternal Deaths*	*Still-births*	*Neo-natal Deaths*
Persistent Occipito Posterior ...	30	0	1	1
Uncomplicated Breech	108	0	25	8
Complicated Breech	48	0	11	3
Face	2	0	0	1
Brow	1	0	1	0
Transverse	16	0	7	2

Twin Pregnancy. There were 44 cases with no maternal death, 3 stillbirths and 9 neo-natal deaths.

Contracted Pelvis. There were only 6 cases, with no maternal death and one neo-natal death.

Prolapse of Cord. There were 11 cases with no maternal death and 8 stillbirths.

Post-partum Haemorrhage. There were 58 cases with no maternal death.

Operative deliveries were as follows:—

Operation	*Cases*	*Maternal Deaths*	*Still-births*	*Neo-natal Deaths*
Forceps	96	0	5	0
Internal Version	13	0	6	2
Embryotomy	2	0	2	0
Caesarean Section	29	1	2	2

Maternal Deaths. There were only two deaths during the course of the year. One was due to severe concealed accidental bleeding with shock and heart failure, the other was due to shock and heart failure following obstructed labour in a case of hydrocephalus which was sent in by a midwife with the body hanging outside.

Maternal Morbidity. There were 12 cases of genital infection and 91 cases of extra-genital infection, with no death. The computation of the maternal morbidity figure on the total number of 103 cases works out at 2.25%.

Stillbirths and Neo-natal Deaths. There were 135 stillbirths (i.e. children born at or after the 28th week of pregnancy who failed to breathe after birth).

In addition there were 61 neo-natal deaths (i.e. deaths within 28 days of delivery, either in hospital or after transfer to another hospital, but excluding those discharged healthy). It is of interest to note that 51 of these 61 deaths were in cases of premature live-born infants, with a birth weight under 5 lbs. or 2,300 grams. The year's figures showed 2.94% stillbirths and 1.37% neo-natal deaths, making a total wastage of infant life of 4.31%, which compares very favourably with that of previous years.

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ANNEXURE L.

A SUMMARY OF THE WORK DONE AT THE KOWLOON AND HONG KONG PUBLIC MORTUARIES.

1948.

Total number of Post-mortem Examinations performed during the year	2,973
No. of male bodies examined	1,522
No. of female bodies examined	1,394
Sex unknown owing to decomposition	57
No. of claimed bodies sent from hospital, etc.	563
No. of unclaimed bodies mostly abandoned	2,410
Body of infants sent from Convent	500
No. of bodies cremated	412
No. of Chinese bodies examined	2,937
No. of Non-Chinese bodies examined	24
No. of bodies Nationality unknown	12
No. of Medico-Legal Cases	461

	Male	*Female*	*Total*
No. of bodies under 2 years of age ...	870	1,011	1,881
No. of bodies over 2 years of age ...	652	383	1,035

No. of bodies received from the following sources:—

(Hong Kong)

Victoria District	763
Shaukiwan District	111
Other Villages	32
Total	906

(Kowloon)

Water Police Station	184
Tsim Sha Tsui Police Station	53
Yaumati ,, ,,	151
Mongkok ,, ,,	140
Shumshuipo ,, ,,	268
Kowloon City ,, ,,	133
Hunghom ,, ,,	54
Tsun Wan ,, ,,	17
Sheung Shui ,, ,,	13
Sha Tau Kok ,, ,,	3
Tai Po ,, ,,	13
Shatin ,, ,,	11
Ta Ku Ling ,, ,,	6
Castle Peak ,, ,,	6
Ping Shan ,, ,,	15
Lok Ma Chau ,, ,,	3
Kam Tin ,, ,,	2
Tai O ,, ,,	1
Cheung Chau ,, ,,	12
Sai Kung ,, ,,	3
Hospitals, etc.	979
Total	2,067

No. of rats caught and brought to the mortuaries	191,096
No. of rats examined	191,096
No. of rats spleen smears taken for examination	12,679
No. of rats infected with plague	Nil.

ANNEXURE M.

ANNUAL REPORT OF MALARIA BUREAU.

Notification of Malaria.

The arrangement by which Malaria was notified voluntarily by doctors ceased in May 1948 and as a result accurate figures are no longer available.

Staff.

The staff of the Malaria Bureau was made up of 1 Malariologist, 5 grade I Inspectors, 2 grade II Inspectors, 3 Probationer Inspectors and 2 Health Inspectors who were seconded to the Bureau in March, 1948. Dr. J. B. Mackie departed to attend the 4th International Congresses on Tropical Medicine and Malaria at Washington as a Government Observer in April 1948. He returned to the Colony on December 11th, 1948. During his absence Dr. G. B. Smart was in charge of the Malaria Bureau.

Field Work.

Rough training of streams, stone drainage, clearing, subsoil drainage, and oiling were the methods used. In addition a cheap experimental form of rough concrete training was carried out in the Deep Water Bay Valley, and if this proves successful, it may be possible to extend it to other areas.

The R.A.F. have withdrawn their field work at the Airport on instruction from British Government, and the complete control of this district has been taken over by the Malaria Bureau.

Owing to the extensive excavation of land and large increase in building in all areas, control work was made more difficult, but no breakdown occurred. In addition to these larval control measures the Chinese villages of Sai Wan, Pokfulam, Telegraph Bay and Ngau Chi Wan, on the outskirts of our control area, were residually sprayed with D.D.T.

Malarial Surveys.

No malarial surveys were undertaken during the year, but checking larval surveys were periodically carried out in all areas. In addition periodic checks of incoming trains, lorries and aircraft were carried out.

Laboratory.

In the present office of Malaria Bureau it has not been possible to put up a good insectary on account of the heat, but with the removal to a cooler level this will be done. Blood films as well as mosquito larvae and adults were examined, and the results of the examination are appended. The Identification of beetles, moths and flies was undertaken for other Departments. The results of identification of mosquitoes and larvae can be seen in Annexures M2 and M3.

New Territories.

Work continued to increase in the New Territories. All Government Quarters and offices were sprayed with DDT. Unfortunately for the occupants in some cases, full advantage could not be taken of this measure on account of the poor state of the screening, or in some places, its complete absence.

Suppressive Paludrine (100 Mgm. twice weekly) for the second year again proved its efficiency in the protection of the European and Chinese Police, who are, of necessity in their work, exposed to considerable risk. So much so, that the Chinese Police on Government Mepacrine, in some places, changed over to Paludrine at their own expense. Both as a suppressive and from an administrative point of view Paludrine is superior to Mepacrine.

With the southward advance of the Communists there was an influx of non-immunes, both European and Chinese, into the New Territories. Notably the American Seventh Adventist Mission who moved down two whole schools and their entire European and Chinese Staff. A complete blood parasite survey of these schools (some 500 people) was undertaken, and as expected coming from the north, were negative for Malaria.

Advice, which they have been quick to take, has been given them on the best methods of screening their buildings which of necessity were makeshift, and on the use of residual Gammexane and suppressive Paludrine.

A further influx has come in the Tsun Wan area where a large number of factories have been built. Malaria in these work people has been controlled with suppressive Paludrine, and an endeavour has been made to obtain the co-operation of the owners in a combined housing scheme for the labour force which would be reasonably cheap to protect by anti-larval measures.

Residual DDT and Gammexane have been proved most effective in reducing the mosquito catches in houses in the rural districts, but their future as a preventive measure in rural malaria depends on their ultimate effect on the blood parasite rate and the incidence of malaria, and in this respect much more work has to be undertaken in each malarious area of the world to determine the night-resting and feeding habits of the carrying species. In this connection experiments in mosquito trapping in selected malarious districts in the New Territories to determine the habits of our local carrying species are now being undertaken—this work will take some time.

Experiments were also carried out in order to determine whether malaria could be controlled in villages in the New Territories by monthly fumigation of dwellings with Gammexane, using Gammexane Smoke Generators.

The insecticidal action of Gammexane smoke is by direct kill and by the effect of the residue deposited on walls and ceilings of rooms after fumigation.

The three villages of Shum Tseng, Pok Wai, and Chuk Yuen were selected for the experiments with Chuk Yuen acting as a control. The parasite rate was taken as an index of the degree of malaria infection in each of the three villages and was determined at the onset and termination of the experiments i.e. in May and December. Mosquito catches were carried out each month in order to determine the vector species in the respective villages and the effect of Gammexane on the mosquito population.

The dosage of Gammexane employed was a 2 oz. Generator per 4,000 cu. ft. of room space, but this dose was often exceeded; on the other hand, the proper sealing of rooms for 2 hours after fumigation could not always be ensured.

In view of the short period over which the experiments were conducted viz. one malarial season, it was decided to accept as significant only marked reductions in the parasite rates.

Mosquito Catches.

A. hyrcanus var. sinensis was the predominant anopheline species in all these villages and was found mainly in pigsties. A. minimus and A. jeyporiensis var. candidiensis, the two important vector species in the Colony, were found in small numbers in Shum Tseng and Pok Wai but not in Chuk Yuen. A few A. tessellatus were caught only in Pok Wai Village.

	Parasite rate (May, 1948)	*Parasite rate* (Dec., 1948)
Pok Wai	4.16%	Nil.
Shum Tseng	16.6 %	21.2 %
Chuk Yuen	18.9 %	9.12%

Malaria Parasites.

Plasmodium vivax was the only species of malarial parasite encountered in blood films when determining parasite rates.

Conclusion.

The conclusion drawn from the experiments is that the Gammexane Smoke Generator is unlikely to prove successful in controlling Malaria in Malaria endemic areas unless supported by other control measures.

On the other hand, the experiments proved that Gammexane Smoke is a powerful insecticide, although the residual effect after fumigation is not as lasting as that obtained by spraying with solutions of Gammexane or DDT. Bug infestations were eradicated and fly and mosquito nuisances were controlled for short periods in the two villages subjected to Gammexane fumigation.

A larval survey carried out in November in hill-streams near the villages of Tau Yuen Wai and Foo Tau in the Ping Shan area gave the following result:—

A. hyrcanus var. sinensis 147, A. minimus 24, A. maculatus 3.

The two villages combined showed spleen and parasite rates of 31% and 25% respectively.

A larval survey carried out in December in the hill-streams near Chung Uk Village, gave the following result:—

A. maculatus 98, A. karwari 55, A. hyrcanus var. sinensis 121, A. jeyporiensis var. candidiensis 4, and A. minimus 52.

The village showed a spleen and parasite rate of 43.7% and 0% respectively.

Teaching of Mosquitology.

A course of twenty Lectures on this subject was given to Public Health Inspectors together with Field and Laboratory Demonstrations. Personnel of the Army and Navy were also given a course of instruction in Anti-Malaria Work, and arrangements have been made with the University to recommence the course in Malariology for the M.B. Ch.B.

Legal Action.

Sixty legal notices were served in the course of the year for mosquito breeding, and two people were summoned.

Mosquito Nuisances.

Mosquito nuisances were investigated on behalf of the Urban Council at Eastern District, Central District, Upper Level, Pokfulam, Aberdeen, Stanley, Shek O, Tytam Tuk, Shaukiwan, Kowloon City, Kowloon Tong, Kai Tak, Lai Chi Kok, Hung Hom, Yaumati and Tsim Sha Tsui.

Sgd. J. B. Mackie,
Government Malariologist.

ANNEXURE M1.

Malaria Cases notified by Government Hospitals and Dispensaries and

Deaths from Malaria recorded by the Registrar of Births and Deaths, during 1948.

Month.	Cases.	Deaths.
January	62	11
February	46	18
March	66	10
April	60	5
May	71	8
June	84	30
July	83	17
August	238	18
September	103	22
October	147	26
November	93	15
December	62	10
	1,115	190

ANNEXURE M2.

RESULT OF IDENTIFICATION OF MOSQUITOES, 1948.

Month	A. maculatus	A. minimus	A. jeyporiensis var. candidiensis	A. hyrcanus var. sinensis	A. karwari	C. fatigans	Ae. albopictus	Ae. togoi	C. bitaeniorhynchus	Ar. obturbans
January	—	—	—	—	—	many	many	many	5	—
February	—	—	—	—	—	many	many	many	—	8
March	—	—	—	—	—	many	many	many	—	—
April	—	—	—	—	—	many	many	many	—	—
May	—	1	1	89	—	many	many	—	2	—
June	—	2	—	49	2	many	many	—	11	—
July	—	1	—	17	1	many	many	—	—	—
August	1	—	—	5	—	many	many	—	6	14
September	—	—	—	3	—	many	many	—	2	—
October	—	2	2	9	1	many	many	—	—	—
November	—	2	5	8	—	many	many	—	—	—
December	—	—	—	—	—	many	many	—	—	4

ANNEXURE M3.

RESULT OF IDENTIFICATION OF LARVAE, 1948.

Month	A. maculatus	A. minimus	A. jeyporiensis var. candidiensis	A. hyrcanus var. sinensis	A. karwari	C. fatigans	C. bitaeniorhynchus	Ae. albopictus	Ae. togoi
January	134	3	—	26	—	many	27	many	many
February	—	—	—	—	—	many	10	many	many
March	—	—	—	—	—	many	—	many	many
April	—	—	—	—	—	many	—	many	many
May	—	—	—	—	—	many	—	many	—
June	—	—	—	—	—	many	31	many	—
July	8	—	—	—	—	many	4	many	—
August	93	—	—	7	—	many	—	many	—
September	—	—	—	—	—	many	—	many	—
October	26	—	—	2	—	many	—	many	—
November	3	24	—	147	—	many	—	many	—
December	98	52	4	101	55	many	27	many	—

ANNEXURE N.

ANNUAL REPORT OF THE GOVERNMENT LABORATORY FOR THE YEAR 1948.

The work of the Laboratory continues to show a steady increase. A comparative table of samples examined is given (Table 1).

TABLE 1

	1947.	*1948.*
(i) Waters & Waterworks Chemicals	897	689
(ii) Foods & Drugs	57	97
(iii) Chemico-legal	409	607
(iv) Commercial	2,014	1,886
(v) Biochemical	360	3,056
(vi) Coal from Department of Supplies, Trade & Industry	84	101
(vii) Miscellaneous from other Government Departments	53	173
	3,874	6,609

(i) Under this heading are included the routine examinations of the reservoirs and filter beds of the Colony water supply, daily samples from supply taps in various parts of the Colony, and samples from waterboats supplying shipping in the harbour.

(ii) Food samples consisted principally of milk, for control of pasteurisation, but cases were found of butter substitutes being sold as butter, and arachis oil being sold as olive oil.

(iii) Table 2 shows the considerable range of material examined under this heading. There were no cases of homicidal poisoning.

A disastrous outbreak of fire occurred at the Wing On Company Godown, as a result of which nearly 200 persons lost their lives. Mr. R. C. Terry, Assistant Government Chemist, carried out a detailed investigation into the cause of this fire, which was traced to the spontaneous combustion of washed nitrocellulose film. At the Commission of Enquiry which was set up both the Government Chemist and Mr. Terry gave evidence. The same material is believed to have caused another fire in a godown in the Colony.

A dangerous commodity which was discovered during these investigations was crude caustic soda containing a large quantity of metallic sodium, sufficient to cause ignition when the material was placed in water.

TABLE 2

Chemico-Legal Analyses.

Toxicological Examinations (including postmortem materials from 46 persons)	255
Urine and Blood for Alcohol determination	119
Articles connected with:—	
Acid-throwing	62
Bombs & Explosives	10
Collapse of Building	1
Firearms	4
Fraud	1
Illegal practising of Western medicine	23
Larceny	2
Licensing Laws	1
Medicines, Drugs & Poisons	73
Outbreaks of Fire	48
Smuggling	2
Stains on clothing etc.	6
	607

TABLE 3

Toxicological Examinations.

No Poison present	96
Opium	13
Phenolic or Cresolic Compounds	86
Alcohol	5
Aspirin	2
Barbiturate	8
Calcium chloride	1
Calcium oxalate	1
Camphorated oil	1
Caustic Alkali	6
Crayon	1
Dyestuff	1
Fungi	1
Gasoline	1
Hydrochloric acid	1
Hydrocarbon oil	3
Hyoscyamine	2
Kai Po Yue Fish	1
Magnesium sulphate	2
Mercury	1
Methylene blue	1
Morphine	10
Oxalic acid	2
Soap	1
Strychnine	2
Sulphuric acid	1
Thiamin	1
Yohimbine	1
Miscellaneous	3
	255

(iv) Commercial samples form the largest single item of the work of the Laboratory. Fees collected have increased from $106,601 to $118,811, making a total of $262,844 since the war. It is unusual for a Government Laboratory to concern itself to this extent with consulting work, but this is necessitated by the absence of adequate private laboratories, and by the abnormal trading conditions. Table 4 gives details of the samples submitted.

TABLE 4

Commercial Samples.

Minerals & Metals:—

Aluminium	1
Aluminium silicate	1
Antimony	4
Antimony oxide	4
Asbestos	1
Beryl	1
Bismuth concentrate & ores	23
Brass, Bronze & Gunmetal	4
Chromite	3
Clay & Kaolin	53
Coal	18
Cobalt	2
Copper	28
Copper concentrate	1
Felspar	4
Fluorspar	1
Ferro-Manganese	8
Ferro-Molybdenum	4
Ferro-Tungsten	11
Gold	1
Graphite	26
Iron ore	6
Iron oxide	11
Lead & Lead ores	72
Manganese ore	25
Magnesium	1
Molybdenum	13
Molybdenum concentrate	6
Nickel	1
Pewter	9
Plated metal sheets	5
Quartz	1
Scheelite	2
Silver	10
Solder	2
Talc	3
Tin	244
Titanium ore	2
Titanium dioxide	4
Tungsten	3
Tungsten concentrate	3
Wolfram ore	26
Zinc concentrate & ores	13
Zirconium	1
(Minerals & Metals, Total) *C/f.* ...	662

TABLE 4

Commercial Samples,—*Contd.*

(Minerals & Metals, Total) *B/f.* ...	662
Oils & Fats:—	
Aniseed oil	26
Camphor oil	10
Cassia oil	4
Citronella oil	1
Clove oil	2
Coconut oil	33
Fuel oil	12
Groundnut oil	2
Isoborneol	1
Lard	4
Linseed oil	2
Lubricating oil	17
Olive oil	3
Palm oil	12
Paraffin Wax	2
Peanut oil	1
Peppermint oil	10
Petrol	1
Rapeseed oil	65
Rosin	6
Stearine	1
Stillingia oil	9
Safrol	1
Soyabean oil	1
Tallow	5
Teaseed oil	164
Terpineol	1
Wood oil	279
Miscellaneous:—	
Battery acid	4
Camphor	34
Cement	6
Chemicals & Fertilisers	81
Chinese Lacquer	10
Copra & Oil Cake	12
Firecrackers	3
Food-stuffs	82
Formaldehyde	96
Gallnuts	12
Medicine	34
Paints, Varnishes, Dyestuffs etc.	44
Soap	97
Steamer Tanks	10
Water	24
Total	1,886

TABLE 4,—*Contd.*

Fees collected for commercial analyses	$116,421
Fees collected for biochemical analyses	2,390
	$118,811

(v) The apparently sudden development of biochemical work is accounted for by the fact that the figure shown for 1947 was for November 1947 and December 1947 only. Private practitioners have made considerable use of the facilities provided.

TABLE 5

Biochemical Examinations.

Specimens received:—

Bile	1
Blood	1,028
Cerebro-spinal-fluid	300
Gastric contents	1,657
Stool	8
Urine	49
Miscellaneous	13
	3,056

Received from:—

Anti T.B. Clinic	3
Families' Clinic	1
Kowloon Hospital	729
Lai Chi Kok Hospital	19
Medical Post (Central Police Station)	1
Private Practitioners	200
Queen Mary Hospital	2,032
Sai Ying Pun Hospital	8
Tsan Yuk Hospital	7
Tung Wah Eastern Hospital	56
	3,056

(vi) There has been a slight increase in the use made of the Laboratory by other Government Departments, although much of this resulted from the number of samples examined for the Fire Brigade following on the Godown fires referred to in para. (iii).

TABLE 6

Miscellaneous samples from Government Departments.

Samples from:—	
Agricultural & Gardens Department	11
Controller of Stores	6
Fire Brigade Department	100
General Post Office:—	
Telecommunications Branch	1
Imports & Exports Department	5
Kowloon Canton Railway	4
Marine Department	2
Medical Department:—	
Central Medical Stores	7
Health Officers & Inspectors	10
Medical Department Headquarters	1
Queen Mary Hospital	2
Slaughter House	2
Urban Council	1
Prison Hospital	2
Public Works Department:—	
Building Ordinance Office	14
Electrical & Mechanical Office	2
Supplies, Trade & Industry Department	3
	173

Staff.

Mr. J. Redman, Government Chemist, proceeded on leave on 3rd March, 1948 and returned to duty on 8th March, 1949. Mr. D. E. Davis acted as Government Chemist during this period.

Mr. E. Collins, Assistant Government Chemist, was seconded to the Imports & Exports Department during the same period.

Mr. R. C. Terry, Assistant Government Chemist, joined the staff on 24th January, 1948.

Mr. R. G. Barradas, Laboratory Assistant, was awarded a Colonial Welfare & Development Scholarship, tenable for four years at Liverpool University, and left for the United Kingdom on 2nd August, 1948.

Sgd. J. Redman.

J. Redman, B.Sc.Tech., A.M.C.T., F.R.I.C.

Government Chemist.

Government Laboratory,
Hong Kong.

8th April, 1949.

ANNEXURE O.

ANNUAL REPORT OF THE GOVERNMENT PATHOLOGIST 1948.

(1) Introductory.

This report deals with the activities of the Institute in Hong Kong, the branch in Kowloon, and the Queen Mary Laboratory. Throughout the year equipment, supplies, and technical books continued to arrive, making routine work easier to perform and enabling progress to be made in many directions.

Rewiring of the Institute and overhaul of all electrical installations were commenced in May and completed by the end of the year, when all the necessary fittings became available; in June the Gardens Department instituted regular attention to grass plots, shrubs, and surroundings; and by the end of March 1949 the buildings were renovated and painted throughout, with remarkable effect.

At the Queen Mary Hospital, the laboratory was moved into new quarters towards the end of the year and although somewhat cramped for space is serving the needs of the hospital well under the part-time direction of Dr. K. T. Loke.

The Kowloon branch continued to function with Dr. R. E. Alvares in charge, and has proved a most useful focus for Kowloon, both as regards routine laboratory examinations and as a centre for the distribution of vaccines. Repainting was carried out in the spring of 1949.

By arrangement with the Agriculture Department part of the animals housed in unsatisfactory quarters in the Institute, comprising rabbits, sheep, guinea pigs and mice, were removed to a far more suitable location in the New Territories for breeding and stock purposes.

Analysis of the nightsoil held in the so-called maturation tanks at Castle Peak revealed that the extremely high concentration of ova constantly present in this material showed little change after a month in the tanks, Clonorchis and Ascaris being especially prevalent and Ankylostoma proving to be demonstrably viable. Bacteriological findings for pathogenic organisms were negative, but are still under investigation.

Revenue for the period under review exceeded estimated revenue by $33,000.

The following were the more important additions to the library:—

Gynaecological & Obstetrical Pathology—Novak.
Disorders of the blood—Whitley & Britten.
Handbook of Practical Bacteriology—Mackie & McCartney.
Forensic Medicine—Keith Simpson.
Medical Jurisprudence & Toxicology—Glaister.
Pathology of Tumours—Willis.
Textbook of Clinical Pathology—Parker.

Staff Changes—Dr. K. T. Loke was confirmed in the post of Pathologist during the year. New appointments included Messrs. Shum Hay, laboratory assistant, Ko Jak Wai, attendant, Fong Kam, watchman, and Chan Ho, coolie. There were two resignations—Poon Ting Kam, attendant, and Lee Sik, coolie.

N.B.—The figures in the following tables include those of the Kowloon and the Queen Mary Hospital branches. Allocation of the work performed is shown separately in the Summary at the end of this report.

(2) Protozoology and Helminthology.

2. Blood films for malaria—Five thousand and fifty-five films were examined for the parasites of malaria. Classification of types found and negative findings are shown in the table.

TABLE I

Blood Examined for Malaria.

	Chinese	Non-Chinese	Total
Sub-tertian	266	3	269
Benign-tertian	324	20	344
Quartan	152	—	152
Unclassified (Type undetermined)	28	—	28
Multiple infection	17	—	17
Negative	4.027	218	4.245
Grand Total	4.814	241	5.055

3. Filaria—Microfilarial parasites were found in five cases.

4. Anthrax—Infection with B. anthracis was established in 19 instances of blood films taken from sick animals.

5. Faeces—Ten thousand six hundred and eleven stool specimens were examined for parasites, ova, or cytological picture. Using concentration methods on bulk specimens from night soil tanks, it would appear that infection with Clonorchis is almost as common as Ascariasis in this area.

TABLE II

Examination of Stools for Intestinal Parasites.

	Chinese	Non-Chinese	Total
Ascaris	1.851	121	1.972
Clonorchis	306	6	312
Trichuris	563	34	597
Ankylostoma	323	9	332
Enterobius	4	—	4
Taenia	1	—	1
Fasciolopsis	33	1	34
Schistosoma	2	—	2
E. histolytica	50	12	62
Multiple infestation	1.303	18	1.321
Negative	5.082	892	5.974
Grand Total	9.518	1.093	10.611

(3) Haematology.

Most of this work is carried out at the Queen Mary Laboratory and the Kowloon Branch, as shown in the Summary.

TABLE III

Hb. percentage	2,542
Total Red Cell Count	2,569
Total White Cell Count	3,188
Differential Count	3,906
Blood Sedimentation Rate	1,125
Blood Bleeding Time	33
Blood Coagulation Time	32
Platelet Count	19
Reticulocyte Count	5
Blood Grouping	681
Cross-Matching	177
Grand Total	14,277

(4) Serology.

6. The Kahn reaction—Thirty-eight thousand, seven hundred and twenty-five sera were tested. This figure is again an annual record and can rightly be interpreted to mean unremitting hard work and responsibility on the part of the staff concerned.

TABLE IV
Examination of Blood Sera for Syphilis.

	Chinese		Non-Chinese		Total
	M.	F.	M.	F.	
Strong Positive	3,052	2,497	19	4	5,572
Positive	1,698	920	9	2	2,629
Weak Positive	1,154	1,089	5	1	2,249
Doubtful	1,006	938	3	—	1,947
Negative	13,114	12,591	518	105	26,328
Grand Total ...	20,024	18,035	554	112	38,725

7. Agglutination tests—One thousand six hundred and forty sera were examined for the presence of agglutinins against various organisms.

8. Blood Clot Culture—Culture of the clot from agglutination specimens was carried out as a routine from January 15th, and the positive findings at the Institute, which included 47 Bact. typhosum, 3 Bact. paratyphosum A, 1 paratyphosum B, and 1 paratyphosum C, often threw an interesting light on the agglutination results. The para. C culture, kindly confirmed by the Salmonella Reference Laboratory in London, represents the first known case of para. C infection in Hong Kong since the war.

TABLE V
Agglutination Tests.

Organisms	Chinese			Non-Chinese			Total
	Pos.	Neg.	Doubtful	Pos.	Neg.	Doubtful	
Bact. Typhosum	223	899	19	3	48	1	1,275
Bact. paratyphosum A.	13	—	3	2	—	—	
,, ,, B.	6	—	1	—	—	—	
Enteric fever, type undetermined .	42	—	15	—	—	—	
Br. melitensis	—	6	—	—	1	—	7
Br. abortus	—	6	—	—	1	—	7
Weil Felix reaction ...	11	310	1	1	28	—	351
Grand Total ...	1,555			85			1,640

(5) Bacteriological Examinations.

9. Faeces—Eight hundred and fifty-six stools were cultured for pathogenic organisms. No case of cholera was discovered.

TABLE VI

Examination of Stool for Organisms.

	Chinese		Non-Chinese		Total
	Pos.	Neg.	Pos.	Neg.	
Bact. typhosum	11	402	—	44	457
„ dysenteriae (Group)	3	275	—	27	305
Cytology typical of bacillary dysentery	29	—	2	—	31
B. dysentery (Flexner)	5	—	2	—	7
B. „ (Shiga) .	1	—	—	—	1
V. cholerae	—	54	—	1	55
Grand Total ...	49	731	4	72	856

10. Sputum—Eleven thousand and thirteen sputa were examined for the presence of the tubercle bacillus. In addition, culture and animal inoculation were called for in a few instances, as shown below, while gastric lavages for tubercle bacilli reached the high figures of seven hundred and thirty-six with eighty-three positive results.

TABLE VII

Examination of Sputa for Tuberculosis.

	Chinese		Non-Chinese		Total
	Pos.	Neg.	Pos.	Neg.	
Direct examination ...	4,396	6,158	165	267	10,986
Culture	2	18	—	—	20
Animal inoculation ...	1	3	—	3	7
Grand Total ...	4,399	6,179	165	270	11,013

11. Urine—One thousand two hundred and sixty-two specimens were cultured for pathogenic organisms.

12. Urethral and cervical smears—One thousand two hundred and thirty-three specimens were examined for the presence of the gonococcus, with 95 positive results.

13. Nasal smears, etc. for M. leprae—One hundred and forty-nine examinations were made for the detection of this organism. 56 positive results were recorded.

14. Throat swabs—One thousand eight hundred and eighty-seven swabs were cultured for C. diphtheriae.

TABLE VIII

Examination of Throat Swabs for Diphtheria.

	Chinese	Non-Chinese	Total
Positive	165	6	171
Negative	1.610	106	1.716
Grand Total	1.775	112	1.887

15. Cerebrospinal fluid—Four hundred and seventy specimens were examined for the presence of pathogenic organisms.

TABLE IX

Examination of Cerebrospinal Fluids for Pathogenic Organisms.

	Chinese	Non-Chinese	Total
Meningococcus	44	—	44
Pneumococcus	15	—	15
M. tuberculosis	3	1	4
Negative	403	4	407
Grand Total	465	5	470

16. Rat spleen smears—Twelve thousand six hundred and seventy-nine examinations were made of smears for P. pestis. No positive findings were recorded.

(6) Clinical Pathological Procedures.

17. Urine examination—Eleven thousand four hundred and ninety-two routine, chemical and microscopic examinations of urine were carried out.

18. Friedman test for pregnancy—Seventy-seven such tests were performed. Owing to the abnormal demand and limited number of suitable rabbits, operation was resorted to in all cases, and whilst the average number of operations per animal was four, some rabbits were able to withstand successfully six laparotomies.

19. Miscellaneous tests—Two thousand one hundred and forty-nine tests of an unclassified nature were carried out.

(7) Preparation of Vaccine lymph.

20. Buffalo calves were used exclusively. A smaller quantity of lymph was prepared this year, sufficient to maintain stocks at a satisfactory level, and there was no particular difficulty in obtaining the number of calves required.

(8) Preparation of Vaccines.

21. Cholera vaccine—Stocks were in process of preparation at the end of the year. The main difficulty in this branch has been lack of adequate refrigeration space in which to store the vaccines ready for use.

22. Antirabic vaccine—The 56½ litres of antirabic vaccine prepared is once again a record figure. In the absence of sheep, goats were used, and the vaccine issued continued to be of the Semple type in 4% & 2% dilutions.

TABLE X

Cases Treated with Antirabic Vaccine.

	Treatment not completed	Treatment completed	Total
Chinese	856	703	1,559
Non-Chinese	53	61	114
Grand Total	909	764	1,673

TABLE XI

Vaccine Production.

	Vaccine issued	Vaccine prepared
Anti-smallpox vaccine ...	23,768 c.c.	22,450 c.c. (In process of manufacture)
,, cholera ,, ...	347,233 c.c.	—
,, T. A. B. ,, ...	22,680 c.c.	—
,, Plague ,, ...	3,773 c.c.	—
,, Rabic ,, ...	32,042 c.c. (2%)	38,110 c.c. (2%)
,, ,, ,, ...	18,570 c.c. (4%)	18,570 c.c. (4%)
Grand Total ...	448,066 c.c.	79,130 c.c.

(9) Examination of Water and Milk.

23. Water—Two thousand four hundred and thirty-seven samples of water from various sources were examined.

TABLE XII

Unfiltered raw water	248
Filtered ,, ,, ...	244
Filtered and chlorinated water from service tap ...	1,899
Well water	10
Water other than public supplies	36
Total	2,437

24. Bacteriological Analysis of Milk and Foods—One thousand one hundred and four examinations of milk were performed, chiefly at the instance of the Health Division. Nine hundred and twenty one examinations of a miscellaneous nature were also carried out as shown.

TABLE XIII

Milk	1,104
Ice-cream	645
Popsicle	163
Aerated water	103
Tinned food	10
Total	2,025

(10) Morbid Histology.

25. There were seven hundred and three examinations of tissue made during the year. Tumours, both benign and malignant, total two hundred and sixty-five. Carcinoma of the cervix, secondary carcinoma in lymph glands of the neck, (most cases due to nasopharyngeal growths) and carcinoma of the breast, continue to head the list of malignant tumours in that order. The rest of the examinations were made for general pathological diagnosis and they include among others the following interesting cases:—

> Hashimoto's disease, Schistosoma ova in the spleen, Filaria in a lymph gland, tuberculosis of the cervix, gumma of the brain and Spirochaeta pallida in the liver of a three months' old child.

26. Negri bodies—Thirty-five brains were examined for the presence of Negri bodies. There were two positive human cases, one resident in Shaukiwan, and one who was bitten in Canton and is therefore an imported case.

TABLE XIV

Brains Examined for Negri bodies.

	Positive	*Negative*	*Total*
Human brains	2	—	2
Dogs' ,,	4	29	33

TABLE XV

Tumours Examined.

	Cases
Fibroma	23
Lipoma	3
Endothelioma	1
Angioma	3
Lymphangioma	1
Nasal polyp	3
Rectal polyp	1
Uterine polyp	1
Cervical polyp	22
Fibroadenoma of the breast	16
Fibromyoma of the uterus	12
,, ,, ,, cervix	7
Adenomyoma of the uterus	4
Mixed salivary tumour	10
Squamous papilloma	9
Sarcoma	13
Lymphosarcoma	8
Osteogenic sarcoma	2
Giant cell tumour (osteoclastoma)	3
Secondary carcinoma of cervical lymph gland	29
,, ,, ,, lymph gland (other regions)	7
Carcinoma of nasal cavity	3
,, ,, nasopharynx	1
,, ,, lung	1
,, ,, mouth	1
,, ,, oesophagus	1
,, ,, liver (hepatoma)	1
Carcinoid tumour of the appendix	1
Carcinoma of rectum	1
,, ,, anus	1
,, ,, breast	20
,, ,, uterus	4
,, ,, cervix	35
,, ,, ovary	2
,, ,, penis	1
,, ,, testis (seminoma)	3
,, ,, skin	7
Embryoma (Wilms' tumour)	1
Melanoma	1
Adamantinoma	1
Chorionepithelioma	1
Hydatidiform mole	5
Cysts of the ovary	27
,, ,, ,, ,, (malignant)	3
,, ,, ,, ,, broad ligament	4

TABLE XVI

Summary of Examinations.

Nature of Examination		Pathological Institute	Queen Mary Hospital Laboratory	Kowloon Pathological Institute	Total
Agglutination reaction	Bact. typhosum „ paratyphosum A „ „ B Enteric fever, type undetermined	845	—	430	1,275
	Br. melitensis	7	—	—	7
	Br. abortus	7	—	—	7
	Weil Felix reaction	224	—	127	351
Serological reaction for syphilis		38,725	—	—	38,725
Blood smears	Malaria	2,285	1,021	1,749	5,055
	Filaria	—	5	—	5
	Kala-azar	—	1	—	1
	B. anthracis	75	—	4	79
Haematology	Hb. percentage	—	2,049	493	2,542
	Total Red Cell Count	2	2,061	506	2,569
	Total White Cell Count	2	2,280	906	3,188
	Differential Count	1,204	1,861	841	3,906
	Blood Sedimentation Rate	1	1,005	119	1,125
	Blood Bleeding Time	—	31	2	33
	Blood Coagulation Time	—	31	1	32
	Platelet Count	—	18	1	19
	Reticulocyte Count	—	5	—	5
	Blood Grouping	173	451	57	681
	Cross-Matching	—	158	19	177
Cultural examination	Naso-pharyngeal swabs (C. diphtheriae)	1,021	206	660	1,887
	Cerebro-spinal fluid for pathogenic organisms	259	9	202	470
	Faeces for pathogenic organisms	470	93	293	856
	Blood	419	73	257	749
	Urine	173	626	463	1,262
Faeces	Intestinal parasites	2,354	5,229	3,028	10,611
	Occult blood	68	168	173	409
	M. tuberculosis	—	—	21	21
Tissue sections		703	—	—	703
Brains for Negri bodies		35	—	—	35
Sputa		4,037	2,829	4,147	11,013
Gastric lavages for M. tuberculosis		708	28	—	736
Smears for gonococcus		213	114	906	1,233
Smears for M. leprae		91	58	—	149
Rat spleen smears for P. pestis		3,893	—	8,786	12,679
Urine (Routine, chemical & microscopic)		741	7,846	2,905	11,492
Friedman test		77	—	—	77
Bacteriological examination of milk and foods		1,214	—	811	2,025
„ analysis of water		2,437	—	—	2,437
Miscellaneous		837	1,108	204	2,149
Grand Total		63,300	29,364	28,111	120,775