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# ANNUAL DEPARTMENTAL REPORTS 1957-58

THE ROYAL SOCIETY

for the Promotion

DIRECTOR OF MEDICAL AND HEALTH SERVICES

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# HONG KONG

# ANNUAL DEPARTMENTAL REPORT

BY THE

DIRECTOR OF MEDICAL
AND HEALTH SERVICES

FOR THE

FINANCIAL YEAR 1957 - 58

# **EXCHANGE RATES**

Where dollars are quoted in this Report, they are Hong Kong dollars. The official rate for conversion to pound sterling is HK\$16=£1 (HK\$1=1s. 3d.). The official rate for conversion to US dollars is HK\$5.714= US\$1 (based on £1=US\$2.80) but a more realistic, though approximate, rate based on the local fluctuating open market would be nearer HK\$5.90=US\$1.

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Statistical information in this report refers to the calendar year 1957

# I. THE COLONY'S HEALTH SERVICE

### INTRODUCTION

In presenting this Report on the Health of Hong Kong a brief outline of the social background is essential to an understanding of the disease problems and the organizations available to deal with them. Essentially a major seaport and thus a centre of communication, Hong Kong, with one of the densest urban populations in the world, may be considered to be extremely vulnerable to the introduction of disease. A lengthy coastline and a relatively well developed medical service invite an influx of the sick from the mainland of China. Thus, in addition to its own intrinsic health problems, the Colony is faced with an annual immigration of unknown proportions, much of which is stimulated by a desire to seek treatment in the clinics and hospitals.

- 2. The whole Colony, including the New Territories, covers a land area of 391 square miles of which 36 square miles is the urban area of Hong Kong Island, Kowloon and New Kowloon. At the end of 1957 the total civilian population was estimated to be 2,677,000. Of this total eighty three per cent was living in the urban areas, and thirteen per cent of this urban population was estimated to be squatters of roof-top dwellers. Five per cent of the total population is literally a floating one and represents the permanent junk and sampan dwellers.
- 3. Hong Kong Island is primarily a commercial and residential area, with a population estimated at over a million, the majority of whom are concentrated in the heavily built up area along the north shore of the Island. Included in the urban area are the fishing communities of Aberdeen and Shau Kei Wan. The great majority however live in crowded tenements. It is a city of densely packed shops, food premises, laundries, tailors and other craftsmen working in small units with an industry and pertinacity that could be well emulated in other large cities of the world. The majority of those so engaged maintain a closely knit family life with standards of decency and morality far in advance of what might be expected in the grossly overcrowded conditions dictated by the scarcity of building land and the phenomenal influx of refugees which has taken place during the last twelve years.

- 4. On the Mainland a similar state of affairs exists in the older parts of Kowloon. The population, probably over a million, has increased greatly since the end of the Second World War.
- 5. Much has been written of the squatter problem in the twin cities and on the periphery of Kowloon. Here is a largely agricultural population abruptly transplanted to urban conditions with sketchy water supplies and environmental sanitation; there is casual employment and insecurity of tenure of dwelling places by virtue of the squatting. Here the social disruption which breeds so much physical and social ill-health stands out in contrast to that of the established residents of Victoria and Kowloon.
- 6. In the New Territories, with a population estimated at about 360,000 life is much more stable and the intensive wet cultivation of food crops fosters a way of life traditional over many hundreds of years. There is a higher standard of physical fitness and the health problems tend to be those of the parasites rather than the acute and chronic bacterial infections. Similarly the fishing community lives a self-contained and traditional life largely undisturbed by the influences of urban development. Nevertheless in some areas of the New Territories light industry has developed rapidly since the war and the influx of labour has brought social problems in its train.
- 7. Piped water supplies of a high standard of purity are now available to the urban community even though the hours of supply are necessarily restricted and one water point may serve many families. In the urban areas it is true to say that wells and well water are strictly controlled and their permitted use limited to flushing. In the New Territories the larger centres also have the benefit of a protected supply; otherwise, the level of acquired immunity measures up to the supplies from unprotected sources.
- 8. Not unnaturally in the circumstances, environmental sanitation poses a problem of staggering proportions. Great strides have been made in the provision of sewerage but the major part of the urban population is still served by bucket latrines. The great demand for the traditional fertilizer for the intensive agriculture of the New Territories means that disposal of night soil presents no great problem once a system of collection and distribution has been solved. This has been achieved to a great extent on an *ad hoc* basis pending the introduction and development of modern and safe systems of disposal and utilization of sewage for agricultural purposes.

- 9. There is little real malnutrition in the Colony but there is a good deal of subnutrition, largely due to imperfectly balanced diets. Fish and pork are plentiful but although, generally speaking, there is no grave shortage of protein it is rarely included in adequate quantities in the average customary diet.
- 10. The health problems therefore are those of a major port and industrial centre in which there is an unprecedented density of population. The population increase that has taken place over the past ten years has far outstripped the capacity to provide, within a short period of time, housing, water, sanitary services, schooling and medical care to accepted modern standards. Accordingly, it is against a background of overcrowding and, as yet, inadequately developed environmental health services that the work of the year has to be assessed.

### ADMINISTRATION OF THE MEDICAL AND HEALTH SERVICES

11. Statutory responsibility for the administration of the services safeguarding the public health in Hong Kong lies mainly with the Director of Medical and Health Services, the Urban Council, the District Commissioner New Territories and the Commissioner of Labour. Executive functions in connexion with curative medical services and a number of aspects of preventive medicine throughout the Colony are the responsibility of the Medical Department. The Urban Council is concerned with environmental sanitation in the urban areas of Hong Kong and Kowloon through the Urban Services Department. The District Commissioner has executive functions as the Health Authority for the New Territories and administers its environmental sanitary services. The Labour Department has an Industrial Health section staffed by officers of the Medical Department. Similarly Medical and Health Officer personnel are seconded in an advisory capacity to the Urban Services Department and the District Administration, New Territories.

### STAFF

12. The Director of Medical and Health Services is the Head of the Department, the chief adviser to Government on medical and health policy, and an official member of the Legislative Council. He is a member of a number of the Boards and Committees of voluntary organizations engaged in medical and health work whose activities receive substantial support by way of Government subventions. He is also the Chairman of the statutory Boards dealing with the registration

and disciplinary control of Medical Practitioners, Dentists, Pharmacists, Nurses and Midwives.

- 13. The Deputy Director of Medical and Health Services is the chief executive medical and health officer who co-ordinates the work of the Medical and Health Divisions. Each of these divisions is in charge of an Assistant Director. The Principal Matron is the Chief Nursing Officer and administers the Nursing Division which provides nursing, midwifery, health visitor and health sister services.
- 14. The Health Division is made up of units dealing with tuber-culosis, malaria, venereal diseases and leprosy, port health and epidemiology, maternal and child health, school health and the health advisory services to the Urban Services Department and the District Commissioner, New Territories. The Assistant Director of Health Services is also Vice-Chairman of the Urban Council. He is assisted in the work of the Division by a Senior Health Officer at Headquarters. Each of the component units is in the charge of a Specialist or of a Medical Officer with special experience and training.
- 15. The Assistant Director of Medical Services responsible for the administrative routine of the Medical Division is assisted by a Senior Medical Officer at Headquarters and two other Senior Medical Officers who are respectively Medical Superintendents of the two main Government general hospitals. In addition there are clinical units for surgery, medicine, obstetrics and gynaecology, psychiatry, anaesthesia, radiology, pathology and ophthalmology, each of which works under the general direction of a specialist. There is a Government Dental Service in the charge of a Dental Specialist and a Government Chemist is responsible for the work of the Chemistry Laboratory. The work of the outpatient clinics throughout the Colony is co-ordinated by the Medical Division although the Health Division also has important functions in the work of these clinics.
- 16. The Almoner Service, the Physiotherapy and the Occupational Therapy services, each in charge of a senior officer, are part of the Medical Division.
- 17. The Auxiliary Medical Service branch of the Defence Services under the Unit Controller, who is the Director of Medical and Health Services, is administered by the Medical Defence Staff Officer with an office at the Headquarters of the Department.
- 18. At Headquarters the Secretary of the Department deals with the routine administrative work of establishments and the secretarial and

clerical branch of the Department. The Principal Accountant and his staff deal with the financial and accounting aspects. The routine work of the Boards section is supervised by the Boards Secretary.

- 19. The Chief Pharmacist is responsible for the pharmaceutical and dispensing activities and has inspectorial duties in connexion with the Dangerous Drugs and Pharmacy and Poisons Ordinances.
- 20. The Chief Hospital Secretary is responsible for the supply of equipment and the day to day lay administration of the hospital and clinic services. The hospitals and clinics are grouped into two large units to each of which is posted a Hospital Secretary. Assistant Hospital Secretaries of Executive Officer Grade are posted to the larger and more important clinical units within the groups.
  - 21. Appendix I shows the establishment at 31st March, 1958.

### PROFESSIONAL REGISTERS

22. Except when the legislation provides for exemption in certain specified instances, medical practitioners, dentists, pharmacists, nurses and midwives are required by law to be registered before being entitled to practise their professions in the Colony. The number of persons so registered on 31st March, 1958 was as follows:

Medical Pra	ctition	ners	 	 	 	570
Dentists			 	 	 	349
Pharmacists			 	 	 	60
Nurses			 	 	 	879
Midwives			 	 	 	898

- 23. Doctors and dentists in Government Service and the Armed Forces are deemed to be registered and their names are not necessarily entered in the Register. This is due to the fact that entrants to these services have fully registrable qualifications before they are appointed and the frequent transfers, particularly within the Armed Services, do not warrant the maintenance of their names in the Register.
- 24. The Ordinances governing the regulation of these professions have constituted Councils or Boards, each under the Chairmanship of the Director of Medical and Health Services. The functions of these statutory bodies are to maintain an adequate standard of practice by ensuring that all persons admitted are properly qualified either by Commonwealth standards or by training and examinations conducted within the Colony under the supervision of the relevant Boards. On the ethical side these bodies have disciplinary powers to deal with unethical or unprofessional conduct. The Dental Board, Pharmacy Board, Nurses

Board and Midwives Board all have powers to regulate training and to hold examinations. The Medical Council is not an examining body and is concerned only with registration and professional discipline.

### FINANCE

- 25. The actual expenditure of the Medical Department for the financial year ended 31st March, 1958 was \$34,864,883 to which should be added a further \$9,726,931 which was disbursed, in the form of subventions, to the voluntary organizations in the Colony that provide hospital and other public health services. These disbursements included \$700,000 to the Anti-Tuberculosis Association, \$1,243,805 to that Association's Grantham Hospital, \$715,000 to the Mission to Lepers, Hong Kong Auxiliary, and \$6,600,014 to the Tung Wah Group of Hospitals, which received the main subvention. Expenditure by the Medical Department, including medical subventions, was approximately 8.37% of the Colony's total actual expenditure.
- 26. The total revenue recovered by the Department from all sources was \$2,609,045.
- 27. The above totals do not include expenditure on environmental sanitation by the Urban Services Department and the District Administration of the New Territories.

### LEGISLATION

28. The following legislation dealing with medical and health matters was enacted during the year 1957-58:

### Ordinances:

- (a) Medical Registration Ordinance No. 25 of 1957.
- (b) Midwives (Amendment) Ordinance No. 30 of 1957.
- (c) Mental Hospitals (Amendment) Ordinance No. 34 of 1957.
- (d) Radiation Ordinance No. 35 of 1957.

# Regulations:

- (a) Medical Practitioners (Registration and Disciplinary Procedure) Regulations (G.N.A. 49 of 1957).
- (b) Midwives (Amendment) Regulations (G.N.A. 59 of 1957).
- (c) Penicillin (and other Substances) Regulations (G.N.A. 66 of 1957).
- (d) Poisons (Amendment) Regulations (G.N.A. 1 of 1958).
- (e) Poisons List (Amendment) Regulations (G.N.A. 2 of 1958).

- 29. The most important items of legislation were the Medical Registration Ordinance and the Radiation Ordinance. The Medical Registration Ordinance, 1957 re-enacted and brought up to date the law to regulate the medical profession in the Colony which was governed formerly by the Medical Registration Ordinance (Cap. 161). The main changes are the replacement of the Medical Board by a Medical Council, the introduction of compulsory pre-registration internships and, by Clause 27, the general prohibition of the practice of western medicine by persons other than those with a registrable medical qualification.
- 30. Owing to the large number of unregistered refugee doctors in the Colony Clause 27 aroused considerable opposition. Some work in 'Charity Clinics' which provide a free or low cost service to the sick poor. In addition a number of the better qualified of such doctors were employed in Government Service and were thus deemed to be registered. At the second reading of the Bill an amendment was introduced to suspend the operation of Clause 27, at the discretion of the Governor, until such time as satisfactory arrangements could be made to give unregistered doctors an opportunity to sit an examination leading to a qualification registrable within the Colony. Negotiations to this end are in hand. This Ordinance, so amended, became law on 22nd May, 1957.
- 31. The Ordinance contains a section which permits the practice of Chinese Herbal Medicine by Chinese Herbalists.
- 32. The Radiation Ordinance (No. 35 of 1957) is designed to control the import, export, possession and use of radio-active substances and irradiating apparatus. It also deals with prospecting and mining for radio-active minerals. The Ordinance establishes a Radiation Board consisting of three ex-officio members and up to ten members appointed by the Governor. The Director of Medical and Health Services is ex-officio Chairman of the Board. The functions of the Board include licensing, inspection and control of irradiating apparatus and Regulations are in process of being drafted to deal with these aspects of the work of the Board.

### WORLD HEALTH ORGANIZATION REGIONAL COMMITTEE

33. In September 1957 Hong Kong acted as host, for the first time, to delegates from fourteen countries belonging to the Western Pacific Region of the World Health Organization who attended the Eighth

Session of the Regional Committee. The meeting, held at the Grantham Training College from 5th to 12th September, was opened by the Governor, and Dr. G. Graham-Cumming, Acting Director of Medical and Health Services and the leader of the United Kingdom delegation, was elected Chairman. Observers from other United Nations agencies and a number of other affiliated organizations also attended.

### II. PUBLIC HEALTH

### GENERAL COMMENTS

- 34. The outbreak of Asian Influenza which occurred during the months of April, May and June was the only major epidemic episode of the year. Next in importance was the increase in the incidence of Diphtheria. Tuberculosis again showed an increase in the total number of cases diagnosed, but this increase is believed to be due mainly to the improved and extended diagnostic facilities. The incidence of other major causes of illness showed no significant variation over the previous year.
- 35. The Colony again remained free from the formidable epidemic diseases of Cholera, Plague, Smallpox, Yellow Fever, Epidemic Typhus and Relapsing Fever. For the second year in succession there was no case of rabies, either human or animal.
- 36. There was a gratifying drop in the number of cases of the enteric fevers, the total being the lowest recorded since 1950; the case fatality rate was the lowest on record.
- 37. The major health problem in the Colony is undoubtedly Tuber-culosis. Under the conditions of density of population and over-crowding pertaining to the urban areas, the magnitude of the re-housing problem is such as to render significant progress in this direction slow in relation to the urgency of the situation. Great strides have been made in re-housing and in the resettlement of squatters, and as much progress as can be expected has been made within the physical limitations of land, materials and cost. Therefore the ambulatory out-patient treatment of Tuberculosis allied to the preventive measures of B.C.G. Vaccination and of prophylaxis in contacts, constitutes the only logical approach to the problem.

### VITAL STATISTICS

38. Compulsory registration of births and deaths occurring in the Colony is required under the provisions of the Births and Deaths

Registration Ordinance. The Director of Medical and Health Services, who had been the Registrar of Births and Deaths since 16th October, 1931, ceased to act as such as from 1st April, 1957, when the function of the registration of births and deaths was taken over by the Registrar General. A scheme for the reorganization and decentralization of the Births and Deaths Registry was implemented late in 1956, and as a result, additional registries have been established in various districts throughout the Colony.

- 39. The number of 97,834 registered births again exceeded all previous records. It was 1,088 more than in 1956 which was itself a record year. Taking the estimated mid-year population of 2,583,000, the crude birth rate was 37.9 per thousand of population, which was slightly lower than the rate in 1956 of 39.7 per thousand.
- 40. On the other hand, the total number of deaths from all causes was only 19,365, just seventy more than in 1956, 285 more than in 1955 and ninety four less than in 1952. The crude death rate was 7.5 per thousand of population, compared with 7.9 per thousand in 1956.
- 41. The net natural increase in the population of the Colony during 1957 was thus 78,469, as against 77,451 in 1956.
- 42. There were 1,245 still births recorded, which gives a pre-natal wastage of just over ten for every 1,000 of all births. The number of children dying in the first month of life, always the most dangerous period of a child's life, was 2,330, giving a neo-natal mortality rate of 23.8 in every thousand live births. This shows a slight decrease over 1956, when the rate was 24.2 per thousand live births.
- 43. Deaths of infants under one year of age numbered 5,436, which is 28.07% of deaths from all causes as compared with 30.6% in 1956. This gives an infant mortality rate of 55.6 per thousand, compared with 60.9 per thousand in 1956. Of an increasing number of babies born, an increasing number is surviving. On an average 268 babies are born in the Colony each day, of which at least 249 survive their first year of life; in the past it would not have been unusual for at least one hundred of them to die before their twelfth month of life. This dramatic success is a tribute to those engaged in the maternal and child health services; none the less this improved situation is posing fresh problems in regard to medical services, education, employment and housing.

44. The following table sets out the figures of infant and neo-natal deaths in detail:

	TA	BLE 1			
Age Period		1954	1955	1956	1957
0—1 day		199	224	212	222
1—7 days		803	989	1,091	1,101
1—4 weeks		1,048	882	1,039	1,007
4 weeks—3 months		1,179	1,148	961	874
3—6 months		1,112	1,121	944	893
6—9 months		991	957	904	763
9—12 months		696	691	744	576
Total under 1 year		6,028	6,012	5,895	5,436
Infant Mortality rate		72.4	66-4	60.9	55.6
No. of deaths under 4 w	eeks	2,050	2,095	2,342	2,330
Neo-natal Mortality rate		24.6	23.1	24.2	23.8

45. There has been a slight rise in the maternal mortality rate from 0.90 per thousand deliveries in 1956 to 1.06 per thousand deliveries in 1957. The following table sets out the maternal mortality figures for the years 1954 - 1957 in detail:

TABLE 2

		Line Sam Total		Total Live		ancy and bearing	Ab	ortion		ternal lity Rate
Year		Live Births	Still Births	and Still Births	No. of deaths	Rate per 1,000 births	No. of deaths	Rate per 1,000 births	No. of deaths	Rate per 1,000 births
1954	 	83,317	1,341	84,658	102	1.20	3	0.04	105	1.24
1955	 	90,511	1,250	91,761	104	1.13	3	0.03	107	1.16
1956	 	96,746	988	97,734	86	0.88	2	0.02	88	0.90
1957	 	97,834	1,245	99,079	101	1.02	4	0.04	105	1.06

46. The following table shows deaths from toxaemias of pregnancy during the years 1954 - 1957:

TABLE 3

Year	Deaths from Toxaemias of Pregnancy	Total births (including still births)	Death rate per thousand
1954	 38	84,658	0.4
1955	 48	91,761	0.5
1956	 36	97,734	0.4
1957	 = 32	99,079	0.3

47. Details of the principal causes of mortality are set out in the following table:

### TABLE 4

Course of Dooth		Number of	of Deaths	
Causes of Death	1954	1955	1956	1957
Pneumonia (all forms)	3,837	3,821	3,548	3,836
Tuberculosis of respiratory system	2,052	1,925	1,901	2,069
Tuberculosis (other forms)	824	885	728	606
Gastro-enteritis and colitis	2,690	2,264	2,361	1,714
Malignant neoplasms	1,000	1,190	1,262	1,380
Premature births	921	912	982	949

### III. WORK OF THE HEALTH DIVISION

### HYGIENE AND SANITATION

Urban Areas

- 48. The need for improved environmental sanitation in the urban areas of Hong Kong and Kowloon continues to increase and such work requires constant reinforcements of supervisory staff in order to maintain even minimum standards. During the year the health staff was strengthened by the addition of a Health Officer (Administration) with offices in the Urban Services Department and by an additional Health Officer in the Hong Kong urban area which was thus divided into Eastern and Western Districts.
- 49. As previously, the duties of the Health Officers were mainly concerned with the public health aspect of environmental sanitation, food hygiene, infectious disease control and the guidance of the Health Inspectorate in carrying out their day-to-day functions.
- 50. Improvements were made in the system of house inspection by District Health Inspectors; teams of four or five inspectors now together visit a group or block of domestic premises, the occupants of which receive prior notice by card of the date of inspection. This has resulted in a more uniform assessment of sanitary defects.
- 51. A new form of inspection record card was introduced for licensed food premises; these record cards are kept in each restaurant and café and provide a continuous survey of the sanitary condition of the premises as well as ensuring their regular inspection.
- 52. A high proportion of milk and ice cream samples taken for examination continued to show unsatisfactory bacteriological results. Some 25% of milk samples and 20% of ice cream samples were below

the required standards; a higher incidence of unsatisfactory samples was found in Kowloon than in Hong Kong.

- 53. A new product, known as 'soft ice cream' presented several health hazards in the manner of its preparation, distribution and sale; conditions of permits to sell this type of ice cream were devised for its hygienic control. On the advice of the Department's Health Officers the Law Revision Select Committee of the Urban Council agreed to include in draft Regulations proposed to be made under a new Public Health Ordinance Heat Treatment Regulations for Ice Cream and Ices.
- 54. Four moderately severe outbreaks of food poisoning were reported during the year, involving in all a total of twenty three persons, one of whom died. In one instance the cause was found in cooked fish and pork infected with pyocyaneus organisms and sold by a cooked food stall hawker. Staphylococci and Bacillus Proteus were isolated from both food and vomitus in another incident involving nine persons.
- 55. Considerable health propaganda has been continued to encourage hygienic methods of food handling by employees of restaurants and other food premises. A locally made colour film demonstrating such methods was shown to 8,230 food handlers employed in Hong Kong and Kowloon.
  - 56. Special studies carried out during the year included:
  - (i) a survey of lighting in the kitchens and food preparation rooms of licensed food premises with a view to formulating future minimum illumination requirements for these premises,
  - (ii) a survey to find out the prevalence and degree of cooking carried out in 'cafés' in the urban areas of Hong Kong Island.
- 57. The investigation and control of cases of notifiable infectious diseases, except tuberculosis and malaria, continued to be one of the main tasks of the Health Staff.
- 58. A considerable number of nuisances due to mosquitoes and flies continued to occur in certain parts of the urban areas. In April 1957 very extensive culicine mosquito breeding was found in swampy land around Chai Wan Bay; vigorous control methods were only partly successful until the full reclamation of the area was completed in September 1957. Many breeding places were also found associated with the numerous new building sites throughout the urban area.
- 59. Health education work was increased during the year both in scope and volume. A long term programme covering all important

aspects of community and household hygiene has been devised by a special select committee of the Urban Council, of which the Senior Health Officer is an active member.

### Rural Areas

- 60. The Health staff was increased by one additional Health Officer and three Public Vaccinators.
- 61. Two new Clinics with maternity wards were opened during the year; the one at Tai Po is an excellent building provided by the Hong Kong Jockey Club with twenty seven maternity beds and a large outpatient department which includes facilities for visiting specialists and for dentistry; the other is a smaller clinic on Lamma Island (North), which is a Rural Committee project of six maternity beds and treatment rooms for general outpatients.
  - 62. Plans are in hand for:
  - (i) a new and much enlarged dispensary to be built at Tai O by the Hong Kong Jockey Club;
  - (ii) a clinic with a 6-bed maternity home on Peng Chau Island (South) with funds raised jointly by the Junior Chamber of Commerce and the Peng Chau Rural Committee;
  - (iii) extensions to the Pok Oi Hospital, Yuen Long, which will include an operating theatre, an X-ray Department and accommodation for sixty four additional beds, mainly in wards for women and children.
- 63. New premises have been secured for Health Offices in both Yuen Long and Tsuen Wan.
- 64. Improvement and modernization of sanitation in the New Territories is, under present conditions, slow. There is, at times, considerable resistance to the introduction of the simpler types of water borne sewage disposal schemes, such as aqua privies and septic tanks. These interfere with the supply of night soil of which large quantities are used as a traditional and cheap fertilizer. Also, wet cultivation, particularly of water spinach, ensures ideal breeding areas for mosquitoes and the danger of damage to these crops precludes the use of insecticides in effective strengths.
- 65. Progress in the elimination of dry pail latrines has been made, however, in licensed food shops, factories and permanent housing. New buildings are now required to include water closet fittings.

- 66. With new and better clinic premises and the extension of visiting specialist services, attendances at all clinic sessions have increased considerably—in the case of children's clinics the increase has been almost twenty five per cent.
- 67. The travelling dispensaries continue to extend their activities to the more remote villages and, in January 1958, a most useful addition to New Territories Medical Services was a health launch, 'Chee Hong' also donated by the Hong Kong Jockey Club; this 'floating clinic' will serve isolated communities of the eastern seaboard of the Colony and regular scheduled stopping places have been arranged for islands and remote mainland villages in the Tolo Harbour—Mirs Bay area. The staff consists of a Medical Officer, a Nurse-Midwife and a Public Vaccinator; general medical treatment, minor surgery, prophylactic immunizations and emergency obstetric work can be carried out either ashore or on board. The vessel has four stretcher beds and a radio telephone link with Kowloon.
- 68. A very intensive and successful anti-diphtheria immunization campaign achieved a total of 69,519 inoculations, which must represent a high proportion of the child population of the New Territories. Reference must be made here to the great help and co-operation given by the District Administration and the Assistant Commissioner of Police (New Territories and Marine) for the loan of transport and loudhailers for use in the more inaccessible districts by the vaccinating teams.

# **Epidemiology**

- 69. During the year a total of 18,170 cases of notifiable communicable diseases was registered, representing an increase of 2,099 or 13·1% over that of the preceding year. The rise was due mainly to increases of 1,510 for tuberculosis (from 12,155 to 13,665), 525 for diphtheria (from 714 to 1,239) and 166 for measles (from 709 to 875). Other diseases showed either a decline or a very slight variation. Of the total number of notifications, 14,052 or 77·3% were made by Government Hospitals and Clinics, 1,986 or 10·9% by the Tung Wah Group of Hospitals and the remaining 2,132 or 11·7% by private practitioners and other hospitals. The total number of deaths due to these diseases was 2,965 as against 2,870 in 1956, showing a rise of 95 or 3·3%.
- 70. The incidence and mortality rates of notifiable diseases in 1957 were 703.4 and 114.8 per 100,000 of population respectively as against 658.6 and 117.6 in 1956.

71. The table at Appendix 2 gives the numbers of cases of and deaths from notifiable diseases reported in the Colony in 1957.

# Influenza

- 72. A large scale outbreak of influenza was experienced in the late spring. The source of the attack was uncertain but the disease had been prevalent in Japan during the preceding winter months and had later spread to China. In Hong Kong the incidence showed a sudden rise in the second week in April and reached epidemic proportions by the end of the month; the total numbers affected were not accurately known since the disease was not notifiable but a conservative estimate indicates that about ten per cent of the population suffered from the condition, that is, approximately 300,000 persons. Some curtailment of public transport services and of industrial output occurred as a result of staff illness, but there was not any widespread or serious dislocation.
- 73. A number of extra outpatient clinics were opened and night sessions from 6 p.m. to midnight were held in existing clinics in order to deal with the large numbers seeking treatment; these clinics were maintained for two weeks and throughout the Easter Holiday week-end during which time the epidemic reached its height.
- 74. The clinical course of the disease was mild and very few complications were noted. A total of 40 deaths was ascribed to influenza during the three month period March to May and over half these deaths occurred in persons over 60 years of age. The total number of deaths from other diseases, apparently precipitated by the influenza outbreak, was increased during these months.
- 75. The outbreak declined rapidly at the beginning of May and no secondary wave of cases occurred during 1957. The virus responsible was identified in several Far East areas as type A/Asian/57, hitherto unknown, which later spread to most other parts of the world and caused appreciable epidemics.
- 76. Information of a recurrence of cases of influenza in Japan was received in October and caused some concern lest the Colony be again attacked; as a precautionary measure and to gain early warning, medical practitioners were requested to notify influenza cases, seen in their practices, on a voluntary basis twice weekly. This arrangement, together with notifications from Government medical sources resulted in a total of 925 cases being reported by the end of 1957.

77. During February and March 1958 the incidence rose considerably and the total number of cases notified in the first quarter of the year was 6,807.

# Dysentery

- 78. 550 cases of Bacillary Dysentery including forty three non-Chinese cases were recorded during the year as against 560 in the previous year. 181 notifications were received during the last quarter of the year as compared with 89, 132 and 148 in the first, second and third quarters respectively. The number of deaths and the case fatality rate were, with the exception of last year, the lowest on record, being 9 and 1.6% respectively.
- 79. The incidence in the 0-4 age group of children remained high, being 190 or 34.5% of the total, as compared with 213 or 38.0% in the preceding year and 250 or 46.7% in 1954, the highest on record.
- 80. 330 or 60% of the returns were reported on Hong Kong Island as against 184 or 33.4% in Kowloon and 36 or 6.6% in New Territories.
- 81. During the course of routine investigation one hundred carriers were discovered amongst the contacts and dealt with by Health Officers.
- 82. Amoebic dysentery and other forms of amoebiasis were notified and 217 cases and eight deaths were ascribed to this infection.

# Enteric Fever

- 83. There was notified a total of 728 cases of typhoid fever which included 723 Chinese and five non-Chinese; twenty six cases of paratyphoid were notified, the lowest figure since 1950. The number of deaths attributed to typhoid and paratyphoid was thirty three giving a case fatality rate of 4.5%, which is the lowest on record.
- 84. The incidence returns in the 5-9 and 10-14 age groups remained high being 207 or 28.4% and 143 or 19.6% of the total respectively. The age incidence peak occurred again in the 5-9 group for the fifth consecutive year.
- 85. In contrast to bacillary dysentery, 46.2% of the cases of enteric fever came from Kowloon as compared with 39.6% from Hong Kong Island.
- 86. T.A.B. inoculation was offered to members of the public throughout the year. During May, June and July, the campaign was intensified and 69,693 first doses, 51,144 second doses and 83,487 booster doses were given as against 118,879 first doses, 88,605 second doses and 120,891 booster doses for the whole year.

87. Other control measures included general preventive measures in public eating houses and stalls, a search for and supervision of carriers and education of the public in general and personal hygiene. During 1957 a total of thirteen carrriers was detected in the course of the investigation of contacts. The carriers were given treatment by the Health Officer staff.

# Chickenpox

88. There were 280 cases, including twelve imported cases, notified during the year as against 273 in 1956. This disease was mainly prevalent during the first four months of the year with outbreaks in schools and other institutions in both the New Territories and the urban areas.

# Diphtheria

- 89. 1,239 cases of diphtheria were reported, representing an increase of 525 or 73.5% over the preceding year. This rise was most marked in the last quarter of the year when 770 cases were reported as compared with 258, 94 and 117 in the first, second and third quarters respectively. The strain responsible was identified as a *mitis* strain.
- 90. Deaths attributed to this infection numbered 129 giving a case fatality rate of 10.4% as against 10.5% in the previous year.
- 91. Most of the cases occurred in the 0-4 age group, more particularly in those under 3 years, giving a total of 626 as compared with 381 in the 5-9 age group and 232 in the group 10 years and over.
- 92. Out of the total of 1,239 cases, 440 or 35.5% occurred on Hong Kong Island, 575 or 46.4% in Kowloon, 179 or 14.4% in the New Territories, and 45 or 3.6%, including three imported cases, among the 'floating' population. The incidence was highest in the more congested districts of the urban areas. It is gratifying to note that more notifications were received from Medical Practitioners in private practice and cases are now sent earlier to the Infectious Disease Hospitals for treatment.
- 93. Prophylactic inoculation against diphtheria is carried out throughout the year and is intensified before the onset of winter when the disease is most active. This has caused a decline in the number of cases and deaths since the disease reached its peak in 1953. However, the number of infants and children immunized each year is not yet sufficient to bring the disease under satisfactory control as there are always sufficient non-immunes available to support a large scale outbreak

when conditions are favourable. In view of the unusually early appearance of numbers of cases in the last quarter of 1957, the anti-diphtheria campaign was extended to the middle of January 1958. At the same time, anti-diphtheria propaganda was intensified.

- 94. The inoculation figures for the whole year were 143,897 first doses, 100,941 second doses and 66,231 booster doses as compared with 74,082 first doses, 58,197 second doses and 46,303 booster doses in 1956.
- 95. The routine investigation of notified cases and their contacts was carried out by the Health staff and resulted in the discovery of seventeen carriers.

### Measles

- 96. Cases reported during the year numbered 875 including ten imported from abroad. This figure, representing an increase of 166 or 23.4% over that of the preceding year (709), is the highest on record.
- 97. The number of deaths attributed to measles was ninety three, giving a case fatality rate of 10.6% as against eighty six deaths and 12.1% respectively in the preceding year. The death rate from measles as reported is unduly high because many of the non-fatal and milder cases of the disease are not notified.
- 98. The infection was most prevalent in the first quarter of the year with a total of 643 cases as against 178, 39 and 15 in the second, third and fourth quarters.
- 99. As in the case of chickenpox, outbreaks occurred in schools and institutions all over the Colony. Notification was more complete in the non-Chinese than in the Chinese Community and a total of 253 non-Chinese cases, mainly Europeans, was recorded during the year representing almost 29% of the total.

# Poliomyelitis

- 100. Forty five cases, including eight Europeans, with seven deaths were recorded in 1957 as compared with thirty one (eight Europeans) with three deaths in 1956.
- 101. A definite seasonal activity was evident this year, thirty of the forty five cases (66%) occurring in the months of June, July and August.
- 102. The following table indicates in more detail the age and race distribution of the cases and deaths.

TABLE 5

4	Chinese		Non-	Chinese	Total		
Ages	Cases	Deaths	Cases	Deaths	Cases	Deaths	
0—4 years	 30	5	1	000-00	31	5	
5—9 years	 3	_	1	_	4	-	
10—19 years	 1	1	-	-	1	1	
20 years and over	 3	_	6	.1	9	1	
Total	 37	6	8	1	45	7	

103. The overall incidence rate of poliomyelitis was 1.74 cases per 100,000 of the population and the mortality rate 0.27 per 100,000.

### Scarlet Fever

104. Only five mild cases were reported in 1957 as against fourteen in 1956. No death was recorded.

# Whooping Cough

105. Ninety six cases (ninety three Chinese and three non-Chinese) were notified during the year as compared with 119 in the preceding year; more cases were reported by private practitioners than by public Clinics or hospitals.

# Puerperal Fever

106. There were only two cases with no deaths registered this year as against seven cases with two deaths in 1956. Deliveries in connexion with both these cases were done at home without the help of either a doctor or a qualified midwife. The sick mothers were later removed to a Government Hospital where a diagnosis of puerperal infection was made.

# Vaccination and Inoculation Campaigns

- 107. Free prophylactic vaccinations against smallpox, typhoid and diphtheria were offered to members of the public throughout the year and were developed into large scale vaccination campaigns, preceded by propaganda, as circumstances warranted. Mobile vaccination teams continued to be sent to Resettlement areas, factories, institutions and offices. Employers of labour are now co-operating well, as shown by an increasing number of requests received by the Epidemiologist for the giving of prophylactic vaccinations to employees and their families.
- 108. The anti-smallpox campaign of December 1956 continued to operate until 15th March, 1957. This was followed by the T.A.B. inoculation campaign which lasted from May to July. Almost

immediately thereafter the mass vaccination campaign against diphtheria, using Alum Precipitated Toxoid, was started. This continued until the middle of January 1958 because of the continuing high incidence of diphtheria in the Colony. In between these campaigns, vaccination teams covered the New Territories, the fishing population and revisited the resettlement and other congested districts in the Colony.

109. Appendix 3 sets out the total numbers of prophylactic immunizations carried out during the year.

### PORT HEALTH

- 110. The Port Health Administration is responsible for the prevention of the importation of infectious diseases into the Colony by sea, land, and air; for the sanitary control of the port areas and the airport; for the carrying out of the provisions of the International Sanitary Regulations as embodied in the Quarantine and Prevention of Diseases Ordinance; for the compilation of epidemiological statistics and reports and for organizing prophylactic vaccination campaigns. The work is also governed by the Hong Kong Merchant Shipping Ordinance, the Vaccination Ordinance and the Asiatic Emigration Ordinance.
- 111. Passengers and crews of incoming vessels were inspected at the two Quarantine Anchorages in Kowloon Bay and off Stonecutters Island, arrivals by air were inspected at Kai Tak Airport, and persons entering by the land frontier were checked at the Lo Wu Station Quarantine Post.
- 112. In the absence of epidemiological information from the Chinese Mainland it was considered advisable to continue to regard all nearby Chinese ports as being infected with the more prevalent of the quarantinable diseases which are considered to be endemic in the area.
- 113. During the year the staff was increased by eight Public Vaccinators for duties in the New Territories and in Schools.
- 114. One Senior Health Inspector, two Health Inspectors, one Fumigator and two Rat-Searchers carried out the fumigation and disinsecting of cargo and ships; they also undertook sanitary duties in the port area and airport, including the collection and despatch of water samples to the Pathology Institute for bacteriological examination.
- 115. Four launches and one fumigation barge were allotted by the Marine Department for Port Health work. The four launches had radio telephones installed on board and carried first aid equipment. In addition to routine work in the port area they provided an ambulance

service and were frequently used by the Medical Department for miscellaneous duties arising mainly from new commitments in the outlying islands.

- 116. 5,015 ships carrying 70,993 passengers and 245,605 crew were inspected at the Quarantine Anchorages during the year as against 4,543 ships, 67,076 passengers and 233,378 crew in 1956. 462 persons required to be vaccinated against smallpox before disembarking and 465 against cholera. Nineteen cases of non-quarantinable infectious diseases were found on board ships and their treatment arranged. 167 ships were granted radio pratique and 514 ships allowed free pratique.
- 117. Passengers and crew of aircraft arriving from infected areas were inspected at Kai Tak Airport. The routine spraying of all aircraft with insecticide before arrival was insisted upon. There was an increase in air traffic during the year but fewer passengers arrived from infected areas. A total of 22,903 passengers was inspected as against 23,660 in 1956.
- 118. 686,198 persons entered the Colony by the land frontier station at Lo Wu as compared with 666,365 in 1956. Of these 365,241 were vaccinated against smallpox.
- 119. During the year the routine vaccination of all arrivals at the land frontier was discontinued and was confined to those new arrivals who were without Police re-entry permits for Hong Kong; this procedure resulted in a speedier passage through the frontier formalities for all passengers.
- 120. In accordance with the Asiatic Emigration Ordinance, an inspection was carried out of all vessels carrying over twenty unberthed passengers travelling as emigrants. sixty four ships carrying 12,813 emigrants were inspected during the year as against sixty two ships with 10,173 emigrants in 1956 and fifty nine ships with 6,389 emigrants in 1955.
- 121. Although no longer required for International voyages, Bills of Health continued to be sought by masters of vessels. 1,861 Bills of Health were issued as against a total of 1,823 in 1956. Revenue from this source was \$18,610.
- 122. Forty one ships were fumigated with sulphur dioxide, thirty seven with cyanide and 170 were granted exemptions. The fumigation staff also carried out the disinsecting of vessels and the fumigation of cargo in lighters.

- 123. Three Port Health Vaccination Centres were maintained, two on Hong Kong Island and one in Kowloon, for the convenience of persons requiring certificates for international travel. They also provided the free prophylactic vaccinations to members of the public. 18,547 certificates issued by private medical practitioners were authenticated by Port Health Officers.
- 124. Regular inspections for the presence of mosquito larvae were carried out on small craft in the harbour. Mosquito breeding was negligible and no Aedes aegypti larvae were found on any of the 4,871 junks inspected during the year. 2,015 inspections of other vessels and of wharves and piers were also undertaken.
- 125. The dock area and airport are included in the rodent control scheme for the Colony. Returns of rodents destroyed and of bacteriological examinations carried out were submitted weekly to the W.H.O. Epidemiological Intelligence Station, Singapore.
- 126. A constant check was maintained on the purity of drinking water supplied to ships. Bacteriological examination of weekly samples from water boats and dock hydrants continued and immediate remedial action was taken when and where necessary by the Water Authority or the Port Health Office. A total of 445 samples were taken from water boats and dock hydrants and were submitted to the Pathology Institute for bacteriological examination; sixty two samples did not conform to the standard of purity. On request, 106 samples of water were taken from ships; of these thirty eight were sub-standard.
- 127. A weekly exchange of epidemiological information was maintained with the W.H.O. Epidemiological Intelligence Station, Singapore, and copies of reports were forwarded for the information of the Secretary of State for the Colonies.
- 128. During 1957, sixteen ships at sea called 'Porthealth' Hong Kong for advice on the treatment of sick persons on board, and nineteen ships were given medical assistance while in port. Direct action was taken to deal with ninety nine sanitary nuisances found on board vessels using the port.

### TUBERCULOSIS

The trend of morbidity and mortality in Hong Kong-1957

129. Despite intensive building in all parts of the Colony during the present year, the continued increase of the population has been sufficient to leave the overcrowding problem substantially unaffected. It is

therefore not without some degree of satisfaction that it has been found possible to record a continuation in the downward trend of the mortality from tuberculosis.

TABLE 6

			TUBERCULOSIS					
Year		Estimated Population	Death-rate per 100,000	Percentage of total deaths	% of tuberculosis deaths below 5 years			
1948	04.	 1,800.000	108-9	14.6	_			
1949		 1,857,000	140.6	16.0	34.8			
1950		 2,265,000	144.0	17-7	38-3			
1951		 2,013,000	208-0	20.0	34.0			
1952		 2,250,000	158-8	18-4	34-3			
1953		 2,250,000	130-6	16.0	36.2			
1954		 2,277,000	126-3	14-9	31.2			
1955		 2,340,000	120-0	14-7	28.0			
1956		 2,440,000	107-0	13.6	25.0			
1957		 2,583,000	103.6	13-9	21.2			

130. Examination of the monthly statistics during the year has shown that there was a sharp rise in the number of deaths ascribed to tuberculosis during the months of April and May. The rise was as much as one hundred per cent above the average monthly totals for the year, and it corresponded with the influenza epidemic. Investigation at the time showed that most of these deaths had been certified at Public Mortuaries, but whether or not they represent a true increase in tuberculosis mortality is a matter for conjecture. Apart from these increases however, there has been a definite rise in the number of deaths from tuberculosis among adults, most marked in the 55 - 59 age group, but more than compensated for by a fall in the number of deaths in children. Deaths from pulmonary tuberculosis among children under the age of 5 years recorded in each of the past four years have been, 293, 159, 139, and 116 respectively, despite the steadily increasing number of children at risk in each successive year. Deaths from Tubercular Meningitis and Tuberculosis (other forms) have each fallen by 17% from last year's figure which was in itself a record low total. It therefore appears that acute progressive primary and post primary tuberculosis, particularly in children, is either less prevalent or less lethal. It is difficult to ascribe this improvement to any one particular cause. However, it is believed that the combined effects of chemotherapy. which is so effective in this age group, allied with the increasing scope of B.C.G. vaccination in newborn children, which is also stated to be effective against this particular type of disease, must have played some part in this significant change in the mortality figures.

131. The notifications of tuberculosis recorded during the year were as follows:

				1956	1957
Government Chest Clinics				7,704	8,194
Other Government Institutions				1,643	2,517
Non-government Institutions	inclu	ding	Tung		
Wah Group of Hospitals				2,222	2,298
Private Practitioners				586	656
Total		***		12,155	13,665

132. It will be seen that the majority of these notifications originate in Government institutions and that the returns from other sources remain unchanged as compared with the figures for last year. The returns from private practitioners bear little relation to the number of cases handled by them.

# Public agencies dealing with the Tuberculosis problem

- 133. During the year Government has continued to implement and to expand its policy of participating directly in the social and welfare services, as well as acting through voluntary associations by providing them with financial support. This policy has considerable advantages as far as the voluntary bodies are concerned in that they have freedom of action to tackle the problem in hand as they think fit. This does work to the common good, provided each aspect of the problem is given the attention it merits.
- 134. In the field of tuberculosis Government takes an active part through the Tuberculosis Service of the Medical Department. Indirectly, it acts by providing financial support in the form of subventions to a number of voluntary bodies working in this field. As the overall control is financial rather than administrative, efficiency depends upon a full liaison and co-operation between the voluntary and the official bodies.
- 135. The principal voluntary organizations operating in the tuberculosis field are:

# (i) The Hong Kong Anti-Tuberculosis Association

This is the largest organization in the Colony which devotes its activities exclusively to tuberculosis. In addition to operating a Health Education Service, a B.C.G. vaccination clinic and a Tuberculosis Insurance Scheme, the Association controls 876 beds for the treatment of tuberculosis in the Ruttonjee

Sanatorium, the Freni Memorial Convalescent Home and the Grantham Hospital.

# (ii) The Tung Wah Hospital Group

This is a large charity organization whose principal activity is the maintenance of three large hospitals. Between them, these hospitals have rather more than one hundred beds, as well as out-patient facilities, for the treatment of tuberculosis.

# (iii) Haven of Hope Sanatorium

This is an institution maintained by the Church World Service and it is devoted exclusively to the treatment of tuberculosis. There are 120 beds as well as same out-patient facilities in the surrounding villages.

# (iv) Sandy Bay Convalescent Home

This recently opened hospital of fifty four beds is operated by the Society for the Relief of Disabled Children and is devoted to the convalescent care of children suffering from orthopaedic conditions, including tuberculosis. The Hong Kong Branch of the British Red Cross Society also participates in the work of the Home.

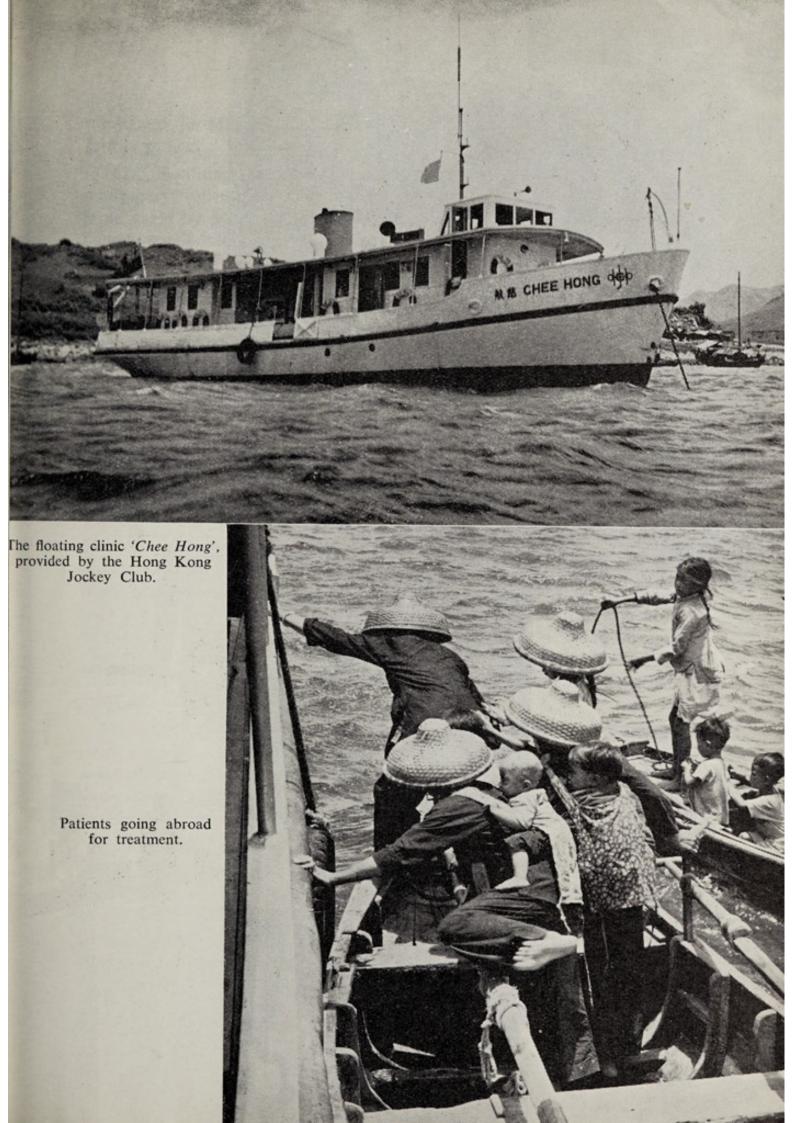
### Private Practice

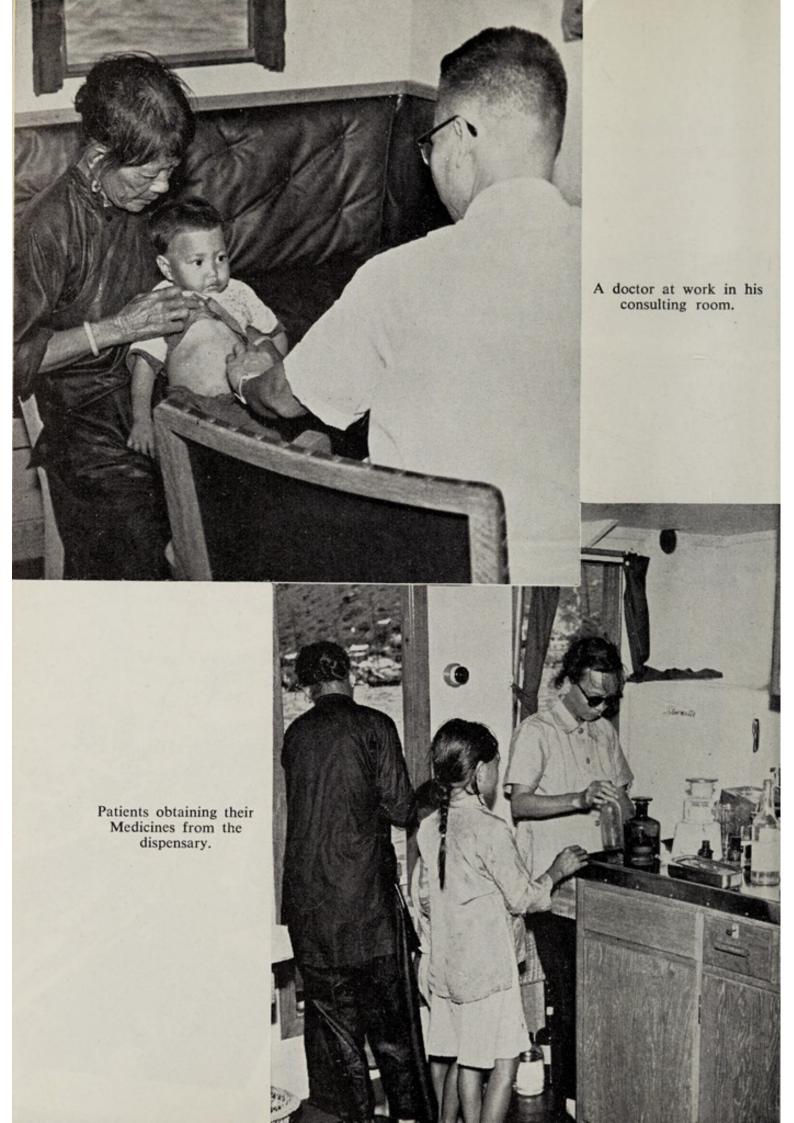
136. Until about ten years ago the only recourse of tuberculosis sufferers was to the private practitioners or to the private hospitals. Some of the practitioners had had special training in the treatment of tuberculosis but this did not by any means apply to all and the facilities for treatment varied very considerably. It is still not known just how much treatment is given by private practitioners as the notifications bear no relation to the number of cases handled but it is believed that the numbers are quite high. Treatment is available in private hospitals according to demand rather than according to any given number of beds.

# The Tuberculosis control programme

137. Hong Kong has the unenviable reputation of having the highest tuberculosis infection rate of anywhere in the world. The control programme is therefore aimed at reducing the sources of infection in the community and at reducing the number of susceptible children.

- 138. To provide beds on a scale sufficient to isolate all cases of the disease would necessitate the construction of hospitals with sufficient accommodation for 2% of the population. This is obviously far beyond the resources of the community and the adequate isolation of open cases must therefore be considered impracticable. As an alternative, efforts are being made to sterilize sources of infection by ambulatory chemotherapy. On this basis the problem assumes more reasonable proportions as it is possible to treat one patient at a cost of approximately HK\$330 per year and to treat nearly twenty patients at a cost equivalent to the maintenance of one case in hospital. With the ambulatory scheme, however, it is still necessary to admit a proportion of patients to hospital, those who are recoverable but who do not yield satisfactorily to ambulatory treatment and those who must be isolated for public health reasons. This is the function of the hospital beds available.
- 139. It has been found that the younger the patient the better the response to treatment and the earlier the treatment the better the result. Therefore contact examination is pressed to its limit and survey work is done in older school children as available resources permit. Owing to the fact that the clinics are at present working to capacity, case finding by general population surveys has not been practised but it is being kept in mind for the future.
- 140. Recognizing that tuberculosis infection at an early age is almost inevitable, B.C.G. vaccination is practised on a considerable scale and as the rate of infection is so high in early infancy, vaccination is offered to all newborn children within a few days of birth. Vaccination at this age involves no preliminary tuberculin test and requires a minimum of records.
- 141. With children who have already been infected in early infancy as judged by the tuberculin test, but who show no apparent disease, INAH is now being given as a prophylactic for one year to those under the age of three years. This form of prophylaxis, though it has been advocated in certain parts of the world as a general population measure, has evoked a storm of criticism. Given to infants as it is in Hong Kong, little can be said against it as, with care, it may do a lot of good and will certainly do no harm. The scheme was introduced during the year and is being used in conjunction with the B.C.G.





campaign; the Maternal and Child Health Services are also co-operating in this project.

142. Facilities for the isolation of the advanced infectious case of pulmonary tuberculosis are almost non-existent. Efforts to sterilize these cases by prolonged chemotherapy are not meeting with the satisfactory results claimed in other parts of the world. The question of the importance of drug resistance is one which has not yet been settled and, until further information is forthcoming, these cases will continue to be handled with extreme caution.

# The Hong Kong Anti-Tuberculosis Association Hospitals Ruttonjee Sanatorium and Freni Memorial Convalescent Home

- 143. These institutions are staffed by the Missionary Sisters of St. Columba and are operated as a single unit by the Hong Kong Anti-Tuberculosis Association. The combined total of 336 beds is devoted mainly to the treatment of pulmonary tuberculosis. Treatment is free, admission being obtained by selection at the Government Chest Clinics. This arrangement which has operated satisfactorily since the institution first came into being in 1949 and which obviates the necessity of duplicating diagnostic services. Admissions are restricted as far as possible to early cases who are likely to derive the maximum benefit from hospital treatment but certain cases are admitted by arrangement with the principal subscribers to the Association and without the need to pass through the Government Clinics. The institution works in close association with the University of Hong Kong, from which most of the Consultant Staff is drawn. The full range of medical and surgical treatment is available.
- 144. Orthopaedic tuberculosis cases admitted to the Sanatorium are treated under the supervision of the Consulting Orthopaedic Surgeon, a member of the staff of the University Surgical Unit who is also the Consulting Orthopaedic Surgeon to Government. Cases are obtained mainly from the orthopaedic clinic operated in the Government Chest Clinic at Wan Chai.
- 145. A Follow-up Clinic is operated by the medical staff of the Sanatorium for the benefit of discharged patients and a B.C.G. clinic is also maintained.
- 146. All social work in the institutions is done by the staff of the Government Tuberculosis Almoner.

147. Admissions during the year were as follows:

Admitted through Government clinics	Pulmonary disease {	Adults Children			 315 39
	Orthopaedic disease,	child	lren		 66
Other admissions not				***	 126
through Govern- ment clinic	Details not available				 91
	Total			***	 637

## The Grantham Hospital

148. This hospital of 540 beds was opened in June 1957 by Sir Alexander Grantham, the Patron of the Hong Kong Anti-Tuberculosis Association. It was built by the Association for the benefit of tuberculosis patients who were in a position to meet the cost of their treatment but not able to pay the high fees for maintenance and treatment in private hospitals. The eventual size of the hospital was considerably greater than had been intended originally, and it soon became evident that it would be extremely difficult to find a sufficient number of paying patients to fill all the beds. Government therefore agreed to finance 200 beds from the opening day, this number being increased later to 264 beds distributed as follows:

Surgical cases (under the	care of the C	Govern	ment	Chest	Surge	on)	28
Orthopaedic cases (under	the care of	f the	Cons	ulting	Ortho	paedic	
Surgeon to the Govern	nment)						28
Medical cases (admitted	by selection	from	the	Govern	ment	Chest	
Clinics)							208

- 149. The remaining beds are available for the treatment of private cases, but owing to staffing difficulties a total of only 330 beds was occupied throughout the year.
- 150. A Government Almoner assesses the ability of the patients to subscribe to the cost of their treatment, and does all social work in connexion with the cases admitted through the Government clinics.
  - 151. Admissions were as follows:

Direct admissions through Government Clir Transfers from Government Hospitals for st		treatm	ent	 78 33
Tota	al			 111

152. This does not include 200 patients who were admitted to the Government sponsored beds from the Tung Wah Group of Hospitals.

### The Government Tuberculosis Service

- 153. Before the Second World War, no public service was available for the diagnosis and treatment of tuberculosis in Hong Kong and all such work was in the hands of private practitioners. In 1946 plans were first made for the establishment of a public service and a start was made in 1947. From a small beginning this service has rapidly expanded to its present size and it is operated as an integrated unit under the direction of the Senior Tuberculosis Specialist.
  - 154. The facilities available are as follows:
  - (I) Full Time Clinics
    - (a) Wan Chai Clinic: This clinic is the headquarters of the Tuberculosis Service and four full time and two part time medical officers are centred here. It was opened in 1954 to take the place of the original clinic at the Harcourt Health Centre which from the point of size and convenience had long outlived its usefulness as a tuberculosis clinic.
    - (b) Kowloon Chest Clinic: This clinic was designed and built as a chest clinic and was opened in 1951; it is staffed by four full time Medical Officers and one part time Medical Officer. It was apparent even before it was opened that the clinic was going to be too small to fulfil its purpose satisfactorily but expansion was delayed until its functions could be temporarily taken over by Shek Kip Mei Clinic. Thereafter it was enlarged and was reopened to the public on 10th March, 1958.
    - (c) Shek Kip Mei Chest Clinic: This clinic is situated within a polyclinic in the Shek Kip Mei resettlement area. Sponsored by the local Kaifong Association, part of the funds for its construction were made available from the balance of a public subscription after the Shek Kip Mei fire in December 1953 and part by Government. It was opened to the public in December 1957 taking over the work of the Kowloon Chest Clinic during the alterations there. It is rather smaller than the other two chest clinics, and has only three Medical Officers.

Each of these three clinics has a full time X-ray department and holds day and evening sessions.

### (II) Part-Time Clinics

In order to provide facilities in the outlying districts for both diagnosis and treatment, clinics are held in all the main centres of population outside the urban area. These clinics are run on the basis of one half day session per week, the medical and auxiliary staff being supplied from the central clinics. X-ray facilities are provided either by the Mobile X-ray Unit or by reference to the central clinics, whichever is the more convenient for the patients. Half-day sessions are held at the following places:

Sai Kung, Tsuen Wan, Tai Po, Sheung Shui, Yuen Long, Aberdeen, Stanley and at St. John Hospital, Cheung Chau.

In the more remote places or where it is uneconomic to maintain a branch clinic, treatment may be directed from the nearest branch clinic and carried out at a public dispensary. Such arrangements are in operation at Silvermine Bay, Peng Chau Island, Ma Wan Island and Lamma Island.

All diagnosis and treatment at the various Government tuberculosis clinics is carried out free of charge.

## (III) Government Operated and Controlled Hospitals

Hospital treatment is available for patients suffering from tuberculosis in the undermentioned hospitals. All treatment is directed by the Tuberculosis Service.

- (1) Queen Mary Hospital
  General hospital, with beds set aside for Surgical
  treatment of pulmonary tuberculosis ... 69 beds
- (2) Lai Chi Kok Hospital
  Infectious diseases hospital, with beds set aside for medical and post-surgical treatment ... 176 beds
- (3) St. John Hospital, Cheung Chau
  Small 'cottage' type hospital, with beds set aside
  for medical and convalescent care ... ... 42 beds

  287 beds

Twenty six beds in Lai Chi Kok Hospital have been temporarily released to meet the needs of diphtheria patients.

# (IV) Other Hospitals

Sandy Bay Convalescent Home, with forty two beds, is under the medical direction of the Consulting Orthopaedic Surgeon to the Government, admissions and social work being carried out by the Government Tuberculosis Almoner.

## Tuberculosis Service—Staff

155. The staff employed full time in the service is as follows:

Senior Tubercu			 	 1
Tuberculosis S	pecialist		 	 (vacant)
Medical Officer	Hospit	tal	 	 3
	Clinic		 	 15
Nurses			 	 9
Almoners			 	 2
Assistant Almo	ners		 	 6 (one vacancy)
Tuberculosis V	isitors		 	 27
Clerks			 	 18
B.C.G. Office	Vaccinato	rs	 	 3
B.C.G. Office	Clerks		 	 1
	Drivers .		 	 1
Ancillary Staff			 	 18
		Total	 	 104

156. This does not include the staff of the Radiological Division who give full or part time service to the Tuberculosis Service, nor does it include staff of the laboratories of the Government Pathological Institute who do the bacteriological work in connexion with tuberculosis patients. This arrangement is convenient and operates satisfactorily.

### Attendances at Clinics

157. As a result of the steadily increasing pressure of attendances at the clinics it was considered necessary in December 1955 to limit the attendances of new patients to a maximum of sixty each day at the main clinics. Despite this limitation of new patients, total attendances have continued to rise in the main clinics. At the branch clinics there is no restriction of the number of new patients attending. Details of attendances during the year were as follows:

### TABLE 7

			1956	1957
First attendances	Main Clinics Branch Clinics	111	32,276 2,331	32,850 2,276
Revisits	Main Clinics Branch Clinics		373,222	498,461
			28,346	40,821
	Total Attendances	***	436,175	574,408

158. Exclusive of negative contacts and negative survey cases the total number of patients under treatment at the clinics during the year was 55,322.

159. The following table gives details of the sources of origin of new patients attending the main clinics during the year:

		T	ABLE	8		
					1956	1957
Voluntary attenda	ince .				 25,118	23,998
	vate Prospitals,	actitio	oners		 900	743
	spitals,	clinic	es, etc.		 1,073	1,733
Contacts					 1,043	1,052
	utine .				 1,473	1,694
Sarvante ) VO	luntary				 44	43
1 Sui	rvey .				 1,181	583
Survey Non-Gove					 567	1,458
Private school tea					 452	287
Evening Clinics					 425	534
	Total .				 32,276	32,125

- 160. The remainder of the total of 32,850 shown in Table 7 was made up by attendances at the Surgical Orthopaedic Clinic and at the Chest Clinic session for lepers, which, in deference to public opinion, are held at separate times.
- 161. Analysis according to the clinical findings on the first attendance of all new patients, including the branch clinics, shows the following:

	17	ADLE :	,		
				1956	1957
Examination incomplete No evidence of tubercule				1,827 3,534 18,056	2,047 2,969 18,357
Other disease				 457	325
Pulmonary tuberculosis				 10,733	11,428
Tot	al			 34,607	35,126

162. Classification of cases of pulmonary tuberculosis according to the stage and extent of disease on first attendance was as follows:

			TA	BLE 1	0		
						1956	1957
	- (	Minima	al			 1,898	2,071
Active disease	Moderate				 1,837	1,958	
	1	Advanc	ced			 1,966	1,962
Quiescent						 3,434	3,377
Arrested						 1,241	1,405
Recovered			***			 357	655

163. Over 35% of active cases were found to be infectious on first diagnosis and while the number of new cases attending Wan Chai was

30% greater than in Kowloon, the number of active cases attending Kowloon was 36% greater than in Wan Chai and showed a much greater proportion of advanced cases. Both the number of cases attending for treatment and the gross attendances have been much greater in Kowloon, so that the new Shek Kip Mei Clinic in Kowloon supplies relief where it is most needed.

## The Findings in Tuberculosis contacts

164. Contact examination is offered to all close contacts of known cases of pulmonary tuberculosis. Contacts are arbitrarily divided into two groups, (a) below 8 years of age and (b) above 8 years. Children below 8 years of age are Mantoux tested and those positive are further examined; those negative are B.C.G. vaccinated. Children above 8 years of age proceed straight to X-ray. The findings in contacts were as follows:

### TABLE 11

		1956	1957
(a)	Under 8 years of age		
	Tuberculin tests { Negative Positive	866 2,292	855 2,158
	Clinical findings ( Active tuberculosis	109	121
	of tuberculin   Inactive tuberculosis	54	42
	tested positive   Suspicious	315	244
	cases Free of tuberculosis	1,814	1,751
	Percentage of active tuberculosis	3.45%	4.02%
(b)	Over 8 years of age		
	Results of ( Active tuberculosis	372	451
	examination   Inactive tuberculosis	159	168
	following Suspicious	633	533
	contact X-ray Free of tuberculosis	6,535	7,238
	Percentage of contacts over 8 years with active tuberculosis	4.83%	5.38%
	Grand total of contacts examined	10,857	11,403

# The Orthopaedic Tuberculosis Clinic

- 165. This clinic held at the Wan Chai Chest Clinic is now in its third year of operation. It is supervised by the Consulting Orthopaedic Surgeon to the Government and operated by his medical staff together with the part time services of a Medical Officer of the Tuberculosis Service who is able to advise on the chest condition, as well as assisting with the Orthopaedic cases. Plaster sessions are held, in conjunction with this clinic, for the convenience of patients.
- 166. Treatment is based mainly on ambulatory chemotherapy which is fitted into the general scheme, plus such ancillary measures as are

necessary. Hospital treatment is available in the Queen Mary Hospital, the Grantham Hospital, the Ruttonjee Sanatorium and, for convalescent child cases, in the Sandy Bay Convalescent Home.

167. The results of treatment are so far encouraging and the attendances are mounting rapidly, the numbers recorded during the year being as follows:

Consultations {	New cases Return visits		 	 	543 768
		Total	 	 	1,311

168. This is more than double the attendances in 1956 and excludes attendances for chemotherapy.

The Surgical Chest Clinics

- 169. A session is held once each week in the chest clinic by the Government Chest Surgeon who sees patients referred either by the Clinic medical staff or by private practitioners. This session also affords the Chest Surgeon the opportunity to follow up cases after operation. The total attendances for the year were 593.
- 170. A further session is now held every two weeks by the Chest Surgeon to the Grantham Hospital who has agreed to assist in the treatment of the large number of cases who are considered to require surgery for the control of their pulmonary tuberculosis, usually after preliminary chemotherapy. This clinic started in January, 1958.

# Radiological Examination

- 171. X-ray examinations are under the control of the Senior Radiological Specialist. Static units are installed in the main clinics and the mobile unit serves the branch clinics once each month. Special chest examinations and skeletal X-rays are carried out in the Queen Mary and Kowloon Hospitals.
- 172. The number of examinations carried out during the year was as follows:

35 mm films	 	 	 	74,989
Large films or paper	 	 	 	81,936
5" × 4" films	 	 	 	3,765

173. The total number of examinations has increased by 25% compared to last year. There has been a further fall in the number of  $5"\times4"$  films taken.

## Bacteriological Examination

174. Laboratory work in connexion with the Tuberculosis Service is controlled by the Government Pathologist and is carried out at the Pathological Institute or one of its branches. The numbers of examinations done on behalf of the Tuberculosis Service were as follows:

	TABLE 12			
			1956	1957
Sputum	{ Positive Negative	 	7,208 26,033	7,162 31,216
	Total	 	33,241	38,378
*Gastric Lavage culture	{ Positive Negative	 	93 236	122 140
	Total	 	329	262
V.D.R.L.	{ Positive Negative	 	15 12	8 38
	Total	 	27	46

175. \*At Kowloon Chest Clinic, reliance is placed mainly on sputum cultures, of which 1,600 were done during the year, as there is neither time nor staff to undertake the requisite number of gastric lavages.

# Ambulatory Chemotherapy

176. During the year there has been evidence of a change in world medical opinion in favour of ambulatory chemotherapy. Several investigations carried out in hospitals have indicated that under the controlled conditions prevailing in hospital, rest in bed adds little to the efficacy of chemotherapy. A recent publication has shown that, in the case of individuals with disease of minimal extent, there is no significant difference between the results of treatment by ambulatory chemotherapy when the patient continues at work and treatment by conventional hospital treatment plus chemotherapy. Testimony in favour of ambulatory chemotherapy was given at the Fourteenth International Tuberculosis Conference held in New Delhi in January 1957 and in the World Health Organization Technical Report Series No. 141 entitled 'Chemotherapy and Chemoprophylaxis in Tuberculosis Control' ambulatory chemotherapy was recommended as an effective therapeutic measure in the control of tuberculosis.

- 177. Ambulatory chemotherapy was first introduced in this Service in 1950 because of the small number of hospital beds available. As time and experience established the efficacy of ambulatory treatment, hospital beds began to be used as a supplement to the ambulatory treatment. The beds were used mainly for cases whose disease was not controlled at the clinic and some of whom required surgical intervention, for the isolation of certain types of case and for investigation where the diagnosis was in doubt.
  - 178. The advantages of ambulatory treatment are:
  - (i) Effective treatment can be given at about one-twentieth of the cost of orthodox hospital treatment;
  - (ii) Considerably larger numbers of patients can be dealt with by the available trained staff;
  - (iii) During the course of treatment the patient can continue to maintain his family and avoids losing his job.
- 179. In Hong Kong, ambulatory chemotherapy offers means of controlling a tuberculosis problem which is far beyond the capacity of the available hospital beds. Further, as there is no general community sick benefit scheme, it provides treatment in a form acceptable to the patient.
- 180. Treatment is given in courses each lasting three months and is carried on for periods varying between the lower limit of six months and two and a half years or longer. Where it appears that the prognosis is poor a trial period of six months treatment is given with proprietary drugs; in the face of failure to respond, treatment is discontinued. In more hopeful cases treatment is continued until no further improvement can be achieved.
- 181. Keeping in mind the dangers of the dissemination of resistant organisms, treatment usually consists of a combination of two or sometimes three of the standard drugs PAS, INAH and Streptomycin; the latter is given either daily or by biweekly injection. A few proprietary drugs are also used. Plans are in operation to obtain PAS and INAH made up together in one tablet with the object of preventing the patient taking only one drug and discarding the less palatable PAS. Drug intolerance is encountered infrequently.

### 182. Details of cases treated were as follows:

### TABLE 13

	1956	1957
Brought forward from last year	 1,703	5,887
Started treatment during the year	 7,861	7,964
Total treated during the year	 9,564	13,851
Completed treatment	 1,037	1,213
( Failed to attend	 2,022	2,868
Treatment incomplete   Admitted to hospital	 445	495
Transferred elsewhere	 140	95
Died	 33	48
Still under treatment at the end of the year	 5,887	9,132

- 183. The overall increase in the figures, particularly the number remaining on treatment at the end of the year, indicates the increase in the volume of the work done.
- 184. The number of cases who completed treatment is still very small, the average duration of treatment being just under fifteen months. The results of treatment were as follows:

			Tota	ıl	***	 	1,213
Information	inco	mplete	 			 	20
Worse			 			 	38
Unchanged			 			 	396
Improved							759

- 185. Comparing results in Hong Kong and Kowloon the percentages improved were 69% and 58% respectively.
- 186. The total of those who failed to complete treatment is disappointingly high, most of them stopping within the first three months despite efforts made to encourage reattendance. The principal reason given for failure was 'too busy to attend.' It is known, however, that some cases, once diagnosis is completed, go to 'Charity Clinics' or 'Workers Clinics' and have treatment there. It is common practice to use the Government clinics as a check on the diagnosis of pulmonary tuberculosis made elsewhere and then to go back to the original source for treatment once the diagnosis has been confirmed.
- 187. Medicines for symptomatic treatment are available for all clinic patients. Complete records of the number of attendances for symptomatic treatment are not available as it is not easy to separate these from the attendances recorded for other purposes.

## INAH Prophylaxis

- 188. A recently published article sponsored by the United States Public Health Service has shown that the administration of INAH for a period of twelve months materially reduces the incidence of post-primary tuberculosis manifestations and is most effective in infants.
- 189. INAH prophylaxis was introduced in Hong Kong following a recommendation by Sir Harry Wunderly after his visit to Hong Kong (See paragraph 507). INAH is given to infants under the age of 3 years who have a positive tuberculin test but one without gross evidence of disease. It is also given to older children who are known to have become tuberculin positive within the previous six months.
- 190. The Maternal and Child Health Service is also co-operating in this Scheme, giving INAH to healthy tuberculin positive infants discovered during B.C.G. vaccination.
  - 191. The total number of children received INAH are as follows:

Tuberculosis Service Maternal & Child Health	Service	 	 02
			287

192. This total represents an accumulation of cases over the latter half of 1957 only.

# Collapse Therapy

193. Temporary collapse therapy still has a limited place in the scheme of treatment but is much less in use than in previous years; the need now being much reduced in view of the established value of prolonged chemotherapy combined with the increasing use of surgical measures. During the year the following treatments were carried out at the clinics:

#### TABLE 14

			1956	1957
	Induction	The state of the s		-
Artificial Pneumothorax	Refills		2,922	1,376
	Abandanad		13	5
	Abandoned {	Completed treatment	34	10
	Inductions		139	14
Pneumo-peritoneum	Refills		17,866	8,932
	Abandanad	Unsatisfactory	239	98
	Abandoned	Completed treatment	106	199

194. This work is very time-consuming and constitutes a considerable drain on the available time of the Medical Officers concerned. However, the steady reduction in the numbers of refills being carried

out is permitting more satisfactory arrangements to be made for the attendance of survey cases at the Clinics.

# Hospital Treatment-Government Hospitals Only

195. The 287 beds in Government hospitals controlled by the Tuberculosis Service are situated in three general hospitals which are administered by their respective Medical Superintendents. Owing to the different functions of each hospital within the treatment scheme, numerous transfers of patients are necessary between hospitals, which in all cases are separated by both land and water. All beds are, for statistical purposes, regarded as a single unit. Details of admissions and discharges were as follows:

TABLE 15			
		1956	1957
Beds occupied on 1st January		 298	314
Admissions		 498	395
Discharge:			
(Improved		 438	352
(1) Completed treatment { Improved Unchanged Worse		 13	8
(Worse		 -	-
(2) Discharged against medical advice		 18	18
(3) Died		 10	13
(4) Transferred to other hospitals	***	 3	38
Beds occupied on 31st December		 314	280

- 196. The figure for 1957 includes thirty three cases discharged temporarily from Lai Chi Kok Hospital owing to a landslide in May 1957 and later re-admitted.
- 197. The fall in the number of occupied beds at 31st December, 1957 is due to the fact that one ward in Lai Chi Kok Hospital has been temporarily surrendered for the treatment of diphtheria cases.
- 198. The fall in the total turnover has resulted from the increasing number of patients occupying beds for long periods while awaiting surgical treatment. This has given rise to a very considerable bottleneck and patients are waiting up to six months to have operations. There are prospects of more beds becoming available during 1958 and they will be utilized to reduce this waiting list.
- 199. Details of major or minor surgical procedures carried out in the hospitals were as follows:

		TABLE	16			
					1956	1957
Artificial Provenothors	. (	Induction		 	71	6
Artificial Pneumothora	x	Refills		 	1,165	136
Thoracoscopy				 	17	1

					1956	1957
Pneumo-peritoneum		nductio	n		 42	18
Theumo-peritoneum	f F	Refills			 1,349	432
Phrenic operation					 63	6
Thoracoplasty					 76	21
Wedge resection				***	 -	3
Segmental		\			 32	36
Lobectomy					 24	35
Decortication					 -	1
Pneumonectomy					 2	1

200. It will be seen that there has been a marked swing away from collapse measure, both temporary and permanent, in favour of surgical resection. The total number of major operations has, however, fallen by almost 30% due to the reduction in the number of thoracoplasties performed.

### The Tuberculosis Almoner Service

- 201. The Almoner's department, consisting of the Tuberculosis Almoner, one other Almoner, six Assistant Almoners and thirty seven Tuberculosis Visitors, is responsible for all social work in connexion with patients attending the clinics, in Government hospitals, in the hospitals operated by the Hong Kong Anti-Tuberculosis Association and in the Sandy Bay Convalescent Home—a total of 929 beds.
- 202. The work in this section is increasing rapidly, 316 beds having been added during the year in addition to the great increase in the number of clinic patients. Clerical assistance has now been made available but the continuing general shortage of Assistant Almoners has more than offset any advantage gained thereby.

# Interviews with patients

203. Every diagnosed case of tuberculosis or other chest disease in need of treatment is interviewed by the Almoner at the commencement of treatment, periodically thereafter as necessary and as further treatment is recommended. Details of the social and economic background are recorded at the first interview; after a visit by the Tuberculosis Visitors, the home circumstances are noted and the record is amended from time to time as necessary. The total number of interviews with patients was 28,540, an increase of 20% compared to last year.

# Admissions to hospital

204. Hospital waiting lists are maintained, patients being divided into the categories of chest medical, chest surgical, and orthopaedic cases. Admission is arranged according to the various priorities of the

patients and according to the types of bed available. Details of the work done in connexion with hospital treatment were:

Admitted to hospitals		100	 1,078
Transfer between hospitals			 226
Awaiting admission as at 31st December, 19	957		 240
Referred to Chinese Charity Hospitals			 54

205. The number of patients awaiting admission at the end of the year is much lower than for any previous year, and is made up almost entirely of cases awaiting admission for surgical treatment. As almost one quarter of the cases at present occupying beds in hospital are also awaiting surgical treatment, further admission of surgical cases serves no useful purpose. The policy regarding surgical admissions has had therefore to be changed and medical cases, who would be expected to respond satisfactorily to ambulatory treatment, are being admitted instead until such time as more surgical facilities become available.

# Visits to patients in Hospital

206. Every patient admitted to hospital through the Chest Clinics is visited in hospital, whether in a Government hospital or under the care of the Hong Kong Anti-Tuberculosis Association. Visits are paid at regular intervals by a member of the almoner staff in connexion with domestic or financial problems.

# Distribution of Drugs

207. The Almoners are responsible for ensuring that all patients on ambulatory chemotherapy attend for drugs issued according to the instructions of the medical staff. It has accordingly been arranged that drugs will now be distributed by the Almoners, mainly through the Almoners' clerks. As the number of patients under treatment at the end of the year was 9,132 the magnitude of this undertaking will be appreciated, as packages of drugs in suitable quantities have to be prepared in advance. It is hoped that the suppliers will soon arrange for drugs to be suitably packed for issue in the requisite quantities.

# Assistance to patients

- 208. The Tuberculosis Almoner had at her disposal during 1957/58 the sum of HK\$200,000 for the provision of assistance to tuberculosis patients and their families.
- 209. Assistance in cash in the form of weekly grants may be made to patients who give up work in order to undergo treatment. The assistance given bears a direct relationship to the patients' previous income but in accordance with certain agreed maxima. During the year

this assistance was provided to 198 families of which twenty seven were Government servants', at a total cost of HK\$85,055. The calls on the fund by Government servants have again fallen, the number treated in hospital being smaller as a result of the success of ambulatory chemotherapy.

- 210. Rehabilitation grants may be made, on the successful termination of treatment, to enable patients to take up suitable work. Normally these grants are used for the purchase of hawkers' licences and for capital to start up in business. This type of business is becoming much less attractive due to the keen competition and only \$950 was spent in this way during the year.
- 211. Of the total money available there was an increased expenditure on financial assistance, compared with last year, from \$68,400 to \$85,055. A contributory factor to this increase was the additional commitment at Grantham Hospital—twenty two families in all. As a result of the drop in the number of CARE parcels and the increased number of patients on ambulatory treatment who are in receipt of milk powder, the expenditure on milk powder rose from \$59,236.00 to \$107,968.00. An additional factor in this rise was an increase in the price of milk powder.
- 212. Assistance in kind is provided in the form of milk powder, to patients undergoing treatment at the clinics, on the basis of one pound per patient per week. On this basis 52,622 pounds of milk powder were issued, an increase of 150% as compared with last year. In addition 2,023 CARE parcels and 800 lbs. of rice were also distributed to patients.
- 213. Ninety two patients were referred to the Social Welfare Office for assistance in the form of food and twenty three were referred to the Hong Kong Family Welfare Society for other assistance.

### Tuberculosis Visitors

214. Contact with the patient in the home and in the clinic is maintained through the Tuberculosis Visitors. The Tuberculosis Visitors differ from their counterparts elsewhere in that emphasis during training is laid on the lay approach to the patients and previous training as a nurse is regarded as a disadvantage, instead of, as elsewhere, being a basic qualification. A further difference is that they are responsible, not to the medical staff, but to the Almoner through a Senior Tuberculosis Visitor at each clinic. This arrangement was introduced in the first instance as an experimental measure, but has

proved to be an unqualified success, and is at present attracting attention from other authorities who have problems similar to those in Hong Kong.

215. Home visiting is normally conducted in the afternoons, so that the Tuberculosis Visitors are available for other duties in the first half of the day, mainly in connexion with the reception of patients. The calls upon their time have been steadily increasing with the introduction of additional clinical sessions in outlying areas, in evening clinics and in special clinics. As a result, the time available for home visiting has been curtailed, and must remain so until it is possible to distribute the load to the additional staff becoming available when new clinics are opened.

216. The work done in connexion with home visits was as follows:

TA	BLE	17		
			1956	1957
First visits to patients			 9,550	7,766
Revisits	1.0		 5,021	4,826
Total visits			 15,621	12,592
Contact cards issued			 13,836	15,028
Contacts sent for examination			 10,857	11,403

### B.C.G. Vaccination

217. B.C.G. vaccination was started in 1952 under the sponsorship of U.N.I.C.E.F. when an intensive campaign was started and continued until 1955. The 'Campaign' as such was then discontinued and the personnel dispersed and absorbed into other sections of the Medical Department. The function of the Central B.C.G. office is now mainly that of a supply organization. It has a total staff of four.

218. The B.C.G. vaccination figures since the beginning of the campaign are as follows:

TABLE 18

			Tubercu	din Test	BCG Va	ccination
Year			Completed test	Negative vaccinated	New Borns vaccinated	Grand total vaccinated
1952			 176,728	38,173	3,120	41,293
1953			 77,422	27,024	4,883	31,907
1954			 52,620	15,234	3,050	18,284
1955			 58,606	15,775	9,587	25,362
1956			 38,523	5,629	23,418	29,047
1957			 34,737	10,074	35,149	45,223
	Tota	al	 438,636	111,909	79,207	191,116

219. It will be seen that the numbers tuberculin tested have fallen year by year while the numbers vaccinated with B.C.G. have reached a new record annual total as a result of the rise in the number of new born babies vaccinated.

## B.C.G. Vaccination of New Born Babies

220. B.C.G. Vaccination of new born babies is carried out by the multipuncture method using 20 mgm/c.c. vaccine. This vaccine is available free to private practitioners, private hospitals, midwives and clinics. B.C.G. Vaccinators attached to the Tuberculosis Service now visit the principal maternity hospitals three times each week instead of twice each week as in previous years. This has necessitated an increase in the establishment of Vaccinators from two to three as it was found that a number of babies were leaving hospital before vaccination could be given. Of the total of 97,834 births known to have occurred during the year 1957, 36% were vaccinated with B.C.G. as compared to 24% in 1956. It is of interest to record that in the small institutions, where the number of births is low, the highest percentage of vaccinations is obtained. It would be reasonable therefore to assume that mothers can be persuaded to have their children vaccinated if trouble and time can be taken so to do.

## B.C.G. Vaccination of other Age Groups

221. Vaccination of individuals other than new born children is carried out by the classical intradermal route, using vaccine of a strength of 1 mgm/c.c. The tuberculin test in use is the Mantoux test of five International Tuberculin Units of Purified Protein Derivative, obtained from Copenhagen in bulk. Vaccination of negative reactors is carried out as a routine measure in the Chest Clinics in connexion with tuberculosis contacts, in the School Health Service and in the Maternal and Child Health Service. A B.C.G. Clinic is also maintained on a full time basis by the Hong Kong Anti-Tuberculosis Association. The total number of persons tuberculin tested by all these organizations during the year was 34,737. Of these 10,074 were subsequently vaccinated, an improvement on last year's total of vaccinations.

# X-ray Surveys

222. General. No general population X-ray surveys were carried out during the year as the facilities for subsequent diagnosis and treatment are already overstrained to such an extent that a limitation of the numbers of these attending for the first time has continued in force throughout the year. Certain special groups were examined.

223. Government Servants. All Government servants are now X-rayed on first appointment and thereafter at annual intervals. This annual examination has been in force for several years and is paying handsome dividends by a reduction of total sick leave, by a considerable annual reduction in the numbers invalided as a result of tuberculosis and by a significant improvement in the prognosis of the cases found. A few individuals are still not regularly examined, but the number is small. The results of surveys during the past few years are:

	IADL	L 19			
Marie Statement Statement of the	1953	1954	1955	1956	1957
Total X-rayed	24,915	26,255	26,574	27,842	30,231
Examined at the clinics	2,746	3,282	3,751	4,347	3,873
Active tuberculosis percentage	0.722	1.017	1.272	1.34	1.61

101

64

New active cases

TARIE 10

- 224. For the first time there has been a fall in the total numbers requiring examination, while the percentage of active cases has further increased. The percentage incidence of new disease remains fairly constant.
- 225. Private Firms and Institutions. Surveys are carried out free of charge provided that a guarantee is obtained which ensures the protection of the patient, with special reference to sick leave with pay and security of tenure of employment. Employees found to be suffering from tuberculosis have complete freedom of choice as to where they obtain treatment.
- 226. The Tuberculosis Almoner is designated as the officer responsible for the contact between private firms wishing to have X-ray surveys of their employees, the Radiological Department, who do the X-ray in connexion with the surveys, and the Chest Clinics who do the clinical assessments and issue the survey reports.
- 227. The findings for the year, with comparative findings for the previous year are:

	TABL	E 20		
WAS DEED THE STREET			1956	1957
Total X-ray on 35 mm film	ıs	***	 2,870	8,991
Reported normal			 2,547	7,617
Clinically examined			 322	1,352
Active tuberculosis			 30	191
Percentage of active tuberc	ulosis		 1.04%	2.1%

228. The reason for the considerable disparity between the findings in the two successive years is that during 1956 the smaller total consisted

mostly of young adolescents whereas in 1957 the group was more representative of the population distribution.

229. Stanley Prison. All inmates of Stanley Prison are X-rayed as soon as possible after arrival; those found to be infected with tuber-culosis are assessed and treated by a Medical Officer from the Chest Clinic who visits the prison weekly. Hospital treatment is available on a scale which ensures that any prisoner whose case so requires it can be admitted to hospital. The result of examinations were as follows:

			1956	1957
Total number X-rayed			 3,036	4,649
Number of cases of active	tuberculosis	found	 78	88

230. School Teachers. Teachers in Government schools are examined annually in the course of the annual X-ray survey of Government Servants. Teachers taking up first appointments in private schools have a compulsory pre-registration X-ray of the chest before permission to teach can be given. The Medical Department is the official agency for certification. No details of the total number of teachers examined each year are available but the results of the findings of cases who attended the Chest Clinics for assessment and certification are appended:

	1954	1955	1956	1957
Referred to the Chest Clinics	288	348	455	318
Unfit to teach on account of	un pilen	mile man	of Married	oting, and
pulmonary tuberculosis	22	36	49	53
Percentage	7.6%	10.6%	10.7%	16.6%

231. School teachers found unfit to teach are permitted to resume work as soon as it appears that they can do so without prejudice to the health of their pupils. They have complete freedom of choice as to where they have treatment, but they are accorded priority of treatment at the chest clinics and of admission to hospital if this is found to be necessary.

### MALARIA

- 232. The staff of the Malaria Bureau responsible for the control of malaria in the Colony consisted of one Malariologist, one Assistant Malariologist, two Senior Malaria Inspectors, eleven Malaria Inspectors, one clerk and some 315 temporary monthly or daily rated gangers and labourers. The post of Assistant Malariologist is a newly created one and has only been filled since 25th November, 1957.
- 233. The population at risk is approximately 2,700,000. When the emoluments of all staff, and expenses on insecticides and equipment are

- all taken into account, the cost of antimalarial work amounts to approximately forty two cents per head of population per annum. This also includes the cost of control of 'nuisance' mosquitoes in certain areas.
- 234. In addition to control measures, malaria surveys were undertaken in various parts of the New Territories and field tests carried out to ascertain the effect of various insecticides on mosquito larvae.
- 235. By arrangement with the Waterworks Office, an additional store was handed over to the Bureau at Deep Water Bay in August 1957 and during December five old Military Block Houses above Lai Chi Kok were acquired as combined stores and coolie lines. These additions have greatly facilitated area control work.
- 236. Control is based mainly on anti-larval measures. Areas in Hong Kong and Kowloon at present under active control consist of the urban areas in which the main bulk of the population is concentrated. In addition, in the New Territories, the Tai Lam Chung Reservoir Site, Rennie's Mill Camp, the Castle Peak Hospital area, the Chi Ma Wan Prison on Lantao Island, and the southern inhabited portion of Cheung Chau Island are similarly protected. For convenience of supervision of the labourers, the control work at Cheung Chau, is the responsibility of the Medical Officer of Health, New Territories, under whose direction is a resident Health Inspector.
- 237. At Hay Ling Chau Leprosarium the anti-malaria work is undertaken by the staff there and the necessary insecticides are supplied by the Bureau. Regular visits are made by the staff of the Malaria Bureau to ensure the effective continuation of anti-malarial measures on the Island.
- 238. In order to delay as long as possible the development of resistance of the malaria vectors against chlorinated hydrocarbon insecticides, anti-malaria oil has, since early 1957, been more generally employed as the larvicidal agent. Gammexane Dispersible Powder, the principal larvicide relied upon in previous years, is now used only for areas such as agricultural lands where the application of oil is contraindicated. Another feature which has come to notice is that Gammexane Dispersible Powder P520 in the usual dosage has become, in many instances, no longer effective against culicine mosquito breeding, particularly Culex fatigans, which frequently breeds in or near potential anopheline breeding places.
- 239. On one occasion during the year, a complaint about a leaf-burn effect on water-spinach due to Gammexane Dispersible Powder P520

was received. The matter was thoroughly investigated with the cooperation of the Agriculture, Fisheries and Forestry Department and, after repeated tests, it was found that a suspension of the powder at a lower concentration of 1:120 would obviate the phytotoxic effect.

- 240. In the protected areas of Kowloon and Hong Kong, numerous check catches and surveys were done by the Bureau and, except in one or two instances, no anophelines, either larvae or adults, were found. Vector mosquitoes however abound on the borders of the controlled areas and, given a favourable opportunity, can increase rapidly at any time. It needs no emphasis that constant vigilance is necessary.
- 241. In the laboratory, in addition to the routine work of identification and dissection of mosquito specimens collected in the field and the staining and examination of blood smears, special field tests on the efficacy of various insecticides were conducted.
- 242. The total number of malaria cases notified for 1957 was 447 compared with 496 in 1956. The Table at Appendix 4 gives the source of these notifications, whether from the protected areas or not, the type of infection and the nature of the attack, fresh or recurrent.
- 243. Analysis of the twenty four 'fresh' cases notified from 'protected areas' revealed that eighteen of these were either apparently contracted outside protected areas or were recurrences of a previous malaria infection. 96.2% of notifications were from Government clinics and hospitals.
- 244. It is worthy of note that approximately 93% of the cases notified originated outside protected areas, and that the Sai Kung area was responsible for 71% of all reported cases. Nearly 88% of the infections were due to plasmodium vivax.
- 245. No death from malaria was recorded in 1957, compared with four in the preceding year.
- 246. In the New Territories, malaria surveys were continued at Ho Chung, Wo Mei, Nam Wai, Kai Ham, Pak Kong Au, Tai Po Tsai, Tai Mong Tsai, Tso Wo Hang, Tseng Lan Shue, Ngong Wo, Shan Liu, Yim Tin Tsai, Wong Yi Chau, Lan Nai Wan, and Shek Pik Villages. During these surveys, spleen examinations of children of 2 to 10 years of age and blood examinations of children up to 10 years of age were performed. Altogether a total of 544 children presented themselves for spleen examination and 591 for blood examination. The spleen rate varied from 0 to 20% and the parasite rate from 0 to 6.9% among the individual

- villages. In another reconnaisance carried out at the two small villages of Ma Yau Tong (North-east of Kung Tong) and Shan Shek Wan (on Lantao Island), respectively, the spleen rate was 0% in the former and 57% in the latter out of ten and seven children examined respectively.
- 247. The above result confirms the previous observation that the degree of malaria endemicity varies in different parts of the New Territories, though on the whole it cannot be considered to be severe at the moment. Up to now no overall anti-malaria programme has been executed there, although some control work is being undertaken in the selected areas mentioned earlier.
- 248. At Shek Pik, where the construction of a new reservoir is contemplated, preliminary surveys were undertaken with a view to estimating the cost of the anti-malaria work considered to be necessary. Proposals regarding the extent and cost of control have been submitted to Government.

#### SOCIAL HYGIENE

- 249. The Social Hygiene Service is concerned with Venereal Diseases and Leprosy. The Social Hygiene Specialist is also the Government Consultant in Dermatology. The staff establishment remained unchanged from the previous year.
- 250. The death of Dr. S. C. Fong in August 1957 is recorded with deep regret. Dr. Fong was one of the most active and experienced members of this sub-department and the loss is a severe one.

### Venereal Diseases

- 251. Four out-patient clinics for males and nine for females were maintained for the diagnosis and treatment of venereal disease. The number of new patients attending all clinics showed a fall of about 2% compared to 1956.
- 252. The table below shows the numbers of new and total attendances at clinics for the last five years.

### TABLE 21

Year			New Patients	Total Attendances
1953	 	 	37,392	213,091
1954	 	 ***	36,652	223,031
1955	 	 	34,853	203,701
1956	 	 	32,490	180,148
1957	 	 	31,393	193,674

- 253. A satisfactory fall in the incidence of infectious syphilis has been recorded over the last few years, the reduction covering all forms of the disease with the exception of late cardiovascular syphilis. Here there has been recently a slight rise, possibly connected with the stress of increasing industrialization in the Colony.
- 254. Other venereal diseases which have also shown a downward trend incidence are gonorrhoea and chancroid.
- 255. At Appendix 5 is a composite table giving details of the new attendances at Social Hygiene Clinics during the year.
- 256. There were 704 admissions to the 30-bed Female Social Hygiene Hospital, Wan Chai, compared to 515 in 1956. 303 of these admissions were in respect of gonorrhoea and ninety five were for syphilitic conditions, mostly late latent manifestations of the disease.
- 257. 3,124 male cases were treated by the Social Hygiene Service at Stanley Prison and 963 females at Lai Chi Kok Prison.
- 258. Although new antibiotics continue to be recommended for the treatment of all venereal diseases, there still appears to be little need to depart from the use of penicillin as the routine therapeutic agent. However, since occasional severe penicillin reactions have led to its more cautious use on a mass scale, its routine employment prophylactically was discontinued in June 1957. It is still given if specifically requested by a known contact.
- 259. Primary, secondary and latent syphilis continue to be treated with a total of 6,000,000 units of Penicillin. Neurosyphilis and cardio-vascular syphilis are treated with 12 million units of penicillin following by iodides.
- 260. Post-treatment observation following penicillin therapy now extends to six and half years and every effort is being made to continue this follow-up. However, it is only possible to keep one out of ten patients on surveillance beyond the usual two year follow-up period.
- 261. For gonorrhoea 400,000 units of penicillin (a mixture of 100,000 crystalline penicillin plus 300,000 procaine penicillin) remains the standard dose for male patients, and 1,200,000 units is now the standard dosage for females. The few cases in men which do not respond to 400,000 units clear up with double this dosage or with the addition of 1·0 gm. of streptomycin.
- 262. As elsewhere, the complications of gonorrhoea are now rarely seen; the main concern is the rate of re-infection.

- 263. Non-gonococcal urethritis is treated with sulphatriad alone or with streptomycin. The aetiology of this condition remains a problem and little advance in knowledge concerning its causation has been made during the year.
- 264. Preventive measures for the control of the venereal diseases include contact notification and the follow-up of defaulters from treatment by means of letters and personal visits by Social Hygiene Visitors. There were 4,158 contact notifications received in 1957 and 81.5% were successfully traced. Social Hygiene Visitors made a total of 5,848 visits of which 1,436 were to defaulters from treatment. 6,448 letters to defaulters were also sent resulting in 1,637 patients returning to complete their scheduled treatments. In this connexion a close liaison is maintained with the Armed Services.
- 265. Ante-natal blood tests for syphilis for pregnant women attending both Government clinics and private midwives totalled 27,330 during the year. Of these 979 were positive, giving a positivity rate of 3.5% compared with 3.8% in the previous year.
- 266. Laboratory studies were continued on penicillin resistant gonococci in males. Special test tubes were made available during the year for the transmission of specimens to be examined at the Pathological Institute for Trichomonas vaginalis.

### LEPROSY

- 267. Clinic services have continued to expand considerably and eleven sessions each week for leper patients were held throughout the Colony, including the New Territories; six of these sessions are held, after the usual working hours, on premises used in normal hours by other medical services.
- 268. During the year the staff was increased by one Medical Officer, two Nurses, and two Female Leprosy Visitors; the Almoner, previously available only on a part-time basis, undertook full time duties from October 1957.
- 269. Total attendances at clinics were 31,204; new attendances numbered 981 of which 436 were freshly discovered cases of leprosy and of these approximately 40% were of the lepromatous type. Male patients predominated, forming 70% of the new leprosy cases.
- 270. Of 174 cases recommended for admission 132 were admitted to Hay Ling Chau Leprosarium during the year.

- 271. Family contacts of both tuberculoid and lepromatous cases were examined regularly when it was possible to trace them. The number examined in 1957 was 68% higher than the figure for 1956. Child contacts were referred for B.C.G. vaccination.
- 272. In treatment, oral dapsone or Avlosulfon Soluble by intramuscular injection is the standard therapy. Dapsone suspension ceased to be employed because of the occasional occurrence of oil abscesses as a complication.
- 273. Selected cases for surgical treatment by bilateral ulnar nerve transplant were admitted to Queen Mary Hospital.
- 274. A colour film illustrating the activities of the leprosy outpatient clinics was made in July 1957 and shown at the Regional Meeting of the World Health Organization held in Hong Kong in September.

#### DISTRICT MIDWIFERY SERVICES

- 275. Apart from the hospital midwifery services the Department operates a domiciliary and maternity home midwifery service throughout the Colony. Forty four midwives, an increase of seven over the previous year's figure, were employed at twenty one district centres; thirteen of these centres have maternity homes attached providing a total of 127 maternity beds. The great majority of these beds are in the New Territories since the policy in the more crowded urban districts has been to use the maternity facilities available in general or specialized hospitals. The remaining eight centres have resident midwives doing domiciliary deliveries.
- 276. Two new centres were opened during the year, one in June 1957 on Lamma Island, which has six maternity beds in charge of a nurse with midwifery qualifications. The other is at the Shek Kip Mei Clinic which was opened in December 1957, and has a staff of three midwives for domiciliary work.
- 277. The total number of cases attended in 1957 was 11,779, of which 8,216 were maternity home patients and 3,563 domiciliary cases. Live births totalled 11,538, approximately 11% of all registered births. 151 still births were recorded giving a still birth rate of 12.9 per 1,000 births.
- 278. The average annual 'case load' per midwife was 267, a satisfactory reduction on the previous year's figure of 314. The range of this case load is wide and varied from twenty six for the midwife on Lamma Island to 538 at Yuen Long.

- 279. The frequency of ante-natal attendances continues to improve slowly. The average number of attendances per case was 3.29, but 22.74% of the mothers delivered had had no ante-natal care; this latter figure was 29.17% in 1956.
- 280. There are 1,334 midwives registered in the Colony but only 202 are in active private practice. 174 of these maintain small maternity homes and twenty eight do domiciliary work only. Twice as many midwives practice in Kowloon as in Hong Kong.
- 281. Private midwives delivered 35,608 cases during the year. The number of live births was 35,331, which is over one third of all births registered in the Colony in 1957. The figures for ante-natal attendances are almost identical with those recorded by Government District Midwives, the average attendances per case being 3·31 and the percentage of cases delivered without any ante-natal care was 20·71.
- 282. Regular inspection and supervision of private maternity homes is carried out by the supervisor of Midwives; 797 such visits to the 132 homes on the register were made during the year. Particular attention is paid to the hygiene of the premises, to maternity equipment and to records.
- 283. A very encouraging increase was recorded in the number of B.C.G. vaccinations given to infants within a few days of birth. This anti-tuberculosis measure is being increasingly advocated and has been again successfully pursued in the recent year. 34% of babies delivered by midwives in 1957 received this vaccination; of the 15,927 vaccinations recorded 67.8% were carried out by Government midwives and the remainder by midwives in private practice. Vaccine is provided free of charge to all medical practitioners and midwives in the Colony.
- 284. The vaccination of infants against smallpox also continued to be offered as a routine protective procedure and 35,958 primary vaccinations were performed by midwives during 1957.

#### MATERNAL AND CHILD HEALTH

285. This Service provides, for the general public, ante-natal and post-natal care, infant welfare, and 'toddler' care up to school age. The main emphasis is on preventive medicine and health education. The Service operates from six full-time and twenty part-time centres throughout the Colony. Existing services have been developed and expanded during the year. A new full time centre was opened in November 1957 at the Shek Kip Mei Clinic and another is to open in April 1958 at the

Kau U Fong Clinic in the Central District. The staff was increased during the year by one Medical Officer, seven Health Visitors, and three Health Nurses.

- 286. Three additional ante-natal clinics were organized during the year and a total of thirty four clinics are now held weekly. Post-natal clinics have also been increased to fourteen sessions each week.
- 287. Sixty six infant and child health clinic sessions are conducted each week and a total of 246,013 attendances was recorded for 1957.
- 288. The immunization of children against infectious disease is an important part of the preventive medical work of Maternal and Child Health Clinics. The majority of infants now attending these clinics have already received B.C.G. vaccine without preliminary tuberculin testing, but much effort has been made to seek out and test those who have not been vaccinated. 8,702 children were tested and 6,853 negative reactors vaccinated in 1957.
- 289. Immunization against diphtheria was offered throughout the year; for infants between 3 and 6 months of age a combined vaccine against diphtheria, whooping cough and tetanus is used; in later months diphtheria toxoid alone is employed; 26,782 immunizations were recorded.
- 290. Dietary supplements were provided to both mothers and children by means of milk powder and vitamin capsules from U.N.I.C.E.F. and canned protein foods, meat and liver, from C.A.R.E. A special provision of supplementary meals for selected undernourished patients is made daily at midday in the main clinic centres. Other forms of milk powder, protein foods, and vitamins are also supplied by Government for distribution in these clinics.
- 291. Health Education forms a major part of the work of this service, particularly by means of home visits by Health Visitors. The increased staff of Health Visitors made it possible to reorganize completely, on a district basis, the home visiting system.
- 292. Liaison and co-operation with the Registrar of Births and Deaths has resulted in the notification of names and addresses of all new births registered to the Maternal and Child Health staff. 38,638 visits were made to individual homes in 1957.

293. Table 22 summarizes the figures for the main activities of the Maternal and Child Health Service in 1956 and 1957:

TABLE 22

#### MATERNAL AND CHILD HEALTH WORK

Staff:						1956	1957
Medical Officer						8	9
Health Sisters						4	4
Health Visitors						14	21
Health Nurses						23	27
Clinics:							
No. of full time of	entres					5	6
No. of part time	centres					14	20
Ante-natal clinics				Clinics	)		
Total attendar						41,521	52,714
New attendan	ices					11,699	15,447
Post-natal clinics (	excludi	ng Ho	spital (	Clinics)			
Total attendar			1000			3,653	4,817
New attendan	ces					2,925	3,575
Child Health Clin	ics						
Total attendar	nces					241,591	246,013
New attendar	ices					18,930	23,333
Health Education							
Home visits						25,225	38,638
Total attend	ances	at t	alks,	discuss	ions,		
demonstration	ons, et					309,024	274,085
No. of cases refer	red to	Family	y Plani	ning Cl	linics	3,520	4,604

#### SCHOOL HEALTH

- 294. There was no alteration in the scope of this service during the year and no new schools were admitted to the service. Staff and facilities remained as in 1956.
- 295. The number of participants in the service dropped to 32,339 pupils and teachers from 386 schools distributed as shown in the following Table:

### TABLE 23

Status of	Schoo	ol	No. of Schools	No. of Participants
Government			 47	19,370
Subsidized			 83	8,396
Private and	Grant-i	n-Aid	 256	4,573

296. With the decreased numbers of participants the number of routine medical inspections carried out was less than in the previous

year. The number of clinic attendances also decreased except for attendances at the Ophthalmic Clinics. The tables below give the figures for this aspect of school health work:

#### TABLE 24

## MEDICAL INSPECTIONS OF PUPILS, 1957

New Entrants (existing	Gove	rnment	schoo	ls only	)	 3,962
Re-inspections						 10,221
Periodical Inspections						 36,419
		Total				 50,602

### TABLE 25

### ATTENDANCES AT SCHOOL CLINICS, 1957

Attendances	General Clinics	Dental Clinics	Ophthalmic Clinics	E.N.T. Clinics
New cases	 53,490	3,370	2,317	926
Revisits	 17,548	22,914	1,759	1,397
Total	 71,038	26,284	4,076	2,323

- 297. The influenza epidemic in April 1957 affected large numbers of school children though no schools were closed. An unusually large number of cases of German Measles was also observed. Typhoid fever continues to occur somewhat frequently in children of school age, 220 cases being notified during the year. The diphtheria outbreak did not affect school children to any extent when compared with the pre-school age group.
- 298. 923 children were referred to Consultants for specialist diagnosis and treatment. 178 general medical and surgical cases were admitted to Government hospitals and, in addition, 193 were admitted for tonsillectomy. 2,888 pairs of spectacles were prescribed and made by the Ophthalmic Service during the year.
- 299. Apart from a medical service to participants, the School Health Service undertakes certain general health services for schools. Prophylactic immunizations are available for all school children against smallpox, typhoid fever, diphtheria, and tuberculosis and the following numbers of such immunizations were given to pupils and school staff in 1957.

### TABLE 26

Anti-smallpox vaccination	on	 	 	144,718
Anti-typhoid				
1st dose		 	 	41,396
2nd dose		 	 	40,157
Booster dose		 	 	10,858
Anti-diphtheria				
1st dose		 	 	17,195
2nd dose		 	 	7,232
Booster dose .		 	 	6,730
Anti-tuberculosis				
Tuberculin Tested		 	 	23,841
Tuberculin Positive		 	 	21,193
Tuberculin Negativ	e	 	 	1,782
Vaccinated with B.	C.G	 	 	1,778

- 300. Three Health Inspectors carried out 1,672 sanitary inspections of school premises during the year; these included 145 premises for which applications to open new day or night schools were made.
- 301. Health education of the child is an important aspect of school health work. The key worker in this field is the Health Visitor, who is specially trained to teach and advise on health matters. The aim for the school child is the promotion of good health habits on both a personal and community basis. Simple talks to arouse interest in hygiene were given throughout the year, in school clinic waiting rooms, by Health Visitors and School Health Nurses. School doctors undertake systematic lectures and demonstrations to teachers in the Training Colleges.

### INDUSTRIAL HEALTH

- 302. The health of workers in factories and other industrial undertakings is the statutory responsibility of the Commissioner of Labour, whose Industrial Health Section is staffed by the Medical Department and consists of an Industrial Health Officer, an Assistant Industrial Health Officer, a Health Visitor and a Technical Assistant. The work of the section falls into two main divisions: the prevention of occupational diseases and the improvement of medical facilities in factories.
- 303. The most serious diseases met with in industry are silicosis and lead poisoning but fortunately few cases have been encountered. Dermatitis occurs in a large number of local industries. Strict precautions are taken against injury from radiation in trades where X-rays or

radio-active substances are used, and so far no signs of ill health due to this cause have been detected.

304. First aid classes have been organized for factory workers, and advice given on first aid and medical equipment in factories. The Section also deals with a variety of other problems of Industrial Health which are referred to it from time to time.

#### HEALTH EDUCATION

- 305. This continued to take an important place in the work of all divisions of the Medical Department.
- 306. The Maternal and Child Health Centres have continued to expand active Health Education programmes with the help of the twenty one Health Visitors on the staff. The School Health Service, the Tuberculosis Service and the Social Hygiene Service also carry out considerable health teaching campaigns in their own fields of work.
- 307. The anti-epidemic immunization campaigns against smallpox, typhoid fever and diphtheria, which were carried out at appropriate seasons during the year, showed that the best results followed propaganda from loud speaker motor vans to which mobile vaccinating teams were attached. The distribution of handbills by Health Inspectors of the Urban Services Department during their routine house inspections was also a part of the campaign.
- 308. For a period of six months a series of talks on general health topics by a radio doctor was commenced in October 1957. These were broadcast over the Chinese networks of Radio Hong Kong at known favoured listening times and have proved to be useful and acceptable.

### IV. THE WORK OF THE MEDICAL DIVISION

#### HOSPITALS

309. There are thirty one hospitals in the Colony, twelve of which are Government Hospitals. A further ten are maintained by voluntary and missionary bodies which receive substantial subventions from Government funds. There are nine private hospitals, and 132 nursing homes, registered under the Nursing and Maternity Homes Registration Ordinance. Details of all these institutions are at Appendix 6. Details of the cases treated in Government and assisted hospitals are given at Appendix 7, in which the classification of diseases follows the International Standard Classification using the International List of 150

Causes. Details of in-patients treated in all hospitals during the year are shown at Appendix 8.

310. The twelve Government hospitals provide a total of 2,184 beds, the Government-assisted hospitals 3,063 beds, and private hospitals 1,051 beds. In addition, various Government Dispensaries provide a further 123 beds, mainly in the New Territories, and practically all for maternity cases. There are 549 maternity beds in private maternity homes and nursing homes. There is therefore in the Colony a total of 6,970 beds for all purposes including the mentally ill and those suffering from infectious diseases. Excluding the 1,730 beds set aside for tuberculosis, the 261 beds for the mentally ill and the 540 beds for the treatment of leprosy, there are 4,439 beds available for all general purposes, including maternity. On an estimated population of 2,677,000 this gives a ratio of one bed to each 600 of the population for all general and maternity purposes and one bed to each 382 of population for all purposes. While this may be far from adequate by modern standards, undoubted progress is being made towards a more satisfactory ratio. Meantime, a number of hospitals are crowded beyond capacity, treating many more in-patients than the wards have been designed to take.

311. An analysis of the bed state in the Government and Government-assisted hospitals is given below:

TABLE 27
GOVERNMENT HOSPITALS

Hospital	General	Maternity	Tuberculosis	Infectious Diseases	Venereal Diseases	Mental	Total
Queen Mary	490	37	71	_	-	1	599
Kowloon	260	46		7	-	-	313
Lai Chi Kok	180	_	176	120	-	_	476
Mental and Castle Peak	-	-	_	_	_	140	140
Hospitals	_	-	-	-	-	120	120
Stanley Prison	44	-	20	18	-	-	82
Lai Chi Kok Prison	9	1	-	-	-	-	10
Social Hygiene, Wan Chai	-	_	5 10-0 1	-	30	-	30
Sai Ying Pun	-	-	90-	88	10-11	-	88
St. John Hospital, Cheung							
Chau	45	15	42	-			102
Tsan Yuk	-	200	_	_	-		200
Eastern Maternity		24			_	_	24
Total	1,028	323	309	233	30	261	2,184

TABLE 28
GOVERNMENT-ASSISTED HOSPITALS

Hospital	General	Maternity	Tuberculosis	Leprosy	Total
Tung Wah	238	34	101	-01	373
Tung Wah Eastern	239	32	49		320
Kwong Wah	214	130	60	4 1-	404
Pok Oi	50	10	_	_	60
Alice Ho Miu Ling Nethersole	194	70	12	-	276
Ruttonjee Sanatorium	_	_	230	SITE IN	230
Freni Memorial Convalescent					
Home	100 Feb.	onless th	106	orb TZ I O	106
Grantham	_	III or	540	-	540
Hay Ling Chau Leprosarium	28	-	12	540	580
Haven of Hope Sanatorium	_	2000	120	_	120
Sandy Bay Convalescent Home	54				54
Total	1,017	276	1,230	540	3,063

## Queen Mary Hospital

- 312. This is the largest Government Hospital in the Colony and is also the Teaching Hospital for the University of Hong Kong Medical School. Its function is that of an acute hospital which is also the main specialist centre for the Colony. The University clinical units of Surgery, Medicine and Paediatrics and Gynaecology provide the medical staff and clinical care for 251 beds. There are also major clinical units in medicine, surgery and radiology under Government Specialists. A limited number of beds is available for orthopaedic surgery, chest surgery, neurosurgery, ophthalmology, radiotherapy, midwifery and otorhinolaryngology. Physiotherapy and occupational therapy units are also established in the main building. The administration of the hospital is the responsibility of a Medical Superintendent of Senior Medical Officer rank and nursing care is provided entirely by the Government Nursing Service. The Queen Mary Hospital is the main Government centre for the training of nurses.
- 313. During the year a minor adjustment in the arrangement of wards increased the bed capacity to 599. The number of in-patients treated rose from 12,866 to 13,725, an increase of 859, mainly accounted for by admissions to general wards. The completion of the alterations to the operating theatres has greatly improved the surgical amenities and 8,055 operations were performed in the theatre unit, an increase of 703 over 1956.

- 314. There is no out-patient department at the Hospital and admissions are made through the Government out-patient clinics on Hong Kong Island. The Casualty Department, recently modernized is, however, the only casualty centre for the whole of the Island, and traumatic and other emergency cases are admitted direct to the wards from Casualty. A fracture clinic, under the supervision of the University Consultant in orthopaedics, has continued an extremely valuable special service which has reduced considerably admissions to the limited number of beds available.
- 315. The neurosurgical unit formed in 1956 has continued to set a high standard in the treatment of acute head injuries. As a result there has been a significant decrease in the number of deaths from this cause.
- 316. Specialist clinics were maintained for peptic ulcer, thyroid and cardio-respiratory cases. The latter is supported by the Lewis Laboratory and the Cardio-Respiratory Committee which is composed of physicians, surgeons, radiologists and anaesthetists, met regularly throughout the year. Specialist out-patient clinics are held twice weekly by the Government Specialist staff of the Hospital at the Violet Peel Polyclinic in Wan Chai.
- 317. In the surgical wards special attention has been given to clinical research on the surgical treatment of duodenal ulcer, on cholangiohepatitis and on the surgery of tuberculosis of the spine dealt with by the anterior approach.
- 318. The role of the Queen Mary Hospital as an acute hospital continues and this is particularly so in the paediatric wards to which only emergencies can be admitted at the present time. Despite a maximum turn over of patients in the acute wards, the utilization of convalescent beds in the Lai Chi Kok Hospital and the saving in beds by the extended use of special out-patient clinics, little progress can be made towards the reduction of waiting lists until much more accommodation is available. This is under urgent consideration with a view to building a new thirteen storey wing in the near future.

# Kowloon Hospital

319. This is the only large acute hospital serving Kowloon and the New Territories and the increase of 66 beds from 247 to a total of 313 has had no appreciable impact on the situation. Pending the completion of the New Kowloon Hospital of 1,350 beds in 1962, the best possible is being done by the use of the Lai Chi Kok Hospital as an overflow

and convalescent unit for the Kowloon Hospital and by the use of outpatient clinics.

- 320. As on Hong Kong Island, Kowloon Hospital is the only casualty centre which has the facilities to accept traumatic cases and the acute surgical emergencies. In addition there is a large and very busy Out-Patient Department adjacent to the Hospital.
- 321. General medical, surgical and obstetricals and gynaecological services are provided and staffed by doctors who are specialists or have specialist qualifications. There are three surgical teams each consisting of one surgeon and one house officer and three medical units staffed by three physicians assisted by two house officers. Radiodiagnostic, clinical pathology, physiotherapy and occupational therapy services are provided for both in-patients and out-patients.
- 322. This is undoubtedly the busiest hospital in the Colony. There were 10,460 admissions during the year, an increase of 554 admissions over 1956. The total of new cases treated at the out-patient clinics was 316,582 and total attendances amounted to 547,026.

## Lai Chi Kok Hospital

- 323. Formerly a prison camp in two sections and at two levels, these buildings have been converted to hospital use. The upper hospital of 180 beds is used as an overflow for Kowloon Hospital and as a convalescent unit for both the Queen Mary and Kowloon Hospitals. The lower section of 296 beds and cots has accommodation for seventy six beds and eighteen cots for cases of infectious disease and 202 beds for the treatment of tuberculosis. There is a full time occupational therapist on the staff and a physiotherapy service is now also provided on a full time basis. The Red Cross School, maintained for children from all sections of the hospital, is doing very valuable work amongst long term patients, particularly those receiving orthopaedic treatment for tubercular disease. The school has its own Boy Scout Troop, which meets in the children's ward in the upper hospital.
- 324. A total of 1,606 cases was admitted during the year, of which 1,109 were suffering from infectious disease, and 337 from tuberculosis and 160 were convalescent or sub-acute general cases. The distribution of beds for the receipt of general and tuberculosis cases from the two acute hospitals is:

	Surgical	Medical	Orthopaedic	Gynaecological
Queen Mary Hospital (63)	17	6	40	-
Kowloon (117)	80	23	TOTAL TOTAL	14

- 325. The diphtheria epidemic threw a great strain on the Infectious Diseases portion of the Hospital. 637 cases were treated; of these 271 required tracheotomy, having been brought to clinics late in a disease which was also undoubtedly more virulent than in previous years. The mortality was 13.6%. Typhoid fever accounted for 154 cases with a case mortality of 3.2%, the lowest on record. Broncho-pneumonia following measles accounted for 26.7% mortality in 101 cases of complicated measles admitted. Again delay in attending for treatment accounted for the majority of the deaths as the children were often moribund on admission. There were sixty nine cases of tetanus of whom twenty seven were under one year of age; the mortality rate of all tetanus cases was 59.4%. Tuberculosis, meningitis, meningococcal meningitis, encephalitis, poliomyelitis, bacillary and amoebic dysentery accounted for the remainder of the cases.
- 326. Cases of pulmonary tuberculosis under treatment, including cases remaining in hospital from the previous year, totalled 540. Only minor surgical procedures were carried out in Lai Chi Kok. They were limited to artificial pneumothorax, pneumo-peritoneum and phrenic crush in a total of thirty selected patients. 449 refills were carried out.

# Tsan Yuk Maternity Hospital

- 327. This is the main specialist maternity hospital in the Colony and is maintained by Government. The Professor of Obstetrics and Gynaecology of the University undertakes responsibility for the clinical work in the wards assisted by medical staff of the University unit. This is also the main teaching hospital in obstetrics for medical students and the main training centre for midwives. The Medical Superintendent, resident House Officers and the nursing and administrative staff are provided by Government. The Professor, three lecturers and two clinical assistants constitute the Hong Kong University staff.
- 328. There is a total of 200 beds and there were 12,160 admissions during the year. At the out-patients' clinics 68,629 attendances were recorded, of which 19,476 were new cases. There were 9,850 live births, 117 still births and 224 neo-natal deaths in the hospital; 10·1% of the total births in the Colony took place in Tsan Yuk.
- 329. Of the 10,865 maternity cases admitted 97.4% were booked cases. Of the 9,606 deliveries only 249 were from unbooked cases. The still birth rate was 1.17% and the neo-natal death rate 2.10%. The maternal mortality rate was 1.01 per 1,000 live and still births.

- 330. Ante-natal, post-natal and baby clinics are held throughout the year; in addition there are specialist clinics for medical diseases complicating pregnancy, a social hygiene clinic for venereal diseases and a Family Planning Clinic, all three of which are held either once or twice weekly.
- 331. In the hospital laboratory 25,363 routine examinations were carried out, of which 10,425 were for blood grouping. In addition there is a research laboratory, staffed by the University, which is carrying out investigations into the fibrinogen level in accidental haemorrhage, into the blood chemistry of toxaemia and into anaemia complicating pregnancy.
- 332. The radiodiagnostic section undertook 13,901 X-ray examinations, of which 11,662 were chest X-rays and 1,530 for pelvimetry.
- 333. Seventy one medical students in groups of seven or eight underwent five weeks training in obstetrics; twenty eight new student midwives entered the course of training during the year and forty three student midwives from the hospital passed the Midwives Board's Examinations.
- 334. Owing to the limited number of beds, uncomplicated multigravida deliveries remained in hospital for only three to four days and primigravida, with normal deliveries, for seven days.

# Mental Hospital

- 335. A new Mental Hospital is being constructed near Castle Peak in the New Territories. So far two wards with common rooms and ancillary annexes have been completed, providing accommodation for sixty men and sixty women. The next phase of construction, due to be completed in early 1960, will give accommodation for 500 mental patients; thereafter it is proposed to extend further to a total of 1,000 beds.
- 336. In the meantime the Mental Hospital in Hong Kong is housed in two very old and unsuitable buildings situated in a densely populated part of the City. It was originally designed to accommodate 140 patients, but the daily average population in the old Mental Hospital during the year was male 159.23 and female 138.48.
- 337. The Mental Hospital service, which is under the direction of the Psychiatric Specialist, has a staff of two Medical Officers holding specialist qualifications in Psychiatry and one Woman Medical Officer. Despite the unfavourable conditions, unavoidable in overcrowded wards

in old buildings, the most modern treatment is available within the Hospital. In addition, out-patient sessions are held regularly and have proved to be not only popular, but also successful in limiting the number of admissions to the wards. Admissions during the year totalled 1,002 and there were 300 readmissions. 847 patients were discharged and there were thirty six deaths.

## Infectious Diseases Hospitals

- 338. Mention has been made earlier of the infectious diseases portion of the Lai Chi Kok Hospital in Kowloon. On Hong Kong Island there is the Sai Ying Pun Hospital, which is one of the remaining parts of the old Government Civil Hospital and has a nominal bed strength of eighty eight beds. Although the number of patients treated in Hospital is considerably in excess of this number, the standard of work done is very high. The Medical Officer in charge is a part time lecturer of the University and gives clinical instruction in the Hospital to medical students on the diagnosis and treatment of infectious diseases.
- 339. The most common diseases under treatment during the year were diphtheria, typhoid fever, bacillary dysentry and measles. The total admissions amounted to 1,560 and there were 133 deaths.
- 340. Associated with this Hospital is the Sai Ying Pun Out-patient Clinic which caters for general out-patient needs for this section of the city. Under the direction of the Medical Officer in charge of the Hospital, this Clinic is one of the three busiest institutions in the Colony. It serves as the out-patient teaching centre for medical students who attend specialist sessions conducted by the heads of the University Clinical Units. During the year the total attendances amounted to 236,576.
- 341. The premises occupied by this very busy Clinic are old, cramped and generally unsuitable. However, the present Clinic is to be demolished (starting in September 1958) and on the site there will be erected a 9-storey building. This building will provide, in addition to the general and specialized out-patient services, a Chest Clinic. The top two floors of the building will become the new Pathological Institute, the present Institute being situated in an old building now far too small for the amount of work that has to be undertaken.

# St. John Hospital

342. This Hospital on Cheung Chau Island is the property of the St. John Ambulance Association but it is now staffed and maintained by Government. It serves not only the island population of 30,000

persons but also the neighbouring islands which are visited periodically by launch from Cheung Chau. In the Hospital there are sixty general, maternity and children's beds and forty two beds for the accommodation of convalescent cases of pulmonary tuberculosis. There are as yet no facilities for major surgery on the Island and patients requiring such treatment are removed to the Queen Mary Hospital. There were 1,816 admissions during the year with fifty seven deaths. In the maternity section there were 435 deliveries. The total attendances at the Outpatient Department of the Hospital amounted to 63,093.

## Prisons Hospitals

- 343. At the Stanley male prison there is a hospital of eighty two beds for the treatment of certain categories of illness. Patients requiring major surgery or investigation and medical treatment of any specialized nature are transferred temporarily to the custodial wards at the Queen Mary and Kowloon Hospitals. The majority of patients in the Stanley Prison Hospital are under treatment for tuberculosis or for the effects of drug addiction.
- 344. The treatment of drug addiction among convicted prisoners forms a major part of the work of the Prison Medical Officers and medical treatment is given in the prisons hospital wards during the period of withdrawal. Thereafter rehabilitation is effected through routine occupation in the prisons workshops. Government has under consideration a specialized prison for the treatment of convicted drug addicts at which there will be facilities for a full programme of rehabilitation.
- 345. At the Remand Prison in Victoria there is a small ward of eight beds for the treatment of acute illness. The duration of stay in the Remand Prison is necessarily short but there are a number of cases of acute illness, particularly amongst drug addicts, which have to be treated in this ward.
- 346. The female prison at Lai Chi Kok maintains a small hospital of ten beds under the supervision of the Medical Officer in charge of the Lai Chi Kok Hospital. Here again any case of major illness is transferred to the custodial ward in the Kowloon Hospital.

# Wan Chai Social Hygiene Hospital

347. Reference has already been made to the work of this small 30-bed Hospital for the reception of women and children. Its main function is the in-patient treatment of venereal disease in women and children although, with modern treatment, this aspect of the work is

becoming less important. On the other hand, cases of acute skin disease are now admitted to this Hospital and it is tending to become more and more a centre for the treatment of acute dermatological cases.

348. There is a busy out-patient department for the treatment of women with venereal disease and a large number of examinations of known contacts are carried out every year.

#### GOVERNMENT ASSISTED HOSPITALS

# Tung Wah Group of Hospitals

- 349. There are three major hospitals maintained by the Board of Directors of the Tung Wah Hospitals. The Tung Wah Hospital of 373 beds and the Tung Wah Eastern Hospital of 320 beds are situated on Hong Kong Island; the Kwong Wah Hospital of 404 beds is in Kowloon.
- 350. Established in 1870 the Tung Wah is a charitable organization which provides education and medical services to the poor. The Board of Directors, elected annually, raises large sums of money for charity, a considerable part of which is devoted to the maintenance of its Hospitals. The scope of the hospital service is such that Government makes a large annual subvention towards this work which is under the general direction of the Tung Wah Hospitals Medical Committee. This Committee is under the Chairmanship of the Director of Medical and Health Services and consists of the Chairman and Principal Directors of the Tung Wah, two members of the Tung Wah Hospitals Advisory Broad, the Medical Superintendents of the three Hospitals and the Deputy Financial Secretary (Finance). These Medical Superintendents are seconded Government Medical Officers.
- 351. All three hospitals maintain large and very busy out-patient departments but they do not accept casualties, which go to the Casualty Departments of the Queen Mary and Kowloon Hospitals.
- 352. The general medical and surgical wards of the Tung Wah Hospitals provide much needed accommodation for those suffering from chronic ailments requiring prolonged hospital treatment. There are in addition two Infirmaries, one of 125 and one of eighty six beds, for those suffering from incurable diseases.
- 353. The maternity service provided by the three hospitals is the busiest in the Colony and during 1957 there were 29,331 births in the hospitals. This is approximately one-third of the total births registered.

- 354. Consultant services are provided mainly by specialists in private practice whose services are given voluntarily.
- 355. The major part that the Tung Wah Hospitals play in the work of the Colony medical service is indicated by the following Table:

#### TABLE 29

Hospital		Beds	Total in-patients	Total out-patient attendances
Kwong Wah	 	404	39,613	188,552
Tung Wah	 	373	11,106	102,303
Tung Wah Eastern	 	320	7,991	143,350
Total	 	1,097	58,710	434,205

356. Planning has started for the rebuilding and extension of the Kwong Wah Hospital in Kowloon. The work is expected to extend over five years and when completed will provide a modern hospital of 1,238 beds. This is complementary to the Government plans to build the New Kowloon Hospital of 1,350 beds.

# The Alice Ho Miu Ling Nethersole Hospital

357. This hospital, operated by the London Missionary Society, has 276 beds for general medical and surgical treatment and includes a large and modern maternity section of seventy beds. There is also a large out-patient department. The hospital caters for all classes of patients but the major part of the work is amongst the poor. Again this valuable contribution towards the Colony's medical service is supported by a substantial subvention from Government funds. During the year 7,104 in-patients were treated and there were 58,795 out-patient attendances.

# The Pok Oi Hospital

- 358. This hospital of sixty beds, situated near Yuen Long in the New Territories, is a charitable hospital in the Chinese tradition. It is maintained by a Board of Directors and is largely supported by charitable donations augmented by an annual Government subvention. Originally, hospital treatment was mainly by traditional Chinese Herbal methods, but these have now largely given way to treatment by western medicine.
- 359. Two Government Medical Officers are seconded to this hospital to augment the medical staff. The Directors have plans in hand to build

a new section of the hospital giving accommodation for an additional sixty patients.

360. There were 2,681 in-patients in the hospital during 1957 and 68,437 out-patient attendances were recorded.

# Hay Ling Chau Leprosarium

- 361. This institution, which is maintained by the Mission to Lepers Hong Kong Auxiliary has accommodation for 580 lepers; it is situated on the former Nun Island now renamed Hei Ling Chau, which may be translated 'Island of Happy Healing'. There is residential accommodation for leprosy patients as well as ward accommodation for surgical treatment and for those in need of other hospital care. The largely self-contained community in the Leprosarium is engaged in agriculture and pig-farming. Rehabilitation by the teaching of other trades in the workshops is an important activity. There is a school for children under treatment and there are large and active troops of Boy Scouts and Girl Guides.
- 362. A close liaison is maintained between Hei Ling Chau and the Social Hygiene Division of the Medical Department.

## Hospitals for Tuberculosis

- 363. Mention has been made earlier in this report of the work of the Grantham and Ruttonjee Hospitals and the Freni Memorial Convalescent Home maintained by the Hong Kong Anti-Tuberculosis Association.
- 364. The Haven of Hope Sanatorium run by the Church World Service on a site in Junk Bay has accommodation for one hundred cases of tuberculosis. Patients are admitted through various Medical Missionary organizations and the surgical aspect of the service is provided by the Nethersole Hospital. Situated adjacent to Rennie's Mill Camp, the Sanatorium also provides an out-patient tuberculosis clinic in the Camp.

#### **OUT-PATIENT SERVICES**

365. At Appendices, 9, 10, 11 and 12 are records of the attendances at the various hospitals, both Government and Government-assisted, at clinics, Health Centres and Public Dispensaries throughout the Colony. There is a total of fifty six units at which these services are available to the general public. In addition there are two travelling dispensaries, operating from Tai Po and Yuen Long which serve the more isolated areas of the New Territories that can be reached by road.

- 366. Regular specialist out-patient clinics including tuberculosis, ophthalmology, social hygiene and maternity child health are held at a number of these out-patient centres.
- 367. Owing to the very large volume of work to be undertaken it is necessary to hold a number of night clinics at seven centres. Held from 6 p.m. to midnight these night sessions are attended to capacity and have proved a welcome and significant augmentation of services strained to the utmost during the hours of daylight.

#### SPECIALIST SERVICES.

#### General

- 368. There are Government specialist services in medicine, surgery, obstetrics and gynaecology, tuberculosis, ophthalmology, dermatology, venereal diseases, radiology, dentistry and pathology. Members of the staff of the University clinical units of medicine, surgery, obstetrics and gynaecology, orthopaedics and pathology also provide consultant services. Within the Government surgical service there are neuro-surgical and chest surgery units.
- 369. Mention has already been made of the general medical and surgical services, and of the obstetrical and gynaecological specialist facilities provided on Hong Kong Island and in Kowloon.
- 370. The midwifery service continues to expand at a phenomenal rate and the demands exceed the facilities despite a relatively high ratio of maternity beds to population. Owing to the conditions of overcrowding in the urban areas there is literally no space to provide other than an emergency domiciliary service. Therefore institutional midwifery is an essential in the urban areas of the Colony and plans for wards for uncomplicated midwifery at certain of the new Government clinics are under consideration. Private maternity homes run by midwives in private practice contribute largely to the service. These homes are licensed by the Midwives Board and are inspected regularly by the Inspector of Midwives who is a Government Medical Officer and a member of the Board. Domiciliary midwifery is practised whenever possible, mainly in the New Territories and in areas where rehousing has made it possible.
- 371. Ante-natal and post-natal clinics are an increasingly popular feature of the midwifery service and during the year attendances totalled 112,647 and 10,268 respectively.

#### RADIOLOGICAL SERVICE

372. There are three sections in this Service, Radio-diagnostic, Radio-therapeutic and the Physics and Workshop Section. The head-quarters in the Queen Mary Hospital is under the direction of the Senior Radiological Specialist, assisted by a staff of one Radiological Specialist, three qualified Radiologists and twenty one Medical Officers training in radiology. Student radiographers are trained for the M.S.R. (London) examinations.

## Radio-diagnostic Section

373. The Radio-diagnostic Section provides a service in each of the following institutions:

In Hong Kong:

- (i) Queen Mary Hospital (including radio-diagnostic work for the Mental and Sai Ying Pun Hospitals and the Government clinics and dispensaries on the Island),
- (ii) Tsan Yuk Hospital,
- (iii) Wan Chai Chest Clinic,
- (iv) Medical Examining Board;

#### In Kowloon:

- (i) Kowloon Hospital (providing also the radio-diagnostic service for institutions and clinics without these facilities),
- (ii) Kowloon Chest Clinic,
- (iii) Shek Kip Mei Chest Clinic,
- (iv) Lai Chi Kok Hospital.
- 374. There is also a Mass Miniature Radiography Unit which operates as required throughout the Colony. In addition consultant services are supplied to the Tung Wah and Tung Wah Eastern Hospitals.
- 375. Extension of the radio-diagnostic work has included the X-ray Department in the new Shek Kip Mei Chest Clinic and an expansion of the X-ray Department in the Kowloon Chest Clinic.
- 376. 265,814 investigations were carried out by the radio-diagnostic section. This is an increase over 1956 of 13,123 investigations.

# Radio-therapeutic Section

- 377. This Section is at the Queen Mary Hospital and is equipped for deep radiotherapy, superficial and contact radiotherapy and radium and radio-isotope work.
- 378. The deep radiotherapy equipment consists of one 400 KV Maximar deep therapy machine, one 250 KV Maxitron deep therapy

machine and one Telecobalt unit of 60 curies. During the year the treatment potential was doubled by the addition of the 250 KV Maxitron and the replacement of the cobalt 60 source in the Telecobalt Unit by one of 60 curies, which increased the strength of this source fourfold. The increase in potential has made it possible virtually to eliminate the waiting list for treatment.

- 379. A total of 294 patients suffering from malignant disease were treated by deep therapy. Of these 172 were suffering from carcinoma of the nasopharynx. This condition is very common in Hong Kong and is the subject of continued research. A new technique of treatment has been developed but it is too early, as yet, to assess its effect on the cure rate.
- 380. The installation of a Philip's Contact Radiotherapy unit has increased very considerably the number of patients it is possible to treat by superficial and contact radiotherapy. The majority of the cases treated were referred from the dermatology clinics.
- 381. Radium treatment was limited by the number of beds available for this purpose and only a small number of cases was so treated.
- 382. A small laboratory equipped with scintillation and geiger counters and other physics equipment was established to deal with the use, on a small scale, for medical purposes, of the radio-isotopes of iodine, of gold including seeds and colloidal suspensions, of cobalt and of strontium.
- 383. In the radiotherapy section 13,797 individual treatments were given to 342 patients. Out-patient clinics were held on six half day sessions each week, three of them were for new patients and three for the follow-up of those under treatment. The follow-up clinic for gynaecological cases is run in conjunction with the University Department of Obstetrics and Gynaecology. In addition to the routine diagnosis and treatment carried out in the out-patient clinics, 635 biopsies were performed.

# Physics and Work Shop Section

384. This section is responsible for the training in physics of the radiological staff, for the radio-protection service to the Radiological Division and for assisting the Radiotherapists in the physical aspects of treatment planning. It also assists in the design and making of devices for the improvement of certain radiological techniques and in the maintenance and repair of all Government radiological and

physiotherapeutic equipment. It has also assisted the Industrial Health Officer with problems relating to radiation protection in certain industries in the Colony.

#### OPHTHALMOLOGY

- 385. There are two main eye clinics, in the Arran Street Eye Clinic in Kowloon and the Violet Peel Polyclinic in Victoria. At the latter is the optical workshop run by the Department. The Ophthalmic Specialist is responsible for the work of this Division and is assisted by a staff of five ophthalmologists and by an ancillary staff of sixteen nurses, dressers, opticians, almoners, dispensers and clerks. Ophthalmic teams go out daily from the main clinics to nine centres in the New Territories where a total of twenty eight out-patient eye clinics is held each month. There are ten beds set aside in Government hospitals for emergency and major ophthalmic work.
- 386. There was a total of 103,698 attendances at eye clinics; of these 50,499 were new cases. This represents an increase of 13% over the attendances of 1956. There were 2,942 major and intermediate operative procedures carried out. The ophthalmic almoners investigated and gave assistance to approximately one in twenty of all new cases attending the urban clinics; 329 newly diagnosed cases of blindness were referred for registration to the Blind Welfare Office of the Social Welfare Department. The School Health Scheme attendances were slightly less than in the previous year; the optical workshop glazed and issued 2,888 pairs of spectacles to school children.
- 387. The major clinical problem of the year was again the two waves of epidemic acute purulent conjunctivitis. These episodes are facilitated by the overcrowding and the water shortage in the urban areas. The first wave occurs in the trimester of March to May and the second during September to November when shifts in average temperature and mean humidity rise or fall over a range of twenty five integers. The problem is to get the cases to attend for treatment early and before the disease process progresses to keratomalacia and blindness. The Health Education service helped considerably during these peak periods of incidence by broadcasting propaganda urging early attendance for treatment.

#### DENTAL SERVICE

388. Working under the direction of the Dental Specialist, there are two sections in the Dental Service, one of which provides a general

dental service mainly to Government servants and their dependants and the other a School Dental Service.

- 389. The general dental service is responsible for the routine and emergency treatment of a total of approximately 90,000 Government servants and their dependants. In addition a dental service is provided for in-patients in Government Hospitals and for the prisoners in Victoria, Stanley and Lai Chi Kok Prisons. Regular clinics for emergency treatment of the general public (mainly extractions) are held twice weekly at the Government out-patient clinics at Sai Ying Pun in Victoria and at Li Kee Memorial Clinic in Kowloon; similar clinics are held in the New Territories, fortnightly at Tai Po and Yuen Long and monthly at Cheung Chau and Tai O.
- 390. The clinical work of this section is carried out by the Dental Specialist and twelve Dental Officers. The heavy demands on the service have resulted in a waiting list of approximately two months for those requiring routine inspections and treatment.
- 391. During the year there were 15,318 attendances by Government servants and 14,017 attendances by dependants. There were 30,596 extractions, 11,080 teeth were filled or crowned, 969 dentures or special appliances were fitted and 4,325 patients received treatment which rendered them dentally fit.
- 392. The School Dental Service is staffed by seven Dental Officers and one Dental Nurse. Although the number of participants fell during the year to 32,336 the staff available was unable to do more than provide treatment required urgently by the majority of those entitled to dental care. Priority was necessarily given to the relief of pain and sepsis, and this meant that extractions, numbering 15,917, exceeded the 8,869 conservative treatments given by nearly two to one. Visits to School Dental clinics numbered 26,349.
- 393. The first qualified Dental Nurse returned to the Colony in November 1957 after twenty eight months of training in Malaya, the training being based on the New Zealand pattern. She will undertake minor operative work in the public service, for children only, under the supervision of a Dental Officer. Future plans envisage a considerable expansion of the training of this type of dental ancillary for work in the School Dental Service. The role of these ancillaries is to assist the Dental Officers by carrying out routine minor operative procedures and by educating patients, parents and teachers to understand and appreciate the principles of the preservation of dental health.

394. Five new dental clinics were opened during the year. Two of these clinics, in the North Point Housing Estate and at the Tsuen Wan School respectively, are for the School Dental Service. There were three general dental service clinics opened, at the Tai Po Jockey Club Clinic, at the Central Police Station and at the Canton Road Police Quarters respectively. Though the two latter are in temporary accommodation made available by the Commissioner of Police in view of the urgent need for the service at these two points, they do not provide treatment only for members of the Police Force.

## Fluoridation of Water Supplies

395. Approval has now been given for fluoridation of the public water supplies in the Colony. The necessary plant has not yet arrived but when installed it will be designed to bring the concentration of fluoride ions up to 1 part per million in the water. This well tried and proved method of the prevention of dental caries is very necessary in a community where 90% of 6 year old school children are already being attacked by dental caries.

## Voluntary Dental Services

396. Welfare organizations operated a number of dental clinics for their own members or for the poor in their respective districts. The Hong Kong Dental Society continued to staff three free evening clinics which are held each week, two in Kowloon and one in Hong Kong. In addition the Society holds a fortnightly clinic in the Ruttonjee Sanatorium. A dentist attached to the St. John Ambulance Brigade Penetration Squad also gave voluntary service for the relief of those in need in the remote areas of the New Territories.

# Control of Dental Practice

- 397. Two Dental Inspectors were employed, on behalf of the Dental Board, on duties in connexion with the control and supervision of private dental practice in the Colony. Premises in use were visited regularly and new premises were inspected before a licence to practise was issued.
- 398. Two cases of illegal dental practice came to light during the year and were brought to the Courts.

#### THE PATHOLOGICAL SERVICE

399. The Pathological Institute, situated in one of the oldest buildings in Victoria, has a direct link with the work of Yersin who, working

in the same building in 1894, identified the causative organism of plague simultaneously with, but independently of, Kitasato. The microscope used by Yersin is still in the Institute and it is of considerable interest that, despite its age and no more than routine care, there is no sign of fungus on the lenses.

- 400. The Institute with its adjacent animal house is the main Government laboratory centre in the Colony; there is a major branch of the Institute at the Kowloon Hospital. Small clinical laboratories are maintained at the Queen Mary Hospital, the Tsan Yuk Hospital, the Sai Ying Pun Hospital and the Lai Chi Kok Hospital. The work of the Institute covers the wide field of routine clinical pathology, public health bacteriology, histo-pathology, daily autopsies in the two public mortuaries in Victoria and Kowloon, supervision of the Blood Banks and vaccine production.
- 401. The staff consists of the Government Pathologist who is of Specialist rank, two Pathologists, one Medical Officer and two Assistant Medical Officers; there are one Chief Laboratory Technician, one Senior Laboratory Technician, three Laboratory Technicians and forty three Laboratory Assistants; of the latter twenty six are under training to meet the staff requirements inherent in the development plans.
- 402. Plans for the future include a modern and expanded Institute which will be included in the new Sai Ying Pun Polyclinic, due to be completed in 1959, and which will replace the present Institute. In addition both the new Kowloon Hospital and the new Mental Hospital will have clinical pathology facilities; plans are also afoot to build a vaccine laboratory in the New Territories.
- 403. 379,974 specimens were received for examination during 1957. This represented an increase of 48,707 over the previous year. The increase was general throughout all sections of the work, the major increase being in the haematological examinations carried out in the clinical laboratories in the hospitals.
  - 404. The following comparisons are noteworthy:

		1956	1957
Haematological examinations	 	46,726	63,756
Culture of sputa for M. tuberculosis	 	3,552	4,504
Sections for histological diagnosis	 	1,102	1,068

405. As in previous years the staff of the Institute gave a course of lectures on Communicable Diseases and Bacteriology to Health Visitors and Health Inspectors. Student Male Nurses were attached to the

Institute for three months of training in simple laboratory procedures. Student laboratory workers from the Hong Kong Anti-Tuberculosis Association and the Government Veterinary Laboratory were also attached for short periods of training.

## Vaccine production

- 406. Vaccine to the value of \$213,595 was produced and for the most part issued free to hospitals, clinics and medical practitioners for use in the Colony.
- 407. Lanolated calf lymph vaccine reserve stocks were maintained by the preparation of 37 litres of vaccine; the actual routine demand required 28 litres. The demand for rabies vaccine remained steady and 100 litres were prepared. Small batches of typhoid-paratyphoid and cholera vaccines were also prepared to meet the routine requirements. No plague vaccine was manufactured during the year.

## 408. The vaccines produced in 1957 were:

Anti-smallpox vaccine			1	 	36,800	ml.
Anti-cholera vaccine				 	30,000	ml.
Anti-typhoid-paratyphoid	(Adult	)		 	9,450	ml.
Anti-typhoid-paratyphoid	(Child	ren)		 	20,300	ml.
Anti-rabies vaccine (2%)				 	38,400	ml.
Anti-rabies vaccine (4%)				 	25,500	ml.
Diluted Tuberculin				 	15,400	ml.

#### THE PUBLIC MORTUARIES

- 409. At the Victoria Public Mortuary 1,049 autopsies were performed; of these 274 were medico-legal cases, including eighty two referred to the Forensic Pathologist. There were 266 unnatural deaths which included five homicides, 133 suicides and 128 deaths due to accidents. Drowning, hanging and jumping from heights accounted for 120 of the suicides.
- 410. In the Kowloon Public Mortuary there were 3,338 post-mortem examinations. Of these 424 were medico-legal cases including 117 examined by the Forensic Pathologist. There were 424 unnatural deaths comprising nine homicides, 143 suicides and 272 accidental deaths. The suicides were fifty eight by hanging, forty three by poison, twenty nine by jumping from heights and twelve by drowning; one suicide was by a cutting instrument.
- 411. Another function carried out at the public mortuaries is the examination of specimens of rodents for plague. 267,756 rats were

examined and 16,610 spleen smears were taken. There were no rats infected with plague. A statistical summary of the work done is attached at Appendix 13.

#### FORENSIC PATHOLOGY

- 412. Two Medical Officers seconded to the Police Department undertake medico-legal work in connexion with crime. There are three aspects to this work, namely forensic, laboratory and teaching.
- 413. The forensic work includes the examination of victims and suspects, visits to the scenes of crimes, attendance at the Courts and certain of the medico-legal post-mortems. The investigation of alleged irregular practices by unregistered persons practising as doctors and dentists and by sellers of poisons and manufacturers of dangerous drugs is also part of the work.
- 414. The laboratory work deals mainly with the examination of blood and seminal stains, hairs, fibres, weapons and other articles connected with crimes. In addition the blood grouping of criminal cases forms an important part of the work; the blood-grouping of police recruits passing out of the Police Training School is also undertaken.
- 415. Courses of lectures and demonstrations on the medico-legal aspects of crime are given to Police Officers. Lectures in forensic medicine are also given to medical students at the University of Hong Kong.
  - 416. The following Table shows the work done during 1957:

#### TABLE 30

Examination of victims and suspects				454
Attendance at scenes of crimes				125
Attendance at Courts				104
Medico-Legal post-mortems				217
Medico-Legal examination of weapons				83
Examination of hairs, fibres and other	slides			330
Examination of clothing				1,030
Miscellaneous examination (Articles)				519
Blood Grouping (Medico-Legal)				2,081
Blood Grouping (Police Officers)				624
Lectures to Police Officers including ad-	vanced	cours	se	15
Assistance in Raids				
Breach of Pharmacy and Poisons	Ordina	ance	and	
Penicillin Ordinance				44
Unregistered Medical Practitioners				11
Abortionists				3
Dentist				1

#### GOVERNMENT CHEMIST'S LABORATORY

- 417. The Laboratory undertakes the chemical analytical and consulting work for Government, the Armed Services, for industrial and commercial concerns and occasionally from other Far Eastern countries. The scope of the work is varied and the Laboratory is equipped to carry out a wide range of investigations.
- 418. The Government Chemist is assisted in this work by two Chemists, one Biochemist, four Assistant Chemists, a Senior Laboratory Assistant and five Laboratory Assistants. One Assistant Chemist and one Laboratory Assistant are seconded to the Police and Labour Departments respectively. The total number of samples examined during the year was 37,738.
- 419. Water analyses of samples of the public water supply before and after treatment are carried out regularly throughout the year and the standard of chemical purity remains of a high order. Analyses of water from new wells, sunk as sources of domestic supply outside the urban areas, are undertaken; in addition, urban sources of well water to be used for flushing or air conditioning are investigated.
- 420. Work undertaken on behalf of the Police included the examination of 13,878 samples of narcotics seized and requiring certification under the Dangerous Drugs Ordinance. This entailed visits to five illicit heroin factories. The biggest seizure of raw opium for many years, amounting to half a ton, was also examined for certification. In addition much work was done on the identification and certification of drugs controlled by the Pharmacy and Poisons Ordinance.
- 421. Toxicological analyses of specimens from over one hundred persons, mainly cases of suicide, were performed. It is of note that in addition to the commonly used lysol, cyanide and barbiturates, the modern insecticides derived from thiophosphoric acid and pentadiene are being more extensively used, particularly in country districts, as a means of suicide. There were accidental deaths caused by morphine and vohimbine.
- 422. Other analytical work in connexion with counterfeiting, ink on documents, authenticity of post marks, traffic accidents, explosions, arson, acid throwing, murder, burglary and lesser crimes was carried out for the Police.
- 423. For the Commerce and Industry Department examination and certification was undertaken in respect of seizures of gold and checks

were made systematically on the quality of exports, notably textiles and jewellery, especially in respect of misdescriptions of articles for which Imperial Preference Certificates were requested. A total of 5,156 articles were also examined for duty assessment, mostly liquors, tobacco, perfume, paints and proprietary medicines.

- 424. The Industrial Health Officer sent in 132 samples for examination in connexion with atmospheric pollution, industrial diseases, particularly plumbism, and industrial accidents.
- 425. The Stores Department requested that examinations of a great variety of materials from local sources should be undertaken for the guidance of Tender Boards. This work, now being undertaken systematically, has effected considerable savings in public funds.
- 426. Examinations have also been made of inflammable goods to support prosecutions by the Fire Brigade. Ships' fuel storage spaces have been examined for dangerous gases on behalf of the Marine Department and the Admiralty. Food analyses are carried out on samples submitted by the Health Inspectorate of the Urban Services Department. For the Army, large numbers of paint and concrete samples have been analyzed in connexion with the placing of contracts locally. Samples of an extremely wide range of materials have also been analyzed for commercial firms. These materials include ores, metals, food, drugs, water, enamel ware, firecrackers, textiles, oils, detergents and insecticides.
- 427. The Biochemistry section dealt with 13,488 clinical analyses from Government and private hospitals and private practitioners. The following Table shows the work done during 1957:

# TABLE 31 BIOCHEMICAL EXAMINATIONS

Blood	 	 	 	7,748
Cerebrospinal fluid	 	 1000	 	1,669
Gastric Contents	 	 	 	3,489
Stools	 	 	 	119
Urine	 	 	 	302
Miscellaneous	 	 	 	161
				13,488

#### OTHER ANCILLARY SERVICES

#### The Almoner Service

- 428. This Medico-Social Service expanded considerably during the year. Quite apart from the rapidly increasing total of attendances at Government medical centres there is a sharply increasing awareness of the part played by the Almoner in the social aspects of medical work. Doctors are making much more use of the Service and Almoners now participate in ward rounds and in discussions on the solutions of the social problems which are a part of any plan of treatment.
- 429. The Principal Almoner is responsible for this Division of the Department and she is assisted by seven Almoners and twenty one Assistant Almoners. Two Assistant Almoners resigned and seven new entrants were recruited for training in the Assistant Almoner grade.
- 430. Two new Almoners' Offices were opened during 1957, making a total of fourteen offices. The service was also extended to include visits to the Grantham Hospital for tuberculosis and the Sandy Bay Convalescent Home.
- 431. During the Asian flu' epidemic a great deal of home care advice was given to patients in an attempt to limit the duration of the illness and, where possible, the spread of infection. The transfer of patients from the Victoria Mental Hospital to the new wards at Castle Peak entailed special arrangements for the visiting of patients by relatives and for maintaining the contact of the Almoners with the relatives. The Mental Health Association gave valuable assistance with transport so that aged and frail relatives were able to pay a monthly visit to Castle Peak.
- 432. The provision of proper surgical appliances for needy patients has been a problem for many years past. In liaison with the University Orthopaedic Unit the Almoner Service arranged for the training of a rattan appliances maker and a belt maker. The staff of the Orthopaedic Unit supervised the technical training and the Almoner Service supplied the materials and arranged for the sale, supply and payment of the finished articles. The rattan appliances maker is now capable of providing crutches, calipers, splints and spinal braces to a satisfactory standard and the belt maker is doing likewise with surgical corsets, colostomy belts, back supports and pelvic halters. In this way, appliances ordered by the medical staff can be supplied at a reasonable price and without serious delay. For those too poor to pay for

appliances they were supplied free and payment was made to the maker from a special fund voted for this purpose by Government.

433. From the Samaritan Fund \$10,590 was spent on travelling expenses for needy patients and their relatives, on extra nourishment, on hawkers' licences for patients who were being re-established after an illness resulting in the loss of employment and on many other necessary sundries.

## Physiotherapy

- 434. The staff of this Service, in charge of the Superintendent Physiotherapist, has been considerably augmented by the appointment of two qualified Physiotherapists from overseas and the return from the United Kingdom of two qualified Hong Kong Physiotherapists who have been studying in the United Kingdom under Sino-British Scholarships. On the other hand the demand for physiotherapy has far outstripped the accommodation available. Nevertheless the standard of work is now much higher and the initiation of supervised group activity has ensured the maximum possible expansion of the service within the limits of accommodation.
- 435. The headquarters of the service is at the Wan Chai Clinic where there are a gymnasium, individual treatment cubicles and a hydrotherapy tank. Physiotherapy units are also established in the Queen Mary Hospital, the Kowloon Hospital and the Lai Chi Kok Hospital. There is no gymnasium at any of the hospitals as yet and therefore classes are held, whenever possible, outside. Limitations imposed by the weather make this a far from satisfactory arrangement.
- 436. An overhead suspension apparatus and suspension bars have been fitted in the Lai Chi Kok Hospital. A suspension bed and a portable suspension apparatus are now in use at the Queen Mary Hospital. These enable suspension therapy to be practised in the wards. A number of wheel chairs were purchased for the male patients in Lai Chi Kok. This means that, despite the difficult terrain, patients can now get to the physiotherapy and occupational therapy units themselves.
- 437. The local manufacture of good rattan appliances has been most beneficial to the work of the Physiotherapists. Patients are thus much more mobile and can attend group activities in the several physiotherapy units or come themselves for individual treatment.
- 438. The treatment of cases of child poliomyelitis has been greatly facilitated by the establishment of an orthopaedic consultant clinic at

Wan Chai, the opening of the Sandy Bay Convalescent Home, the availability of rattan splints and the increase in staff. Children of 5 years and over work in groups while those under 5 are still being treated individually. Many of these children are now able to walk and the waiting list for surgical treatment has been considerably reduced. Out-patient physiotherapy treatment is also available on a limited scale at the Kowloon Hospital, where there is provision for hydrotherapy.

- 439. The Orthopaedic Unit takes full advantage of the service and much more can now be done for the trauma cases in need of physiotherapy.
- 440. The increase of staff and equipment has also benefited the long term paraplegic patients, particularly in the Lai Chi Kok Hospital. There is at last some prospect of discharge from hospital and of rehabilitation in some form of light employment.
- 441. Physiotherapy for pre- and post-operative chest cases, for neurological cases and for leprosy patients is being developed as facilities permit.
- 442. The training of Physiotherapists locally is, owing to the lack of accommodation for students, very limited and only two students are at present under instruction.
- 443. There is a small room available as a classroom at Wan Chai and physical training instruction is carried out at the Northcote Training College by courtesy of the Education Department. Demonstrations in anatomy are given once a week at the University Dissecting Room, again, by courtesy of the Professor of Anatomy. The lectures and training in physiotherapy are given by the Superintendent Physiotherapist at Wan Chai.

# Occupational Therapy

- 444. This service is the responsibility of the Senior Occupational Therapist assisted by four Occupational Therapists, three Clerk-Interpreters and six Handicraft Instructors. There are three Occupational Therapy units at the Queen Mary, Lai Chi Kok and Mental Hospitals respectively.
- 445. During the year, illness and staff changes made continuity of treatment difficult but towards the end of the year an improved staff situation allowed an increase in the scope of both diversional and specific therapy. The standard of work also improved and there was

- a larger output of finished materials. Altogether 3,508 in-patients were treated; there was a small number of selected out-patients under treatment at the Queen Mary Hospital.
- 446. At the Queen Mary Hospital the unit was closed for part of the year but some continuity in diversional therapy was maintained by the visits of two Handicraft Instructors. Towards the end of the year re-opening of the unit allowed of an expansion of the diversional therapy and specific treatments were introduced for orthopaedic and neurological cases; remedial treatments were given for leg and hand injuries, paraplegias and poliomyelitis. Portable weaving looms, which can be used in the wards, became available. An interesting feature of the work is that the Rattan Splint Maker used the unit regularly for the making of rattan crutches, splints and other surgical appliances.
- 447. At the Mental Hospital, ward classes in raffia work, string plastic bag making, soft toys, woodwork, crochet, needlework, weaving, carpentry, painting and drawing were held by the Occupational Therapist and Handicraft Instructors. On the recreational side a group project resulted in the making of a collapsible stage which was used for Chinese operas given by local companies and for a concert. Games such as table tennis, badminton, mahjong and tin-kau were organized by the Occupational Therapy and Nursing staffs. The incentive payment scheme for work done was continued and provided funds for special dinner parties and concerts.
- 448. Art Therapy for diagnostic purposes was started for selected mental patients at the request of the medical staff.
- 449. At the Castle Peak Hospital therapy was maintained under the supervision of the Occupational Therapist and the General Handicraft Instructor who visited during alternate weeks. Here, simple crafts such as the making of raffia mats, string and plastic bags, hospital garments and Christmas decorations were in use as diversional therapy, as were embroidery and crochet work. Occasional painting and drawing sessions were introduced. A vegetable and flower garden was started under the supervision of the Nursing staff.
- 450. In December 1957 the Mental Hospital held an Exhibition and sale of work which was very successful and attracted considerable interest.
- 451. At Lai Chi Kok Hospital the work was limited in the earlier part of the year as only part-time therapy could be given in four sessions each week. In September the posting of a full-time therapist

who was assisted by three Handicraft Instructors and a Clerk, enabled the classes in rattan and carpentry work to be re-started. Incentive payment, are made to the patients engaged in this work. The Welfare Handicraft Shop in Kowloon accepts finished articles for sale, as it does from the two other units. Occasional classes in English and typing were also given as pre-vocational training.

452. Government orders for wastepaper baskets, squeegees, brooms and crutches have been undertaken by the various units of the Service.

#### MEDICAL EXAMINATION BOARD

453. The function of the Board is to examine medically all candidates for Government employment, any Government officers due for promotion or transfer and all members of and recruits for the Auxiliary Defence Units. The Board consists of a Chairman and four other Government Medical Officers, one of whom is a woman. During the year 14,442 persons were examined. This represents an increase of 1,660 over 1956. The categories examined are set out in Table 32.

TABLE 32

	Government Candidates	Auxiliary Defence Units	Miscellaneous	Total
New examinations	 6,327	3,292	199	9,818
Re-examinations	 2,810	1,803	11	4,624
	9,137	5,095	210	14,442
				-

- 454. All candidates coming before the Board undergo a full medical examination and an X-ray of the chest which are carried out on the premises along with such routine laboratory investigations as are required. During the year 2,427 cases were referred for a specialist opinion. 1,857 of these were referred to the Senior Tuberculosis Specialist. Of persons examined for the first time by the Board 1,050 were rejected as unfit. As in previous years, the main cause of rejection was pulmonary tuberculosis, which accounted for 70% of the rejections. The other main causes of rejection were diseases of the circulatory and alimentary systems.
- 455. Of all candidates examined during the year 12.9% were referred for the opinion of the Tuberculosis Specialist and 6.9% of the total examined were finally rejected on account of pulmonary tuberculosis. In 1956 this latter figure was 8%.

- 456. In the past much difficulty was experienced on account of concealment of previous ill health and of substitution of another individual for the medical examination. A revised and improved form of medical examination record was introduced in August 1957 and this contains a declaration by the candidate that previous ill health has not been concealed. Only two cases of significant concealment came to light during the year and only two cases of substitution were detected.
- 457. Attendance by candidates who have been rejected on a previous occasion and who re-appear under an alias was not infrequent in the past. The necessity to produce an Identity Card with the relevant application form appears to have solved this problem.
- 458. The Board now holds the medical examination records of some 62,000 persons who have been examined since the inception of the Board on 1st March, 1952. All these records have been microfilmed and sent for storage in safe custody.
- 459. Auxiliary Defence Units account for some 5,000 examinations each year, and in 1957 the Board undertook the additional responsibility for the two yearly chest X-ray examination of all Defence Units personnel. Unfortunately this proved to be impracticable and the arrangement has had to be suspended indefinitely.
- 460. Redundancy in H.M. Dockyard, and in War Department and R.A.F. establishments has led to large numbers of their employees being sent for examination as to their fitness to enter Government service. This required additional staff and accommodation for the Board to deal with the increased work, if serious delay was to be avoided. The arrangements worked smoothly and there was no significant hold up in the examination of the redundant employees who presented themselves.

#### Blood Banks

461. There are two Blood Banks in the Colony situated at the Queen Mary and Kowloon Hospitals. The Hong Kong Branch of the British Red Cross Society operates a donation centre in premises on the Hong Kong waterfront. The Society undertakes the necessary propaganda, collection and distribution of blood to the Banks and this aspect of the Society's work is supported by a subvention from Government. Blood is also contributed directly to the Banks by voluntary

donors and relatives and friends of patients, but almost 70% of the total blood collected during the year was obtained through the efforts of the Red Cross Society.

462. It is estimated that a minimum of 6,000 pints of blood will be required annually if modern criteria for the therapeutic use of blood are to be followed. During the year 4,211 pints of blood, the greater part of which came from the Armed Services, were taken into the Blood Banks. There is a traditional reluctance on the part of the Chinese to donate blood to Blood Banks but there is a small band of regular donors. It is hoped that the influence and example of this devoted group will gradually overcome a traditional hesitation to give blood.

#### The Pharmaceutical Service

- 463. The Central Medical Store is situated at North Point on Hong Kong Island with a branch in Kowloon. The main function of the service is the supply of drugs, pharmaceuticals, dressings and instruments to Medical Department institutions. A considerable amount of bulk manufacturing is carried on at North Point and Kowloon; from these two centres the smaller institutions are supplied with a variety of pharmaceuticals ready for use. The larger institutions have their own bulk dispensing arrangements. The best equipped pharmacy is at the Queen Mary Hospital where almost every aspect of pharmaceutical manufacture is covered.
- 464. There was a notable increase during the year in the use of parenteral fluids and over 83,000 litres of intravenous fluids were manufactured. Over 45,000 bottles of injections were also made up for bulk use in large and busy out-patient departments. This particular aspect of the work will increase when the new premises in the Government Stores building are occupied in 1958.
- 465. The Chief Pharmacist, who is responsible for the working of the service, also has important duties in connexion with the working of the Dangerous Drugs and the Pharmacy and Poisons Ordinances. These duties include the inspection and licensing of premises used for the manufacture of pharmaceuticals and for the retail trade. In addition the Inspectorate staff keeps a close watch on the import of dangerous drugs and the records of distribution and sale. A record of the work done is at Table 33. The considerable drop in the number of inspections was due to shortage of inspectors as a result of retirement and of

transfer to other duties. By the end of the year the staff situation had improved and more frequent inspections had become possible.

TABLE 33
LICENCES AND PERMITS ISSUED TO PREMISES INSPECTED

			1956	1957
Wholesale Poisons' Licences		 	321	335
Listed Sellers' Licences		 	243	242
Licences issued for Authorized	Premises	 	24	26
Anti-biotic Permits (General)		 	171	205
Anti-biotic Permits (Restricted)		 	23	12
Premises inspected		 	1,024	513

# Hospital Administration and Supply.

- 466. The Chief Hospital Secretary and his staff of qualified Hospital Secretaries and Executive Officers Class II are responsible for the routine administration of the Hospitals and Clinics. The responsibilities include the recruitment and discipline of the male menial staff, staff welfare, departmental transport, the supply and maintenance of medical and surgical equipment and furniture; Hospital stores and stores accounting; fire precautions; the maintenance of fabric and buildings, libraries and stationery stores. The Chief Hospital Secretary also has important planning duties; he is also the Honorary Area Representative for U.N.I.C.E.F. in connexion with the Milk Feeding Programme and the Maternal and Child Health Project.
- 467. There are two Group Hospital Secretaries, one in Hong Kong at the Queen Mary Hospital and one at the Kowloon Hospital. In the Hong Kong Group of Hospitals and Clinics there are Assistant Hospital Secretaries, who are Executive Officers Grade II, at the Queen Mary Hospital, at the Mental Hospital and at the Sai Ying Pun Clinic and Infectious Diseases Hospital. In Kowloon there are two Assistant Hospital Secretaries, one at the Kowloon Hospital and one at the Lai Chi Kok Hospital. The Kowloon Group includes the New Territories' institutions, with the exception of the uncompleted Castle Peak Mental Hospital which, for administrative purposes, is treated as part of the old Mental Hospital in Victoria.
- 468. Work has continued on the development of local sources of supply of hospital furniture. In addition modifications to equipment provided from overseas have been recommended to the manufacturers with a view to minimizing breakages in transit and improving performance under the climatic conditions of Hong Kong. In several

instances this has resulted in the production of a much more durable and satisfactory article.

469. The maintenance of furniture and equipment by hospital artisan staff has also developed and a great deal of time and money has been saved in this way.

## Planning

- 470. The scheduling of equipment, the examination of plans and advice on design have been carried on in connexion with twenty one new projects. These projects vary from the design and equipment of clinics to the detail of the internal arrangement and ward equipment of the proposed new Kowloon Hospital of 1,300 beds.
- 471. An important and continuing aspect of this work is the alterations and improvements necessary in existing hospitals and clinics where the demand for services has outgrown the potential of the original design.

## U.N.I.C.E.F. Projects

472. In connexion with the Milk Feeding Programme and the Maternal and Child Health Project 155,034 lbs. of dried skim milk powder and 540,000 capsules of fish liver oil were received and distributed. Four additional Milk Feeding Centres were opened during the year; altogether 1,168,110 supplementary diets were given to mothers and children in need.

# Staff Welfare

- 473. There are a number of staff associations and clubs within the Department. The Queen Mary Hospital Chinese Staff Welfare Club is the largest organization with a membership of some 1,500 members. The Club supports a benevolent fund from which benefits are paid to members or their dependants who are in need. There are also retirement and death benefit payments. An Evening School, which is registered with and inspected by the Education Department, is also maintained.
- 474. Amateur dramatics, football, table tennis, concerts, film shows and the maintenance of libraries are amongst the recreational facilities provided for their members by the Associations and clubs.

# Auxiliary Medical Service

475. The role of the Auxiliary Medical Service, established under the provisions of the Essential Services Corps Ordinance is to supplement the civil medical services during an emergency. The aim is to duplicate the Medical Department staff engaged in the care of the civilian population so that the specialist staff can be augmented and adequately supported in the task of dealing with a greatly enhanced intake of acute cases to the established and emergency hospitals. In addition the Auxiliary Medical Service provides a cadre of stretcher bearers trained in first aid to man the ambulance teams attached to the Civil Aid Services. The Medical Defence Staff Officer is responsible for the routine maintenance and training of the Auxiliary Medical Service teams and the Director of Medical and Health Services is the Unit Controller. In the event of an emergency the Auxiliary Medical Service becomes an integral part of the civil Medical Service with the ambulance teams functioning as part of the Civil Aid Service rescue organization.

- 476. Recruitment was steady throughout the year but did not keep pace with the wastage due to retirement, transfers and members leaving the Colony.
- 477. Training has been intensified and over 1,000 members are now doing up to fourteen hours of training in Ambulance work each month. Over 700 members passed the proficiency examination in First Aid. The First Aid training is given by doctors and by St. John Ambulance Brigade Instructors. Close liaison with the Brigade has resulted in a much improved standard of work and tribute is paid to the enthusiasm and keen interest of the Brigade personnel.
  - 478. Course of instruction were completed by members as follows:

Members attending	Basic First Aid 31	Driving Instruction 96	Message Writing 56	Stores Storekee	eping	Pay and Records 42
	Ward Auxiliary Dressers Course (4 days)	Auxiliary Nurses Hospita Course (2 weeks)	l Aux Dresse	ciliary ers Basic ourse	Ward C	Refresher ourse days)
Members attending	62	96		31		507

479. Classes on the preparation of sterile intravenous fluids have been maintained by the Chief Pharmacist throughout the year.

## V. TRAINING PROGRAMME

#### **DOCTORS**

480. The degree of Bachelor of Medicine and Surgery of the University of Hong Kong has been recognized by the General Medical

Council of the United Kingdom since 1911. Post-graduate training within the Colony for qualifications recognized by the Secretary of State for promotion to specialist appointments in the Medical Service is now well established and experience gained with the University Clinical Units is recognized by the majority of the Examining Bodies in the United Kingdom. The Queen Mary Hospital has been recognized as a training centre for the Diploma in Medical Radiology, both therapeutic and diagnostic; House Officer appointments in Obstetrics and Gynaecology at the Tsan Yuk and Queen Mary Hospitals are recognized by the Royal College of Obstetrics and Gynaecology for admission to its Diploma and Membership Examinations. At the Mental Hospital an appointment as a House Officer for one year is accepted towards the two-year hospital experience required for entrance to the examination for the Diploma in Psychological Medicine. The Institute of Child Health gives credit for experience with the Professor of Medicine towards its course of training in Pediatrics.

481. A Panel on Medical Post-Graduate Education reviews the schedule of training of doctors who aspire to post-graduate qualifications and every effort is made to integrate the facilities provided by the University and Government Clinical units for this purpose. This is particularly important to ensure that the numbers of specialists necessary for the new Kowloon Hospital in particular and the expansion of the service in general will be available when they are required.

#### DENTISTS

482. There is as yet no facility for the training of dentists in Hong Kong and the question of whether or not a Faculty of Dental Science can be established is under active consideration. In the meantime a Government Dental Scholarship scheme is in operation, under which twenty eight students are in training in Malaya and Australia.

#### NURSES

- 483. The Nursing Board holds examinations twice yearly and those who pass the final examinations and are registered in the Colony receive, on application, full recognition by the Nursing Councils in the United Kingdom.
- 484. Student nurses in the Government School of Nursing are trained in the Queen Mary and Kowloon Hospitals, where the training is carried out in English.

- 485. There are also training schools at the Tung Wah Group of Hospitals, the Alice Ho Miu Ling Nethersole Hospital, and the Hong Kong Sanatorium and Hospital. In these schools the training is carried out in Chinese.
- 486. Recruitment of both male and female nurses has been satisfactory and during 1957 three men and eighty six women passed the final examinations of the Board. The three men and eighteen of the nurses received their training at the Government School of Nursing.
- 487. The block system of study was introduced in the Government School of Nursing in July 1957 and has proved to be of value in the teaching programme. The arrival of an additional Sister Tutor from the United Kingdom during the year has facilitated the teaching in the Government Nurses' Preliminary Training School.
- 488. Four registered nurses, two men and two women, returned from the United Kingdom after obtaining the Registered Mental Nurse certificates. As yet there is no course of training in Mental Nursing available in the Colony.

#### MIDWIVES

- 489. Registered Nurses who are trained in the Government School of Nursing go on to take the one-year course in midwifery, conducted in English, in the maternity wards of the Queen Mary and Kowloon Hospitals. Registered Nurses trained in the other hospitals mentioned in paragraph 485 go on to take the one-year course in midwifery in the wards of their respective hospitals. These courses are conducted in Chinese.
- 490. The Tsan Yuk Hospital is the Government training school for student midwives who are not registered nurses. This entails a two-year course which is carried out in Chinese.
- 491. The Midwives' Board conducts the examinations for registration as a Midwife in the Colony four times yearly. The lack of facilities for domiciliary midwifery has prevented this important aspect of training from receiving the attention it deserves. As a result, the Board's Certificate is not fully recognized by the United Kingdom Central Midwives' Board but the Certificate does give credit equivalent to three-quarters of the course of study for the S.C.M. examination.
- 492. Recruitment has been satisfactory and during 1957 a total of 145 midwives passed the Midwives' Board examination. Of these, seventy five were trained in Government Hospitals.

#### HEALTH VISITORS

- 493. The course conducted at the Harcourt Health Centre for the training of Health Visitors covers a very wide field and leads to the examinations for the Certificate of the Local Examination Board of the Royal Society for the Promotion of Health. Lectures are given by the Supervisor and Training Officer of Health Nurses, by Medical Department doctors, including specialists, and by officers of other Government Departments. The students, who are all qualified nurses and midwives, visit a variety of institutions and organizations including factories and are also assigned, in turn, to the branches of the Health Service where they gain practical experience.
- 494. The fourth Health Visitors' Course was completed in September 1957, when nine out of ten students gained the Health Visitor's Certificate. The fifth course began in October 1957 with the maximum entry of ten students.

#### RADIOGRAPHERS

495. The training of Radiographers in Hong Kong is recognized by the Society of Radiographers in the United Kingdom, and the examinations for the Membership of the Society are held in Hong Kong. There were sixteen students in training at the end of the year. At the M.S.R. examinations held in April 1957 two students obtained the qualification.

#### LABORATORY TECHNICIANS

- 496. The Pathological Institute is recognized by the Institute of Medical Laboratory Technology in the United Kingdom as a teaching Laboratory and the requisite period of experience and training qualifies for entrance direct to the Intermediate examination of the Institute. There are four students at present in the United Kingdom who are preparing for the A.I.M.L.T. qualification, two in the techniques of haemotology and blood banks, one in histo-pathology technique and one in clinical pathology technique.
- 497. There are twenty five student Laboratory Assistants undergoing training, based on the Institute of Medical Laboratory Technology's curriculum, but modified to suit local conditions, who will eventually sit a local Departmental Examination.

#### OTHER FORMS OF TRAINING

498. Mention has been made of the limited facilities for the training of Physiotherapists. As soon as adequate premises have been acquired

and a Tutor Physiotherapist appointed it is planned to make arrangements to commence training for a recognized qualification.

- 499. Lectures in the local aspects of medico-social work are given to probationer Almoners who already have the basic qualifications of a University Degree plus a recognized Certificate or Diploma in Social Service.
- 500. Pharmacy training is unfortunately in a state of flux and is at present undertaken only for Dispensers within the Department. Previously, the institution of a University course for a Diploma in Pharmacy led to the discontinuance of the arrangements for training for the Chemists' and Druggists' Certificate. However, there were not sufficient entrants for the University Pharmacy course, which was then also discontinued. The Pharmacy Board has the whole question of training under urgent consideration with a view to establishing a satisfactory course of instruction in the Colony for a pharmaceutical qualification.
- 501. The following Table lists the categories of training carried out within the Department during the year:

TABLE 34

	Appointment	Resignation	Strength at 31.3.58	Passed
Probationer Assistant Physiotherapist	1	NAME OF THE OWNER, THE	2	NS at
Probationer Radiographic	Sold and	man Thursday		
Assistant	2	2	16	2
Student Dispenser	9	an and The land of	13	2
Probationer Laboratory				
Assistant	12	2	29	3 (a)
Probationer Assistant Almoner	6	2	8	3
Student Nurse	49	13	197	25
Student Dresser	19	11	35	4
Student Nurse (Mental Hospital)	3 (b)	-	4	_
Student Male Nurse (Mental				
Hospital)	16 (c)	2	17	_
Student Midwives	16	17	41	30
Student Midwives (Registered				
Nurses)	30	-	30	34
Health Visitor	10	_	10	9
Tuberculosis Visitors	8	2	6	6

<sup>(</sup>a) 1 on probation until 6.5.58.

<sup>(</sup>b) 2 transferred to post of Student Nurses.

<sup>(</sup>c) 1 transferred to post of Student Dresser.

#### WORLD HEALTH ORGANIZATION FELLOWSHIPS AND STUDY TOURS

- 502. One Medical Officer holding a W.H.O. Fellowship obtained a Diploma in Public Health at the University of Malaya in May 1957. Two Women Medical Officers were awarded W.H.O. Fellowships to study for the same Diploma in September 1957.
- 503. The Psychiatric Specialist was granted a Fellowship in Mental Health, with special reference to Drug Addiction, covering study in the United States of America and the United Kingdom.
- 504. The Assistant Director of Health Services attended the Public Health Conference and Study Tour in Japan which followed the meeting of the Regional Committee of the Western Pacific Region of the World Health Organization in Hong Kong in September 1957.
- 505. The Senior Health Officer represented Hong Kong as a delegate to the United Nations Seminar on Rehabilitation held in Solo, Indonesia, at the end of August 1957.
- 506. The following Table sets out the courses of study attended by officers during the year.

#### TABLE 35

-	1 ppointm	ent	Course of Study	Place of Study	Source of Funds
Psychiat	ric Specia	alist	 Child Psychiatry and Mental Health, with special reference to drug addiction	U.K. and U.S.A.	Government W.H.O.
Surgical	Specialist	t	 Thoracic Surgery	U.K.	Government
Medical	Officer		 Diploma in Anaesthetics	U.K.	Own expense
Medical	Officer	1	 Internal Medicine	U.K.	Government
Medical	Officer		 Licenciate, Medical Council of Canada	Canada	Own expense
Medical	Officer		 Chest Disease and Registrable Qualification	Canada	Own expense
Medical	Officer		 Diploma in Psychiatry	U.K.	Government
Medical	Officer		 Laryngology and Otology	U.K.	Government
Medical	Officer		 Fellowship of the Royal College of Surgeons	U.K.	Government
Medical	Officer		 Post-Graduate Training in Obstetrics and Gynaecology	Canada	Own expense
Woman	Medical	Officer	 Obstetrics and Gynaecology	U.K.	Government
Woman	Medical	Officer	 Paediatrics and General Medicine	U.S.A.	Own expense
Woman	Medical	Officer	 Diagnostic Radiology	Canada	Own expense
Woman	Medical	Officer	 Diploma in Public Health	Malaya	W.H.O.

Appointment	Course of Study	Place of Study	Source of Funds
Assistant Medical Officer	Radiotherapy	U.K.	Government
Assistant Medical Officer	Diploma in Ophthalmolegy	U.K.	Sino-British Fellowship Trust
Supervisor and Training			The state of
Officer of Health Nurses	Tutor Diploma (Health)	U.K.	Government
Nursing Sister	Post-Graduate Couse in Nursing	New Zealand	Own expense
Radiographer	Radiotherapy	U.K.	Government
Nurse	Infant Nursing and Mothercraft	Australia	Own expense
Nurse	Theatre Technique and Paediatric Nursing	U.S.A.	Own expense
Nurse	Midwife Teacher's Diploma	U.K.	Own expense
Nurse	Chest Nursing	U.K.	Own expense
Nurse	General Surgery and Operating Technique	U.S.A.	Own expense
Dresser	Sister Tutor Course	U.K.	Government
Student Dispenser	Dentistry	Australia	Government

#### DISTINGUISHED VISITORS

- 507. The following distinguished medical men and women visited the Colony during 1957/58:
  - (i) Dr. Pauline Stitt, Associate Professor of Maternal and Child Health at the Harvard School of Public Health, arrived in July to study the Hong Kong Maternal and Child Health Services on behalf of the World Health Organization.
  - (ii) In August, Sir Harry Wunderly, Director of the Tuberculosis Division of the Australian Department of Health, studied the work of the Government and Government-assisted services engaged in tuberculosis control in the Colony. He submitted a report to Government giving valuable criticism and advice.
  - (iii) Professor Dugald Baird, consultant in Obstetrics of the Nuffield Foundation, visited Hong Kong in October under arrangements made by the Colonial Office for a Panel of Medical Visitors.
  - (iv) Dr. T. Guthe, Chief of the W.H.O. Venereal Disease and Treponematoses section, Geneva, paid a short visit to Hong Kong in December.
  - (v) Dr. Ralston Paterson, Director of the Christie Hospital and Holt Radium Institute, Manchester, also arrived in December to advise on the planning of the New Kowloon Hospital Radiotherapy Centre.

#### VI. BUILDING PROGRAMME

- 508. The Report for 1956/57 made mention of the new clinics to be opened during 1957. The following projects were either completed, under construction or being planned:
  - (i) The 'Chee Hong', a 70-foot launch, equipped as a floating clinic, was presented to Government by The Hong Kong Jockey Club at a handing-over ceremony on 22nd January, 1958. It will be equipped and staffed by May 1958 when it will commence visits to outlying islands and villages on the eastern seaboard of the New Territories.
  - (ii) The new Central District Health Centre at Kau U Fong, being built by the Hong Kong Jockey Club for presentation to Government, is almost complete and will be opened in April 1958.
  - (iii) The new Dental Clinic at the Kowloon-Canton Railway Terminus is also almost complete and is expected to open in April 1958.
  - (iv) Plans for the new Tai O Health Centre are well advanced, and work should commence soon.
  - (v) The new Kowloon Public Mortuary is expected to be ready for use in September 1958.
  - (vi) A new Maternity Home and Clinic on Peng Chau Island is expected to open in August 1958. This project is a combined effort of the Junior Chamber of Commerce and the Peng Chau Rural Committee.
  - (vii) It is expected that work will commence on the new Sai Ying Pun Polyclinic in August 1958.
- (viii) A new Maternity Home and Clinic in Hung Hom, sponsored by the Hung Hom Kai Fong Association, is expected to be in operation towards the end of 1958.
  - (ix) Planning is continuing on a new Health Centre for Kennedy Town, a similar institution in Yuen Long, and an extension of the X-ray section of the Casualty Department in Kowloon Hospital.
  - (x) Work has commenced on the site works for the new Kowloon Hospital.

## VII. PUBLICATIONS

509. The following articles were published by members of the Department in the publication shown:

	Title of Article	Publication	Name and Title of Author
1.	Suicide in Hong Kong.	Journal of Mental Science, April 1958.	Dr. P. M. Yap, M.A., M.D. (Camb.), M.R.C.S. (Eng.), D.P.M. (Lond.), Psychiatric Specialist.
2.	Hypereridism and Attempted Suicide in Chinese.	Journal of Nervous and Mental Disease, July 1958.	— do —
3.	A Diagnostic and Prognostic Study of the Schizophrenias in Southern Chinese.	Report of the IInd. International Congress of Psychiatry, Zurich, 1958. (In Press)	— do —
4.	Death following Injection of Paraffin into the Breast.	British Medical Journal	Dr. T. C. Pang, M.B., B.S. (H.K.), D. Obs. R.C.O.G. (Lond.), L.M. (Dub.), Senior Forensic Pathologist.
5.	Tropical Osteomyelitis of the Jaws. Report of a case involving the whole body of the Mandible.	Journal of Oral Surgery, Oral Medicine, and Oral Pathology.	Mr. Walter C. Allwright, H.D.D., R.C.S. (Edin.), L.D.S., R.C.S. (Eng.), D.P.D. (U. St. And.), Dental Specialist.
6.	The Use of Long-acting Penicillin in the Prophy- laxis of Congenital Syphilis.	Journal of Obstetrics and Gynaecology of the British Empire.	Dr. G. M. Thomson, M.D., M.R.C.P. (Edin.), D.P.H., Social Hygiene Specialist,
7.	Odontomes of the Axial Core Type as a Cause of Osteomyelitis of the Mandible.	British Dental Journal, May 1958.	Mr. Walter C. Allwright, H.D.D., R.C.S. (Edin.), L.D.S., R.C.S. (Eng.), D.P.D. (U. St. And.), Dental Specialist.

## ACKNOWLEDGMENT

It is a pleasant duty to pay tribute to the hard and devoted work of the staff of the Department who have tackled the many problems with courage and enthusiasm. The assistance that has been received from other Departments of Government is gratefully acknowledged.

D. J. M. MACKENZIE,

Director of Medical & Health Services.

## SAMARITAN FUND

# STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31ST MARCH, 1958

Description	Amount	Description	Amount
RECEIPTS	ن «	PAYMENTS	69
To Balance brought forward (on deposit with Accountant General)	ith	By Providing maintenance, capital grants, clothing, food, travelling expenses,	
Fund \$14,2	\$14,286.64	etc. to patients	8,676.55
Pensions and other monies held on behalf of in-		Incidental expenses for individual patients Balance carried forward, (on deposit with	1,913.00
dividual patients 2,0	2,032.77	Accountant General)	
D	16,319.41	Fund \$11,348.34	
Pensions and other monies received	0,138.23	Pensions and other monies held on behalf of in-	
on behalf of individual patients	1,982.75	dividual patients 2,102.52	13,450.86
	\$24,040.41		\$24,040.41

Certified correct.

(Sgd.) D. T. SMITH,
p. Director of Medical & Health Services.
22, 5, 58

(Sgd.) S. C. CHENG,
Ag. Principal Almoner, Medical Department.

The above statement has been examined in accordance with Condition 6 of the Schedule to Legislative Council Resolution dated 24th May, 1950 (G.N. No. A. 113 of 26th May, 1950). I have obtained all the information and explanations that I have required, and I certify, as a result of this audit, that in my opinion the statement is correct.

AUDIT DEPARTMENT, Hong Kong, 24th June, 1958.

(Sgd.) W. H. WILLIAMS, Acting Director of Audit.

## NURSES REWARDS AND FINES FUND

# STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31ST MARCH, 1958

Description	Amount	Description	Amount
RECEIPTS	8	PAYMENTS	ن «ه
To Balance brought forward (on deposit with Accountant General)	3,376.57	By Purchase of prizes, etc. for Nurses and Dressers	170.85
Forfeiture of deposits from Misses Violet Leung and Viva Chan	400.00	Provision of tea on the occasion of presentation of certificates and prizes to Nurses and Dressers for the years 1957 and 1958	1,705.00
		Balance carried forward (on deposit with Accountant General)	1,900.72
	\$3,776.57		\$3,776.57

Certified correct.

(Sgd.) D. T. Smth,
p. Director of Medical & Health Services.

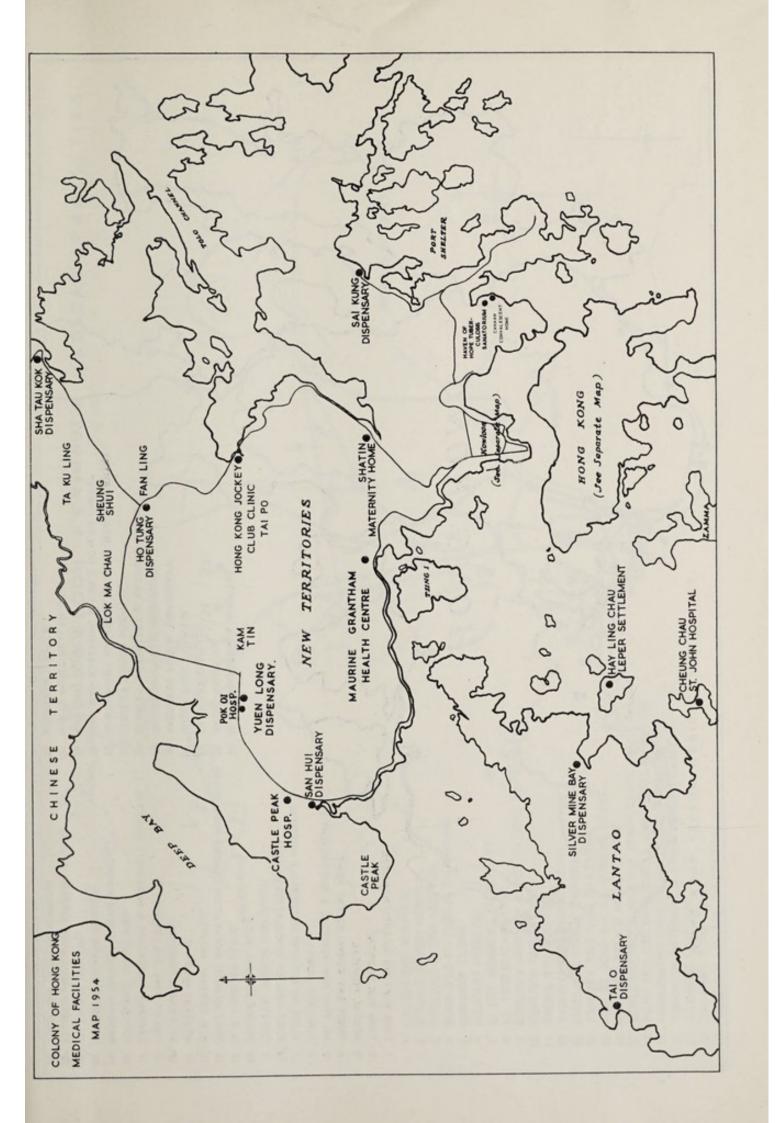
(Sgd.) B. G. SCHOFIELD,

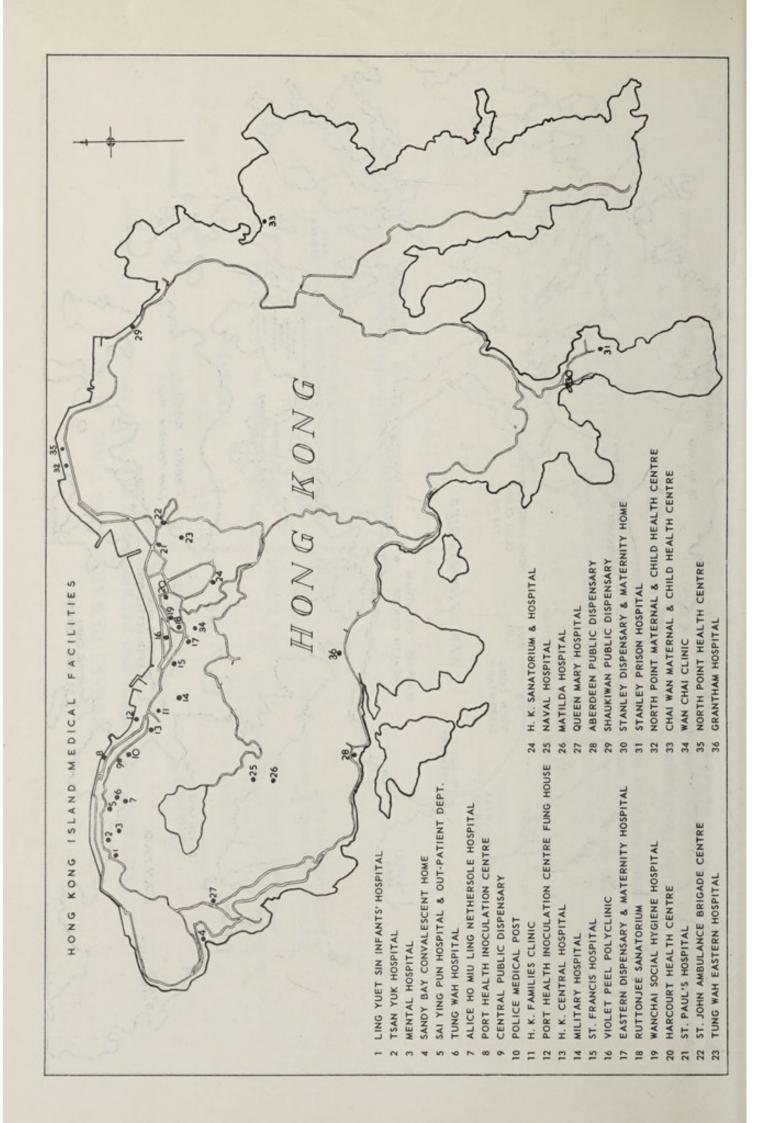
Principal Matron, Medical Department,
22. 5. 58.

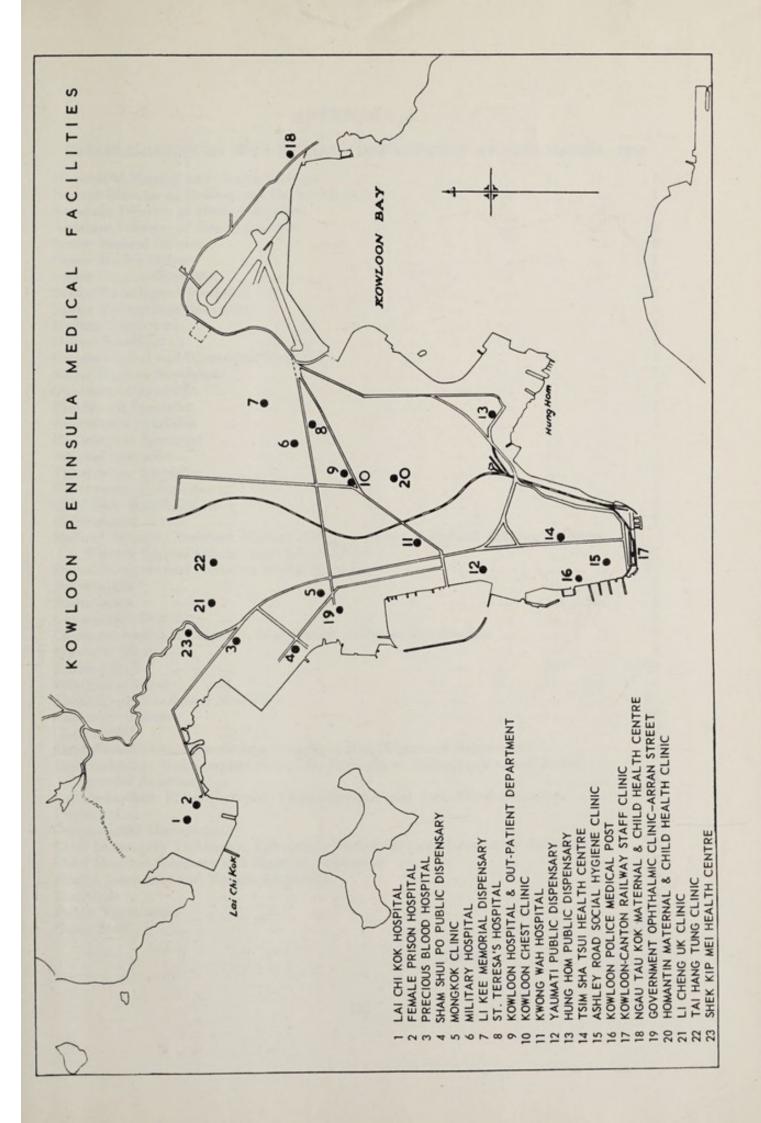
The above statement has been examined in accordance with Condition 5 of the Schedule to Legislative Council Resolution dated 24th May, 1950 (G.N. No. A. 115 of 26th May, 1950). I have obtained all the information and explanations that I have required, and I certify, as a result of this audit, that in my opinion the statement is correct.

AUDIT DEPARTMENT, Hong Kong, 26th June, 1958.

(Sgd.) W. H. WILLIAMS, Acting Director of Audit.







## ESTABLISHMENT OF THE MEDICAL DEPARTMENT AT 31ST MARCH, 1958

	THE RESERVE									
Director of Medical and										1
Deputy Director of Med			h Servi	ces						1
Assistant Director of Me										1
Assistant Director of He	ealth Se	rvices		***			***			1
Senior Medical Officers										3
Senior Health Officer	***						***			1
Senior Surgical Specialis	t									1
Senior Radiological Spec	cialist									1
Senior Tuberculosis Spe	cialist									1
Medical Specialist										1
Dental Specialist										1
Gynaecological and Obs	tetrical	Special								1
Social Hygiene Specialis										1
Ophthalmic Specialist										î
Psychiatric Specialist										1
Anaesthetic Specialist										î
Radiological Specialist										î
Surgical Specialist				***						î
Tuberculosis Specialist										1
Government Pathologist	***									1
Chief Port Health Office										1
Malanialania										1
Medical Officers, Assist	ont Mo	lical C		Wan	M.	diant O	 	Andres		1
Women Medical Off							fficers,	Assista		211
										311
Dental Surgeons and As		Dentai	Surgeo	ns		***				21
Pathologists	***	**	***	***		***			***	3
Radiologists										8
Government Chemist	··· ·				D: 1					1
Chemists, Assistant Che	mists, I	olocnen	lists, A	ssistant	Bloch	emists				9
Principal Matron										1
Nursing Staff	***						***			1,248
Principal Almoner	***		***							1
Almoners and Assistant	Almone	ers					***			31
Executive Officers										12
Clerical Staff										227
Chief Pharmacists, Phar										84
Superintendent Radiogr		Senior I	Radiogr	aphers,	Radio	graphe	rs and l	Radio-		
graphic Assistants										58
Superintendent Physiot	herapis	t, Phys	iothera	pist an	d Asst.	. Physic	otherap	ists		19
Physicists										3
Occupational Therapists										4
Chief Laboratory Techn	ician, L	aborate	ory Tec	hnician	, and ]	Laborat	tory Ass	sistants		56
Chief Hospital Secretary	and H	ospital	Secreta	ries						6
Health Inspectors and M										29
Dietitians			***							2
Public Vaccinators										63
Other Staff										2,304
									-	

## APPENDIX 2 NOTIFIABLE DISEASES REPORTED CASES AND DEATHS 1956 AND 1957

		No. of N	otifications	No. of	Deaths
Diseases		1956	1957	1956	1957
Cholera			_		-
Plague		_	_	_	-
Smallpox			-	-	-
Typhus (epidemic lo	use-borne)	-	-	-	The latest
Yellow fever		-	_	_	and a second
Relapsing fever		-		-	-
Amoebiasis		182	217	6	8
Bacillary dysentery		560	550	4	9
Enteric fever		789	728	48	33
Poliomyelitis		31	45	3	1
Chickenpox		273	280	2	2
Cerebrospinal Mening	itis	21	21	9	9
Diphtheria		714	1,239	75	129
Measles		709	875	86	93
Scarlet fever		14	5		_
Whooping cough		119	96	2	
Puerperal fever		7	2	2	The state of the s
Human		_	-	_	E STATE OF
Rabies { Animal		0	0	0	0
( Hyben		1	-	_	_
Typhus { Scrub		_	-	_	1
Malaria		496	447	4	
Tuberculosis		12,155	13,665	2,629	2,675
	-	0	0	0	0
TOTAL		16,071	18,170	2,870	2,965

## APPENDIX 3 ANTI-EPIDEMIC PROPHYLACTIC IMMUNIZATIONS 1956 AND 1957

Immunological I	rocedure			1956	1957
Anti-Smallpox Vaccination				1,404,669	1,082,809
Anti-Cholera Inoculation	***			28,713	29,070
Anti-Diphtheria Inoculatio	ns:				
1st Dose				74,082	143,897
2nd Dose				58,197	100,941
Booster Dose				46,303	66,231
Anti-Typhoid Inoculations	:		-		
1st Dose				150,282	118,879
2nd Dose				95,920	88,605
Booster Dose				137,232	120,891
Anti-Plague Inoculation				260	299
Anti-Typhus Inoculation	***	***		1,444	1,421
Anti-Rabies :					
1st Dose				2,885	3,080
Other Doses				14,189	11,474
Anti-Tetanus Inoculation				30,681	1
Anti-Tuberculosis (B.C.G.)	Vaccina	tions:			
Infants				19,616	35,149
Others				5,629	10,074

APPENDIX 4

## MALARIA NOTIFICATION, 1957

## SOURCE OF CASES

Reported as		FRE	FRESH CASES	SES			RECURRENT CASES	RENT	CASES	-	
Reported	V.	F.	M.	T.U.	T.U. Total	V.	E.	M.	T.U.	T.U. Total	TOTAL
Unprotected Area	277	26	6	m	315	85	9	2	0	93	408
Protected Area	18	2	-	0	24	7	2	1	0	10	34
Address not correctly given	en	1	0	0	4	0	0	0	0	0	4
Imported Cases	0	0	0	0	0	0	0	-	0	-	1
TOTAL	298	32	10	60	343	92	80	4	0	104	447

V. = vivax

F. = falciparum

M. = malariae

T.U. = type unspecified

APPENDIX 5

COMPOSITE TABLE TO SHOW ATTENDANCES FOR VENEREAL DISEASES AND OTHER WORK DONE BY SOCIAL HYGIENE CLINICS

	1953	1954	1955	1956	1957
New Cases	37,392	36,652	34,853	32,490	31,393
Total Attendances	213,091	223,031	203,701	180,148	193,674
Admission to Hospital	741	588	704	515	704
Total Syphilis (Except Congenital)	6,969	6,825	4,232	3,711	3,190
Primary Syphilis	634	393	153	93	17
Secondary Syphilis	132	54	34	20	7
Early Latent Syphilis	2,298	2,209	1,044	733	450
Late Latent Syphilis	3,727	3,983	2,853	2,616	2,532
Congenital Syphilis (Under 1 yr.)	44	24	19	19	3
Congenital Syphilis (Over 1 yr.)	69	93	111	64	116
Gonorrhoea	11,625	10,785	11,309	10,609	9,881
Chancroid	2,507	2,365	2,468	1,614	685
Lymphogranuloma Venereum	208	286	249	140	178
Non-Venereal Disease	13,616	14,526	14,788	14,682	15,669

## LEPROSY OUT-PATIENT CLINICS

					1955	1956	1957
New Attendances					762	751	981
New leprosy cases					368	423	436
(a) Lepromatous					170	160	173
(b) Tuberculoid					198	262	262
(c) Mixed Type					0	1	1
Total Attendances					22,012	25,789	31,204
Number of Cases admit	ted to	Hay I	Ling Ch	au	98	165	132

APPENDIX 6

NUMBER OF HOSPITAL BEDS IN HONG KONG — 1957

	Medical	Surgical	Gynaecol- ogical	Tuber- culosis	Mental	Mater- nity	Infectious	Observa- tion	Miscel- laneous	Total
GOVERNMENT HOSPITALS:		11,000	77			100			100	002
Queen Mary	(a) 206 117	(0) 223	16	=	-	46	1	12	t (a)	313
	1	1	1	1	140	1	1	1	1	140
eak	1	1	1	1	120	1	1	1	1	120
и	1	1	1	1	1	15	88	1	1	888
Tsan Yuk	5	1001 007	1:	120	1	200	100	1	1	200
	27	(d) 139	14	176	1	10	120	1	1	976
Eastern Maternity	1	1	1	1		4.7	( 22		1	6.7
Wan Chai Social Hygiene	1	1	1	1	1	1	4 cots	1	1	30
						100	( 4 cradles			
St. John	32	00	1	42	1	15	ın ,	1	1	102
Stanley Prison	61 5	- 23	-	50	11	1-	18	1 1	11	10
	411	510	77	300	1961	323	268	21	4	2.184
The state of the s	1776	010	:	000	107	000	200	42		*****
CRANT-IN-AID HOSPITALS:	115	113	10	101	1	34	1	1	1	373
Eastern	169	09	10	49	1	35	1	1	1	320
Kwong Wah	140	24	50	09	1	130	ı	1	13	404
Alice Ho Miu Ling Nethersole	9	(e) 68	45	12	1	20	1	1	6) 16	270
natio	1	1	1	336	1	1	I	1	1	336
se Sanatorium		1	1	540	1	1	1	1	1	540
	50	1	1	1	1	10	1	1	1	09
	28	1	1	12	1	1	540	1	1	280
Haven of Hope T.B. Sanatorium	1	13	-	(g) 120	1	1	1	-	1	120
Sandy Bay Convalescent Home	1	54	-	1	1	1	1	-	1	54
	292	349	85	1,230	1	276	540	1	16	3,063
		00	33	24	-	40	14	1	-	302
Precious Blood	32	9	1	(h) 37						
				80	1	-	1.	1	1	8
St. Teresa's	30	50	10	10	1	16	•	1	1	90
: :: ::	200	(1) 12		30		24	۰ ا		(1) 18	172
	30	30	9	10	1	101	4	1	1	06
Line Ynet Sin Infants'		9	1	1	1	15	5	1	1	125
		15	ro.	13	1	12	1	1	1	25
me	1	1	1	09	1	1	-	1	1	09
	438	199	54	161	1	124	27	1	18	1,051
							-			

		-								
	Medical	Surgical	Gynaecol- ogical	Tuber- culosis	Mental	Mater- nity	Infectious	Observa- tion	Miscel- laneous	Total
PRIVATE MATERNITY HOMES:	1	1		1	1	503	1		1	503
PRIVATE NURSING HOMES:	46	- 1	1	1	1	1	1	1	1	46
GOVERNMENT DISPENSARIES:										
Stanley Hone Kone Locker Clark Claric Trans.	10	1	1	1	-13	9	I	1	Î	9
Yuen Long	- 1	11	11	11	1.1	722		11	11	72
	1	1	1	1	1	8	1	1	1	00
Sai Kung	0	11	11	11	11		1.1	11	11	13
	1	1	1	1	1	6	1	1	1	. 6
Maternity Home	1	1	1	1	1	en ·	1	1	1	eo .
Silver Mine Bay Maternity Home	11	11		11	11	4 4	11	11	11	* 4
h Centre	1	1	1	1		96				96
ital	9	1	1	1	1	3	1			9
	1	1	1	1	1	9	1	1	1	9
	14	1	1	1	1	109	1	1	1	123
GOVERNMENT HOSPITALS	411	510	77	309	261	323	268	21	4	2.184
GRANT-IN-AID HOSPITALS	567	349	82	1,230	1	276	540	1	16	3,063
Howes	438	199	\$	191	1	124	27	1	18	1,051
NURSING HOMES	46					200				503
ENT DISPENSARIES	14	1	1	1	1	109		11	11	123
GRAND TOTAL	1 476	1.058	916	1 730	196	1 225	000	0.1	90	0.00
		2001	2	20114	107	1,000	653	1	00	0,9,0
(a) Including 47 beds for medical or surgical cases (variable	surgical ca	ases (varial	ble Class	S	Private wa	rd beds us	Private ward beds used for either medical or surgical cases as	medical o	r surgical	cases as
(b) Including beds for orthopaedic cases	75				required).					
					Including 2	o peds in c	Including 20 beds in convaiescent cottages.	ottages.		
(d) Including (i) 24 Beds for orthopaedic cases.	die cases.			(v)	Private Rooms- gvnaecologica		ivate Rooms—including beds for medical, surgical, tuberculosis, gynaecological and infectious cases.	medical, su	rgical, tube	reulosis,
(u) 20 Deds for candren used and surgical cases.		ior orthopaedic, medical	medical	(6)	Including h	eds for own	Including hade for general passes			
(e) Including (i) 22 Beds for children (used for either medical or	(used for	either me	dical or		Baha and	100 101 101	and	*0.0*		
(ii) 7 Bale Cases as required).	quired).	16			Dany ward.					
(11) i Deus for Sick Staff ward (used for either medical or surgical cases as required).	s required).	d for either	medical	17.17.17						

APPENDIX 7

IN-PATIENTS TREATED IN GOVERNMENT AND GOVERNMENT ASSISTED HOSPITALS, 1957 CLASSIFIED ACCORDING TO INTERNAIONAL STANDARD CLASSIFICATION INTERMEDIATE LIST OF 150 CAUSES

		Total	2,069	465	0.1	17	103	52	1	8	20	20		1	33		1	1	1	6	8	1	1	1	2,806
1957	Colony	Sex Un- known	1	1		11	1	1	1	1	1	1		1	1		1	1	1	1	1	1	1	1	1
Deaths 1957	Whole Colony	Female	199	234	-	y 00	49	1	T	1	67	10		1	16		1	1	1	3	S	1	I	1	1,000
		Male	1,408	231	1.0	12	54	1	T	7	18	40		1	17		1	1	1	9	3	1	I	1	1,806
1957	Govern-	Assisted Hospitals	1,044	378	0	13	37	64	1	9	1	5		1	16		-	1	1	1	67	1	1	1	1,509
Deaths 1957	Govern-	ment Hospitals	35	32		60	15	1	1	1	20	9		1	12		1	1	1	3	4	1	1	1	131
ses 1 1957	Govern-	Assisted Hospitals	3,400	635	20	410	103	51	1	18	3	73		1	202		3	1	1	10	17	i	1	1	4,961
Cases Treated 1957	Govern-	ment Hospitals	1,124	138		129	80	22	1	6	82	108		304	357		56	1	1	446	147	9	1	2	3,008
	Cause Groups		respirator	meninges us system	Tuberculosis of intestines, peri-	Tuberculosis of bones and ioints	l other forms		Early Syphilis	Tabes dorsalis	General paralysis of insane	All other syphilis		Gonococcal infections	Typhoid fever	Paratyphoid fever and other	Salmonella infections	Cholera	Brucellosis (undulant fever)	Bacillary dysentery	Amoebiasis	Other unspecified forms of dysentery	Scarlet fever	Streptococcal sore throat	Carried forward
Detailed	List	Number	001 - 008	010	011	012 - 013	014 - 019	020	021	024	025	022, 023	026 - 029	030 - 035	040	041 - 042		043	044	045	046	047, 048	020	051	
Inter-	mediate List	Number	A 1	2 V	A 3	A 4	A 5	9 V	A 7	A 8	6 V	A 10		A 11	A 12	A 13		A 14	A 15	A 16 (a)	(9)	(0)	A 17	A 18	

APPENDIX 7—Contd.

A 20 052 A 21 053 A 22 053 A 23 055 A 24 060 A 25 061 A 25 061 A 26 061 A 27 062 A 28 060 A 28 080 A 29 081, 083	Cause Groups	Treated	Treated 1957	Deaths 1957				
Number 19 22 22 24 25 26 26 29 30 30		Govern-	Govern- ment Govern-	n- Govern-		Whole Colony	Colony	
3 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		ment Hospitals	Assisted Hospitals	HA	Male	Female	Sex Un- known	Total
10 10 10 10 10 10 10 10 10 10 10 10 10 1	Brought forward	3,008	4,961 131	1,509	1,806	1,000	1	2,806
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Ervsipelas	1	9	1	I	1	1	1
3 30 58 57 57 57 57 57 57 57 57 57 57 57 57 57	a and pyaemia	13	101 111	1 42	40	32	1	72
3 30 30 30 30 30 30 30 30 30 30 30 30 30	Diphtheria	1,169	2 12	1	89	19	1	129
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Whooping cough	10	-	1	1	I	1	1
3 30 22 24	Meningococcal infections	6	2	5 2	5	4	1	6
3 30 58 72 83 30 30 30 30 30 30 30 30 30 30 30 30 30	Plague	1	1	1	1	T	1	1
3 30 330 330	Leprosy	57			2	1	1	3
27 29 30 31	Tetanus	136	17 6	67 12	46	33	1	79
28 30 31	Anthrax	1	1	1	1	T	1	1
30	Acute poliomyelitis	43	1	- 9	4	3	1	7
30	Acute infectious encephalitis	3	1	2 1	2	3	1	2
31	Late effects of acute poliomyelitis		4					
3.1	and acute infectious encephalitis	-	17	1	1	i	1	1
10	Smallpox	1	1	1	1	1	1	1
32	Measles	204	37 3	33 8	54	39	1	93
33	Yellow fever	1	1	1	1	1	1	1
34	Infectious hepatitis	41	1	1 1	4	1	1	2
35	Rabies	1	1	1	1	1	1	1
A 36 (a) 100	Louse-borne epidemic typhus	1	-	1	1	1	1	1
(6) 101	Flea-borne epidemic typhus (murine)	1	-	1	1	1	1	1
	Tick-borne epidemic typhus	1	1	1	1	I	1	1
(d) 105	Mite-borne typhus	1	1	1	1	1	1	1
(e) 102, 103 106 - 108	Other and unspecified typhus	1	1	1	1	1	1	1
-	Vivax malaria (benign tertian)	8	2	1	1	1	1	1
(6) 1111	Malariae malaria (quartan)	23	-	L	1	I	1	1
	Carried forward	4,705	5,789 378	1,577	2,031	1,177	1	3,208

List Number 112 113, 114 116, 117 123.0 123.1 123.2 123.2 123.3 124, 128, 130.0 130.0 130.0 130.0 124, 128, 130.1, 130.2	Conse Crouns	-	Treated 1957						
112 113, 114 116, 117 123.0 123.1 123.1 123.2 123.3 123.3 127 127 127 127 127 127 127 127		Govern-	Govern-	Govern-	Govern-		Whole	Whole Colony	
112 113, 114 116, 117 123.0 123.1 123.2 123.3 127 127 127 127 127 127 127 127		ment Hospitals	Assisted Hospitals	ment Hospitals	Assisted	Male	Female	Sex Un- known	Total
112 113, 114 116, 117 123.0 123.1 123.2 123.2 123.3 127 127 127 127 127 127 127 127	Brought forward	4.705	5.789	378	1.577	2.031	1.177	1	3.208
113, 114 116, 117 123.0 123.1 123.3 123.3 127 127 127 127 127 127 127 127	(Malignant								
115 113, 114 116, 117 123.0 123.1 123.2 123.3 127 127 127 127 127 127 127 127		9	13	1	i	1	1	1	1
113, 114 116, 117 123.0 123.1 123.2 123.3 127 127 127 127 127 127 127 127	r fever	1	1	1	1	-	T	1	F
116, 117 123.0 123.1 123.2 123.3 127 127 127 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2	Other and unspecified forms of								
123.0 123.1 123.2 123.3 127 127 127 127 127 127 127 127 127 127		1	26	1	1	I	1	1	1
123.1 123.2 123.3 127 127 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2	niasis vesical (S. haema-								
123.1 123.2 123.3 127 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2		1	1	i	-	-		1	1
123.2 123.3 125 127 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2	niasis intestinal (5. Man-								
123.2 123.3 127 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2		1	1	1	1	I	1	1	1
123.3 125 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2	niasis pulmonary								
123.3 125 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2	onicum)	1	1	1	1	1	1	1	1
125 127 127 127 129 120 130.0 130.3 124, 128, 130.1, 130.2	unspecified schis-								
125 127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2	sis	1	1	1	1	1	1	1	1
127 127 127 129 129 130.0 130.3 124, 128, 130.1, 130.2	lisease	1	1	1	1	1	1	1	1
127 127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2	iasis	1	1	1	1	1	1	I	1
127 127 129 126 130.0 130.3 124, 128, 130.1, 130.2		1	1	1	1	1	1	1	1
127 129 126 130.0 130.3 124, 128, 130.1, 130.2	:	2	1	1	1	1	1	1	1
129 126 130.0 130.3 124, 128, 130.1, 130.2	riasis		1	1	1	1	1	1	!
126 130.0 130.3 124, 128, 130.1, 130.2	miasis	20	47	1	1	1	1	1	1
130.0 130.3 124, 128, 130.1, 130.2	(infestation) and other								
130.0 130.3 124, 128, 130.1, 130.2	infestations	1	1	1	1	1	1	1	1
130.3 124, 128, 130.1, 130.2	: : : : :	31	61	1	1	1	1	1	1
124, 128, 130.1, 130.2 037	Guinea Worm (dracunculosis)	1	1	1	1	1	1	1	1
130.1, 130.2	cases due to helminths	14	09	1	!	1	1	1	1
037									
	anuloma venereum	3	1	1	1	1	1	1	1
(b) 038 Granuloma inguir	Granuloma inguinale, venereal	-	1	1	1	1	1	1	1
Carri	Carried forward	4.792	5.997	378	1.578	2.031	1.178	1	3.209

APPENDIX 7-Contd.

Inter-	Detailed		Treated 1957		Deaths 1957	1957		Deaths 1957	1957	
List	List	Cause Groups	Govern-	Govern- Go	-	Govern-		Whole Colony	Colony	
Number	Ivamper		Hospitals	p	Hospitals H	Assisted	Male	Female	Sex Un- known	Total
		Brought forward	4.792	5.007	378	1.578	2.031	1.178	-	3.900
A 43 (c)	039	unspecified venereal				2	1001	2		2016
		diseases	80	1	1	1	1	1	1	1
(p)	049	Food poisoning infection and								
			4	1	1	1	1	1	1	-
(e)	071	Relapsing fever	1	1	1	1	1	1	1	1
S	072	Leptospirosis icterohaemorrhagica								
		(Weil's disease)	1	1	1	1	I	1	1	1
(g)	073	Yaws	1	1	1	1	1	1	1	1
(h)	087	Chickenpox	71	80	1	1	1	2	1	2
(E)	060	Dengue	1	1	1	-	1	1	1	1
5	095	Trachoma	67	1	1	1	1	1	1	!
(k)	1.960	Sandfly fever	1	1	1	1	1	1	1	1
(2)	120	Leishmaniasis	1	1	1	1	1	1	1	1
(m)	121	Trypanosomiasis gambiensis	1	1	1	i	1	1	I	1
	(9)	rhodesiensis	1	1	1	1	1	1	I	1
	ં	sciffed								
		trypanosomiasis	1	1	1	1	1	1	1	1
E	131	Dermatophytosis	1	1	1	1	1	1	1	1
0	135	Scabies	4	1	1	1	1	1	1	1
(d)	036,054,059,	All other diseases classified as								
	063,064,070,	infective and parasitic	63	20	2	2	1	9	1	7
	074,086,088,									
	089,093,									
	096.1,096.6,									
	096.8, 096.9,									
	122,132-134,									
	130-138									
		Carried forward	4.945	6.026	381	1.584	9 039	1 186	-	3.218

	Detailed		Treate	Treated 1957 D	Deaths 1957		Dea	Deaths 1957	1957	
mediate	List	Cause Groups	Govern-	Govern- Govern-	ern- Govern-	ė	W	Whole C	Colony	
Number	Number		ment Hospitals	Assisted Hospitals	AH!	als Male	e Female	1	Sex Un- known	Total
		Brought forward	4,945	6,026	381 1,584	4 2,032		1,186	i	3,218
A 44	140 - 148	Malignant neoplasm of buccal								
	1		126	164			114	63	1	177
	150	of o	39	37	9 1	17	43	14	1	174
A 47	152, 153	Malignant neoplasm of stomach	07	113			00	3	1	11.3
		except rectum	37	61		29	24	30	1	54
A 48	154	Malignant neoplasm of rectum	24	33	3 1	13	91	16	1	32
A 49	191	-	17	00		4	10	67	1	12
A 50	162, 163	jo,								
		and of bronchus and lung not	- 33			-				
		specified as secondary	64	95	13 5	52	84	64	1	148
A 51	170	Malignant neoplasm of breast	87	131	-	22	1	22	1	22
A 52	171	Malignant neoplasm of cervix uteri	216	125	9 9	99	T	138	1	138
A 53	172 - 174	Malignant neoplasm of other and								
		unspecified parts of uterus	48	36	3	6	1	46	1	49
A 54	177	-	4	3	1	2	4	1	1	4
A 55	190, 191	Malignant neoplasm of skin	7	9	1	2	61	61	1	4
A 56	196, 197	Malignant neoplasm of bone and			000000000000000000000000000000000000000					
		connective tissue	21	23	2 1	12	10	14	1	24
A 57	155 - 160	Malignant neoplasm of all other								
	164, 165,	and unspecified sites	264	298	88 181		299	153	1	452
	175, 176,									
	178 - 181,									
	192 - 195						_			
	198, 199									
A 58	204	Leukaemia and aleukaemia	83	36	31 1	11	33	16	1	49
		Carried forward	6,055	7,257	591 2,182	2,779		1,868	1	4,647

APPENDIX 7-Contd.

Cause Groups
200
200
Lymphosarcoma and other neoplasms of lymphatic and
haematopoietic system Benign neoplasms and neoplasms
of unspecified nature
:
Tyrotoxicosis with or without goiter
Beriberi
:
Other deficiency states Pernicious and other hyperchromic
anaemias
Iron deficiency anaemias
(hypochromic) Other specified and unspecified
All other allergic disorders, endocrine, metabolic and blood
diseases
Carried Jornard

57	yr.	Un- Total	4,991	1		1	1	The same of the sa	807	94 -	1	1 2	i 1	1	1	1	1	1		1		5 846
Deaths 1957	Whole Colony	Female Sex Un-	1,976	1		1	1		339	17	T	2	1	1	1	1	1	1		T		9 224
		Male F	3,015	1		T	I		468	53	T	I	T	T	T	T	T	1		1		2 519
1957	Govern-	Assisted Hospitals	2,279	1		1	1		428	11	1	1	1	1	1	1	1	1		1		9 710
Deaths 1957	Govern-	Hospitals	622	* 10		1	1		116	56	1	1	1	1	1	1	1	1		1		27.4
ses 1 1957	Govern-	Assisted Hospitals	8.920	1	;	19	7		865	14	1	26	2	115	23	7	41	3		20		10 197
Cases Treated 1957	Govern-	ment Hospitals	7.521	1,005		375	36		238	57	1	85	41	241	36	9	49	3		100		0 200
Spiritual and appeared of print	Cause Groups		Brought forward	Psychoses	Psychoneuroses and disorders of	personality	Mental deficiency	Vascular lesions affecting central	nervous system	Nonmeningococcal meningitis	Multiple sclerosis	Epilepsy	Inflammatory diseases of eye	Cataract	Glaucoma	Otitis externa	Otitis media and mastoiditis	Other inflammatory diseases of ear	All other disease and conditions	of eye		Carried Commend
Detailed	List	Number		300 - 309	310 - 324,	326	325	330 - 334		340	345	353	370 - 379	385	387	390	391 - 393	394	380 - 384	386, 388,	389	
Inter-	List	Number		A 67	A 68			A 70		A 71	A 72	A 73	A 74	A 75	A 76	A 77 (a)	(9)	ં	A 78 (a)			

\* Among these, I died of A63-Diabetes mellitus.

l died of A78(b)—All other diseases of the nervous system and sense organs.

<sup>4</sup> died of A82-Other diseases of heart.

<sup>1</sup> died of A85-Diseases of arteries.

<sup>2</sup> died of A90-Bronchopneumonia.

<sup>1</sup> died of A109-Chronic, other and unspecified nephritis.

APPENDIX 7-Contd.

Inter-	Detailed		Treate	Treated 1957	Deaths 1957	s 1957		Deaths 1957	1957	
mediate List	List	Cause Groups	Govern-	Govern-	Covern-	Govern-		Whole Colony	Colony	
Number	Number		Hospitals	Assisted Hospitals	ment Hospitals	Assisted Hospitals	Male	Female	Sex Un- known	Total
			9,793	10,137	774	2,718	3,512	2,334	1	5,846
A 78 (b)	350 - 352	All other diseases of the nervous	217	84	15	13	18	15	i	33
	354 - 357					}				
	395 - 398									
A 79	400 - 402	Rheumatic fever	44	41	1	1	1	1	1	
	410 - 416	Chronic rheumatic heart disease	369	643	33	101	102	157	1	259
A 81	420 - 422	Arteriosclerotic and egenerative								1
		heart disease	62	237	32	120	324	279	1	603
A 82	430 - 434	Other diseases of heart	193	588	41	83	142	105	1	247
A 83	440 - 443	Hypertension with heart diseases	68	332	12	97	169	101	I	270
A 84	444 - 447	Hypertension without mention								
		of heart	87	320	6 *	12	31	29	1	09
85	450 - 456	Diseases of arteries	95	65	13	3	57	24	1	81
	460 - 468	Other diseases of circulatory system	213	162	4	S	3	9	1	
A 87	470 - 475	Acute upper respiratory infections	481	496	1	S	3	S	1	
A 88	480 - 483	Influenza	215	613	1	1	24	29	1	53
A 89	490	Lobar Pneumonia	75	966	10	86	202	81	1	283
	491	Bronchopneumonia	459	4,644	163	1,797	1,824	1,634	1	3,458
A 91	492, 493	Primary atypical, other and								
		unspecified pneumonia	70	298	14	46	57	38	1	95
A 92	200	Acute bronchitis	265	242	6	16	54	38	1	92
A 93	501, 502	Bronchitis, chronic and unqualified	101	462	2	45	78	79	1	157
A 94	510	Hypertrophy of tonsils and								
		adenoids	287	13	1	1	1	1	1	
A 95	518, 521	Empyema and abscess of lung	69	14	11	4	57	29	1	98
		Carried forward	13,154	21.016	1.148	5,164	6.658	4.984	1	11.642

\* 1 died of A109-Chronic, other and unspecified nephritis.

Number   Cause Groups   Govern   Govern   Govern   Govern   Much	Inter-	Detailed		Ca Treate	Cases Treated 1957	Deaths 1957	1957		Death	Deaths 1957	
Number   Number   Number   Hospitals   H	mediate	List		Govern-	Govern-	Govern-	Govern-	1	Whole	Colony	
96 519 Pleurisy	Number	Number	The second secon	ment Hospitals	Assisted	ment Hospitals	Assisted	Male	Female	Sex Un- known	Total
96 519 Pleurisy 29 82 1 4 41  97 (a) 515-51 All other respiratory diseases 456 206 27 12 61  520, 522  98 (a) 530 Dental Caries 29 3				13,154	21,016	1,148	5,164	6,658	4,984	1	11,642
97 (a) 5523 (b) 511-517 (c) 520, 522 (d) 521-527 (e) 521-527 (e) 521-527 (f) 5	96 Y	519	:	29	82	1	4	41	24	i	65
98 (a)       520, 522         98 (a)       524 - 527         6b       531 - 53         All other diseases of teeth and soft and soft and structures are supporting structures supporting supporting structures supporting supportin	A 97 (a) (b)	523		456	206	27	12	61	52	11	113
98 (a) 531 - 535 All other diseases of teeth and solution in the structures are supporting structures and solution in the string and duodenitis and duodenitis and solution in the string and duodenitis and solution in the string and duodenitis and solution in the string and solution in the string and solution in the string and colitis, ages and solution in the string in the solution in the string in the solution in the string in the solution in the solutio		520, 522									
(b) 531 - 535 All other diseases of teeth and solutions supporting structures	A 98 (a)	530	:	29	3	i	1	1	1	1	1
99 540 Ulcer of Stomach 305 647 8 47 68 100 541 Ulcer of Stomach 305 647 8 47 68 101 543 Castrix and duodenitis 837 512 1 3 560, 561, Intestinal obstruction and hernia 562 322 29 15 54 104 (a) 571.0 Gastro-enteritis and colitis, ages 229 495 18 105 584, 585 Choolic enteritis and ulcerative colitis 234 308 43 66 160 106 584, 585 Cholelithiasis and cholecystitis 243 89 1 5 107 536 - 539 Other diseases of digestive system 782 636 91 47 99 107 586, 587 Carried forward 17,897 27,712 1,433 6,507 8,068	(p)	531 - 535	All other diseases of teeth and								
100 541 Ulcer of duodenum 381 743 8 4 4 4 550 - 553 Appendicitis 381 773 8 207 - 4 4 4 550 - 553 Appendicitis 562 322 29 15 54 10 6 571.0 Gastro-enteritis and colitis, ages 229 495 18 159 150 Chronic enteritis and olerative colitis 229 495 18 159 150 100 554 585 Cholelithiasis and cholecystitis 234 89 1 55 15 15 15 15 15 15 10 107 554 584, 585 Cholelithiasis and cholecystitis		072	tures	145	18	10	124	1 89	96	1	100
101 543 Gastritis and duodenitis 58 207 — 4 4 550, 561, Intestinal obstruction and hernia 562 322 29 15 54 1570 Gastro-enteritis and colitis, between 4 weeks and 2 years 444 2,942 63 949 701 Castro-enteritis and colitis, ages 229 495 18 159 150 Chronic enteritis and ulcerative colitis 234 308 43 66 160 160 5536 539 Other diseases of digestive system 782 636 91 47 99 542, 544, 585 Cholelithiasis and cholecystitis 782 636 91 47 99 542, 544, 585 Cholelithiasis and cholecystitis 782 636 91 47 99 542, 544, 585 Cholelithiasis and cholecystitis 17,897 27,712 1,433 6,507 8,068		541	: :	381	73	0 00	6	28	2 00		36
102 550 - 553 Appendicitis 562 322 29 15 54 570 104 (a) 571.0 Gastro-enteritis and colitis, ages (b) 571.1 Gastro-enteritis and colitis, ages (c) 572 Chronic enteritis and ulcerative colitis (c) 572 Chronic enteritis and ulcerative colitis (c) 572 Chronic enteritis and cholecystitis 224 308 43 66 160 107 536 - 539 Other diseases of digestive system 782 636 91 47 99 545, 545, 558, 580, 587 Garried forward 17,897 27,712 1,433 6,507 8,068		543	: :	58	207	1	1	4	2	1	9
103 560, 561, Intestinal obstruction and hernia 562 322 29 15 54  104(a) 571.0 Gastro-enteritis and colitis, between 4 weeks and 2 years 444 2,942 63 949 701  2 years and over 229 495 18 159 150  2 years and over 234 308 43 66 160  584, 585 Cholelithiasis and cholecystitis 243 89 1 5  542, 544, 544, 545, 544, 545  586, 587  Carried forward 17,897 27,712 1,433 6,507 8,068		550 - 553	:: ::	837	512	1	3	5	5	1	10
(b) 571.0 Gastro-enteritis and colitis, between 4 weeks and 2 years 444 2,942 63 949 701 between 4 weeks and 2 years 444 2,942 63 949 701 2 years and over 229 495 18 159 150 Chronic enteritis and ulcerative colitis 9 156 — 27 23 106 584, 585 Cholelithiasis and cholecystitis 234 89 1 56 160 160 542, 544, 544, 544, 558. 580, 587 586, 587 586, 587 586, 587	A 103	560, 561,	ction and hernia	562	322	53	15	54	22	1	92
(b) 571.0 Gastro-enteritis and colitis, between 4 weeks and 2 years 444 2,942 63 949 701  (c) 571.1 Gastro-enteritis and colitis, ages 229 495 18 159 150  2 years and over 229 495 18 159 150  (c) 572 Chronic enteritis and ulcerative colitis 9 156 — 27 23  105 584, 585 Cholelithiasis and cholecystitis 243 89 1 5  542, 544, 545, 544, 545, 544, 545, 580, 581  Carried forward 17,897 27,712 1,433 6,507 8,068		570									
(b) 571.1 Gastro-enteritis and colitis, ages	A 104 (a)	571.0	colitis,	444	9 049	63	040	701	675		1 376
(c) 572 Chronic enteritis and ulcerative colitis 581 Chronic enteritis and ulcerative colitis 234 308 43 156 27 23 23 150 150 150 150 150 150 150 150 150 150	(9)	571.1	colitis, ages		1	2	1				2
(c) 572 Chronic enteritis and ulcerative colitis 9 156 — 27 23 105 581 Cirrhosis of liver 234 308 43 66 160 100 584, 585 Cholelithiasis and cholecystitis 243 89 1 5 15 15 107 536 - 539 Other diseases of digestive system 782 636 91 47 99 545, 545, 573 - 580, 582 - 583, 586, 587 Carried forward 17,897 27,712 1,433 6,507 8,068			2 years and over	229	495	18	159	150	149	1	299
105 581 Cirrhosis of liver 234 308 43 66 160 160 160 584, 585 Cholelithiasis and cholecystitis 243 89 1 5 15 15 107 536 539 Other diseases of digestive system 782 636 91 47 99 545, 573 - 580, 573 - 583, 586, 587 Carried forward 17,897 27,712 1,433 6,507 8,068	ં	572	Chronic enteritis and ulcerative colitis	6	156	13	27	23	16	1	39
106 584, 585 Cholelithiasis and cholecystitis 243 89 1 5 15 15 107 536 - 539 Other diseases of digestive system 782 636 91 47 99 542, 544, 545, 5573 - 580, 582 - 583, 586, 587 Carried forward 17,897 27,712 1,433 6,507 8,068	A 105	581		234	308	43	99	100	42	1	202
536 - 539 Other diseases of digestive system 782 636 91 47 99 542, 544, 545, 573 - 580, 582 - 583, 586, 587 Carried forward 17,897 27,712 1,433 6,507 8,068	A 106	584, 585	cholecystitis	243	68	-	0	15	13	1	28
580, 583, 583, 587 Carried forward 17,897 27,712 1,433 6,507 8,068	A 107		Other diseases of digestive system	782	636	91	47	66	10	1	175
589, 583, 587 Carried forward 17,897 27,712 1,433 6,507 8,068											
583, 587 Carried forward 17,897 27,712 1,433 6,507 8,068		573 - 580,									
587 Carried forward 17,897 27,712 1,433 6,507 8,068		582 - 583,									
17,897 27,712 1,433 6,507 8,068								-			-
			Carried forward	17,897	27,712	1,433	6,507	8,068		1	14,162

Inter-	Detailed		Treate	Cases Treated 1957	Deaths 1957	1957		Deaths 1957	1957	
List	List	Cause Groups	Govern-	Govern- ment	Govern-	Govern- ment		Whole Colony	Colony	
Number	TAMILIDE	STATE OF THE PARTY	Hospitals	Assisted	Hospitals	Assisted	Male	Female	Sex Un- known	Total
		Brought forward	17,897	27,712	1,433	6,507	8,068	6,094	1	14,162
A 109	591 - 594	Acute nephritis Chronic, other and unspecified	71	138	1	21	24	23	1	47
A 110	600		146	377	22	111	190	158	1	348
	602, 604	em	204	97	4	7 61	4 4	7	li	20 10
	610	:	15	4	67	1	9	1	1	9
A 113 A 114(a)	620, 621	:	57	28	11	11	11	1		1
(q)	634	of menstruation	39	75					11	
(c)	601, 603,									
	605 - 609,	genito-urinary system	1,560	1,369	10	S	6	6	1	18
	614 - 617,		4							
	635 - 637.									
A 115	640 - 641, 682,	Sepsis of pregnancy, child-birth and the puerperium		21	-	1	- 1	64	1	61
711.4										
A 110	685, 686	loxaemias of pregnancy and the	936	150	7	95	-	37	1	37
A 117		e of pregnancy and						5		5
A 118	670 - 672	childbirth Abortion without mention of	410	356	14	25	1	43	1	43
		:	616	1,996	1	3	1	4	1	4
4 119	651	Abortion with sepsis		124	1	1	1	1	1	1
		Carried forward	22,115	32,544	1,493	6,702	8,305	6,375	1	14,680

mediate List Number			Treated 1957	d 1957	Deatus 1951	1061 8			Deatins 1991	
Number	List	Cause Groups	Govern-	Govern-	Govern-	Govern-		Whole	Whole Colony	
	Number	The same of the sa	ment Hospitals	Assisted Hospitals	ment Hospitals	Assisted Hospitals	Male	Female	Sex Un-	Total
		Brought forward	22,115	32,544	1,493	6,702	8,305	6,375	1	14,680
A 120(a)	645 - 649, 673 - 680,	Other complications of pregnancy, childbirth and the puerperium	5,778	897	7	22	1	19	1	19
	683,									
(9)	099	Delivery without complication	11,863	33,635	1	1	1	1	1	1
171 W	050 - 050	- 100	602	356	8	38	29	24	1	53
A 122	720 - 725	:	62	151	1	1	-	m	1	4
C71 W	170, 171	rheumatism, unspecified	16	7	1	1	1	1	1	1
A 124	730	stitis	81	46	1	5	2	1	1	2
A 125	737,									
1 1006 1	745 - 749	-	18	57	1	1	1	1	1	1
A 120(a)	cr)	60	38	211	1	1	-	-	1	1
(9)	700 - 714,	All other diseases of skin	372	197	5	3	1	6	1	10
(3)	731 - 736	All other diseases of					N.			
(2)	738 - 744	musculoskeletal	130	49	1	1	1	1	1	1
A 127	751	Spina bifida and meningocele	8	10	1	6	4	80	1	12
A 128	40/	circulatory system	64	11	15	7	18	14	1	32
A 129	750, 752,	All other congenital malformations	171	137	32	41	49	43	1	92
	755, 750									
A 130	760, 761	Birth injuries	50	9	30	S	31	19	1	50
A 131	762	Postnatal asphyxia and atelectasis	376	117	27	96	191	101	1	262
		Carried forward	41,744	68,379	1,618	806'9	8,602	6,615	1	15,217

APPENDIX 7-Contd.

Inter-	Detailed		Ca Treate	Cases Treated 1957	Deaths 1957	s 1957		Deaths 1957	1957	
List	List	Cause Groups	Govern-	Govern-	Govern-	Govern-		Whole	Colony	
Number	Number		Hospitals	Assisted	ment Hospitals	Assisted Hospitals	Male	Female	Sex Un- known	Total
		Brought forward	41,744	68,379	1,618	806'9	8,602	6,615	1	15,217
A 132(a)	164	Diarrhoea of newborn (under 4 weeks)	128	128	7	88	55	57	1	112
(9)	765	Ophthalmia neonatorum	13	1	1	1	1	1	1	1
(9)	(c) 763, 766-768	Other infections of newborn	110	186	14	152	179	160	1	339
A 133	770	Haemolytic disease of newborn	19	42	15	34	48	27	1	75
A 134	769,771,772	All other defined diseases of early infancy	371	38	81	23	65	45	+	110
A 135	773 - 776	Ill-defined diseases peculiar to early infancy	472	588	152	492	541	417	-	959
A 136	794	Senility without mention of psychosis	67	395	1	136	151	267	1	418
A 137(a)	788.8	Pyrexia of unknown origin	113	24	1	1	1	1	1	-
(9)	793	Observation, without need for further medical care	347	999	1	1	1	1	1	
©	(c) 780 - 787 788.1-788.7 788.9, 789 - 792, 795	All other ill-defined causes of morbidity	. 118	203	14	33	641	515	-	1,163
- 19		Carried forward	43,437	70,648	1,901	7,866	10,282	8,103	80	18,393

APPENDIX 7-Contd.

957	Colony	Sex Un- known Total	8 18,393	- 119	- 47		- 106	10	- 80	31	-	- 135	10 00
Deaths 1957	Whole Col	Female kr	8,103	34	21	ıs	30	F	47	15	1	32	1000
		Male 1	10,282	82	26	9	92	ıo	33	16	1	103	007.01
1957	Govern-	Assisted Hospitals	7,866	1	1	1	1	1	1	1	1	1	,,,,,
Deaths 1957	Govern-	ment Hospitals	1,901	57	17	7	54	60	13	26	1	1	0000
es 1 1957	Govern-	Assisted Hospitals	70,648	1	1	1	13	1	1	30	1	1	000
Cases Treated 1957	Govern-	ment Hospitals	43,437	735	346	147	1,240	170	125	296	00	25	000
	Cause Groups	THE ROLL OF THE PARTY OF THE PA	Brought forward	Motor vehicle accidents	Other transport accidents	Accidental poisoning	Accidental falls	Accident caused by Machinery	Accident caused by fire and explosion of combustible material	Accident caused by hot substance, corrosive liquid, steam and radiation	Accident caused by firearm	Accidental drowning and submersion	
Detailed	List	Number		E810 - E835	E800 - E802 E840 - E866	E870 - E895	E900 - E904	E912	E916	E917, E918	E919	E929	
Inter-	mediate List	Number		AE 138	AE 139	AE 140	AE 141	AE 142	AE 143	AE 144	AE 145	AE 146	

APPENDIX 7—Contd.

madiote	Detailed		Treated 1957	Cases ated 1957	Deaths 1957	1957		Deaths 1957	1957	
List	List	Cause Groups	Govern-	Govern-	Govern-	Govern-		Whole Colony	Colony	
Number	Number	the state of the s	ment Hospitals	Assisted Hospitals	ment Hospitals	Assisted Hospitals	Male	Female	Sex Un- known	Total
AE 147		Brought forward	46,529	70,693	2,079	7,866	10,632	8,287	00	18,927
(a)	E920	Foreign body entering eye and adnexa	4	- 1	1	1		1	1	1
(b)	(b) E923	Foreign body entering other orifice	124	1	1	1	1	1	1	2
(c)	(c) E927	Accidents caused by bites and stings of venomous animals and insects	31	1	1	1	1	. 1	1	1
(p)	(d) E928	Other accidents caused by animals	6	11	23	1	3	1	1	4
9	E910, E911, E913-E915, E921-E922, E924-E926, E930-E965	All other accidental causes	722	62	26	1	75	38	1	113
AE 148	E970 - E979	Suicide and self-inflicted injury	310	1	51	1	177	119	1	296
AE 149	E980 - E985	Homicide and injury purposely inflicted by other persons (not in war)	281	1	80	1	15	00	1	23
AE 150	E990 - E999	Injury resulting from operations of war	1	1	1	i		1	1	1
		GRAND TOTAL	48,010	79,767	2,167	7,866	10,903	8,454	00	19,365

		Total	12	91	16	1		196	144	15	1	ro.	109	06	368	972
Deaths 1957	Whole Colony	Sex Un-	1	1	1	1	1	1	I	1	1	1	1	1	1	1
Death	Whole	Female	3	9	80	1	1	58	44	5	1	2	61	36	128	351
		Male	6	10	8	1	1	138	100	10	1	67	48	54	240	621
Deaths 1957	Govern-	Assisted Hospitals	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Death	Govern-	ment Hospitals	12	16	7	1	1	100	34	7	1	61	43	30	15	266
es 1 1957	Govern-	Assisted	1	9	11	61	9	9	4	46	67	1	30	4	-	119
Cases Treated 1957	Govern-	ment Hospitals	231	242	696	81	35	1,047	109	583	152	200	408	439	77	4,573
	Cause Groups		Fracture of skull	Fracture of spine and trunk	Fracture of limbs	Dislocation without fracture	Sprains and strains of joints and adjacent muscle	Head injury (excluding fracture)	Internal injury of chest, abdomen and pelvis	Laceration and open wounds	Superficial injury, contusion and crushing with intact skin surface	Effects of foreign body entering through orifice	Burns	Effects of poisons	All other and unspecified effects of external causes	TOTAL
Detailed	List	Number	N800 - N804	N805 - N809	N810 - N829	N830 - N839	N840 - N848	N850 - N856	N860 - N869	N870 - N908	N910 - N929	N930 - N936	N940 - N949	096N - 096N	N950 - N959 N980 - N999	
Inter-	List	Number	AN 138	AN 139	AN 140	AN 141	AN 142	AN 143	AN 144	AN 145	AN 146	AN 147	AN 148	AN 149	AN 150	

## IN-PATIENT ADMITTED INTO GOVERNMENT, GOVERNMENT ASSISTED AND PRIVATE HOSPITALS IN 1957, INCLUDING CASES REMAINING IN HOSPITALS FROM THE PREVIOUS YEAR

NAME	Beds	General Cases	In- fectious Cases	Tuber- culosis Cases	Mater- nity Cases	Mental Cases	Total
Government Hospitals:							
	1000						
Queen Mary	599	11,190	117 76	466	1,950	2	13,725
Kowloon	313 88	7,653 340	1,281	45	2,861	16	1,666
Sai Ying Pun Tsan Yuk	200	1,323	1,201	_	11,064		12,38
W	140	-,020		_		1,358)	
*Castle Peak	120	_	-	_	-	-3	1,35
Stanley Prison	82	1,041	125	120		9	1,29
Eastern Maternity	24	106		-	2,256	-	2,36
Wan Chai Social Hygiene	30	313	412		-	-	72.
Lai Chi Kok	476	160	1,127	540		-	1,82
St. John	102	1,216 52	44	136 20	504		1,900
Lai Chi Kok Female Prison	10	32	-	20			0.
TOTAL	2,184	23,394	3,186	1,401	18,642	1,387	48,010
Government Assisted Hospitals:							
Tung Wah Group	1,097	24,343	220	2,813	31,334	-	58,71
Alice Ho Miu Ling Nethersole	276	4,838	71	124	2,071	-	7,10
Ruttonjee Sanatorium	336	1		873	-	-	87
Grantham	540	1 717	_	449	064	-	9 69
Pok Oi	60	1,717	634	=	964		2,68
Hay Ling Chau Leprosarium Haven of Hope Tuberculosis	580		054			1	0.0
Sanatorium	120	_	_	192		-	19
Sandy Bay Convalescent Home	54	-	-	123	-	-	12
TOTAL	3,063	30,899	925	4,574	34,369	_	70,76
Private Hospitals :							
St. Paul's	172	1,880	271	384	597	5 30	3,13
The Vest Cl. T.C	125	258	1	1	133		39
Precious Blood	90	2,410	111	136	105		2,76
Hong Kong Sanatorium	302	6,197	126	368	1,356	104	8,15
St. Francis	70	1,540	26	24	-	-	1,59
St. Teresa's	90	2,231	50	130	335	-	2,74
Hong Kong Central	90	3,256	48	164	208	-	3,67
Matilda and War Memorial Canaan Convalescent Home	52 60	1,007	=	102	101	=	1,11
TOTAL	1,051	18,780	633	1,313	2,835	104	23,66
GRAND TOTAL	6,298	73,073	4,744	7,288	55,846	1,491	142,443

<sup>\*</sup> Figures are included in Mental Hospital's return.

## ${\bf OUT\text{-}PATIENTS - 1957}$

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

INSTITUTIONS	Dress- ings	General Out- patients	Chil- dren's Clinics	Ante- natal	Post- natal	Gynaeco- logical	Social Hygiene	Eye	Ear, Nose & Throat	Tuber- culosis	Casualty	Ortho- paedic	Leprosy	Mental	Total
Hospitals:															
Queen Mary            Kowloon            Tsan Yuk            St. John            Stanley Prison            Lai Chi Kok Female Prison            Mental	8,015 327,573 12,511 5,265 10,362	11.333 139,616 27,935 68,081 8,901	18 270 13,782 27,431 —	2,657 13,398 38,516 1,118	498 1,021 3,820 — —	3,845		15 1,144 = =	9,317 — — — —	64 	13,896 51,986 — 170 2,056 —	970			42,513 547,026 68,629 63,093 85,430 8,901 4,428
Clinics and Dispensaries:							,	( ) 007							
Sai Ying Pun	37,783	100,620	75,382	5,537	135	4,593		(a) 927 (b) 6,521	1,837	-	-	3,241	-	-	236,576
Violet Peel Violet Peel Ophthalmic Clinic Wan Chai Chest Clinic Kowloon Chest Clinic Social Hygiene Clinics	122,748 — — — —	112,518 — — — — —	92,570 — — — —		=	=======================================	193,674	21,943 31,001 —	2,792 = = = =	248,201 281,210	1,257 — — — — —	1,311 —	- 170 419	= = =	354,104 31,001 249,682 281,629 193,674
14 Public Dispensaries (Hong Kong & Kowloon) 15 New Territories Disps Families Clinic, Hong Kong Hong Kong Police Med. Post Kowloon Police Med. Post	122,136 67,013 12,915 1,913	254,640 79,427 8,180 13,308 10,405	312,541 90,248 	13,727 25,673 370 320	1,824 1,158 — 4	250 638	2,108 	405 5,617 641 1,084	323 — 531 1,694	3,562 11,565 — 33 115	474 5,615 478		213 1,775 — — — — 25	=======================================	716,106 290,199 8,331 44,153 36,503
Victoria Remand Prison Victoria Remand Prison Family Clinic	1,057	48,356 186	357	- 4	_	14	56	65	61	86	_	45	_	_	49,751
Port Health Kowloon Canton Railway Clinic Government Ophthalmic	174	1,970 1,151	1,072	=	=	=	=	Ξ	=	=	=	=	=	=	1,970 2,397
Clinic, Arran Street Chi Ma Wan Prison Clinic	1,938	4,130	=	=	_	=	- 9	60,026 86	_	_	=	=	=	=	60,026 6,163
Health Centres:															
Harcourt				1,972 859 5,309 1,472 2,363 244	296 290 709 308 231 11									= = = = = = = = = = = = = = = = = = = =	2,268 1,149 6,018 1,780 2,594 255
Total of Government Institutions	731,503	890,757	649,064	113,539	10,305	20,514	198,578	129,489	16,762	546,853	75,932	6,286	3,064	4,428	3,397,074
Tung Wah Group of Hospitals Alice Ho Miu Ling Nethersole	33,975	222,714	109,522	23,382	-	3,872	-	21,612	1,848	15,134	112	2,034	-	-	434,205
Hospital	447 — 2,087	19,214 	9,116   	11,626 — 1,573 —	1,253 	17,139 — 851 —	=		=	14,179 9,838	=	Ξ	= =	=	58,795 14,179 68,437 37,787
GRAND TOTAL	768,012	1,219,612	767,702	150,120	14,465	42,376	198,578	153,142	18,610	586,004	76,044	8,320	3,064	4,428	4,010,477

<sup>(</sup>a) Patients seen in Government Eye Clinic. (b) Patients seen in Hong Kong University Eye Clinic.

## OUT-PATIENTS — 1957

## NEW CASES AT GOVERNMENT AND GOVERNMENT ASSISTED HOSPITALS, CLINICS AND DISPENSARIES

INSTITUTIONS	Dress- ings	General Out- patients	Chil- dren's Clinics	Ante- natal	Post- natal	Gynaeco- logical	Social Hygiene	Eye	Ear, Nose & Throat	Tuber- culosis	Casualty	Ortho- paedic	Leprosy	Mental	Total
Hospitals :  Queen Mary	7,884 149,347 4,574 4,215 1,419	5,079 107,493 ————————————————————————————————————	15 92 1,561 22,172 —	422 2,448 10,123 481	218 795 3,218 — —	446 1,594 — — 30 — —	_ _ _ _ 514	15 — 568 —	156 2,827 — — — —	64 — — 382 —	11,165 51,986 — 170 513 —	278  -  -  -  -  -			25,742 316,582 19,476 50,078 27,517 8,901 704
Clinics and Dispensaries:															
Sai Ying Pun	4,971 42,352 — —	73,027 67,694 — —	64.607 58,170 — — —	1,572 — — — —	- 9	2,178 		(a) 558 (b) 1,498 10,136 13,009	391	17,748 14,480	1,257 — — —	719 106 543	_ _ _ _ 28 51	11111	149,730 180,694 13,009 18,319 14,531 31,393
14 Public Dispensaries (Hong Kong & Kowloon) 15 New Territories Disps. Families Clinic, Hong Kong Hong Kong Police Medical	41,041 18,951 —	165,703 62,621 480	250,836 72,596 —	5,249 6,955 —	1,605 1,132	3,060	347	327 3,086	293 —	1111 1,730	-	==	734 —	Ξ	468,705 173,491 480
Post Kowloon Police Medical Post Victoria Remand Prison Victoria Remand Prison	5,742 841 680	8,239 22,422	7,720 14,764	207 311 —	_ 4	143 315 —	42 79 47	379 756 34	48	14 103 82	-	191 — 45	= 25	=	22,525 26,416 23,383
Family Clinic Port Health Kowloon Canton Railway Clinic Government Ophthalmic Clinic, Arran Street	71 170	_	233 1,047	_ 4	=		= -	29,972	- 32 	_ 3 	=	= -			460 1,744 2,330 29,972
Chi Ma Wan Prison Clinie	382	1,278	-	-	-	-	2	18	-	-	-	- 1	-	-	1,680
Health Centres :  Harcourt  Western  Kowloon  Chai Wan  Ho Man Tin  Shek Kip Mei		=======================================	=======================================	414 169 941 556 605 137	184 187 275 237 114				=====						598 356 1,216 793 719 146
Total of Government Institutions	282,640	580,370	493,813	30,594	7,987	7,777	32,424	60,368	6,162	34,717	71,382	1,882	870	704	1,611,690
Tung Wah Group of Hospitals. Alice Ho Miu Ling Nethersole Hospital Ruttonjee Sanatorium Pok Oi Hospital Rennie's Mill Church Clinic	14,681 _ _ _ _	77,771 6,738 35,201 569	47,801 1,968 —	20,796 2,701 — 1,348	1,253 - 969	1,598 5,437 — — — — —	-	6,709 — — —	607	1,931 	=	541 — — —		11111	172,547 18,097 14,179 37,819 680
GRAND TOTAL	297,321	700,649	543,582	55,439	10,209	15,113	32,424	67,077	6,769	50,938	71,494	2,423	870	704	1,855,012

<sup>(</sup>a) Patients seen in Government Eye Clinics.

<sup>(</sup>b) Patients seen in Hong Kong University Eye Clinic.

APPENDIX 11

ATTENDANCES AT PUBLIC DISPENSARIES (HONG KONG AND KOWLOON) — 1957

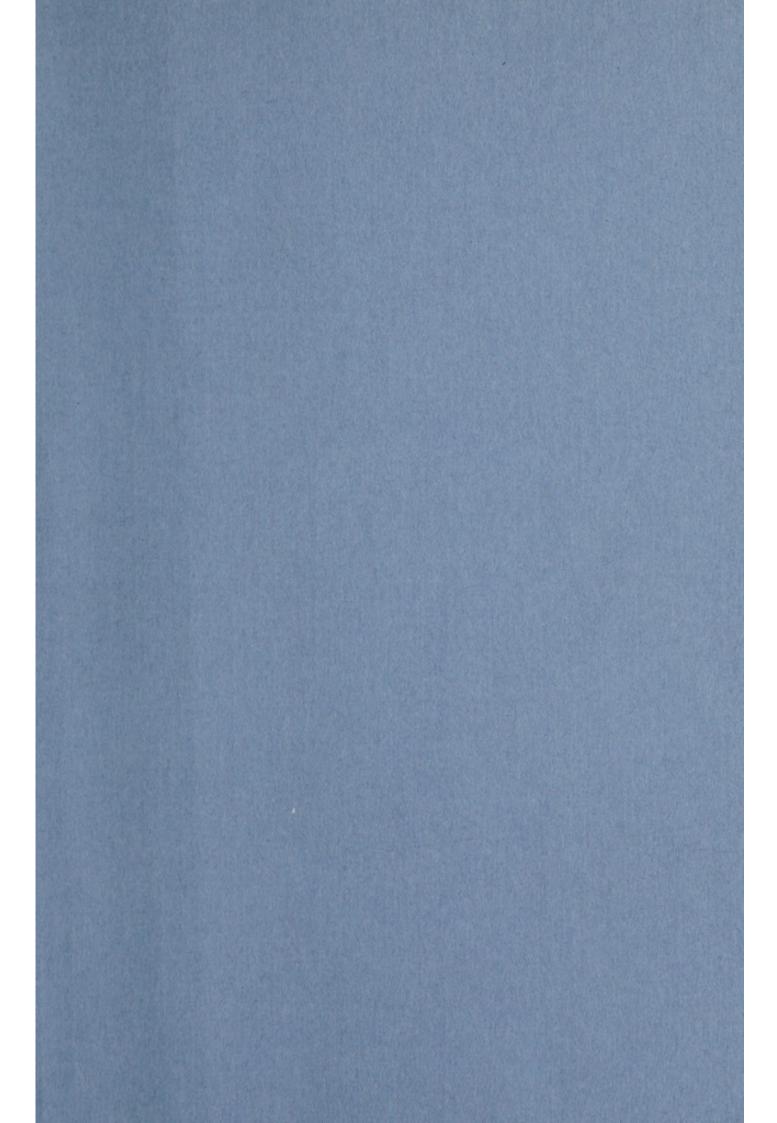
			Out-P	Out-Patients		Deliveries	eries		
		Children	lren	Adults	lts			Vaccino	Image
Fublic Dispensaries		New Cases	Total attend- ances	New Cases	Total attend- ances	In- patients	Domi- ciliary	tions	tions
Central		21,877	27,133	13,744	21,744	1	1	3,212	2,381
Eastern	:	22,796	26,741	12,705	22,177	1	1	7,991	122
Shau Kei Wan		50,473	60,170	30,574	62,045	1	377	4,639	3,876
Aberdeen	:	16,514	18,826	10,308	20,639	1	547	3,493	3,486
Sham Shui Po	:	1	1	38,931	105,898	1	511	5,088	1
Yau Ma Tei	:	14,179	21,510	7,526	14,364	1	144	4,696	3,715
Hung Hom	:	21,152	22,677	11,212	14,414	-1	1	3,050	2,924
Stanley	:	1,614	2,102	3,657	8,666	245	7	1,134	1,024
Li Kee Memorial	:	61,436	69,841	34,089	51,380	1	809	20,669	16,406
Mong Kok Clinic	:	40,795	63,541	24,452	39,547	1	1	1	1
Li Cheng Uk Clinic	:	1	1	15,280	20,488	1	1	10	1,978
Tai Hang Tung Clinic	:	1	I	12,327	17,852	1	1	1	10,777
North Point Health Centre	:	1	1	454	902	1	1	1	67
Shek Kip Mei Health Centre		1	1	2,610	3,446	1	32	73	131
TOTAL		250,836	312,541	217,869	403,565	245	2,427	54,056	46,822

APPENDIX 12
ATTENDANCES AT MEDICAL CENTRES — NEW TERRITORIES, 1957

		Out-p	atients	Deliv	veries
Dispensaries		New Cases	Total Attendances	In-patients	Domiciliary
Hong Kong Jockey Cl Clinic, Tai Po		29,938	47,177	1,232	4
Ho Tung	 	2,537	5,887	729	10
Sha Tau Kok	 	5,085	10,125	296	6
Yuen Long	 	21,938	49,183	1,605	8
San Hui	 	3,248	7,758	660	11
Sai Kung	 	21,433	29,222	399	65
Sha Tin	 	5,786	10,493	441	29
Гаі О	 	25,431	38,461	343	-
Silver Mine Bay	 	8,063	9,149	76	4
Peng Chau	 	4,590	5,744	-	-
Travelling (East)	 	9,222	10,910	-	-
Travelling (West)	 	760	2,006	-	-
Maurine Grantham He Centre		30,597	53,398	1,713	48
Tai Lam Chung	 	2,641	5,638	-	-
North Lamma Clinic	 	2,222	5,048	24	2
TOTAL	 	173,491	290,199	7,518	187

## A SUMMARY OF THE WORK DONE AT THE HONG KONG AND KOWLOON PUBLIC MORTUARIES, 1957

**	OHLOOM	LUDI	ne me	JICI OF	uiiis,	1931			
Total No. of Post-morter	n Examina	ations p	erform	ed dur	ing the	year			4,387
No. of male bodies exam	ined								2,833
No. of female bodies exam									1,547
Sex unknown owing to d									7
No- of claimed bodies ser									1,628
No. of unclaimed bodies,	mostly ab	oandone	d		***				2,759
No. of bodies cremated						***			186
No. of Chinese bodies exa									4,358
No. of non-Chinese bodie		d							29
No. of Medico-Legal Case	es								698
						Male		Female	Total
No. of bodies under 2 yes	ars of age					952		808	1,760
No. of bodies over 2 year						1,882		739	2,621
No. of bodies received fro						-,			2,021
Hong Kong	one the ron	owing .	sources						
Victoria District								640	
Shau Kei Wan								640	
Infant Hospital								115	
Other Hospitals						***		46	
Marine Police S								114	
Cheung Chau Po							•••	112	
Tai O Police Sta							***	18	
Tai o Tonce St	ation					***		4	
Kowloon and New To	arritarias							1,049	
Sham Shui Po I		ion						240	
	once Stati	ion						348	
Kowloon City Yau Ma Tei	" "							526	
	" "		***					59	
Mong Kok Tsim Sha Tsui	" "						•••	108	
Hung Hom	" "		***					7	
Marine	" "						***	48	
Castle Peak	" "							4	
Ta Ku Ling	" "							11	
Ping Shan	" "				***			3	
Lok Ma Chau	" "		***		•••	***		49	
Sha Tau Kok	" "						•••	12	
Sha Tin	" "							8 15	
Tai Po	" "								
Sheung Shui	" "		***					44	
Sai Kung	" "							51	
Pat Heung	" "							11	
Tsuen Wan	" "							55	
Maurine Granth	am Health	Centre	NT						
Li Kee Memoria			,					6	
Hospitals, etc.	Dispense	,	***						
arospituis, etc.		***						1,967	
								3,338	
No. of rats caught and br	ought to r	nortuar	ies						267,756
No. of rats examined					***	•••			267,756
No. of rats' spleen smears									16,610
No. of rats infected with					200				nil.
	- B								mu.





Code No.: 3039-58