

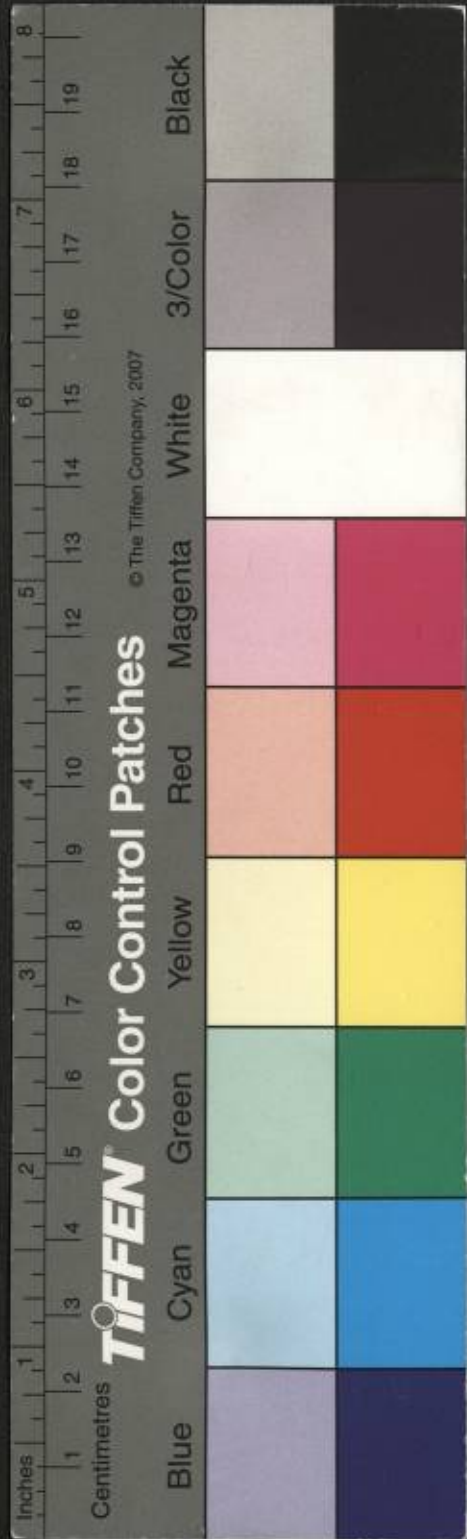
1972-73
ANNUAL DEPARTMENTAL
REPORT



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DIRECTOR OF MEDICAL AND HEALTH SERVICES



CONTENTS

HONG KONG
ANNUAL DEPARTMENTAL REPORT
BY THE
DIRECTOR OF MEDICAL AND HEALTH SERVICES
G. H. CHOA, C.B.E., J.P., M.D. (HONG KONG), F.R.C.P.,
F.R.C.P.E., D.T.M. & H. (LIVERPOOL)
FOR THE
FINANCIAL YEAR 1972-73*

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EXCHANGE RATES

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I. INTRODUCTION

A CHANGE has been brought into this Report. The main review adheres to traditional presentation, but this Introduction has been revised, as well as lengthened, so as to highlight some of the significant events and developments which occurred in 1972-73.

General

2. It is gratifying to note from the vital statistics that the health of the population remained good during the year. The general picture is favourable, and reflects the rapid improvement of medical and health services for a young and expanding population. An interesting development relates to the crude birth rate. At 19.4, this was slightly above the rate for 1971, and appears to have reversed a continuous downward trend since 1960. What this portends for the future remains to be seen, but the reversal comes in a year when the Department is preparing to assume a more direct role in family planning, making the timing most opportune.

3. There was no outbreak of cholera in 1972, but on three occasions, routine examination of nightsoil samples on Hong Kong Island revealed the presence of cholera vibrio. The public were informed of the findings, and advised to observe strictly the rules of personal and food hygiene. In the event, the record of freedom from cholera in Hong Kong since the last notification in 1969 remains unbroken.

4. Tuberculosis continued to be the major cause of death among the communicable diseases. Although virtually eradicated among the young as a result of vaccination with B.C.G. of the new-born, the disease took a significant toll among the unprotected adult population, with mortality increasing from 30.9 in 1971 to 32.2 this year. The Chest Service reports continuing progress on Hong Kong's collaboration with the Medical Research Council of the United Kingdom as to the ways by which treatment of tuberculosis could be made more efficient, cheaper, and shorter. Many of the results of the numerous current investigations are in fact already being applied in practice. What is significant about this joint endeavour is that although the studies are

primarily intended to benefit the people of Hong Kong, the findings have worldwide implications.

5. But this emphasis on tuberculosis as a continuing problem should be seen in the proper perspective of its relationship to the other major causes of mortality. Again this year tuberculosis ranks fifth, the first being cancer, followed by heart diseases, pneumonia, and cerebrovascular diseases. In 1972, the death rate from cancer rose to 107.3 per 100,000 of the population from 104.7 in 1971. The commonest types were cancer of the lung, primary cancer of the liver, nasopharyngeal cancer, and cancer of the stomach.

Disablement and Age

6. The year saw an increase in problems connected with caring for the chronic sick, the disabled, the elderly, and the drug-addicted. The Government announced its intention to provide an allowance without a means test for the severely physically disabled and the elderly aged 75 and over. Although the scheme is to be operated by the Social Welfare Department, the Medical and Health Department will become involved because of the need to assess the severity of the disability.

7. Increasing concern for the welfare of the aged was also reflected in 1972 by the Government's appointment of a widely representative working party to consider the needs of the elderly. The Department took part in these deliberations, and made a useful contribution to the working party's final report. This stressed the point that the elderly should be served in a variety of ways, helped to stand on their own feet, encouraged to feel they were still contributing to the community, and not placed in institutions unless this was absolutely necessary. These recommendations accorded largely with world trends in attitudes, both philosophic and practical, towards the problems posed by geriatrics.

Siu Lam Hospital

8. The Siu Lam Hospital for the severely mentally retarded was completed in the last financial year, but opened in 1972. When Sir Kenneth Ping-fan FUNG cut the ribbon on 28th June, he said the Hospital was a manifestation of the Government's view that the time had come for all sections of the community even the most disadvantaged, to be 'brought into the fold to enjoy the benefits of an improved economy and general prosperity'. Siu Lam was a recom-

mendation of Dr. L. T. HILLIARD, who had been invited in 1959 to investigate, advise and report to the Government on the problems of mental deficiency in Hong Kong.

9. Dr. HILLIARD concluded that mentally subnormal or defective persons should be grouped in three main categories, according to the severity of their handicaps. He proposed that those with a minor-degree of mental retardation should be the responsibility of the Education Department which would set up special classes for them. The Social Welfare Department should provide institutional care and training for the medium grade, and the Medical and Health Department should undertake the medical and nursing care of the severe grade.

10. Siu Lam Hospital was built with the third recommendation in mind, and its opening implemented in full the main proposals in the Hilliard Report. The Hospital was built with a donation of \$5.7 million from the Royal Hong Kong Jockey Club, with accommodation for 200 patients. After the formal opening, patients were accepted in groups of 50 at a time from special wards in the Tung Wah Hospital and the Po Leung Kuk to enable the staff to adjust to the routines required for this type of patient. Most began to thrive as a result of their transfer from urban centres to a country hospital. Siu Lam is now playing a role in the treatment of the severely mentally handicapped in our midst, and the conscience of a progressive Hong Kong requires that we do no less for them.

Methadone Maintenance

11. The year also saw the start of the Medical and Health Department's methadone maintenance programme with the first volunteer patients arriving at the Pilot Methadone Study Centre in Eastern Street on 1st December for admission. The programme got off the ground after some deliberation. It has been fully documented as a result of large scale experiments in the United States that the majority of patients on methadone maintenance are able to hold responsible jobs and do manual work, but methadone is itself an addictive drug, and maintenance implies a permanent responsibility to keep up the supply.

12. The Department's pilot study is to last three years, and will involve 550 patients. It is hoped the programme will throw light on the efficacy of methadone as a medication capable of achieving the pharmacological effect that is intended—namely the elimination of heroin hunger, heroin-seeking behaviour, and blockade against the

euphoric actions of heroin. The goal of social rehabilitation by a treatment programme is a broader objective.

13. The maximum dosage used in the Centre is 40 mgm a day in one dose by mouth. This low dosage blocks heroin craving, but does not induce euphoria. In the first five months of the programme, 228 patients were treated. Some of the problems encountered and overcome included medical, social and psychological difficulties.

Polyclinic for South Kwai Chung

14. Her Royal Highness Princess Alexandra opened the first stage of the South Kwai Chung Jockey Club Polyclinic on 25th October. This development extended the Department's services to a section of the community in an area where there were formerly no convenient medical facilities. Its opening was also in step with the rapid increase in the population of Tsuen Wan and Kwai Chung in recent years. A year earlier, a standard urban clinic in north Kwai Chung was opened for the benefit of residents in the northern parts of the township.

15. The Polyclinic is named after the Royal Hong Kong Jockey Club, which was responsible for the capital cost of the project. The Department has many clinics and other medical facilities bearing the Club's name. They testify to the Club's magnificent contribution to Hong Kong's medical and health services.

The Institute of Immunology

16. The conquest of disease, especially infectious diseases, by the application of the principle of immunization is one of the most colourful and exciting stories in the history of medicine. Starting in the 18th century with the epoch-making discovery of Sir Edward JENNER, and proceeding to the classical experiments of Louis PASTEUR in the 19th, it has progressed into the 20th century with the work of Sabin and Salk. The list of diseases preventable by immunization is now a most impressive one. The control and eradication of these diseases have made the world a different place, and millions of lives have been saved.

17. In Hong Kong, in the first few years after the end of World War II, there were still epidemics of smallpox and cholera, and the incidences of other infectious diseases, such as diphtheria, tuberculosis and poliomyelitis were high. But as a result of a large scale immunization campaign coupled with other preventive measures, smallpox has

disappeared since the last case in 1952. The immunization of infants and children is now accepted by parents in relation to diphtheria, whooping cough, poliomyelitis and tuberculosis. We continue to meet with some traditional resistance only with regard to immunization against measles, but even here, more and more parents are gradually being convinced.

18. Against such a background, the Department's new Institute of Immunology in Victoria Road was opened in 1972. The new building replaced the old vaccine institute in Caine Lane. In designing the building, the planners had to keep pace with the many recent advances in the science of immunology.

19. For example, the designers had to consider the World Health Organization's recommendations for public health laboratories, namely that separate laboratory facilities be provided for the manufacture of bacterial and viral vaccines as a precaution against contamination. The Institute continues to produce human vaccine for the public health service in Hong Kong. In times of emergency, if required, it will also produce certain vaccines for export to other countries in the region to meet their urgent needs. Completion of the Institute signified a further step in the development of this particular field of the health services in Hong Kong.

Termination of Pregnancy and Venereal Diseases

20. The Offences Against the Person Ordinance was amended during the year to afford more protection to doctors involved in the therapeutic termination of pregnancy. Regulations made under the amended Ordinance allowed 11 hospitals to carry out such therapeutic terminations.

21. Unfortunately, publication of the amendments and the names of the 11 hospitals led to mis-interpretation of the issue by some members of the Press and public that abortion had been legalized in Hong Kong. This was subsequently corrected.

22. The incidence of venereal diseases rose by 12 per cent during the year, an increase considered slight compared with many other parts of the world. Among teenagers, the incidence was approximately 6 per cent of the total cases of venereal disease.

Dental Health

23. His Excellency the Governor, Sir Murray MacLEHOSE, in his address to the Legislative Council on 18th October, announced that a school dental health programme to provide children with routine check-ups and simple conservative treatment was being considered by the Government. Initially, he thought the programme might cover all children entering Primary I in a given year. It could gradually be extended to cover all children in the primary school age group, and later, in the light of experience, 'we might consider extending it to post-primary school children'. Sir Murray said to provide such a service, it would be necessary to set up a school for training dental nurses.

24. So far, the Department's dental service provides comprehensive dental care for all monthly-paid government officers, their dependents, and pensioners, in addition to a limited treatment programme for in-patients of government hospitals, prisoners, and trainees at training centres. Clinics in densely-populated urban and rural areas also provide emergency dental treatment for the general public, and a monthly helicopter 'flying doctor' service makes treatment available to residents in inaccessible areas.

25. His Excellency's announcement indicated for the first time the direction which the Department's dental service would take to extend the scope of its activities. During the year, work proceeded on plans for the proposed dental nurses training school, to be located in the Morrison Hill area close to the Tang Shiu Kin Hospital.

Family Planning

26. The Governor also referred in his speech to the future direct participation of the Medical and Health Department in family planning. His Excellency explained that, since the mid-1950s, the Government had supported family planning mainly by subventions to the Family Planning Association and the Catholic Marriage Advisory Council.

27. During the past decade, the decline in Hong Kong's birth rate had been significant. It had fallen from 40 per 1,000 of the population in 1962 to 19.4 per 1,000 of the population in 1971. But it was clearly in the public interest and family health, having regard to the pressure generated by people on services such as housing and education, that 'the blessing of children should be bestowed at a rate which is planned and not profligate', the Governor said.

New Laundry Building

28. Another development worthy of note in 1972 was the opening of a new laundry in Chai Wan. Until then, most of the Department's washing was carried out by a special unit in the Queen Elizabeth Hospital, commissioned in 1964. An investigation in 1965 showed that by 1972, even with the expansion of this unit to handle one million lbs. of laundry a month, future additional laundry requirements were likely to exceed the available facilities by 50 per cent, or 500,000 lbs. a month.

29. In effect, by the beginning of this year, the machinery at the Queen Elizabeth Hospital, working in two shifts a day, was processing 1,100,000 lbs. of laundry a month. This was clearly unsatisfactory, because little opportunity could be taken either for maintenance or repairs. There was also the problem that would arise with the expected opening of the Princess Margaret Hospital in 1974, when the Department's laundry requirements would be increased substantially.

30. It was in these circumstances that construction of the new laundry at Chai Wan was conceived and undertaken. It was designed not only to meet growing pressures, but also to reduce the work load of the Queen Elizabeth Hospital unit to a reasonable limit. The total cost of the project amounted to \$8.4 million, of which \$2.7 million was set aside for the purchase and installation of equipment, including two of the most modern, fully-automatic, continuous-flow washing machines. These 'tunnel' washers, as they are called, are not only the largest laundry equipment ever to be installed in Hong Kong, but are also believed to be the only two of their kind in Southeast Asia. The new laundry is handling 1,100,000 lbs. of departmental washing a month.

Past and Future Development

31. The Department's 10-year Plan, issued as a White Paper in 1964, and kept under constant review by the Medical Development Plan Standing Committee, ended on 31st March, 1973. With the Plan's conclusion, the Standing Committee also ceased to function. The target of providing 4.25 hospital beds per 1,000 of the population was achieved with the completion of the projects in the pipeline.

32. A Medical Development Advisory Committee, under the chairmanship of Dr. the Hon. Sir Albert RODRIGUES, and the Director of Medical and Health Services as its vice-chairman, was set up by the Government on 27th March. It replaced the defunct Standing Com-

mittee, and its terms of reference were: 'To keep under continuous review and to advise on the development and phased implementation of medical and health services in Hong Kong, having regard to all factors which would determine the progress of expansion—including financial, the rate of building construction, the availability of qualified staff, and the principles of subvention'. In addition, the Committee was given a remit to advise in what programmes of improvement and expansion would be appropriate over the next 10 years in the circumstances of Hong Kong, and to produce a report to the Governor by 31st July, 1973.

Acknowledgements

33. The Department is responsible for administering services which provide medical and health care for the community of Hong Kong. It operates hospitals and clinics throughout both the urban and rural areas, maintains maternal and child health, school health, and port health services, and undertakes measures for the control of epidemic and endemic diseases. To do all this, a staff of 12,737 was needed in 1971. In 1972, the total grew to 13,264, of which 747 were medical officers of all grades, and 4,504 nurses.

34. I would like to place on record my sincere appreciation to the staff of all ranks for their help in dealing with the many problems which the Department has had to face every day in the year under review. In spite of the fact that they often had to work under the pressure of difficult circumstances, they all carried out their duties effectively, with a true sense of devotion and dedication. I am grateful to them all for their unflinching support throughout the year.

35. My nursing, dental and medical colleagues are the original authors of the chapters that follow. I gratefully acknowledge their help.

36. The Department received every assistance and co-operation from other government departments, voluntary agencies, the Press, and the radio and television networks. The patience shown by members of the public in spite of many unavoidable shortcomings is also deeply appreciated.

37. I also wish to thank the many public-spirited persons who devoted so much of their time in order to serve on statutory boards, advisory committees, working parties, and in voluntary agencies dealing with the many aspects of medical and health problems in Hong Kong.

38. Finally, thanks are also due for the contributions of private individuals, and local and overseas organizations who assisted the Department in providing facilities for those in need of subsidized medical care.

G. H. CHOA,

Director of Medical and Health Services.

1st August, 1973.

II. PUBLIC HEALTH

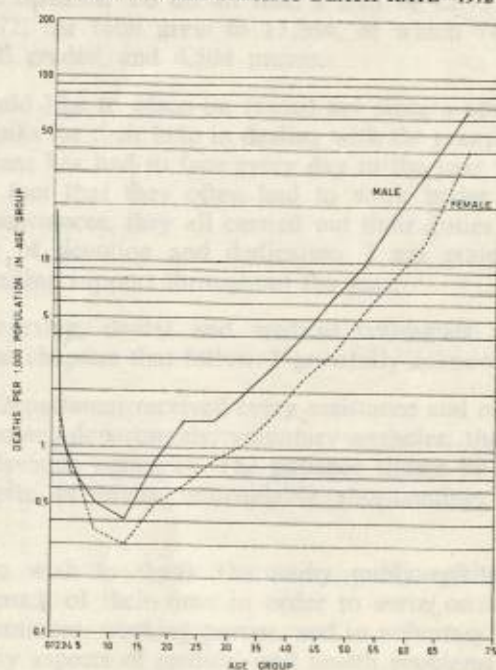
(Tables 6-20)

VITAL STATISTICS

(Tables 6-12)

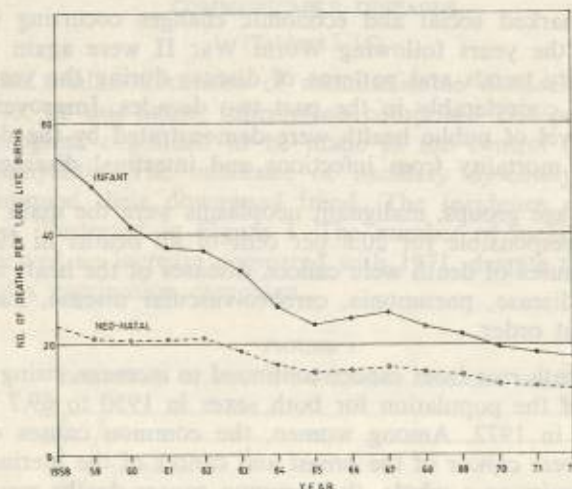
39. The estimated population of Hong Kong in the middle of 1972 was 4,077,400. Approximately 83 per cent of this total was concentrated in the urban areas of the Island, Kowloon and New Kowloon. About 35 per cent was under 15, and 8 per cent over 60 years of age. The general state of health remained satisfactory. The crude death rate, based on the number of deaths registered, was 5.2 per thousand of the population. As shown in Figure 1, age and sex specific death rates were also low, and reflected the rapid improvement of medical and health services on a young and expanding population. The crude birth rate at 19.4 was slightly above the rate for 1971, and reversed a continuous downward trend since 1960.

FIGURE 1
AGE AND SEX SPECIFIC DEATH RATE—1972



40. The infant mortality and neo-natal mortality rates continued to decline. This useful index to the trend of health conditions of the general population is illustrated in Figure 2.

FIGURE 2
INFANT AND NEO-NATAL MORTALITY RATE 1958-72



Infant Mortality

41. The infant mortality rate was 17.5 per thousand live births, and is now at a lower level than many European and American countries. The decline in infant mortality during the year was due to improvement in environmental conditions, development of maternal and child health services, and increasing public appreciation of the value of these services in the maintenance of health among infants and mothers.

42. Among the major causes of infant mortality there were reductions in mortality from preventable diseases, particularly tetanus, pneumonia and bronchitis. There has been a steady reduction in mortality from prematurity due to improvement in midwifery and maternal health services. As experienced elsewhere, congenital malformations and other diseases of the new-born proved during the year to be more intractable, and mortality from these causes was little affected.

Maternal Mortality

43. The rate for 1972 was 0.20, a slight increase on the 1971 rate. The causes of maternal mortality, which increased during the year, were haemorrhages, abortions and toxæmia.

General Mortality

44. The marked social and economic changes occurring in Hong Kong during the years following World War II were again reflected in the mortality trends and patterns of disease during the year. These have changed considerably in the past two decades. Improvements in the general level of public health were demonstrated by the decline in proportionate mortality from infections and intestinal diseases.

45. In all age groups, malignant neoplasms were the main cause of death, being responsible for 20.8 per cent of all deaths in 1972. The five leading causes of death were cancer, diseases of the heart including hypertensive disease, pneumonia, cerebro-vascular disease, and tuberculosis, in that order.

46. The death rate from cancer continued to increase, rising from 30 per 100,000 of the population for both sexes in 1950 to 69.7 in 1961, and to 107.3 in 1972. Among women, the common causes of death from cancer were cancer of the breast and cancer of the uterine cervix. In the community as a whole, the common cancer deaths were cancer of the lung, primary cancer of the liver, nasopharyngeal cancer, and cancer of the stomach.

47. Heart disease, including hypertensive diseases, was the second leading cause of death with a mortality rate of 58.9 per 100,000 of the population in 1961, increasing to 74.4 in 1972.

48. Pneumonia was the third leading cause of death. The disease was a major cause of death in the mid-1950s, but the mortality rate dropped from 85.8 in 1961 to 57.8 in 1972.

49. Cerebro-vascular disease, fourth in the list, had a mortality rate of 44.2 in 1961. This rose to 46.4 in 1972.

50. Mortality from tuberculosis increased from 30.9 in 1971 to 32.2 in 1972. In 1961, the rate was 60.2.

51. The eighth revision of the International Statistical Classification of Diseases, Injuries and Causes of Death, published by the World

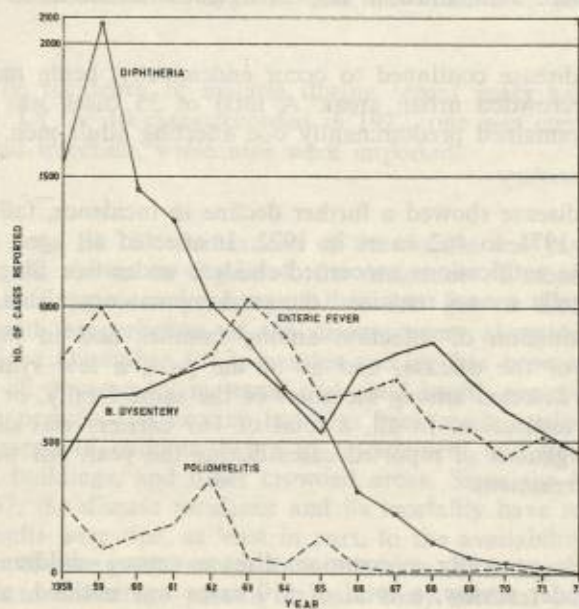
Health Organization, came into use on 1st January, 1969. All registered medical practitioners were supplied with a supplement of the eighth revision, and were requested to ensure that the nomenclature of causes of death given by them on death certificates complied with those in the International Classification.

COMMUNICABLE DISEASES

(Tables 13-16)

52. The total notifications of communicable diseases during 1972 was 10,873. Of this figure, tuberculosis comprised 77.4 per cent. Satisfactory progress continued to be made in the control of diphtheria, and poliomyelitis. The incidence of bacillary dysentery and enteric fever continued their downward trend. The incidence of these four diseases is illustrated in Figure 3. The number of measles cases and deaths showed an increase compared with 1971, despite the continuing anti-measles vaccination campaign.

FIGURE 3
INCIDENCE OF MAJOR INFECTIOUS DISEASES 1958-72



Cholera

53. Cholera has not been reported in Hong Kong since October 1969. Routine sampling of nightsoil for cholera vibrio was carried out on a year-round basis as part of the surveillance programme. In June, cholera vibrio were isolated from a sample of nightsoil taken routinely from a collection route at Shau Kei Wan on Hong Kong Island. In July, cholera organisms were again isolated from the same nightsoil route, but in each case subsequent samples from the same route were negative. In September, specimens taken from nightsoil vehicles serving the Happy Valley and Wan Chai areas were found to be positive, but subsequent investigations from these two sources proved negative. No case of cholera was reported during the period when positive nightsoil samples were obtained. The public were informed of the findings and advised to observe strictly the rules of personal and food hygiene.

54. No mass immunization campaign was carried out during the year, but emphasis was placed on the importance of personal, environmental and food hygiene as safeguards, both against cholera and the other intestinal groups of communicable diseases. Strict quarantine restrictions were maintained in respect of countries declared infected.

Amoebiasis

55. This disease continued to occur endemically, being most prevalent in overcrowded urban areas. A total of 35 cases was notified. The disease remained predominantly one affecting adult men.

Bacillary Dysentery

56. This disease showed a further decline in incidence, falling from 543 cases in 1971 to 462 cases in 1972. It affected all ages, but 27.5 per cent of the notifications concerned children under five. *Shigella flexneri* and *Shigella sonnei* remained the predominant organisms isolated.

57. Transmission of infection among families and in institutions is a feature of the disease, and as in the past, a few symptomless carriers were detected among members of the same family, or inmates of the same institution. In all, a total of 167 carriers was discovered during investigations of reported cases during the year. All were given appropriate treatment.

Chickenpox

58. This is generally a common disease among children. During the period under review, a total of 510 cases was notified, almost all

being under 15. The seasonal prevalence of the disease being in the winter and spring, the earlier part of the year saw an increase in the number of notifications.

Diphtheria

59. Only five cases of the disease were notified during the year, an even lower figure than the 25 cases recorded in 1971. As a result of annual immunization drives since 1959, the disease has shown a continuous and steady decline, falling from 2,087 cases in 1959 to five cases in 1972.

Enteric Fever

60. The number of cases notified was 438, a decrease of 77 cases over the preceding year. The disease was generally mild, and the case fatality rate was less than one per cent. Transmission of infection was frequently associated with neglect in personal and food hygiene. As elsewhere in the world, the peak incidence occurred among children of school age and young adolescents. Free inoculation was offered, and the usual preventive measures enforced, with special attention to environmental and food hygiene, and the control of food premises.

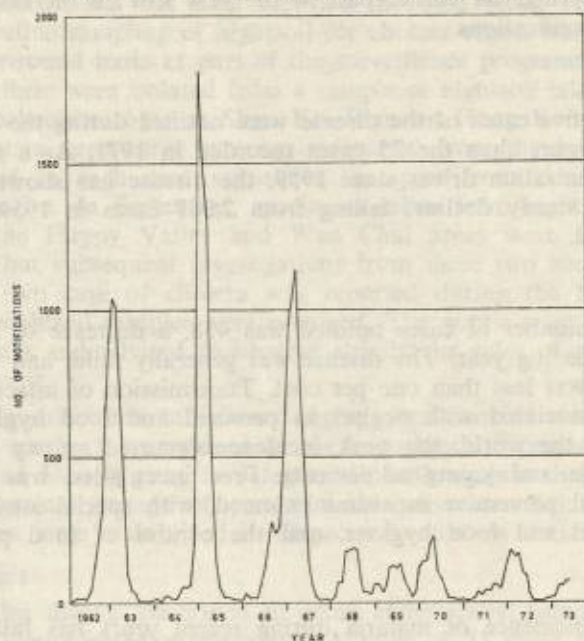
Malaria

61. The incidence of malaria during recent years has fallen considerably. Of the 10 cases recorded in 1972, one was considered to be an induced infection, while nine were imported.

Measles

62. A total of 783 notifications of the disease was reported during the year. As shown in Figure 4, the incidence of measles in Hong Kong has in previous years tended to fall into a distinct biennial pattern, with exacerbation of the disease every alternate winter and spring. Since December 1967, measles vaccine has been available regularly at all government maternal and child health centres, and during campaign periods, the vaccine has also been made available, through mobile teams, to children living in resettlement and housing estates, tenement buildings, and other crowded areas. Since the last epidemic in 1966-67, the disease incidence and its mortality have remained low. These results were due, at least in part, to the availability throughout the year of free vaccine for immunization, and continuing health education to encourage parents to seek early medical advice.

FIGURE 4
MONTHLY MEASLES NOTIFICATIONS 1962 - MAY 1973



Poliomyelitis

63. Four cases of poliomyelitis were reported during the year as compared with two in 1971. Three of the cases were of the type 2 poliovirus infection, confirmed by laboratory investigation. The programme of vaccination consisted of giving one dose of type 1 polio-vaccine, soon after birth, followed by two doses of balanced trivalent vaccine at three and five months. Beginning in October 1971, a booster dose of the vaccine was introduced at the age of about 18 months.

64. Approximately 78 per cent of infants received one dose of type 1 polio-vaccine soon after birth, and 74 per cent of infants received two doses of the trivalent vaccine at maternal and child health centres. The annual general immunization campaign against poliomyelitis was held in January and March.

65. Virological investigation of the disease was maintained throughout the year. A poliomyelitis faecal survey among normal children

aged under five was carried out in June - August. The result showed that the excretor rate of 'vaccine' types of poliovirus was 1.40 per cent, among a total of 501 children included in the survey. The 'wild' type of poliovirus (type 3) was detected in one child giving an excretor rate of 0.20 per cent. The findings of the survey indicated the continuing existence of 'wild' poliovirus type 3 in the community, but did not demonstrate the existence of type 2 poliovirus which was isolated from three of the four cases of clinical poliomyelitis recorded during the year.

Influenza

66. The surveillance programme for influenza was continued on a year-round basis. Several general out-patient clinics have been designated as influenza surveillance centres, and these reported regularly the number of influenza-like illnesses seen. The government virus unit continued to function as a World Health Organization National Influenza Centre during the year, and virological investigations of throat swabbings and throat washings were carried out routinely on samples taken from influenza-like cases. Deaths from influenza, pneumonia and bronchitis were recorded regularly as part of the programmes of epidemiological surveillance of the disease.

67. The disease occurred sporadically between January to May and August to October. The most prevalent strain of influenza A virus occurring in January to May was A/Hong Kong/5/72 while strain A/England/42/72 was most prevalent between August to October. Influenza virus B was isolated several times during the year. The strain B/HK/5/72 isolated in December is under close surveillance for possible epidemic spread in view of its significant change in antigenicity.

Tetanus

68. This disease, although not notifiable, was recorded during the period under review with reasonable accuracy owing to the severity of the symptoms, requiring hospitalization of clinical cases. In past years, approximately half the cases reported were among the new-born whose births had not been attended by trained staff, and who had been exposed to various hazards from unsterile equipment. In 1972, tetanus neonatorum was responsible for only 0.5 per cent of recorded cases, and infant mortality from such infection fell from 1.2 deaths per 1,000 in 1951 to 0.025 deaths in 1972.

Viral Hepatitis

69. Notification of this disease remained voluntary. A total of 729 cases was notified in 1972. Most cases were among adolescents and adults, and a higher proportion was found among men. During the year, steps were taken to promote better and more complete reporting and investigation of the disease.

70. Developments in other communicable diseases showed little variation during 1972.

III. WORK OF THE HEALTH DIVISION

AREA HEALTH WORK

71. Area health officers worked during the year to maintain satisfactory standards of environmental sanitation and food hygiene. But they also carried out field investigations into the major communicable diseases, and helped to co-ordinate the activities of teams of inoculators participating in prophylactic immunization campaigns.

72. Four such campaigns were carried out. They were against poliomyelitis, measles, diphtheria and smallpox. Hong Kong has not had a case of smallpox since June 1952, and the latest drive against the disease, held in February 1973, was intended to remind the public of the need to preserve this record. Moreover, the sudden outbreak of smallpox in the spring of 1973 in Britain, focussed attention on vigilance in view of Hong Kong's increasing importance as a crossroads in international travel in this part of the world.

TUBERCULOSIS

73. Tuberculosis remained the major health problem in Hong Kong. The policy for control of the disease continued during the year to be to protect, by vaccination with B.C.G., the new-born, who were particularly vulnerable to the fulminating forms of the disease, and primary school entrants and school leavers who could develop active disease later in life. For actual cases of the disease, it has been shown that in a large proportion of cases, out-patient therapy is at least as good as institutional treatment. In complete contrast to the past, there is now no waiting list for hospital admission for the treatment of tuberculosis. Institutional resources are reserved for those not responding to out-patient therapy, for acutely-ill cases, for those where the diagnosis is in doubt, and for those in need of surgical intervention. In line with

this policy, there is a high degree of co-operation between the Government and voluntary agencies concerned with the problem, particularly the Hong Kong Anti-Tuberculosis and Thoracic Diseases Association, the Haven of Hope Sanatorium, and the Tung Wah group of hospitals. The Government chest service maintained the B.C.G. vaccination and out-patient treatment programme, while the voluntary agencies, aided by substantial government subventions, maintained most of the hospitals.

74. To keep pace with rapid changes occurring in the treatment and prevention of tuberculosis, close liaison continued to be maintained with agencies outside Hong Kong. During the year, there was much activity, in collaboration with the Medical Research Council of the United Kingdom, as to ways by which the treatment of tuberculosis could be made more efficient, cheaper, and shorter. Many of the results of numerous current investigations are now being applied in practice. Although these studies are primarily intended to benefit the people of Hong Kong, many of the results have worldwide implications. As it has been shown that the advantages obtained from routine pre-treatment sensitivity testing in newly-registered cases are minimal, routine pre-treatment sensitivity testing, previously thought to be important in view of the high level of drug resistance in Hong Kong, has been abandoned. Reliance is now placed on regular examination of the sputum as the best monitor of response to treatment. That failure to take drugs is an important cause of treatment failure has been clearly demonstrated for the Hong Kong population in one of the recent controlled trials. In view of this, a careful record is kept of attendance for treatment. Whenever a patient defaults, immediate action is taken to call him back either by a home visit or by telephone. The present course of treatment for tuberculosis is long and arduous, averaging some 18 months. A large controlled clinical trial to investigate the possibility of shortening this is underway.

75. There have also been important investigations with regard to B.C.G., particularly in the methods of administration of B.C.G. at birth, when full-time, highly-trained staff are not available. Results of the survey on children born on, or after, 11th July, 1966, and notified as suffering from tuberculosis, are just beginning to become available. In this connection, the collaboration of the Medical Research Council Statistical Research and Services Unit has been obtained. The study on direct B.C.G. given to children of school age has been completed, and this indicates that direct B.C.G., except for the new-born, has a small role to play in Hong Kong.

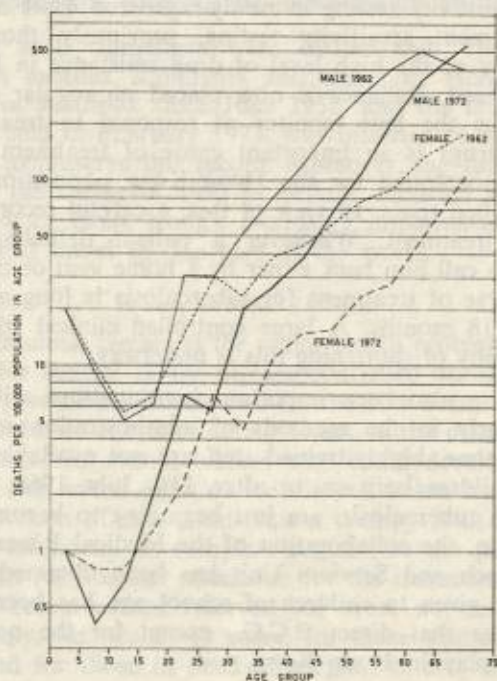
Case Finding

76. In the past, the many patients attending the chest clinics made large scale case-finding undesirable. With improved facilities and the decrease in the number of patients, case finding is now playing a greater role than in the past. During the year, there was an anti-tuberculosis week lasting from 20th November to 30th November, 1972, based on the theme 'If you have a chronic cough lasting more than two weeks, get a chest X-ray.' This was successful, considering the limited scale of the campaign. A much more intensive effort is needed for the future.

Mortality and Morbidity

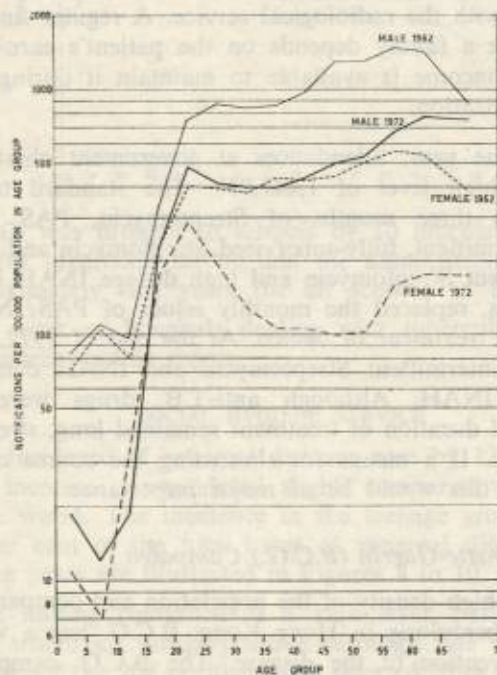
77. During the year, there was a slight rise in the tuberculosis death rate from 30.9 to 32.2. Although this was disappointing, its importance should not be exaggerated, as it probably reflected a slight reaction from the considerable fall in the death rate during the previous year. Tuberculosis mortality by age and sex is shown in Figure 5.

FIGURE 5
TUBERCULOSIS MORTALITY BY AGE AND SEX 1962 AND 1972



During the year, the notification rate fell to 206.5 per 100,000 of the population. Figure 6 shows the age and sex specific notification rates. Tuberculosis is much more common in men than women, and is especially common among older men. Tuberculosis is now rare among residents under 15, probably due to the high level of B.C.G. administration to the new-born.

FIGURE 6
TUBERCULOSIS NOTIFICATIONS BY AGE AND SEX
1962 AND 1972



Work of the Government Chest Service

78. The government chest clinics provide ambulatory chemotherapy services for the great majority of cases of tuberculosis, hospital admission being reserved for special cases. Increasing attention is being paid to the public health aspects of tuberculosis, and 80 health

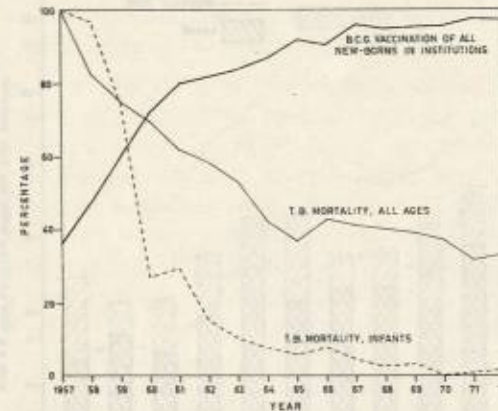
auxiliaries, whose main duties consist of contact tracing and home visiting, are attached to the chest service. They are supervised by one senior health visitor and 13 health visitors. Patients have all aspects of the disease thoroughly explained to them by the health visitors, and are given explanatory leaflets. Regular attendance for out-patient chemotherapy is regarded as being of paramount importance, and considerable emphasis is placed on the follow-up of defaulters, and on ensuring that contacts are examined. The clinics also provide medical social work, contact tracing and supervisory services, and undertake surveys of selected groups such as government employees and prisoners, in co-operation with the radiological service. A regular financial grant is allowed where a family depends on the patient's earnings and no other source of income is available to maintain it during the breadwinner's hospitalization.

79. During the year, attendances at government chest clinics remained at the high level of 1,441,958. The standard treatment of tuberculosis was three months of Streptomycin, PAS and INAH followed by intermittent, fully-supervised Streptomycin and high dosage INAH. Intermittent Streptomycin and high dosage INAH have, in the majority of cases, replaced the monthly issues of PAS/INAH tablets as the follow-up treatment of choice. At the end of 1972, there were 4,676 cases on intermittent Streptomycin and INAH compared with 1,752 on PAS/INAH. Although anti-T.B. drugs were extremely efficient, the total duration of treatment remained long, stretching from 18 to 24 months. If a means for shortening the course of treatment could be found, this would be of major importance.

The Bacille Calmette-Guerin (B.C.G.) Campaign

80. With the high density of the population and comparatively high prevalence of tuberculosis in Hong Kong, B.C.G. has a vital role to play in the prevention of the disease. The B.C.G. campaign, as in previous years, was mainly directed at the new-born, school entrants and school leavers. During the year, 96 per cent of the new-born were given B.C.G. Bearing in mind that the remaining four per cent usually had some contraindication to B.C.G., for example, prematurity, this represented an almost 100 per cent coverage of eligible babies, perhaps the highest in the world. The decline in infant mortality from tuberculosis which resulted is shown in Figure 7.

FIGURE 7
TUBERCULOSIS MORTALITY AND B.C.G. VACCINATION OF NEW-BORNS 1957-72
(MORTALITY RATES AS PERCENTAGE OF 1957 RATES)



81. B.C.G. was brought to schools by 10 inoculators divided into five teams for tuberculin testing and the administration of B.C.G. It takes approximately two years for all schools to be covered.

82. The work of hospitals dealing with tuberculosis cases is reviewed elsewhere in this report.

SOCIAL HYGIENE SERVICE

83. The incidence of venereal diseases rose by 12 per cent during 1972. This increase is considered slight, compared with many other parts of the world. The incidence in the teenage group was approximately 6 per cent of the total cases of venereal disease. The trends over past ten years are illustrated in Figures 8 to 10.

84. Case finding continued at a high level, particularly in antenatal cases where an initial positive serology rate of 0.84 per cent was observed. Of the 208 positive cases referred from ante-natal clinics, only 136 cases, that is, 65.4 per cent, were actually suffering from syphilis. Contact tracing, particularly of infectious syphilis, was continued.

Leprosy

85. New cases of leprosy treated numbered 100, representing a rate of 2.5 per 100,000 of the population. Tuberculoid manifestations

FIGURE 8
SYPHILIS 1963-72

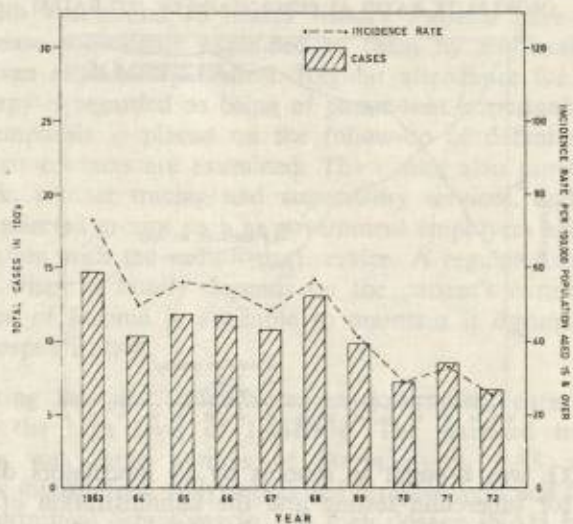


FIGURE 9
INFECTIOUS SYPHILIS 1963-72

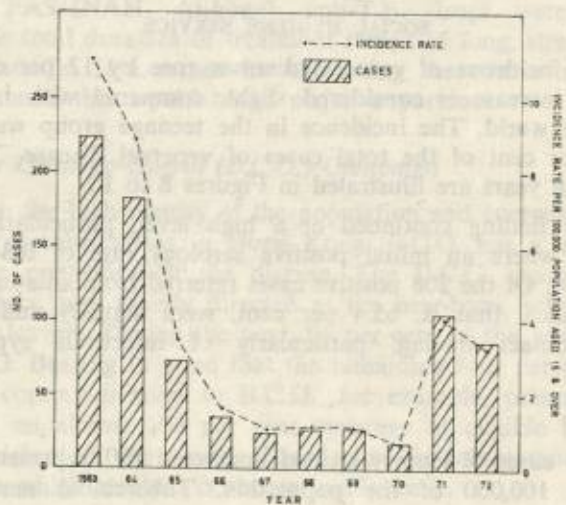
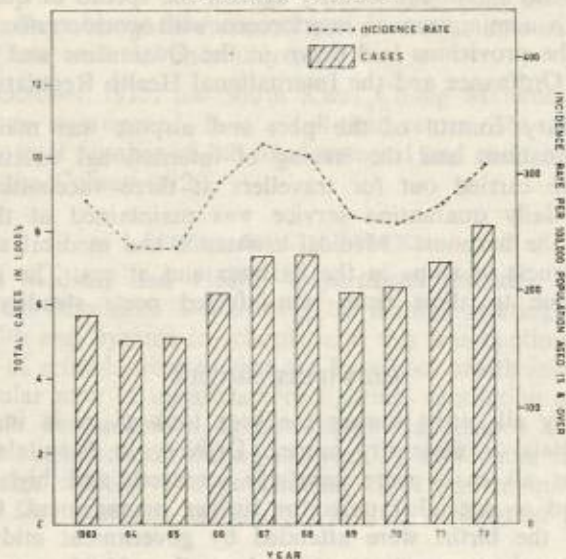


FIGURE 10
GONORRHOEA 1963-72



comprised 40 per cent of total cases. Of the infectious cases, 79 were admitted to the Hay Ling Chau Leprosarium maintained by the Leprosy Mission—Hong Kong Auxiliary, with which the social hygiene service maintains close liaison.

86. During recent years, there has been some advance in overcoming the prejudice against employment of cured leprosy patients, and to this end great attention was paid by the social hygiene service in 1972 to the prevention of disabilities in tuberculoid cases.

Dermatology

87. Dermatology clinics were held in various centres. Table 33 shows the incidence of skin diseases seen at the clinics. The total number of new cases was about 3.4 per cent more than the previous year. It is of note that the incidence of skin cancers has remained low as in previous years.

PORT HEALTH SERVICE

88. The port health service continued to be responsible for enforcing control measures to prevent the introduction of quarantinable

diseases into Hong Kong by land, sea and air. It also has the task of ensuring the maximum security against the spread of quarantinable diseases with a minimum of interference with world traffic, in accordance with the provisions laid down in the Quarantine and Prevention of Diseases Ordinance and the International Health Regulations (1969).

89. Sanitary control of the port and airport was maintained as usual. Vaccinations and the issuing of international vaccination certificates were carried out for travellers at three vaccination centres. A 24-hour daily quarantine service was maintained at the western entrance to the harbour. Medical assistance and medical advice were given on request to ships in the harbour and at sea. The granting of radio pratique to ships from non-infected ports steadily increased in 1972.

MIDWIFERY SERVICE

90. Nearly all births during the year took place in institutions—either hospitals or maternity homes. Delivery in hospitals gradually increased, as all cases were carefully screened, and high-risk cases were referred to specialist units for further management. Only 19.25 per cent of the births were attended by government midwives, and midwives in private practice attended another 11.86 per cent, compared with 18.5 per cent and 15.5 per cent respectively in 1971. The remainder of the births took place in government, government-subsidized and private hospitals.

91. The South Kwai Chung Polyclinic with 26 maternity beds began to receive patients on 25th October, 1972. On the other hand, six private maternity homes were voluntarily closed, with a reduction of 30 beds. In recent years, there has been a steady reduction in the still-birth rates in both government and private maternity homes.

MATERNAL AND CHILD HEALTH SERVICES

92. Public appreciation of the value of these services in the maintenance of health among infants and expectant or nursing mothers was again reflected by the fact that, of the children born, 91.9 per cent were brought to a centre for attention on at least one occasion. The corresponding figure for 1971 was 89.6 per cent. Of new attendants at the various centres, approximately 1 per cent were found to have abnormalities. Of these, the majority had either congenital defects or displayed effects of prematurity.

93. A further encouraging trend was the increasing appreciation by expectant mothers of the need for regular ante-natal care. This was reflected by the average attendances per person at ante-natal sessions and by the low maternal mortality rate.

94. In October 1972, the South Kwai Chung Maternal and Child Health Centre was opened. It is a full-time centre. This development brought the total number of full-time maternal and child health centres throughout the Colony to 20.

SCHOOL HEALTH SERVICE

95. The Medical and Health Department provides an advisory service to the Education Department on matters relating to environmental health and hygiene in schools, and this was continued in 1972. Inspections of schools were carried out by school health inspectors who took particular note of unsatisfactory lighting, ventilation and sanitary arrangements. Immunization against diphtheria, tetanus and smallpox was carried out in schools during the year by staff under the direction of area health officers. The government chest service maintained responsibility for tuberculin testing and B.C.G. vaccination in schools.

SCHOOL MEDICAL SERVICE BOARD

96. The School Medical Service is operated by private medical practitioners under the aegis of the School Medical Service Board, an independent statutory body incorporated by ordinance. Remuneration to doctors is on a per capita basis, one-fifth of the annual fee being paid by the participating pupil and four-fifths contributed by the Government, which also meets the Board's administrative expenses.

97. On 31st March, 1973, the number of pupils participating was 70,758 from 700 schools, compared with 37,181 from 661 schools on the same date in the previous year. Doctors participating in the scheme numbered 181 compared with 174.

DENTAL SERVICE

98. The dental service provides comprehensive dental care for all monthly-paid government officers, their dependents, and pensioners, in addition to a limited treatment programme for in-patients of government hospitals, prisoners, and trainees at training centres. Certain clinics in densely-populated urban areas and in rural areas also provide emergency dental treatment for the general public. In addition, a

monthly helicopter dental service makes available treatment to residents in inaccessible areas. With the opening of the Tai Lam Dental Clinic, there are at present 33 government dental clinics, including a mobile dental unit.

99. Fluoridation of the Colony's urban water supplies began in 1961. The rate of enrichment was formerly at two levels. This was changed in 1972 to 0.7 parts of fluoride per million throughout the year. This level was maintained in consideration of more recent work on the study of optimum fluoride levels for community water supplies. The cost of this operation was estimated at about 16.3 cents a person a year. Dental health education plays an important part in combatting dental disease, and the dental service continued to take advantage of major educational exhibitions to disseminate information and advice on dental health.

FORENSIC PATHOLOGY

100. The forensic pathology service consists of a main laboratory in the Hong Kong headquarters of the Royal Hong Kong Police Force, and another laboratory in the Mong Kok Police Station. It deals mainly with medico-legal work in close association with the Royal Hong Kong Police Force. This includes all homicidal deaths, deaths under suspicious circumstances, sexual offences, and other offences against the person. Autopsies are performed in both the Victoria Public Mortuary, Hong Kong, and the Kowloon Public Mortuary, Kowloon.

GOVERNMENT LABORATORY

101. The laboratory provides chemical and related scientific services for government departments. During the year, 39,759 items were examined by the professional and technical staff, an all-time record.

102. In the forensic science division, there was a marked increase in the number of questioned documents examined, particularly passports and forged papers. Handwriting examinations featured prominently in the year's work. A series of murder cases occupied the attention of the scientific staff of the division throughout the year.

103. The quantity of illicit drugs of all kinds examined by the narcotics section was steady, and staff of the narcotics section had to work through several week-ends on the larger seizures.

104. The introduction of the methadone maintenance scheme imposed on the staff of the toxicology section a considerable additional



The Methadone Pilot Scheme Treatment Centre was opened during the year in Eastern Street, occupying premises of the former mental hospital. The Centre is responsible for the Department's three-year methadone maintenance programme involving 550 volunteer patients.

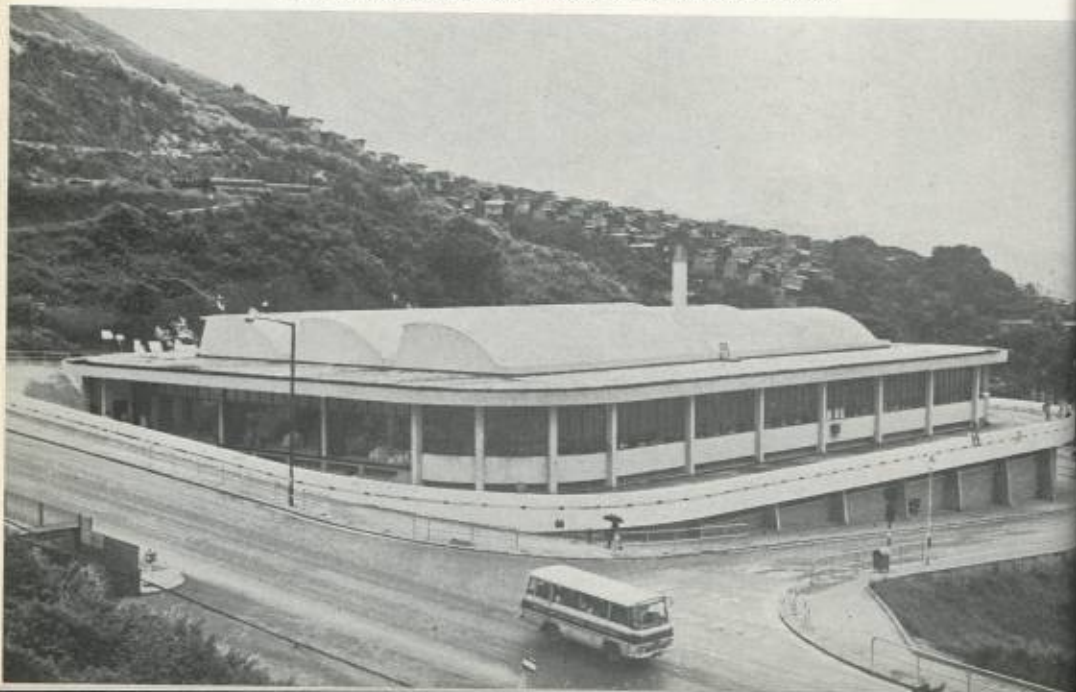
In-patients at the Methadone Pilot Scheme Treatment Centre have much time on their hands. A favourite occupation is to watch television. Here two patients are enjoying an afternoon programme.





The Department's new Institute of Immunology was opened during the year, replacing the former Vaccine Institute in Caine Lane. Picture shows the series of buildings making up the Institute in a rural setting at Pokfulam.

This is the new Medical and Health Department Laundry at Chai Wan. Some of the world's most advanced washing equipment is installed in the building. The plant is capable of processing one million lbs of laundry a month.



The social event of the year was the opening of the first stage of the South Kwai Chung Jockey Club Polyclinic by Her Royal Highness Princess Alexandra. In the photograph she is shown conversing with two nurses in the company of the Director of Medical and Health Services, Dr. G. H. CHO.

Construction of the new Princess Margaret Hospital at Lai Chi Kok progressed satisfactorily during the year. The picture above shows a section of the complex already completed. The general wing is expected to be opened in early 1975.





The Medical Development Advisory Committee, a new body, was given the task this year to advise the Government on what programmes of improvement and expansion would be appropriate over the next 10 years in the circumstances of Hong Kong. This picture shows the Committee in session. Reading from left to right: Mr. Tai Kuen, Dr. Li Shu-pui, Sister (Dr.) M. AQUINAS, Dr. G. H. CHOA (Vice Chairman), Dr. Sir Albert RODRIGUES (Chairman), Mr. R. H. LOBO, Mr. Li Fook-wo, Mr. S. F. BAILEY, Mr. D. G. JEAFFRESON, and Mr. P. B. WILLIAMS.

A nurse and a ward aid lend helping hands to patients at the Siu Lam Hospital for the mentally subnormal. The children in this play room spend hours toying with blocks and jigsaw puzzles.



burden. The work involved the screening of urine samples for narcotic drugs which required the evaluation of the most up-to-date scientific methods for rapid screening.

105. Lectures in respect of scientific aid to crime investigations were given to police staff by forensic scientists of the laboratory. Officers of the general division were active throughout the year. The pharmaceuticals section continued to expand, recording a four-fold increase in the volume of work done, and the output of the food control section was greatly increased. There was an upsurge in the work carried out for the Commerce and Industry Department, and other departments. The determination of arsenic content in oyster sauces and poisonous metals in sea food and canned food was carried out.

INSTITUTE OF PATHOLOGY

106. The department's Institute of Pathology operates a number of clinical and public health laboratories providing laboratory investigations in both curative and preventive medicine. It serves mainly government hospitals, clinics and various public health divisions. It also helps to conduct laboratory examinations for the Tung Wah Group of Hospitals, and the Pok Oi Hospital. Work arising from the Queen Mary Hospital on pathology, clinical biochemistry and bacteriology is undertaken by the University of Hong Kong's Department of Pathology, which receives a grant from the Government for such services. During the year, the total number of examinations undertaken by the Institute exceeded that of the previous year by 13,362. The increase was mainly in histopathology, chemical pathology, haematology, serology and virology.

Morbid Anatomy and Histopathology

107. A total of 1,307 post-mortem examination was carried out in 1972, of which 789 had medico-legal implications. The brains of 39 dogs were examined for the presence of Negri bodies (indicating death from rabies), but no positive findings were obtained. More than 4,900 specimens of sputum, pleural fluid, vaginal and cervical smears and other specimens, were received for cytological examination, of which 108 showed definite evidence of malignant disease. More than 40,500 biopsy specimens were examined in order to determine the histopathological diagnosis. Of these, about 3,000 were benign or malignant tumours.

Haematology and Serology and the Blood Bank

108. More than 426,000 haematology specimens were examined, the most common examinations being haemoglobin estimations, total and differential white cell counts, blood examinations and blood grouping. More than 137,500 serology tests were performed, the most common being the V.D.R.L. flocculation slide test for syphilis. In the blood banks, 36,140 pints of blood were received during the year, 33,794 pints of which were from the blood-collecting centres of the Hong Kong Red Cross Society. A total of more than 238,500 blood tests was carried out in the blood banks.

Chemical Pathology

109. Some 479,500 specimens were examined, the most common being various quantitative examinations on blood, which accounted for more than 368,500 of the examinations.

Bacteriology and Public Health

110. More than 592,500 bacteriological examinations were carried out. Samples of nightsoil, well water, and imported food from endemic areas were routinely examined throughout the year for cholera vibrios. *V. cholerae*, biotype Eltor, serotype Inaba was isolated from nightsoil on three occasions during the period from June and September 1972, but no clinical case of cholera was recorded.

111. Apart from routine bacteriological diagnosis of tuberculosis, the tuberculosis laboratory was involved in anti-tuberculosis drug sensitivity tests in conjunction with the Medical Research Council of the United Kingdom.

Virology

112. During the year, the incidence of poliomyelitis remained low. There were only three laboratory-confirmed cases of poliovirus type 2 infection. One case occurred in January and the other two in August. The annual poliomyelitis faecal survey revealed a relatively low excreter rate of 0.20 per cent of 'wild' poliovirus in 501 children under the age of five.

113. There were two outbreaks of influenza in the year. The first outbreak lasted from January to May and was caused by the variant A/HK/5/72. The second outbreak in August - October was due to the variant A/England/42/72 of which a world-wide spread was later reported. Influenza B virus was responsible for sporadic cases. The

strain B/HK/5/72 isolated in December was under close surveillance for possible epidemic spread in view of its significant change in antigenicity. Of other respiratory viral infections, parainfluenza type 3 and adenovirus type 3 were found more prevalent in the first quarter of the year.

114. A follow-up study of viral conjunctivitis was carried out in the summer season. There was only one case confirmed of infection by the virus HK3454/71, which was responsible for the epidemic in 1971, while most of the sporadic cases were adenovirus type 3 infection.

115. Cytomegalovirus infection was confirmed in 36 children, ranging from three weeks to five years. Of these, 30 (83 per cent) had hepatitis, three (8 per cent) pneumonia, and the remaining three (8 per cent) central nervous system diseases.

116. Australia antigen was found positive in 53 (10.8 per cent) of 494 cases of viral hepatitis, while Australia antibody was detected in two cases of aplastic anaemia with repeated transfusions.

Vaccine Production

117. Smallpox, rabies, typhoid-paratyphoid, and cholera vaccines were prepared at the Institute of Immunology, and issued free to doctors if used in Hong Kong. Occasional shipments were made available to neighbouring governments or agencies when requested.

INDUSTRIAL HEALTH

118. The health of workers in factories and industrial undertakings is the statutory responsibility of the Commissioner of Labour. The industrial health division of the Labour Department, staffed by officers seconded from the Medical and Health Department, is responsible for advising the Commissioner on all matters affecting the health and welfare of industrial workers, and providing an advisory service on the medical aspects of industrial problems. The division's main functions are to prevent occupational diseases and to promote health at work. The inspection of industrial undertakings by medical officers, the monitoring of the working environment by the laboratory staff, and the investigation of notified occupational diseases and medical surveillance of special groups of workers, are the principal ways in which these functions are carried out. Professional and technical staff of the division lecture labour officers, assistant factory inspectors and labour inspectors under training, medical students of Hong Kong University, students health visitors, health inspectors and health auxiliaries.

119. Environmental surveys include measurement of silica dust in quarries, and of concentrations in the air of, among many, lead, manganese, solvents, and sulphur dioxide. These surveys also investigate standards of thermal comfort, ventilation, noise and lighting.

120. Industrial health officers also act as advisers to commercial undertakings and other government departments on occupational health matters. They examine government divers annually to safeguard their health.

121. A total of 47,685 occupational injuries was recorded by industrial health visitors and nurses of the Industrial Health Division. Of these, 29,639 were accidents which caused the injured person to be off work for more than three days, and were therefore reportable under the Workmen's Compensation Ordinance. A total of 296 occupational deaths was recorded. It was found on investigation that 25 occurred among seamen recruited in Hong Kong, and 61 were due to natural causes.

122. Industrial health officers took part in medical boards to assess the degree of disability of 8,117 injured workers. Health visitors and nurses carried out case work, visiting homes and places of work as well as attending at the casualty sections of major hospitals.

123. Monitoring of air pollutants continued throughout the year. The results from the four daily stations were shown along with the Huey plate figures for the 33 monthly stations—13 on Hong Kong Island, 13 in Kowloon and 7 in the New Territories. The Advisory Committee on Air Pollution continued to meet regularly once every two months. During the year, the staff of the Air Pollution Control Unit was increased to ten inspectors. The Clean Air (Furnace, Ovens and Chimneys) (Installation and Alteration) Regulations 1972 took effect on 15th December, 1972.

124. The industrial health laboratory is now designated by the World Health Organization as a collaborating laboratory. It takes part in international studies on air pollution in conjunction with other national laboratories throughout the world.

HEALTH EDUCATION

125. A better community appreciation of the basic principles of personal and environmental hygiene, and the prevention of disease,

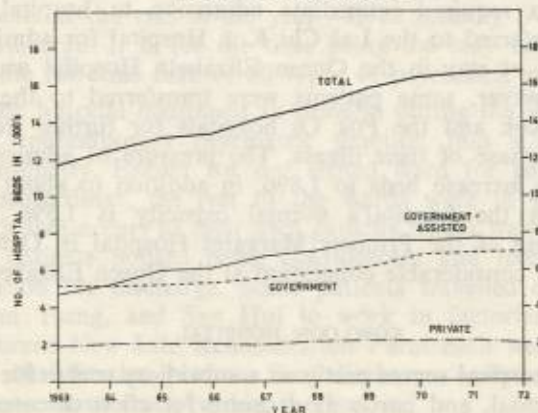
continued to be the main health objective. A wide field was covered by many branches of the department, and the co-operation of all voluntary agencies interested in such topics was actively sought.

126. In December 1972, the department participated in the Agricultural Show at Sek Kong with displays on various aspects of preventive medicine. In addition, the health education unit in the New Territories organized a number of local health exhibitions in rural towns. Exhibits included displays on personal and environmental hygiene, prevention of diseases, prevention of home accidents, maternal and child health and nutrition.

IV. WORK OF THE MEDICAL DIVISION

127. At the end of 1972, a total of 15,993 beds was available in all hospitals in Hong Kong, excluding those maintained by the armed forces. In addition, there were 740 beds in government maternity homes, and beds in private maternity and nursing homes. The total 16,733 beds represented a ratio of 4.1 beds per 1,000 of the population. The figures are based on the normal bed capacities of hospitals, but in some cases, the actual bed occupancy was much higher, since camp beds and other additional beds were used whenever the need arose. Development over the recent past is illustrated in Figure 11, and it will be noted that the bed provision in 1972 represented an increase of 67 per cent over the bed provision in 1962.

FIGURE 11
HOSPITAL BEDS 1963-72



QUEEN MARY HOSPITAL

128. Built in 1937, the Queen Mary Hospital is the main acute and specialist centre for the Island, and also the teaching hospital for the medical faculty of the University of Hong Kong. Clinical supervision is provided partly by the University's clinical departments, and partly by government specialist units. The workload at the casualty section continued to increase, attendances rising by 12 per cent over those of the previous year. Traumatic cases accounted for 26.1 per cent of all cases seen. A total of 39.8 per cent of all attendances at the casualty department was admitted to hospital for further treatment. Of those admitted, the average length of stay was 8.4 days a patient.

129. A new psychiatric unit was commissioned in January 1972. A new pathology building consisting of a new mortuary, a virus laboratory and clinical pathology services, and a new clinical building to cater for an increased intake of medical students were all completed by the end of 1972. They are now functioning. The bed complement of the hospital is 1,164.

QUEEN ELIZABETH HOSPITAL

130. The Queen Elizabeth Hospital serves a population of approximately 2.5 million in Kowloon and the New Territories as a medical centre for emergency and specialist care.

131. Last year, attendance at the casualty section rose by 9 per cent compared with the previous year. Of these attendances, 28.3 per cent were due to trauma. A total of 40.7 per cent of all cases attended to in this section required immediate admission to hospital. A small number was referred to the Lai Chi Kok Hospital for admission. The average length of stay in the Queen Elizabeth Hospital was 5.9 days a patient. However, some patients were transferred to the Kowloon, the Lai Chi Kok and the Pok Oi hospitals for further treatment of the sub-acute phase of their illness. The pressure of admissions made it necessary to increase beds to 1,896, in addition to about 100 camp beds, although the hospital's normal capacity is 1,596 beds. The planned opening of the Princess Margaret Hospital in October 1974, will relieve the considerable congestion at the Queen Elizabeth.

KOWLOON HOSPITAL

132. This hospital serves partly as a subsidiary centre for the Queen Elizabeth Hospital, and partly as a centre for chest diseases requiring

both medical and surgical treatment. It has an acute psychiatric ward, and a paraplegic unit.

133. With the completion of the west wing in October 1970, the total bed complement of the hospital increased from 500 to 1,042, including an acute psychiatric unit of 67 beds, a paraplegic unit of 50 beds, 209 beds for thoracic diseases, and 716 convalescent beds for patients from the Queen Elizabeth Hospital. Towards the end of the year, the west wing was almost fully operational, while some wards in the old section were being renovated.

TSAN YUK HOSPITAL

134. This hospital, under the clinical supervision of the Professor of Obstetrics and Gynaecology of the University of Hong Kong, is the main specialist obstetric hospital in Hong Kong. It has 300 beds, including 50 for the care of premature and sick babies. It is the teaching centre of obstetrics for medical undergraduates and the training school for midwives.

135. About 91 per cent of admissions during 1972 were booked cases. These were mainly primigravidae, grand multiparae, and cases with previous, or present, complications that required specialist care. The emergency admissions were referred mostly from government maternity homes. There were 6,186 deliveries with two maternal deaths.

MENTAL HEALTH SERVICE

Castle Peak Hospital

136. This hospital of 1,242 beds was required to accommodate 1,942 patients at the end of the year—1,915 actually living in, and 27 on trial discharge. It is for the time being the only hospital in Hong Kong for the full-time care of all types of psychiatric patients.

137. The hospital continued to develop during the year, in accordance with contemporary psychiatric practice, into a modern therapeutic community. Except for one closed ward for patients involved in court proceedings, the rest of the wards were in various degrees 'open', with free access to their own gardens. Eight wards were entirely open, the patients housed being convalescent and receiving attention in preparation for discharge. Some patients travelled daily to Tsuen Wan, Sham Tseng, and San Hui to work in factories. Others went to the adjacent New Life Rehabilitation Farm each week, for a short period of rehabilitation prior to final discharge, and many were given permission to move freely within the hospital.

138. All modern treatment in psychiatry was administered. Reliance continued to be placed on drug treatment and social measures, with the emphasis on inter-disciplinary, participatory-democratic teamwork, co-ordinating the functions and resources of social workers, nurses, occupational therapists, doctors and others in therapy. There was an increasing tendency to treat patients in psychiatric out-patients' centres and day hospitals rather than to admit them to Castle Peak.

139. Continued efforts were made to rehabilitate the long-stay and severely mentally disabled patients, the aim being to discharge them when they were fit to earn a living. Two wards were especially set up for this purpose. The usual therapeutic measures, including occupational therapy, group therapy and re-education, were intensively used, but emphasis was placed on training in activities having a direct bearing on their work after discharge. By these means, a number of patients were able to find employment while still in hospital. They later left the hospital for full-time employment.

140. A variety of social and recreational activities was organized for the patients, and they were always kept informed. In addition, they had their own social club. Every ward has a television set.

141. Planning for the second mental hospital at Lai Chi Kok within the Princess Margaret Hospital complex was in an advance stage, and the date of completion was set for 1976-77.

Psychiatric Centres

142. The Yau Ma Tei Psychiatric Centre provides treatment for both out- and day-patients, including follow-up cases from the Castle Peak Hospital. Its facilities include a child psychiatric unit. The day hospital is useful for the treatment of psychoneurotics and disturbed adolescents and children. On the Island, the Hong Kong Psychiatric Centre continued to look after out-and day-patients, follow-up cases from the Castle Peak Hospital, and forensic cases. In addition to these centres, psychiatric services were provided for the Siu Lam Hospital for the mentally subnormal, the Prisons Department Siu Lam Psychiatric Centre, the Tai Lam Centre for Women, and the Social Welfare Department's Aberdeen Rehabilitation Centre.

Kowloon Hospital Psychiatric Unit

143. This unit, located in the west wing of the Kowloon Hospital, provides comprehensive psychiatric services in a general hospital setting. Because of a shortage of staff, only the out-patients' section,

the day hospital, and two-thirds of the in-patients' section, were operational. All types of patients, except those with strong suicidal and aggressive tendencies, were admitted. During their stay, they were subjected to an intensive treatment programme. Average length of stay was two weeks.

Voluntary Mental Health Organizations

144. The New Life Psychiatric Rehabilitation Association, with the close co-operation of the mental health service, operates the New Life Rehabilitation Farm adjacent to the Castle Peak Hospital for the benefit of patients requiring a period of orientation before returning to full social and economic activity in the community. The Association also owns two half-way houses for both men and women, and a sheltered workshop for selected discharged patients from the Castle Peak Hospital. The Mental Health Association continued to provide the useful function of bridging the gap between the service and the community in 1972. The Irene House, a half-way hostel run by the Association for short-stay discharged patients from the Castle Peak Hospital, could accommodate 32 patients at a time.

Drug Addiction

145. The department maintained close liaison during the year with the Action Committee Against Narcotics (ACAN), other voluntary agencies, and government departments connected with this work. Representatives from this department served as members on various sub-committees of the Action Committee Against Narcotics and participated in activities, particularly in relation to the treatment and rehabilitation of drug addicts, and research and health education in the dangers of drug addiction.

146. A notable achievement of the department during 1972 was the setting up, on 1st December, of the Pilot Methadone Study Centre in Eastern Street, Sai Ying Pun, in the old premises of the former Mental Hospital. The Centre aims at finding out if local addicts will take to methadone maintenance instead of heroin, or opium, and if not, why not. The Government made available more than \$2 million for a study to last three years, covering an estimated 550 addicts, who are being treated free, and who are volunteers.

147. Ten beds were made available. The procedure lays down that a patient should be treated for withdrawal symptoms for about ten days, depending on the individual. As soon as withdrawal signs occur,

the patient is given 20 mg of methadone diluted in a mixture of orange juice. The intake is once a day, with the dosage increasing by 10 mg a day until a maximum of 40 mg is reached on the fifth day. When the final dosage is found to be adequate to relieve the patient's craving for 36 hours, he is discharged, and then encouraged to return to the Centre every day for his daily dose of methadone taken in the orange cordial. The procedure also requires the regular testing of urine for the detection of morphine, heroin, or opium.

148. In the first five months of the programme, 228 patients were treated. Difficulties resulting from their addiction, such as medical, social and psychological problems, were dealt with. The Centre received valuable help from the Association of Volunteers for Service.

INFECTIOUS DISEASES HOSPITALS

149. There are two hospitals which admit patients suffering from infectious diseases—the Sai Ying Pun Hospital on Hong Kong Island, and the Lai Chi Kok Hospital in Kowloon. The latter also provides some accommodation for convalescent cases from the Queen Mary and Queen Elizabeth hospitals. The two infectious diseases hospitals will soon be replaced by the 110-bed Infectious Diseases Block of the Princess Margaret Hospital, to be opened in late 1974.

150. While the overall trend was towards a reduction in incidence of infectious diseases, food and water-borne diseases, namely typhoid and the dysenteries, and to some extent viral hepatitis, still accounted for a significant number of cases of notifiable diseases. (See Table 14.)

THE TANG SHIU KIN HOSPITAL

151. The Tang Shiu Kin, built with a substantial donation from Sir Shiu-kin TANG, is situated at Morrison Hill, Hong Kong. Opened in 1969, it replaced the former Eastern Public Dispensary and Maternity Home, the Harcourt Health Centre, and the Wan Chai Social Hygiene Female Clinic.

152. The hospital is equipped with a casualty department and casualty wards for 40 patients. It has a general out-patient department, a maternal and child health centre, a 36-bed maternity ward, a social hygiene clinic, a special skin clinic, and a part-time obstetrical and gynaecological clinic.

153. The hospital also houses the head office of the Maternal and Child Health Services and a training school for health visitors and

health auxiliaries. Quarters are available for medical and nursing staff. Since its opening, the hospital has played a useful role in providing casualty and emergency services for the eastern part of the Island.

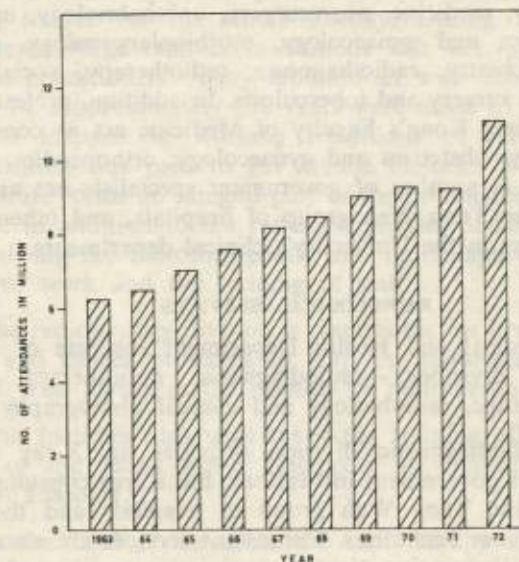
OTHER GOVERNMENT HOSPITALS

154. Other hospitals maintained by the Government are the St. John Hospital, serving the Island of Cheung Chau and neighbouring islands of the western sea-board; the South Lantau Hospital, serving villages on the south-west coast of Lantau Island; and six hospitals within compounds at Stanley Prison, Victoria Prison, the Tai Lam Centre for Women, the Tai Lam Addiction Treatment Centre, the Ma Po Ping Addiction Treatment Centre and the Chi Ma Wan Prison.

OUT-PATIENT SERVICES

155. Pressure remained heavy throughout the year on all 49 general out-patient clinics and also on most specialist clinics. Trends during the past 10 years are shown in Figure 12.

FIGURE 12
TOTAL OUT-PATIENT ATTENDANCES IN GOVERNMENT
INSTITUTIONS 1963-72



REMARK: INCLUDING ATTENDANCES AT PHYSIOTHERAPY & OCCUP. THERAPY CENTRES

156. New facilities which became available during the year are detailed in paragraph 218 of this report.

157. In addition to general out-patient service, regular out-patient sessions were maintained at a number of clinics by staff of specialized units. Evening out-patient sessions continued to be held at 10 clinics in the more densely populated areas. They are the Aberdeen Jockey Club Clinic, the Kowloon Hospital out-patient department, the Kwun Tong Jockey Club Clinic, the Lady Trench Polyclinic, the Li Po Chun Health Centre, the Robert Black Health Centre, the Sai Ying Pun Jockey Club Polyclinic, the Shau Kei Wan Jockey Club Polyclinic, the Violet Peel Polyclinic and the Yau Ma Tei Jockey Club Polyclinic. Sunday and public holiday clinics were also held at six of the clinics. The more remote areas of the New Territories continued to be served by two mobile dispensaries and the 'floating clinics', while the 'flying doctor' service to more isolated and inaccessible villages was maintained.

SPECIALIST SERVICES

158. The Department provides specialist services units in anaesthesiology, dentistry, medicine, neurosurgery, ophthalmology, orthopaedic surgery, obstetrics and gynaecology, otorhinolaryngology, pathology, paediatrics, psychiatry, radiodiagnosis, radiotherapy, social hygiene, surgery, thoracic surgery and tuberculosis. In addition, professors of the University of Hong Kong's Faculty of Medicine act as consultants in medicine, surgery, obstetrics and gynaecology, orthopaedics, pathology and paediatrics. A number of government specialists act as honorary consultants to the Tung Wah group of hospitals, and others serve as part-time lecturers in the University's clinical departments.

RADIOLOGICAL SERVICES

159. The Medical and Health Department Institute of Radiology comprises five divisions:—radiodiagnosis, radiotherapy, radiation physics, radioisotope, radiobiology and clinical photography.

160. The radiodiagnostic division provides an X-ray diagnostic service mainly for government institutions, but a free consultant service is available to the Tung Wah group of hospitals and the Pok Oi Hospital in the New Territories. Consultant services are also available to medical practitioners in private practice on payment of a fee. In all, 19 static X-ray departments and three mobile chest radiography

units were in operation with a total output of 776,766 examinations, an increase of approximately three per cent over the previous year. During 1972, a major diagnostic X-ray machine, with cineradiography, screening and television monitoring facilities, was installed at the Queen Elizabeth Hospital X-ray Department. A new Chest X-ray Department was opened at the Kwai Chung Chest Clinic.

161. The radiotherapy division based at the Queen Elizabeth and Queen Mary hospitals treated more than 90 per cent of all patients requiring radiotherapy in the whole of Hong Kong and also operates a Colony-wide cancer registry.

162. The radioisotope service is included in the radiotherapy division. Because of its modest outlay, it serves mainly government institutions, but a consultant service is also available, on a limited scale, to the Tung Wah group of hospitals, and medical practitioners in private practice.

163. The radiation physics division is responsible for the operation of the radiological workshop which provides a maintenance service for government radiological equipment, and also a film-badge radiation monitoring service for the whole Colony. During 1972, the latter service covered 49 government institutions with 401 radiation workers, 120 private practitioners' X-ray laboratories with 386, and industrial firms with 74. Approximately 180 visits were made to non-government premises to inspect the working conditions of radiation workers. Special attention was paid to gas mantle factories where radioactive thorium nitrate forms an integral part of the production process. These duties were in addition to the radiation physics division's main function of assisting the radiotherapeutic and radiodiagnostic divisions in their routine work and the training of staff.

164. The radiobiology division is responsible for investigating radiobiological and cancer problems to help the radiotherapy division in its work. It also assists in the training of radiotherapists.

165. The Institute also undertakes the training of medical undergraduates of the Hong Kong University in clinical radiology and radiological anatomy.

166. In the field of research, the radiotherapy and radiobiology divisions are continuing their own as well as the collaborative research with the International Agency for Research on Cancer in an investiga-

tion into the epidemiology of nasopharyngeal carcinoma, the commonest cancer among Hong Kong men.

OPHTHALMOLOGY

167. This service maintains three full-time centres with surgical facilities, and in addition, holds regular sessions at 15 out-patient clinics in urban and rural areas. Ophthalmic surgery is performed in two government hospitals with a total of 36 beds for ophthalmic cases as well as in out-patient clinics. Emergency ophthalmic services are also available at the three casualty departments in the Queen Mary, Queen Elizabeth, and Kwong Wah hospitals.

168. During the year, the number of persons first registered as blind was 224, including 17 aged under 15. Trends of previous years in the causation of blindness continued, with increasing frequency of the eye diseases of advancing age, and a reduction in those caused by deficiency states and trauma. Senile cataract and glaucoma replaced keratomalacia as the predominant causes. Among children, the main cause of blindness was congenital defect, while blindness due to keratomalacia was comparatively rare.

EAR, NOSE AND THROAT SERVICE

169. Table 66 shows statistics collected by clinics run by the ear, nose and throat service at various centres, and also hospital cases taken care of by the consultant surgeon and his staff. Under the consultant surgeon are also an audiometric unit and a speech therapy unit. The former handles diagnostic hearing tests on patients referred by qualified E.N.T. surgeons in Hong Kong, and the latter treats all patients referred by registered doctors, with defects and disorders of voice, articulation, fluency, and so on, except cases of severe deafness in children. The latter are taken care of by the hearing and speech centre of the Education Department.

PHARMACEUTICAL SERVICE

170. This sub-department meets the requirements for drugs, dressings, surgical instruments and hospital sundries of all government hospitals, clinics, and health centres, including government-subsidized medical institutions. Headed by the chief pharmacist, it has a staff of 24 pharmacists and 192 dispensers. As a result of the renovation of the Central Medical Store in North Point, the major manufacture of pharmaceutical products, except for tableting, was carried out solely

at the Kowloon Medical Store. The work of this new manufactory has been completed. It will be ready for full operation as soon as it is equipped.

171. The other responsibility of the chief pharmacist is the enforcement of the law pertaining to dangerous drugs, pharmacy and poisons, and antibiotics. During the year, 107 prosecutions were taken out, and all resulted in convictions. Examinations for the registration of pharmacists were held as usual in June and December. A total of 34 candidates sat, but only seven passed.

MEDICAL SOCIAL WORK

172. The expansion of the medical and health services, and the increasing emphasis on rehabilitation in its various aspects, continued to make heavy demands on the services of medical social workers who have been enjoying good team-work with the other professional members of the medical and health team. The trend of moving from basic material and financial assistance to the giving of more and more attention to the problems, or factors, that have led to the need for assistance, has called for more sophisticated social work knowledge, discipline and skill, so as to help the handicapped and the chronically-ill to re-integrate into society with a role and a task which can give them dignity and social status. The allocation of about 100 beds at the Grantham Hospital as convalescent beds for cases from the Queen Mary Hospital resulted in an extension of the service to patients transferred there. Medical social workers of the Hong Kong division also undertook medical social work in the Tsan Yuk Hospital, the Sai Ying Pun Infectious Disease Hospital and Jockey Club Clinic, the Tang Shiu Kin Hospital, the Duchess of Kent Children's Orthopaedic Hospital, the Tung Wah Sandy Bay Convalescent Hospital, the David Trench Rehabilitation Centre, the Wan Chai Physiotherapy Centre, the Violet Peel Polyclinic, the Eye Services of the Yau Ma Tei, Violet Peel and Yuen Long clinics, and the Mount Parish School for Mentally Sub-normal Children, Wan Chai.

173. The medical social service of the Kowloon division which covers medical social work of the Queen Elizabeth Hospital, the Kowloon Hospital, the Lai Chi Kok Hospital, the Kowloon Rehabilitation Centre, the Queen Elizabeth Specialist Clinic, the Cancer Wing of the Caritas Medical Centre and three out-patient departments in Kowloon, continued to provide service to an increasing number of

patients treated at these hospitals and clinics. Besides helping them to regain maximum health and social capability in a joint effort with medical staff, close liaison was maintained during the year with other government departments and voluntary agencies for the rehabilitation and after care of these patients.

174. Medical social workers in the chest and special skin division continued to see patients by a referral and selection system, in addition to automatic interviews of all patients on admission arising from the social aspects of these diseases. Medical social workers of this division worked full-time at all main chest clinics and special skin clinics, and part-time at other sub-clinics, including New Territories clinics and the Aberdeen Jockey Club Clinic. In addition to services to out-patients, this division also provided medical social services to tuberculosis patients treated at such hospitals as the Kowloon, the Grantham, the Ruttonjee Sanatorium, the Wong Tai Sin Infirmary, the Haven of Hope Sanatorium, and other medical institutions. In the special skin service, medical social workers maintained close liaison with the Hay Ling Chau Leprosarium. There were fewer difficulties in 1972 with such rehabilitation problems as the housing of leprosy patients, the employment of cured persons, and their re-integration into the community.

175. Medical social work in the mental health service widened in scope with the Medical and Health Department's expansion, and with the new psychiatric unit in the Kowloon Hospital and the Queen Mary Hospital University Psychiatric Unit now fully operational. The increase of intake naturally had its impact on medical social workers who were required to meet social problems of patients in treatment, the care of these patients' families, as well as planning for their discharge, aftercare and rehabilitation. The full implementation of the public assistance scheme of the Social Welfare Department further increased the demand on medical social workers' time and attention. The opening of the Siu Lam Hospital resulted in an upsurge of referrals to the mental health service of mentally retarded individuals, often with accompanying social problems, such as family rejection, for whom the medical social worker's assistance in counselling and referral for other welfare services was essential.

176. As a result of the rapid expansion in the medical and health services, there was a larger intake of new recruits in the medical social service, and the in-service training and orientation programme was

carried out on a larger scale than before with the appointment of a training officer. Interdisciplinary departmental training, much appreciated because of its teamwork implications, continued to be maintained. Requests also came from other hospitals' nursing schools such as the Tung Wah group of hospitals, from hospital administrators, welfare organizations, the Social Welfare Department's training section, and so on, for medical social workers' contributions towards their staff development programmes. Practical work placements in the department's hospitals, mainly the Queen Elizabeth, the Queen Mary, and the Kowloon hospitals, continued to be made available to the B. Soc. Sc. undergraduates of the two universities, and graduates undertaking the diploma of social studies course of the University of Hong Kong. In both respects, experienced and qualified medical social workers were designated as supervisors in the field training of social work students.

PHYSIOTHERAPY

177. The demand for physiotherapy services continued to rise, particularly for the severely handicapped and patients requiring intensive care. Another large group, mainly out-patients, consisted of those suffering from cervical spondylosis, the symptoms of which are often caused by sedentary occupations and the lack of physical activities among office workers.

178. The physiotherapy services in the west wing of the Kowloon Hospital continued a programme of expansion to give convalescent patients, particularly spinal lesions, as much attention as possible so as to overcome their disabilities. Many were also treated at the Kowloon Rehabilitation Centre. These long-stay patients need much encouragement, and sports activities were arranged for them to help increase their strength and independence. Most of them become proficient at various wheelchair sports and take part in competitions against patients from other centres in basketball, table tennis, archery, javelin, swimming and discus-throwing. More social activities were arranged, such as picnics, visits to tea houses and homes, shopping, ten-pin bowling, and music lessons. A similar service was inaugurated by physiotherapists for about 26 patients at the Queen Elizabeth Hospital.

179. The David Trench Rehabilitation Centre continued to expand slowly. It drew on the Wan Chai Clinic for patients needing hydrotherapy. The Wan Chai Clinic started swimming sessions for the more

independent at the Urban Services Department's all-season swimming pool at Morrison Hill. As more major surgery came to be done at the Queen Mary Hospital, the Queen Elizabeth Hospital, and the Surgical Thoracic Unit at the Kowloon Hospital, more time came to be spent on pre and post-operative care.

OCCUPATIONAL THERAPY

180. During the year, the occupational therapy sub-department reached full strength with the appointment of two expatriate officers, and the return of one scholarship graduate from the New South Wales College of Occupational Therapy in Sydney.

181. There was an increased demand for occupational therapy services in many government hospitals and out-patient centres—there are now eleven occupational therapy units within the sub-department. Otherwise, treatment in 1972 followed the same pattern as in previous years, with the same aim in view—to assist patients to return to their previous employment, or to an alternative form of livelihood.

182. The occupational therapy units in the Queen Mary and Queen Elizabeth hospitals continued with the treatment of in-patients. The Queen Elizabeth Hospital also has a regular attendance of out-patients. The Lai Chi Kok Hospital occupational therapy unit was closed on 10th April, 1972, because of an acute staff shortage. The Wan Chai Polyclinic unit continued to function to the maximum, despite its physical limitations and location, and these together prevented further expansion of the service offered.

183. The occupational therapy unit continued to provide a diverse programme of progressive treatment in the Castle Peak Hospital covering work, recreation and group-social activities. The Hong Kong Psychiatric Centre and the Yau Ma Tei Mental Health Centre continued to provide a treatment programme for out-patients, including selected patients from the Castle Peak Hospital. For the latter, a short follow-up period was necessary, and the same was also true for those receiving other forms of therapy referred for observation prior to assessment for future employment.

PROSTHETIC-ORTHOTIC SERVICE

184. The prosthetic-orthotic service provides modern artificial limbs and orthopaedic appliances for the public and for in-patients of

government hospitals. The demand for prosthetic-orthotic service continued to rise as a result of increased industrial and traffic accidents. Though the number of new poliomyelitis patients requiring orthopaedic appliances decreased, the old poliomyelitis patients were growing up during the year, and so the demand for medium and large sizes of long leg-braces with knee-hinges increased.

185. To ensure that artificial limbs available in Hong Kong were the best possible, and that the method of fabrication and limb-fitting kept abreast of developments, one prosthetist was sent abroad in July 1972 to take a post-graduate prosthetic course, to make an up-to-date general survey of prosthetics and orthotics in England, Denmark, and West Germany, and to work in some of the research and development centres in those countries.

186. Work study in the production of artificial limbs continued. The main research and development undertaken during the year included: (i) dynamic splint for the correction of T.E.V. foot deformities, (ii) new techniques for fitting and manufacturing below-knee prosthesis, and (iii) improved design of all walking aids.

MEDICAL EXAMINATION BOARD

187. This section carries out medical examinations of new entrants to the civil service and certain units of the Essential Services Corps. The number of persons classified as unfit, on account of tuberculosis, decreased considerably in 1972 when compared with the previous year. Tuberculosis remained the primary reason for non-acceptance of applicants on medical grounds, being responsible for seven out of the 10 classifications as 'unfit' in each 1,000 examinations. The Medical Examination Board is now located in the Canton Road government offices.

HOSPITAL MAINTENANCE AND SUPPLY

188. The development of the services provided in medical institutions operated by the Medical and Health Department continued during the year to make the administration and supply of the hospital service increasingly complex.

189. Work on the planning and commissioning of the Princess Margaret Hospital complex made good progress. The majority of the equipment is on order, or will soon be. A Commissioning Unit has been formed, and it is expected that the general hospital will be

opened in phases starting late in 1974. Every attempt has been made to ensure that both the buildings and equipment conform to modern ideas and standards. But in a project of this magnitude, which will have taken some eight years to reach fruition, during which period there have been impressive improvements in diagnostic and therapeutic procedures, some shortcomings are inevitable. These should still be minimal, and it is hoped that the new complex will form a hospital of which the Colony will be proud.

190. Detailed planning on the second mental hospital, which will form part of the Princess Margaret Hospital complex, is now underway and work on the equipment schedules and other maintenance and administrative aspects has started.

191. Staff welfare continued to improve with the appointment of a full time Staff Welfare Officer.

192. A considerable degree of assistance was rendered to various subsidized hospitals in regard to equipment and detailed planning of new projects, in particular to the Yan Chai and the United Christian hospitals which are due to open soon.

AUXILIARY MEDICAL SERVICE

193. The Auxiliary Medical Service consists of more than 6,000 young men and women, of whom at least 2,000 are under 24. The service continued to expand during the year, and there was always a long list of recruits waiting to be trained. Members augment Hong Kong's medical, ambulance and rescue services during any emergency.

194. Approximately 3,500 officers and members are in the ambulance depot teams, which are dispersed, with their stores, throughout the urban areas, the New Territories and outlying islands. These teams are affiliated to the nearest fire stations, and members carry out duties as drivers and crews of ambulances at weekends and on public holidays. They are also trained in light rescue and life-saving. There are more than 600 trained life-savers—men and women—who also carry out regular life-guard duties on the beaches and in public swimming pools during weekends and on public holidays.

195. Officers and members assigned for emergency duties in hospitals carry out annual training for a week in one of the major hospitals. Others are trained as inoculators, dental surgery assistants, and for work with the chest service.

196. All trained members carried out operational duties during the year. Members attended at scenes of all major fires to help care for the injured and homeless, and stood by to assist whenever typhoons threatened.

197. Members manned weekend sessions of the Medical Examination Board set up since mid-December 1972 in response to a mass recruitment campaign for auxiliary police. This has helped considerably to speed up the recruitment procedure of the campaign. The weekend sessions were continued for other defence units after the auxiliary police campaign was over.

198. The band of the AMS performed on many occasions in public parks, at departmental functions, and gave Christmas concerts at various hospitals.

REGISTRATION OF MEDICAL CLINICS

199. In accordance with the Medical Clinics Ordinance, all clinics are required to be re-registered annually. On 31st March, 1973, there were 75 registered static clinics, three registered mobile clinics in the charge of registered medical practitioners, and 344 clinics registered with exemption, making a total of 422.

200. The low cost medical care scheme, aimed at providing general practitioner services to the population residing in all housing estates, continued to operate. Eighty-five registered medical practitioners took part in the scheme in resettlement estates, and 27 in housing estates. In addition, 36 of the 344 clinics registered with exemption under the Medical Clinics Ordinance (para. 159) also operated under the scheme.

V. GOVERNMENT-ASSISTED HOSPITALS

201. Financial assistance, mainly by means of an annual subvention, is given by the Government to certain voluntary organizations maintaining hospitals in Hong Kong. Such hospitals, containing a total of 7,621 beds, provide mainly non-acute general beds, or facilities for persons suffering from certain specific diseases, or handicaps. The total government subvention to these hospitals during the year was \$98,704,432 recurrent, and \$10,272,687 special expenditure.

THE TUNG WAH GROUP OF HOSPITALS

202. The Tung Wah group of hospitals is a long-established Chinese charitable organization, managed by a board of directors elected

annually. During recent years, a programme of modernization and expansion has been undertaken, with assistance from the Government, in staff—especially medical officers and consultant services—money, and material. The subvention for this was \$52,255,214.

203. Construction of the 12-storey Centenary Block in the Tung Wah Hospital was continued, and phase I of the project was completed in August 1972. Work on phase II began in early 1973. When completed, the building will have 424 beds, with a new casualty department, X-ray facilities, new operating theatres, and single quarters for 20 medical officers.

204. In the Kwong Wah Hospital, a medical social service was established in August 1972. Planning began during the year to erect a 10-storey clinical pathology building which will provide accommodation for the clinical pathology service, the physiotherapy department, the occupational therapy department, the medical social service, and other services in the hospital.

205. The casualty section of the Kwong Wah Hospital handles accident cases occurring between Waterloo and Lai Chi Kok roads. Many patients were referred to it by government clinics in Kowloon and the New Territories. As a result, this casualty section dealt with cases not only from the northern part of Kowloon peninsula, but also from other areas. The officers attached to the police post, the industrial health division of the Labour Department, and the ambulance control post in the casualty section continued to work in close liaison with the staff there.

206. In the Wong Tai Sin Infirmary, there are altogether 681 beds, of which 185 are allocated to the government tuberculosis service. Patients for long term treatment are transferred to the Infirmary from the Queen Elizabeth or the Kwong Wah hospitals. There are also 503 beds in the Tung Wah Sandy Bay Convalescent Hospital for the treatment of chronic patients. But the provision of a total 1,184 beds for long-term patients under the management of the Tung Wah group of hospitals was still not sufficient, according to the year's experience, to meet the demand for more chronic beds in Hong Kong.

207. In March 1973, the Tung Wah Eastern Hospital completed its programme of alteration. The work carried out included the provision of two major operating theatres, one minor theatre, two air-conditioned X-ray rooms, an expanded laboratory, and an enlarged

kitchen. After the alteration, the hospital is expected to receive straight-forward emergency cases from its own out-patient section and receiving room, and also from the casualty section of the Tang Shiu Kin Hospital.

ALICE HO MIU LING NETHERSOLE HOSPITAL

208. This hospital, supported by the London Missionary Society, received a subvention of \$8,582,584 during the year. The hospital has been considerably modernized in recent years, and its facilities greatly improved.

209. It has had another busy year with an increase in in-patient admissions over the previous year of 15 per cent and in out-patient attendances of 10 per cent. The greatest demand is on the obstetric service which remains overcrowded despite strict limitations on bookings.

POK OI HOSPITAL

210. This charitable hospital in Yuen Long, New Territories, continued in 1972 to serve the population of Yuen Long and surrounding areas. Recently, the hospital was modestly expanded and during the year the north wing extension project was completed and brought into use. The new building provides a kitchen, a laundry room, and quarters for minor staff.

211. To improve the use of facilities, two surgical teams from the Queen Elizabeth Hospital visited the Pok Oi once a week for surgical clinics and operations. A small quantity of blood began to be stocked in the hospital for urgent use when required.

CARITAS MEDICAL CENTRE

212. The Caritas Medical Centre has 898 beds. It was erected with the aid of donations from Catholic communities in many parts of the world, in particular the Federal Republic of Germany, and is maintained partly with the aid of a government subvention. In 1972, this was \$5,495,940. The Centre is situated in the densely-populated district of So Uk in north-west Kowloon. It is administered by the Canossian Sisters and comprises blocks for general, tuberculosis, and cancer patients, as well as quarters for staff and a nurses training school. The hospital continued to play an active part in the provision of medical services in Hong Kong.

213. During the year, a prosthetic and orthotic section was established. The hospital also planned to develop the site adjacent to the medical centre by the construction of a nurses training centre, a physiotherapy block, a new chronic hospital block, and staff quarters.

THE HONG KONG ANTI-TUBERCULOSIS AND THORACIC DISEASES ASSOCIATION

214. The three institutions of this Association—the Grantham Hospital, the Ruttonjee Sanatorium, and the Freni Memorial Convalescent Home—provide the great majority of beds available for the treatment of tuberculosis, and a close liaison is maintained with the government chest service.

Grantham Hospital

215. This hospital of 625 beds is equipped as a modern chest hospital and is administered by the Grantham Hospital management board on a fee-paying, non-profit-making basis. The Government maintains 610 of the beds, but all staff of the hospital are provided by the Association, with the exception of government medical officers posted to the government clinical units, which are directly responsible for 218 of the beds. Because of the decline in the need for hospital beds for the treatment of pulmonary tuberculosis, 78 beds been re-allocated for general use as convalescent beds for chest and heart cases from the Queen Mary Hospital.

216. The Grantham Hospital is also a centre for cardiac surgery. As a result of contributions from the Government, the University of Hong Kong, and the Association, open-heart surgery was begun in 1968. Staff of this unit consists of specialists from the departments of medicine and surgery of the University of Hong Kong, and from the Medical and Health Department.

Ruttonjee Sanatorium and Freni Memorial Convalescent Home

217. The Ruttonjee Sanatorium has 250 beds, including 40 for children. It is supported by voluntary contributions and by a subvention from the Government amounting to \$3,700,000 in the year under review. Patients are referred for admission by the government chest clinics or the casualty sections of government hospitals. Provision is also made for employees of the principal subscribers to the Association. Though the majority of patients admitted during the year suffered from pulmonary tuberculosis or its sequelae, more patients with lung

cancer were also admitted. A special unit is provided for the management of patients suffering from tuberculous meningitis. The Freni Memorial Convalescent Home has 110 beds for adult males, and allows a greater turnover of patients to take place in the Ruttonjee Sanatorium. It is used for post-operative patients, and also for patients whose progress is uncomplicated but who need supervised anti-tuberculosis chemotherapy. The medical and nursing staff of the Ruttonjee Sanatorium operate the Freni Memorial Convalescent Home.

218. The hospital is currently co-operating with the Hong Kong Government and the Medical Research Council of the United Kingdom in clinical studies on various aspects of the treatment of tuberculosis.

HAVEN OF HOPE SANATORIUM

219. This hospital of 322 beds is situated in the Junk Bay area of the New Territories, and a tuberculosis out-patient and follow-up clinic is maintained at nearby Rennie's Mill. During the year, the hospital was assisted in its recurrent expenditure by a subvention of \$1,944,000.

DUCHESS OF KENT CHILDREN'S ORTHOPAEDIC HOSPITAL AND CONVALESCENT HOME

220. Maintained by the Society for the Relief of Disabled Children, with the aid of a subvention of \$1,677,569, this modern children's orthopaedic hospital now has 200 beds for children requiring specialized long-term orthopaedic care and surgery. Patients are admitted to the hospital through its own out-patient department and other clinics. Traumatic cases are transferred from the Queen Mary Hospital for convalescence. During the year, a new spinal X-ray equipment was installed. The hospital continued its research on the treatment of spinal deformities with the halo-pelvic traction apparatus. Following surgery, rehabilitation is achieved with physiotherapy, occupational therapy and primary schooling.

OUR LADY OF MARYKNOLL HOSPITAL

221. This hospital of 264 beds is administered by the Maryknoll Sisters, and was maintained during the year with the aid of a subvention of \$2,006,082. It is located at Chuk Yuen in north-east Kowloon, and provides general in-patient and out-patient facilities

for this rapidly expanding area. The hospital also provides a two-year training programme for enrolled nurses.

HAY LING CHAU LEPROSARIUM

222. This leprosarium, situated on an island six miles from Hong Kong Island, is maintained by the Leprosy Mission, Hong Kong Auxillary, with the aid of a subvention of \$925,000. It provides in-patient and rehabilitation facilities for leprosy patients, and has special facilities for those who require reconstructive surgery, or who are suffering from intercurrent disease. The number of patients has fallen in recent years as a result of the decreasing incidence of leprosy, and at the end of 1972, there were only 149 patients at Hay Ling Chau, a decrease of 47 patients compared with the previous year.

THE HONG KONG SOCIETY FOR REHABILITATION MARGARET TRENCH MEDICAL REHABILITATION CENTRE

223. This Centre, aided by a recurrent grant from the Government amounting to \$741,000 in 1972, accommodates 80 patients, with occupational workshops and facilities for physiotherapy and the manufacture of prostheses. It is designed to assist in the quick return to employment of those who have been injured, particularly as a result of industrial accidents.

NAM LONG HOSPITAL

224. The Nam Long, maintained by the Hong Kong Anti-Cancer Society, is situated at Brick Hill overlooking Aberdeen harbour. It has 120 beds, and takes in cancer patients, convalescing from major surgery, or from radiotherapy, and also those with advanced disease. Chemotherapy is also given to patients. Cases are referred by government or private hospitals or by medical practitioners, and it is the policy of the hospital to admit only such cases. All needy patients receive free treatment, but for those who are able to pay, a small fee is charged. Patients are provided with medical social service.

HONG KONG BUDDHIST HOSPITAL

225. This hospital, situated in north-east Kowloon, was opened in October 1970. It has a capacity of 350 beds. The hospital is provided with beds for general medical, surgical and obstetric patients. During the year, both out-patient attendances and in-patient admissions

showed an increase. The hospital was assisted by the Government with \$1,580,897 in 1972.

FANLING HOSPITAL

226. This hospital, administered by the Lutheran World Federation, has 54 beds. It is situated in the Fanling area of the New Territories. From April 1971, it began to be assisted by the Government in respect of its recurrent expenditure on a two-thirds cost basis. In addition to the provision of an in-patient service for general cases, the hospital also operates an out-patient clinic for residents in the Fanling district. Towards the end of the year under review, discussions were completed for the hospital to be taken over by the Government on 1st April, 1973.

VI. THE TRAINING PROGRAMME

227. To provide the people of Hong Kong with comprehensive and freely available medical and health services, the department needs a considerable number of doctors, nurses and various para-medical staff to run its hospitals, out-patient sections, polyclinics and other institutions. As the demand for medical services increase yearly, the overall staffing problem can only be met by recruiting and training more men and women of all grades.

228. The training of officers in all grades is therefore an important task. Unless adequate numbers of staff are available, the services will be affected. In addition, the department recognizes the need for providing continuing training for medical and health staff to enable them to improve their skill in their respective fields. This will keep them up-to-date with developments and improved techniques, and so raise general standards.

229. In line with such a policy, the post of Medical Training Administrator was created during the year. This officer is now responsible for co-ordinating and organizing all aspects of training among doctors, nurses and the professions supplementary to medicine.

DOCTORS

230. Post-graduate training for doctors in the various branches of medicine and surgery is carried out by the University of Hong Kong's clinical professors and government clinical specialists. Every year, subject to the requirements of the time, a number of doctors are

sent overseas for higher professional qualification and to obtain the necessary clinical experience in specialized subjects.

231. In addition to the co-operation of university professors, there are arrangements for higher professional examinations in Hong Kong by the Royal Colleges of Medicine, Surgery, Obstetrics and Gynaecology, Pathology, and the Faculty of Anaesthesia.

232. Besides full-pay study leave, other financial assistance include the New Zealand Medical Aid Programme, the World Health Organization Aid Programme, the Sino-British Trust, the Commonwealth Scholarship, and the Li Po Chun Scholarship for the training of doctors overseas. Last year, 26 government doctors were enabled by these means to acquire higher qualifications in their respective fields.

DENTAL STAFF

233. No training in dentistry is available in Hong Kong, but the Government annually awards scholarships overseas for the study of dentistry. Four such scholarships were awarded during the year—three for study at the University of Otago, New Zealand, and one for study at Guy's Hospital, London. One graduate returned to Hong Kong, bringing the total number of such qualified dentists to 68 from a total of 93 scholarships so far awarded.

234. In-service training in dental technology for government student dental technicians was suspended in 1972 because of the absence of new recruits, while evening classes for dental technicians in the private sector were held at the Hong Kong Technical College.

235. During the year, two dental officers were sent abroad for further study in prosthetic dentistry and dental health tutorship in the United Kingdom and New Zealand. A dental nurse who was sent on a 12-month dental nurse tutor course in New Zealand under a World Health Organization fellowship, returned to Hong Kong after completion of her studies. Seven dental surgery assistants were in Singapore and Penang for training in dental nursing under World Health Organization fellowships.

NURSING STAFF

Nurses

236. There are three government hospital schools of nursing. Those at the Queen Elizabeth and Queen Mary hospitals are general schools,

and the one at the Castle Peak Hospital is a psychiatric nursing school. Training at government schools and at the Caritas Medical Centre is in English. There are also approved schools at the Tung Wah group of hospitals, the Alice Ho Miu Ling Nethersole Hospital and the Hong Kong Sanatorium and Hospital, where instruction is in Cantonese. Examinations are held by the Nursing Board of Hong Kong, and there is full reciprocity of registration between the Board and the General Nursing Council of England and Wales.

Enrolled Nurses

237. Two types of course are held for enrolled nurses. The general course lasts two years. It is conducted at the Kowloon Hospital. The psychiatric course, also two years, is held at the Castle Peak Hospital. Enrolment examinations are held by the Hong Kong Nursing Board, but there is no reciprocity between the Board and the General Nursing Council of England and Wales.

Post-graduate Courses

238. Eight nurses returned to Hong Kong from overseas, having successfully gained post-graduate certificates in nursing education, nursing administration, ophthalmic nursing, dietetics, theatre-service-centre technique, and venereal disease nursing. A further nine nurses have gone overseas to study nursing education, nursing administration, dietetics, central-sterile-supply technique, and burn and plastic surgery nursing.

Midwifery

239. For registered general nurses, a one-year course in midwifery is held three times a year. For student midwives who are not registered nurses, a two-year course of training at the Tsan Yuk Hospital, and to a limited extent at other approved training schools, is accepted by the Midwives Board for entry to its examinations.

240. Due to the limited scope of domiciliary midwifery in Hong Kong, adequate practical training in this aspect of midwifery cannot be given, and full reciprocity of recognition of midwifery qualifications with the Central Midwives Board of England and Wales is not possible. Only the one-year post-graduate courses conducted in English, held at the Queen Elizabeth Hospital and the Caritas Medical Centre, have reciprocity with the Part I Examination of the Central Midwives Board of England and Wales.

Health Visitors

241. The nine-month health visitors' course was temporarily suspended in 1972-73.

Health Auxiliaries

242. A two-year course for health auxiliaries is held yearly. It provides training in health education and public health nursing, which includes maternal and child health work, training and keeping of records of infectious diseases in general, and of tuberculosis, leprosy and venereal disease in particular.

RADIOGRAPHERS

243. Radiographers continued to receive in-service training during the year, and examinations were held in Hong Kong for membership of the Society of Radiographers for both therapy and diagnostic radiographers. Seven student radiographers passed the Part II D.S.R.(R) examination, and one passed the Part II D.S.R.(T), so becoming qualified radiographers.

LABORATORY TECHNICIANS

244. The department's Institute of Pathology maintained its in-service training for medical laboratory technicians. The intermediate examination of the Institute of Medical Laboratory Technology of the United Kingdom was held in Hong Kong, and technicians were sent to the United Kingdom to obtain the A.I.M.L.T. qualification.

SCHOOL OF PHYSIOTHERAPY

245. The full programme of the Physiotherapy Training School had to be curtailed during the year as the result of a shortage of teaching staff. No new intake of students was accepted in October 1972, but students in training continued as usual. Thirteen students, including three for non-government institutions, qualified in 1972, leaving 28 who are continuing training at present, of whom eight will eventually work in the private sector. There continued to be much interest in the course, especially among students in secondary schools.

OTHER FORMS OF DEPARTMENTAL TRAINING

246. In-service courses of training continued in 1972 for dispensers and prosthetists. These courses do not lead to recognized qualifications, but qualify those who complete them for appointment to permanent posts in government service after passing a departmental examination.

VII. DEVELOPMENT

FORWARD PLANNING

247. Hospital development has been unparalleled in the past 18 years. But the population has also increased rapidly, and there is considerable pressure on most categories of hospital beds, particularly those for acute and chronic general and mental patients.

248. The white paper on the development of medical services in Hong Kong, tabled in the Legislative Council in February 1964, outlined the medical problems in Hong Kong, and made suggestions for the correction of deficiencies in order to produce, alongside a rapidly increasing population, a reasonably satisfactory standard of medical facilities. The working party which prepared the white paper was re-constituted by the Governor as the Medical Development Plan Standing Committee.

249. The Committee held 57 meetings since its inception in order to keep the recommendations made in the white paper under continuous review, and to report its conclusions on all major matters to the Government. The committee's activities fell into five main categories—the development of medical institutions, the staffing of such institutions, subventions to government-assisted institutions, fees and charges, and improved utilization of existing medical facilities.

250. The principal matters considered by the Committee during the year were the future role of the Fanling Hospital, the Violet Peel Clinic, the United Christian Hospital, the Kowloon Public Mortuary, the standard urban clinics at Li Muk Shue and Ha Kwai Chung, the review of policy governing recurrent subvention, the dental nurses training school and school dental clinics, and the subventions paid to government-assisted institutions.

251. Over the past 10 years, the medical services have been considerably expanded, and the aims set out in the white paper were broadly achieved. For example, the target for an overall provision of 4.25 hospital beds per 1,000 of the population was attained, and developments already in the pipeline will increase the ratio to 4.5.

252. The programmes of improvement and expansion over the next 10 years between 1973 and 1982 would now have to be separately examined, and it was in this context that in March 1973, a new

Medical Development Advisory Committee was appointed by the Governor to replace the Medical Development Plan Standing Committee whose task had been completed.

253. The terms of reference of the Medical Development Advisory Committee were: 'To keep under continuous review and to advise on the development and phased implementation of medical and health services in Hong Kong having regard to all factors which would determine the progress of expansion including financial, the rate of building construction and the availability of qualified staff, and on the principles of subvention.'

254. The Medical Development Advisory Committee was also asked to advise on what programmes of improvement and expansion would be appropriate over the next 10 years, in the circumstances of Hong Kong, and to submit a report to the Governor by 31st July, 1973.

255. The Medical Development Advisory Committee consisted of the following Members:

Dr. the Hon. Sir Albert RODRIGUES (*chairman*); the Director of Medical and Health Services, Dr. G. H. CHOA (*vice-chairman*); the Deputy Financial Secretary, Mr. D. G. JEAFFRESON; the Principal Assistant Colonial Secretary (Social Services), Mr. P. B. WILLIAMS; the Secretary, University and Polytechnic Grants Committee, Mr. S. F. BAILEY; the Hon. R. H. LOBO; Mr. TAI Kuen; Mr. LI Fook-wo; Sister (Dr.) M. ACQUINAS; and Dr. LI Shu-pui.

COMPLETED PROJECTS

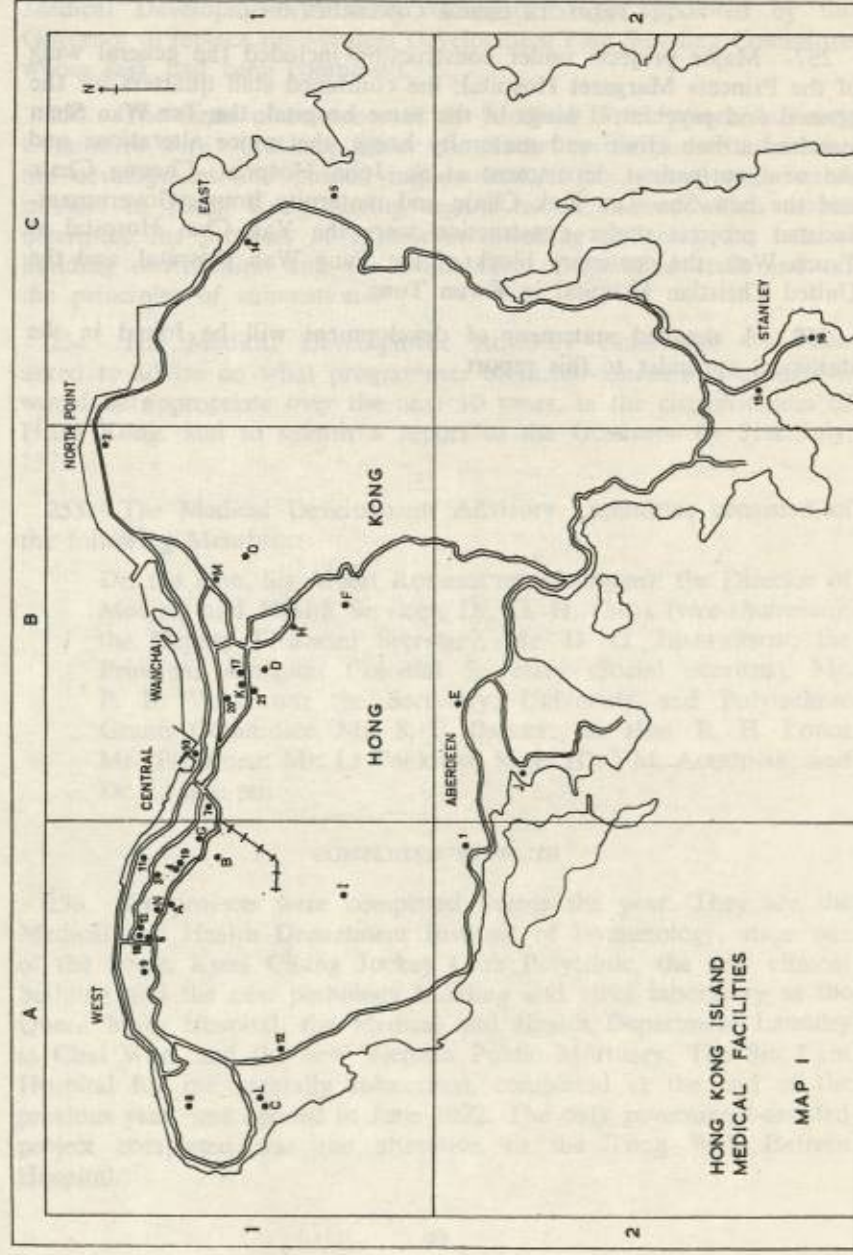
256. Six projects were completed during the year. They are the Medical and Health Department Institute of Immunology, stage one of the South Kwai Chung Jockey Club Polyclinic, the new clinical building and the new pathology building and virus laboratory at the Queen Mary Hospital, the Medical and Health Department Laundry at Chai Wan, and the new Victoria Public Mortuary. The Siu Lam Hospital for the mentally subnormal, completed at the end of the previous year, was opened in June 1972. The only government-assisted project completed was the alteration to the Tung Wah Eastern Hospital.

PROJECTS UNDER CONSTRUCTION

257. Major projects under construction included the general wing of the Princess Margaret Hospital, the combined staff quarters for the general and psychiatric wings of the same hospital, the Tsz Wan Shan standard urban clinic and maternity home, the major alterations and the new out-patient department at St. John Hospital, Cheung Chau, and the new Sha Tau Kok Clinic and maternity home. Government-assisted projects under construction were the Yan Chai Hospital at Tsuen Wan, the centenary block of the Tung Wah Hospital, and the United Christian Hospital in Kwun Tong.

258. A detailed statement of development will be found in the statistical appendix to this report.



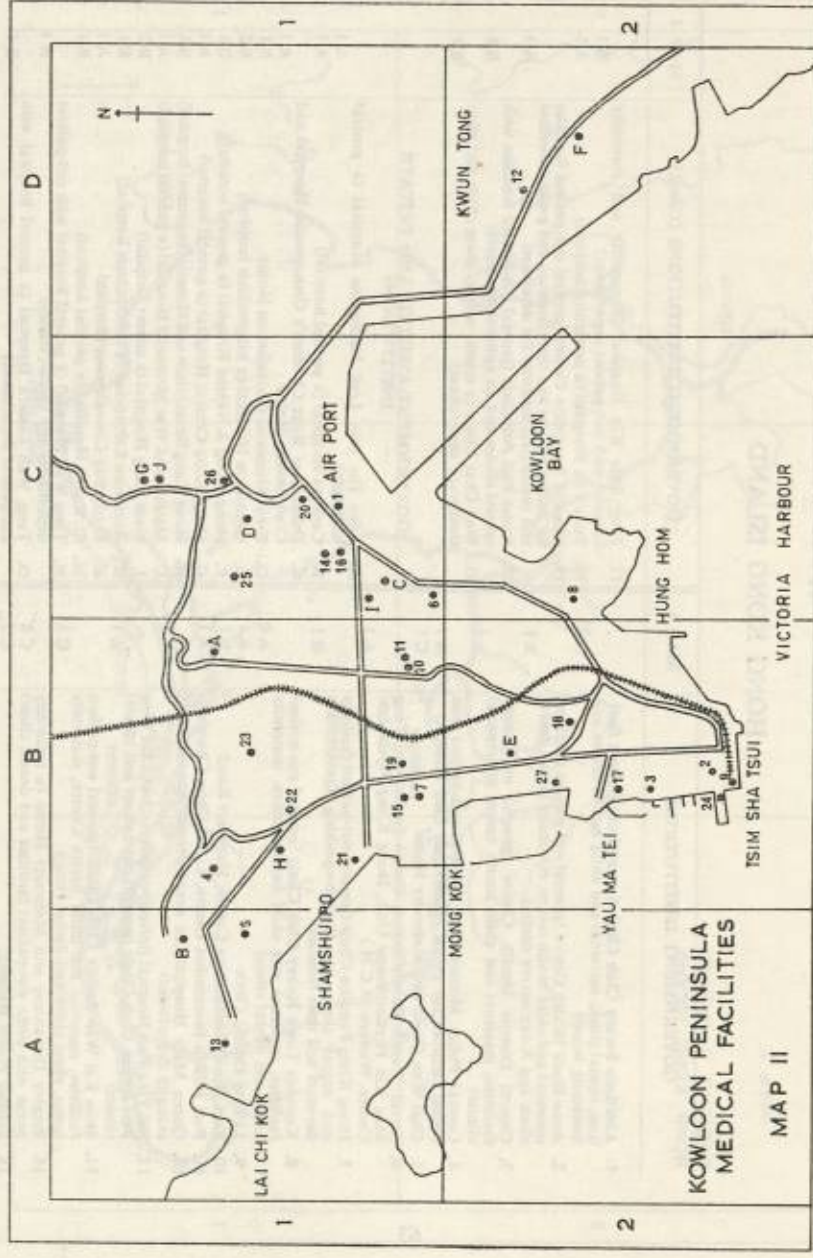


HONG KONG ISLAND MEDICAL FACILITIES

MAP I

A
HONG KONG ISLAND

GOVERNMENT INSTITUTIONS	MAP I	GOVERNMENT INSTITUTIONS (Contd.)	MAP I
1. Aberdeen Jockey Club Clinic (general out-patient facilities, dental clinic, maternal and child health centre and maternity home)	A 2	17. Tang Shiu Kin Hospital (a casualty and maternity hospital with out-patient department)	B 1
2. Anne Black Health Centre (general out-patient facilities, maternal and child health centre, maternity home, dental clinic and X-ray survey centre)	B 1	18. Tsan Yuk Hospital (a maternity hospital)	A 1
3. Central District Health Centre (general out-patient facilities, maternal and child health centre and special clinics)	A 1	19. Victoria Reception Centre (general out-patient facilities for prison officers and their families, and general medical and psychiatric facilities for detainees)	A 1
4. Central Police Medical Post (general out-patient and dental facilities for police officers and their families)	A 1	20. Violet Peel Polyclinic (general out-patient facilities with special clinics and an ophthalmic centre)	B 1
5. Chai Wan Clinic and Maternity Home	C 1	21. Wan Chai Clinic (a dental centre, chest clinic and physiotherapy department)	B 1
6. David Trench Rehabilitation Centre (embracing Tang Shiu Kin Physiotherapy Unit, Hong Kong Psychiatric Centre, Western M.C.H.)	A 1	GOVERNMENT-ASSISTED AND PRIVATE INSTITUTIONS	
7. Hong Kong Families Clinic (general out-patient facilities and dental clinic for English-speaking Government Servants and their families)	B 1	A. Alice Ho Miu Ling Nethersole Hospital (a general hospital)	A 1
8. Kennedy Town Jockey Club Clinic (general out-patient facilities, maternal and child health centre, maternity home and dental clinic)	A 1	B. Canossa Hospital (a general hospital)	A 1
9. Li Sing Dental Clinic	A 1	C. Duchess of Kent Children's Orthopaedic Hospital and Convalescent Home	A 1
10. Port Health Inoculation Centre, Harcourt Road	B 1	D. Freni Memorial Convalescent Home	B 1
11. Port Health Inoculation Centre, Li Po Chun Chambers	A 1	E. Grantham Hospital (a tuberculosis hospital)	B 2
12. Queen Mary Hospital (an acute general hospital with casualty department)	A 1	F. Hong Kong Adventist Hospital (a general hospital)	B 1
13. Sai Ying Pun Hospital (infectious diseases) and Sai Ying Pun Jockey Club Clinic (general out-patient and special clinics)	A 1	G. Hong Kong Central Hospital (a general hospital)	A 1
14. Shau Kei Wan Jockey Club Clinic (general out-patient facilities, maternal and child health Centre, maternity home, chest clinic and dental clinic)	C 1	H. Hong Kong Sanatorium and Hospital (a general hospital)	B 1
15. Stanley Dispensary and Maternity Home (a maternity home with some out-patient facilities and dental clinic)	C 2	I. Matilda and War Memorial Hospital (a general hospital)	A 1
16. Stanley Prison Hospital	C 2	J. Nam Long Hospital (a cancer hospital)	B 2
		K. Ruttonjee Sanatorium (a tuberculosis hospital)	B 1
		L. Sandy Bay Convalescent Hospital	A 1
		M. St. Paul's Hospital (a general hospital)	B 1
		N. Tung Wah Hospital (a general hospital with out-patient department and special clinics)	A 1
		O. Tung Wah Eastern Hospital (a general hospital with out-patient department)	B 1



B
KOWLOON

GOVERNMENT INSTITUTIONS	MAP II	GOVERNMENT INSTITUTIONS (Contd.)	MAP II
1. Air Port Health Station	C 1	19. Queen Elizabeth School Dental Clinic	B 1
2. Ashley Road Social Hygiene Clinic (a male treatment centre for venereal disease)	B 2	20. Robert Black Health Centre (general out-patient facilities, maternal and child health centre and maternity home)	C 1
3. Canton Road Police Medical Post (general out-patient and dental facilities for police officers and their families)	B 2	21. Sham Shui Po Public Dispensary (general out-patient facilities)	B 1
4. Cheung Sha Wan Jockey Club Clinic (general out-patient facilities, maternal and child health centre, maternity home and eye clinic)	B 1	22. Shek Kip Mei Health Centre (general out-patient facilities with special clinics, a chest clinic and a maternal and child health centre)	B 1
5. Cheung Sha Wan Police Medical Post (general out-patient and dental facilities for police officers and their families)	A 1	23. Tai Hang Tung Clinic (general out-patient facilities)	B 1
6. Farm Road Dental Clinic	C 1	24. Tsim Sha Tsui Port Health Inoculation Centre, Ocean Terminal	B 2
7. Government Ophthalmic Clinic—Arran Street (an ophthalmic centre)	B 1	25. Wang Tau Hom Jockey Club Clinic (general out-patient facilities, maternal and child health centre and maternity home)	C 1
8. Hung Hom Clinic and Maternity Home (general out-patient facilities and maternity home)	C 2	26. Wong Tai Sin Police Quarters Medical Post (general out-patient and dental facilities for police officers and their families)	C 1
9. Kowloon-Canton Railway Staff Clinic (dental facilities for railway staff and their families)	B 2	27. Yau Ma Tei Jockey Club Polyclinic (general out-patient, social hygiene facilities, eye clinic, dental clinic, chest clinic, maternal and child health centre)	B 2
10. Kowloon Chest Clinic (a chest clinic)	B 1		
11. Kowloon Hospital and Out-patient Department (a general hospital with general out-patient and dental facilities)	B 1		
12. Kwan Tong Health Centre (general out-patient facilities, maternal and child health centre, dental clinic and maternity home)	B 1		
13. Lai Chi Kok Hospital (an infectious diseases and convalescent hospital, with an Isolation Unit for the segregation of suspected cases of quarantinable diseases)	D 2		
14. Li Kee Memorial Dispensary (general out-patient facilities with special clinics and a dental clinic)	A 1		
15. Li Po Chun Health Centre (general out-patient facilities, maternal and child health centre and maternity home)	C 1		
16. Lions Club Maternal and Child Health Centre (maternal and child health centre and maternity home)	B 1		
17. Medical Examination Board	C 1		
18. Queen Elizabeth Hospital (an acute specialised general hospital with casualty department and specialist clinic)	B 2		
		GOVERNMENT INSTITUTIONS	
		A. Baptist Hospital (a general hospital)	B 1
		B. Caritas Medical Centre (a general and tuberculosis hospital)	A 1
		C. Evangelical Medical Centre (a general hospital)	C 1
		D. Kwong Wah Buddhist Hospital (a general hospital)	C 1
		E. Kwong Wah Hospital (a general hospital with out-patient department)	B 2
		F. Margaret Trench Medical Rehabilitation Centre	D 2
		G. Our Lady of Maryknoll Hospital (a general hospital)	B 1
		H. Precious Blood Hospital (a general hospital)	C 1
		I. St. Teresa's Hospital (a general hospital)	C 1
		J. Wong Tai Sin Infirmary	C 1
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TABLE 1
ESTABLISHMENT OF THE MEDICAL AND HEALTH DEPARTMENT AS AT 31ST MARCH, 1973

Grade	Zone	Establishment											Total	Strength on 31.3.1972			
		Headquarters	Queen Mary Hospital	Queen Elizabeth Hospital	Lai Chi Kok Hospital	Kowloon Hospital	Castle Peak Hospital and Mental Health Centre	Tsan Yuk Hospital	Dental Service	Tuberculosis Service	Other Hospitals, Clinics and Services						
Director of Medical and Health Services																	
Deputy Director of Medical and Health Services																	
Assistant Director of Medical and Health Services																	
Medical Training Administrator																	
Medical Administrator																	
Senior Specialist and Specialist																	
Principal Medical and Health Officer																	
Chief Executive Officer/Senior Executive Officer/Executive Officer																	
Senior Treasury Accountant/Treasury Accountant/Health Officer/Assistant Medical and Health Officer																	
Senior Dental Officer/Dental Officer/Assistant Dental Officer																	
Principal Nursing Officer																	
Nursing Staff																	
Senior Dietitian/Dietitian																	
Senior Medical Social Worker/Medical Social Worker Class I and Class II																	
Chief Pharmacist/Senior Pharmacist/Pharmacist/Chief Dispenser/Senior Dispenser/Dispenser/Student Dispenser/Dispensary Supervisor/Government Chemist/Senior Chemist/Chemist/Assistant Biochemist																	
Carried forward		31	943	1,231	653	716	493	201	59	206	1,396	5,929	5,230				

TABLE 1—Contd.

Grade	Zone	Headquarters	Queen Mary Hospital	Queen Elizabeth Hospital	Lai Chi Kok Hospital	Kowloon Hospital	Castle Peak Hospital and Mental Health Centre	Tsao Yuk Hospital	Dental Service	Tuberculosis Service	Other Hospitals, Clinics and Services	Total	Strength on 31.3.1972
<i>Brought forward</i>		31	943	1,231	653	716	493	201	59	206	1,396	5,929	5,230
Scientific Officer (Medical) and (Clinical Psychologist)												4	4
Senior Physicist/Physicist				3							1	8	8
Chief Hospital Secretary/Senior Hospital Secretary/			2	6								21	16
Hospital Secretary/Assistant Hospital Secretary		1	3	5	2	3	4	1			6	28	27
Steward Class I, Class II and Class III			63	110	6	40	30	6	41	56	242	708	713
Superintendent Radiographer/Senior Radiographer/		114											
Radiographer Class I/Radiographer Class II/													
Student Radiographer			33	53	17	4					42	149	136
X-Ray Assistant											20	20	19
Superintendent Physiotherapist/Senior Physiother-													
apist/Tutor Physiotherapist/Physiotherapist													
Class I/Physiotherapist Class II/Student													
Physiotherapist			9	57	11	8					26	111	88
Superintendent Occupational Therapist/Senior													
Occupational Therapist/Occupational Therapist/													
Occupational Therapy Assistant			5	5	4	8	54				10	86	82
Chief Medical Technologist/Senior Medical													
Technologist/Medical Technologist/Medical													
Laboratory Technician Class I/Medical Laboratory													
Technician Class II/Student Medical Laboratory			12	35	36		3				105	191	177
Technician													
Senior Laboratory Assistant/Laboratory Assistant/													
Student Laboratory Assistant													
Senior Health Inspector/Health Inspector Class I													
and II													
Senior Inoculator/Inoculator											14	11	8
and II											113	127	121
Audiology Technician											1	1	1
<i>Carried forward</i>		146	1,073	1,510	731	781	586	208	100	276	2,034	7,445	6,680

TABLE 1—Contd.

Grade	Zone	Headquarters	Queen Mary Hospital	Queen Elizabeth Hospital	Lai Chi Kok Hospital	Kowloon Hospital	Castle Peak Hospital and Mental Health Centre	Tsao Yuk Hospital	Dental Service	Tuberculosis Service	Other Hospitals, Clinics and Services	Total	Strength on 31.3.1972
<i>Brought forward</i>		146	1,073	1,510	731	781	586	208	100	276	2,034	7,445	6,680
Prosthetist Class I/Prosthetist Class II/Student													
Prosthetist													
Mould Laboratory Technician/Student Mould											16	16	15
Laboratory Technician				4								6	6
Dental Technologist			2						2			2	2
Dental Technician/Student Dental Technician			1	1	1				40			43	40
Dental Inspector									2			2	2
Senior Dental Surgery Assistant/Dental Surgery			3	4		2	1		71			81	77
Assistant									9			9	9
Dental Nurse													
Laundry Manager/Assistant Laundry Manager/													
Laundry Supervisor			3	3	1	2	1	1	9		3	14	13
Linon Production Unit Manager/Linon Production													
Unit Supervisor/Linon Room Supervisor													
Senior Electrical Technician/Electrical Technician			3	4							5	6	6
Senior Optical Technician/Optical Technician													
Technical Assistant (Social Hygiene)													
Technical Supervisor													
Kitchen Supervisor													
Medical Assistant			1	1	1	1	1	1	4		2	4	3
Medical Board Assistant													
Poster Artist			1										
Photographer Class I and Class II				2									
Funerary Officer													
Foreman Class I and Class III				12									
Supplies Officer/Assistant Supplies Officer/Supplies													
Supervisor/Supplies Assistant		2	3	11	3	5	2	4	5		18	44	47
Telephone Operator		1	8	8	4	5	4	4	4		10	44	42
Hospital Receptionist				3									
Other Staff		14	862	1,303	196	484	700	125	47	39	1,729	5,499	5,140
TOTAL		164	1,963	2,867	934	1,278	1,295	339	276	315	3,833	13,264	12,130

TABLE 2

ORGANIZATION OF MEDICAL AND HEALTH DEPARTMENT 1972-73

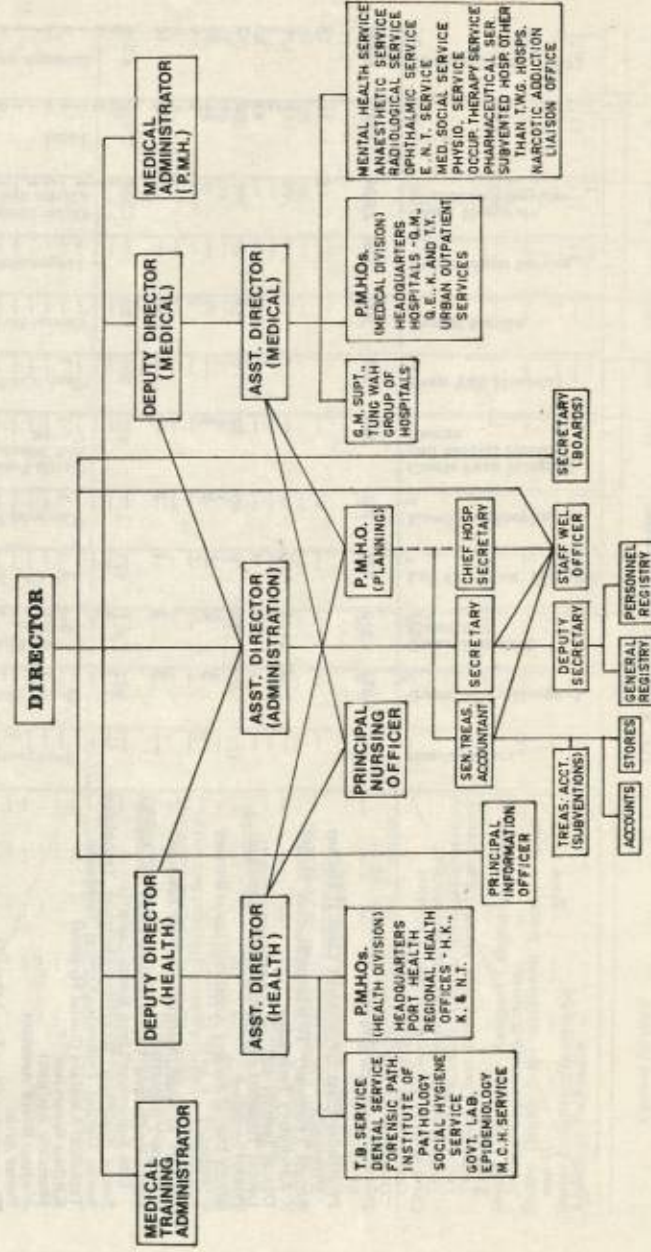


TABLE 3

STATEMENT OF EXPENDITURE FROM 1968-69 TO 1972-73

Particulars	1968-69	1969-70	1970-71	1971-72	1972-73
a. Medical and Health Department...	\$ 133,582,644	\$ 148,239,041	\$ 177,874,176	\$ 189,714,915	\$ 235,243,875
b. Medical Subventions ...	52,457,856	57,732,380	63,146,736	82,046,061	110,108,034
c. Capital expenditure on medical projects under Public Works Non-Recurrent ...	8,420,115	11,434,288	11,225,360	32,615,571	51,923,641
Total ...	194,460,615	217,405,709	252,246,272	304,376,547	397,275,550
Total expenditure of the Colony ...	1,872,974,955	2,032,183,388	2,452,192,832	2,901,375,575	4,299,555,179
Percentage of Medical and Health Department Expenditure to the Total Expenditure of the Colony ...	10.38%	10.70%	10.29%	10.49%	9.24%

TABLE 4

LEGISLATION OF MEDICAL AND HEALTH IMPORTANCE
FROM APRIL 1972 TO MARCH 1973

Ordinances

- (i) Pharmacy and Poisons (Amendment) Ordinance 1972.
(ii) Nurses Registration (Amendment) Ordinance 1972.

Rules and Regulations

- (a) Nurses (Registration and Disciplinary Procedure) (Amendment) Regulations 1972.
(b) Enrolled Assistant Nurses (Enrolment and Disciplinary Procedure) (Amendment) Regulations 1972.
(c) Pharmacy and Poisons Ordinance (Amendment of Schedule) Order 1972.
(d) Pharmacists (Disciplinary Procedure) Regulations 1972.
(e) Clean Air (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations 1972.
(f) Termination of Pregnancy Regulations 1973.

TABLE 5

WORK OF STATUTORY COUNCILS AND BOARDS—APRIL 1972 TO MARCH 1973

	Medical Council		Dental Council		Nursing Board	Midwives Board	Pharmacy and Poisons Board	Radiation Board
	Local list	Overseas list	Dentists	Dental Hygienist				
Number of meetings held...	3		2		3	4	3	—
Number on the Register ...	2,311	60	489	6	Reg. Nurses ... 5,919 Enrolled Nurses ... 985	4,806	201	323g
Number of applications for registration ...	163 a (130)b	28d	30f	2	Reg. Nurses ... 308 Enrolled Nurses ... 1,733	258	44	38g
Number of registrations granted ...	163 a (130)b	28d	21f	2	Reg. Nurses ... 295 Enrolled Nurses ... 1,437	247	12	27g
Number of examinations held ...	—	—	Oral & Practical Written	15 5	Reg. Nurses ... 3 Enrolled Nurses ... 2	4	2	—
Number of candidates examined ...	—	—	Oral & Practical Written	15 11	Reg. Nurses ... 393 Enrolled Nurses ... 153	240	34	—
Number of successful candidates ...	—	—	Oral & Practical Written	15 8	Reg. Nurses ... 380 Enrolled Nurses ... 150	233	7	—
Number of disciplinary hearings held ...	3 (18)	—	—	—	Reg. Nurses ... Enrolled Nurses ...	—	1(1)	—
Number of removals from register ...	19 c	3e	19	—	Reg. Nurses ... Enrolled Nurses ...	2	1	32h

- a. Including 3 restorations to the List and 3 transferred from the Overseas List.
b. Figures in brackets represent applications for provisional registration (not included in total).
c. Including 11 transferred to the Overseas List.
d. Including 11 transferred from the Local List.
e. Including 3 transferred to the Local List.

- f. Including 1 restoration to the register.
g. These figures refer to the licensing of irradiating apparatus.
h. These figures refer to number of cancellations of irradiating apparatus licences.
i. The figures in brackets indicate the number of persons against whom charges were made.

TABLE 6

POPULATION STRUCTURE, MID 1972

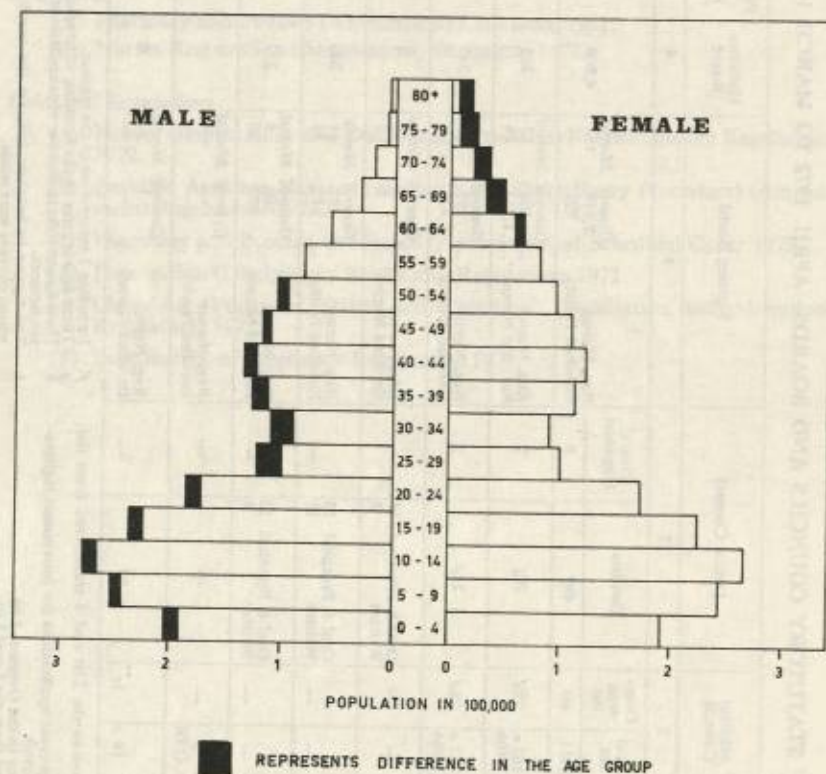


TABLE 7

BIRTHS AND DEATHS 1958 AND 1963-72

Year	Estimated* Mid-Year Population	Registered Live Births	Crude Birth Rate† (per 1,000 Population)	Still Births Recorded	Registered Deaths	Crude Death Rate† (per 1,000 Population)
1958 ...	2,854,100	106,624	37.4	1,297	20,554	7.2
1963 ...	3,420,900	115,263	33.7	1,633	19,748	5.8
1964 ...	3,504,600	108,519	31.0	1,485	18,113	5.2
1965 ...	3,597,900	102,195	28.4	1,363	17,621	4.9
1966 ...	3,629,900	92,476	25.5	1,246	18,700	5.2
1967 ...	3,722,800	88,171	23.7	999	19,644	5.3
1968 ...	3,802,700	82,992	21.8	832	19,319	5.1
1969 ...	3,863,900	79,329	20.5	757	18,730	4.8
1970 ...	3,959,000	77,465	19.6	726	20,763	5.2
1971 ...	4,045,300	76,818	19.0	656	20,253	5.0
1972 ...	4,077,400	79,053	19.4	736	21,145	5.2

* Revised population estimates based on the results of 1971 Census (for the years 1963-72).

† Using revised population estimates.

TABLE 8

INFANT AND MATERNAL MORTALITY 1958 AND 1963-72

Year	Infant Mortality Rate (per 1,000 live births)			Neo-natal Mortality Rate (per 1,000 live births)	Maternal Mortality Rate (per 1,000 total births)
	Male	Female	Both Sexes		
1958 ...	56.2	52.1	54.3	23.4	0.85
1963 ...	35.3	30.5	32.9	18.9	0.29
1964 ...	29.2	23.5	26.4	16.6	0.38
1965 ...	26.8	20.5	23.7	15.2	0.33
1966 ...	27.2	22.3	24.9	15.3	0.43
1967 ...	28.7	22.3	25.6	15.9	0.30
1968 ...	25.2	20.7	23.0	15.0	0.14
1969 ...	24.2	19.3	21.8	14.9	0.15
1970 ...	22.2	16.8	19.6	12.7	0.19
1971 ...	21.0	15.5	18.4	12.6	0.14
1972 ...	18.9	15.9	17.5	11.6	0.20

TABLE 9

MAJOR CAUSES OF INFANT MORTALITY 1958, 1963 AND 1968-72
(per 1,000 registered live births)

Diseases Group	Detailed List Number 8th Revision	1958*	1963*	1968*	1969	1970	1971	1972
Respiratory Tuberculosis	010-012	0.39	0.02	0.01	—	—	0.01	—
Tuberculosis Meningitis	013	0.98	0.14	0.01	0.03	—	—	0.03
Other Forms of Tuberculosis ...	014-019	0.14	0.01	0.02	0.03	—	—	—
Tetanus ...	037	2.08	0.42	0.04	0.05	0.10	0.12	0.03
Pneumonia ...	480-486	—	—	6.13	4.29	4.21	3.85	3.78
Bronchitis ...	466, 490-491	0.20	0.17	0.06	0.09	0.09	0.08	0.06
Gastro-enteritis ...	561	—	—	1.64	1.29	0.53	0.76	0.86
Congenital Anomalies ...	740-759	—	—	2.88	3.33	3.09	3.14	3.59
Birth Injuries ...	764-768, 772	0.44	0.36	0.51	0.43	0.25	0.46	0.40
Anoxia and Hypoxia of Newborn ...	776	—	—	1.64	1.53	1.56	1.58	1.35
Blood Diseases of Newborn ...	774-775	0.78	1.76	1.58	1.40	1.38	1.05	0.89
Nutritional Deficiency ...	260-269	—	—	0.13	0.03	0.04	0.01	0.01
Immaturity ...	777	8.06	8.90	5.27	6.62	5.14	4.78	4.41
Ill-defined Causes ...	795-796	1.04	0.66	0.11	0.04	0.06	0.08	0.05

* Data Grouping according to I.C.D. 7th Revision.

TABLE 10

MAJOR CAUSES OF MATERNAL MORTALITY 1958 AND 1963-72
(per 1,000 total births)

Year	Sepsis (excluding septic abortions)	Toxaemias	Haemorrhages	Abortions	Ectopic Pregnancies	Others
*1958 ...	0.065	0.260	0.250	0.028	0.111	0.139
*1963 ...	0.017	0.077	0.111	0.009	0.034	0.051
*1964 ...	0.009	0.055	0.118	0.045	0.055	0.100
*1965 ...	0.019	0.077	0.135	0.009	0.019	0.068
*1966 ...	0.011	0.053	0.107	0.032	0.128	0.096
*1967 ...	0.011	0.056	0.123	0.011	0.034	0.067
*1968 ...	0	0.024	0.084	0	0.024	0.012
1969 ...	0.012	0.025	0.050	0.012	0.012	0.037
1970 ...	0	0.038	0.051	0.013	0.064	0.026
1971 ...	0.013	0.039	0.013	0.013	0.039	0.026
1972 ...	0	0.050	0.050	0.038	0.038	0.025

* Data Grouping according to I.C.D. 7th Revision.

TABLE 11

PROPORTIONATE MORTALITY BY DISEASE GROUPS 1958, 1963 AND 1968-72

(Percentage of Total Deaths)

Disease Group	Detailed List Number 8th Revision	1958*	1963*	1968*	1969	1970	1971	1972
1. Infective and Parasitic ...	000-136	14.6	12.8	9.0	8.9	7.9	7.2	6.9
2. Neoplasms ...	140-239	8.9	13.4	18.7	20.6	19.1	21.0	20.8
3. Endocrine, Nutritional, Metabolic and Blood ...	240-289	1.1	1.5	2.2	1.6	1.5	1.2	1.3
4. Nervous System, Sense Organs and Mental Disorders ...	290-389	5.3	9.1	10.3	1.0	1.1	0.8	0.7
5. Circulatory System ...	390-458	8.3	12.2	15.2	25.0†	25.1†	25.3†	24.4†
6. Respiratory System ...	460-519	24.2	13.3	12.5	13.5	15.0	16.6	17.2
7. Intestinal System ...	520-577	11.1	7.1	5.5	5.8	5.3	5.1	4.9
8. Genito-Urinary System ...	580-629	1.9	2.2	2.1	2.2	2.2	2.2	2.1
9. Pregnancy, child-birth and Puerperium ...	630-678	0.5	0.2	0.1	0.1	0.1	0.1	0.1
10. Skin and Musculo-Skeletal System...	680-738	0.5	0.2	0.4	0.3	0.2	0.2	0.2
11. Congenital Anomalies and Causes of Perinatal Morbidity and Mortality ...	740-779	10.8	11.3	7.5	6.2	4.8	4.4	4.4
12. Symptoms and Ill-defined Conditions	780-796	8.0	9.9	9.3	10.0	9.4	8.8	8.6
13. Accidents, Poisonings and Violence	E800-E999	4.8	6.3	7.2	4.8	8.3	7.1	8.4

* Data Grouping according to I.C.D. 7th Revision.

† Including Cerebrovascular Disease (formerly Vascular lesion affecting central nervous system under the Nervous System and Sense Organs).

TABLE 12

THE TEN LEADING CAUSES OF DEATH BY AGE AND SEX 1972

Rank	Cause of Death	Detailed List No. 8th Revision	Sex	Age Group							Un- known
				All Ages	0	1-4	5-14	15-44	45-64	65 & Over	
1	All Causes	140-209	M	11,910	771	163	243	1,740	4,789	4,156	48
			F	9,233	607	139	167	847	2,355	5,113	5
			T	21,145(2)	1,380(2)	302	410	2,587	7,144	9,269	53
2	Malignant neoplasms including neoplasms of lymphatic and haematopoietic tissues	390-392	M	2,555	2	10	32	437	1,400	674	—
			F	1,820	2	12	21	213	852	720	—
			T	4,375	4	22	53	650	2,252	1,394	—
3	Heart Diseases, including hypertensive diseases	400-404	M	1,592	—	—	12	108	657	815	—
			F	1,443	—	—	9	94	389	951	—
			T	3,035	—	—	21	202	1,046	1,766	—
4	Pneumonia, all forms	480-486	M	1,233	168	47	31	106	378	501	2
			F	1,126	131	43	21	55	166	707	3
			T	2,359	299	90	52	161	544	1,208	5
5	Cerebrovascular Disease	430-438	M	939	6	—	11	55	427	440	—
			F	953	—	—	1	36	229	687	—
			T	1,892	6	—	12	91	656	1,127	—
6	Tuberculosis	010-012	M	1,032	2	—	3	132	550	343	2
			F	280	—	2	4	48	94	132	—
			T	1,312	2	2	7	180	644	475	2
7	All accidents	E800-E807	M	785	15	56	101	357	194	55	7
			F	407	20	46	65	93	103	79	1
			T	1,192	35	102	166	450	297	134	8

TABLE 12—Contd.

Rank	Cause of Death	Detailed List No. 8th Revision	Sex	Age Group							Un- known
				All Ages	0	1-4	5-14	15-44	45-64	65 & Over	
7	Bronchitis, emphysema and asthma	490-493	M	621	2	—	2	35	301	281	—
			F	391	1	3	1	15	93	278	—
			T	1,012	3	3	3	50	394	559	—
8	Certain causes of Perinatal Mortality	760-779	M	329	329	—	—	—	—	—	—
			F	247	247	—	—	—	—	—	—
			T	576	576	—	—	—	—	—	—
9	Suicide and self-inflicted injuries	E950-E959	M	276	—	—	—	139	102	32	3
			F	187	—	—	3	69	65	49	1
			T	463	—	—	3	208	167	81	4
10	Congenital Anomalies	740-759	M	188	148	21	13	5	1	—	—
			F	160	134	11	6	7	2	—	—
			T	350(2)	284(2)	32	19	12	3	—	—
11	Cirrhosis of Liver	571	M	231	4	2	1	37	134	53	—
			F	78	2	—	1	6	32	37	—
			T	309	6	2	2	43	166	90	—
12	Nephritis and Nephrosis	580-584	M	149	—	—	8	39	59	43	—
			F	106	—	—	3	25	36	41	—
			T	255	—	—	11	64	95	84	—
13	Diabetes Mellitus	250	M	78	—	—	1	5	32	40	—
			F	101	—	—	—	7	31	63	—
			T	179	—	—	1	12	63	103	—
14	All Other causes	—	M	1,902	95	27	28	285	554	879	34
			F	1,934	70	21	32	179	263	1,369	34
			T	3,836	165	48	60	464	817	2,248	34

Note: Figures in brackets denote no. of deaths with sex unknown (included).

TABLE 13

LEADING CAUSES OF DEATH 1956, 1966 AND 1972
(RANKING ACCORDING TO 1956)

Causes of Death	Number of Deaths			Percent of Deaths from all Causes			Rate per 100,000 population		
	1956	1966	1972	1956	1966	1972	1956	1966	1972
	<i>All Ages</i>								
All Causes	19,295	18,700	21,145	100.0	100.0	100.0	738.0	515.2	518.6
1. Pneumonia, all forms	3,548	1,829	2,359	18.4	9.8	11.2	135.7	50.4	57.9
2. Tuberculosis, all forms	2,629	1,515	1,312	13.6	8.1	6.2	100.6	41.7	32.2
3. Gastritis, duodenitis, enteritis and colitis (except diarrhea of new born)	2,364	167	*	12.3	0.9	*	90.4	4.6	*
4. Heart disease, including hypertensive disease	1,354	2,591	3,035	7.0	13.8	14.3	51.8	71.4	74.4
5. Malignant neoplasms	1,328	3,249	4,375	6.9	17.4	20.7	50.8	89.5	107.3
All other causes	8,072	9,349	10,064	41.8	50.0	47.6	308.7	257.6	246.8
<i>1-4 years</i>									
All Causes	2,819	968	302	100.0	100.0	100.0	768.7	229.1	95.4
1. Pneumonia, all forms	1,112	288	90	39.5	29.8	29.8	303.2	68.1	28.4
2. Gastritis, duodenitis, enteritis and colitis (except diarrhea of new born)	731	35	*	25.9	3.6	*	199.3	8.3	*
3. Tuberculosis, all forms	470	30	2	16.7	3.1	0.7	128.2	7.1	0.6
4. All accidents	76	104	102	2.7	10.7	33.8	20.7	24.6	32.2
5. Measles	66	293	5	2.3	30.3	1.6	18.0	69.3	1.6
All other causes	364	218	103	12.9	22.5	34.1	99.3	51.6	32.5
<i>5-14 years</i>									
All Causes	679	489	410	100.0	100.0	100.0	138.0	50.5	39.5
1. Tuberculosis, all forms	153	12	7	22.5	2.5	1.7	31.1	1.2	0.7
2. Pneumonia, all forms	152	58	52	22.4	11.9	12.7	30.9	6.0	5.0
3. All accidents	98	177	166	14.4	36.2	40.5	19.9	18.3	16.0
4. Gastritis, duodenitis, enteritis and colitis (except diarrhea of new born)	54	4	*	8.0	0.8	*	11.0	0.4	*
5. Nephritis and nephrosis	28	12	11	4.1	2.5	2.7	5.7	1.2	1.1
All other causes	194	226	174	28.6	46.2	42.4	39.4	23.3	16.7

TABLE 13—Contd.

Causes of Death	Number of Deaths			Percent of Deaths from all Causes			Rate per 100,000 population		
	1956	1966	1972	1956	1966	1972	1956	1966	1972
	<i>15-44 years</i>								
All Causes	3,275	2,573	2,587	100.0	100.0	100.0	258.7	178.6	148.6
1. Tuberculosis, all forms	865	335	180	26.4	13.0	7.0	68.3	23.3	10.3
2. Malignant neoplasms	360	618	650	11.0	24.0	25.1	28.4	42.9	37.3
3. Heart disease, including hypertensive disease	287	261	202	8.8	10.2	7.8	22.7	18.1	11.6
4. All accidents	260	340	450	7.9	13.2	17.4	20.5	23.6	25.9
5. Pneumonia, all forms	197	110	161	6.0	4.3	6.2	15.6	7.6	9.3
All other causes	1,306	909	944	39.9	35.3	36.5	103.2	63.1	54.2
<i>45-64 years</i>									
All Causes	3,897	5,806	7,144	100.0	100.0	100.0	1,190.8	1,025.4	1,004.8
1. Tuberculosis, all forms	771	779	644	19.8	13.4	9.0	235.6	137.6	90.6
2. Malignant neoplasms	686	1,631	2,252	17.6	28.1	31.5	209.6	288.1	316.7
3. Heart disease, including hypertensive disease	584	929	1,046	15.0	16.0	14.7	178.4	164.1	147.1
4. Cerebrovascular disease	373	692	656	9.6	11.9	9.2	114.0	122.2	92.3
5. Pneumonia, all forms	215	273	544	5.5	4.7	7.6	65.7	48.2	76.5
All other causes	1,268	1,502	2,002	32.5	25.9	28.0	387.5	265.3	281.6
<i>65 years and over</i>									
All Causes	2,723	6,552	9,269	100.0	100.0	100.0	4,448.6	4,737.6	4,870.7
1. Heart disease, including hypertensive disease	451	1,316	1,766	16.5	20.1	19.1	736.8	951.6	928.0
2. Cerebrovascular disease	373	1,013	1,127	13.7	15.5	12.2	609.4	732.5	592.2
3. Malignant neoplasms	242	904	1,394	8.9	13.8	15.0	395.3	653.7	732.5
4. Pneumonia, all forms	231	687	1,208	8.5	10.5	13.0	377.4	496.7	634.8
5. Tuberculosis, all forms	177	348	475	6.5	5.3	5.1	289.2	251.6	249.6
All other causes	1,249	2,284	3,299	45.9	34.8	35.6	2,040.5	1,651.5	1,733.6

* Inapplicable.