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ANNUAL REPORT

OF THE

DIRECTOR OF MEDICAL

AND

SANITARY SERVICES

FOR THE YEAR

1936.



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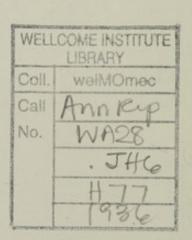


HONG KONG.

MEDICAL & SANITARY REPORT FOR THE YEAR 1936

BY

A. R. WELLINGTON, Director of Medical Services.



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ANNUAL MEDICAL REPORT FOR THE YEAR ENDING 31st DECEMBER, 1936.

Introduction.

Geographical Features.

In order to give a clear impression of the Public Health conditions obtaining in Hong Kong, it is necessary first to describe the situation of the Colony, its geographical features, its climate, the nature of the population, the housing conditions and the bearing old Chinese traditions, beliefs, and customs have on the question of co-operation with the authorities in the promotion and preservation of the Public Health. It is also desirable to indicate the various organisations which together make up the Public Health machinery.

- 2. The Territory under British jurisdiction includes the Colony Proper, namely, the Island of Hong Kong with the Peninsula of Kowloon, and the New Territories. The area of the Island is 32 square miles—that of Kowloon is 2.2/3 square miles while the New Territories have approximately 300 square miles.
- 3. Situated between 22°9′ and 22°37′ North Latitude the area under discussion is just within the northern limits of the tropics. It is in fact practically on the same level as Calcutta. It may be said to form the lower extremity of the left bank of the estuary of the Canton River, at the head of which is the City of Canton and on the right bank of which stands the Portuguese Colony of Macao.
- 4. Topographically the Island of Hong Kong and the Peninsula of Kowloon may be described as a series of granite ridges separated by narrow valleys and having here and there flat areas facing the sea. The New Territory is of similar formation with some fairly wide valleys towards the north and west. The features are such that flats suitable for town sites are few in number and limited in extent. In the Island the only level of any size is that on which the City of Victoria stands and this does not cover more than one square mile. With regards to Kowloon, not more than one half is flat and convenient for street formation.

The Climate.

- 5. Situated just within the northern limits of the tropics and occupying an insular position immediately south of the great land mass of China, Hong Kong's climate is very materially influenced by the direction of the prevailing winds. The North East Monsoon blows from November until April and during this period the weather is dry and cool and invigorating. From May until October, the season of the South West Monsoon, the air is highly charged with moisture and the climate is hot, muggy and enervating. July, August, and September are marked by atmospheric disturbances which now and then culminate in typhoons or cyclones accompanied by blinding sheets of rain.
- 6. The mean annual temperature is 72°F. During the summer months the average temperature is 87°F, and there is little variation throughout the twenty-four hours. Situated on the north side of the Island the City of Victoria gets all the heat and moisture of the South West Monsoon but not the breeze, which is cut off by the mountains behind the town. During the winter months the range of temperature is from 70°F, to 45°F, with an average 66°F, necessitating for comfort the wearing of warm clothes and the provision of fires in the houses. Frost is practically unknown.
- The average yearly rainfall is 85.72 inches. As might be expected most of the rain falls in the summer months.

Population and its distribution.

- 8. Hong Kong, which depends for its prosperity on its trade with China, has three-fourths of its population concentrated in the cities of Victoria and Kowloon which face each other across Victoria Harbour, a stretch of water almost a mile wide at the narrowest point.
- 9. With regard to numbers, except in census years, there are no accurate statistical figures, the great movement to and from the Colony and the facility with which the border is crossed preventing accurate checking. Hong Kong being the principal entrepot for South China and its harbour one of the busiest in the world, every day on an average 6,000 to 7,000 individuals pass to and from China by river steamer or by rail and there are others who arrive and depart by junks or smaller vessels. During times of political unrest in China many thousands from the mainland sojourn in the Colony, some of whom return to their homes when conditions are more settled, others remaining attracted by the opportunities offered for employment.
- 10. The total civil population of the Colony is estimated to exceed 900,000, of which some 400,000 reside in the City of Victoria, 300,000 in the town of Kowloon, over 100,000 on boats in the waters of the Colony and the remainder in villages.

- 11. There are over 20,000 local boats registered at the Harbour Office, the occupants of each of which vary in number from four to forty according to the size and character of the craft. The Harbour Authorities believe the population to be 150,000 and certainly 100,000 cannot be an overestimate.
- 12. Of the total population over 95 per cent are Chinese. According to the Census Report one third of the whole were born in the Colony. The remainder are mostly those who have come from China attracted by the facilities offered for employment. Children born in the Colony are frequently sent to the family homes in China, there to be brought up by the grand-parents, the parents remaining behind to earn their living. Many return to their native towns or villages when too ill or too old for labour. Through such exodus the death rates of the Colony are lower than they otherwise would be.
- 13. The masses are working people belonging to what is commonly described as the coolie class. The Chinese of the upper classes, many of whom have received a western education, are mostly engaged in commerce but there are among them a number of professional men, including both lawyers and doctors.

Housing Conditions.

- 14. The town plans of Victoria and Kowloon are widely different: the former may be described as old-fashioned and irregular, the latter as modern and regular.
- 15. The site on which Victoria stands is a narrow strip of land 4 miles long by 1/5th. to 2/5s. of a mile broad, lying at the northern foot of the mountain and separating it from the sea. The total area of available space is about one square mile or 1/32nd. of that of the whole island. Limited in front by the sea and behind by the steep slopes of the mountain there remains hardly an inch of space which has not been occupied for one purpose or another. The conformation of the site with its rapid rise of land near the sea-shore led in the early days to the erection of houses on the narrow strip of land near the harbour and extending a little way up the lower slopes of the mountain, the houses being separated by narrow lanes and allevways. When the population was small and the houses only one and two stories in height, the situation was not unsatisfactory. As the population increased the houses were heightened to four and five stories without any corresponding widening of the spaces separating them, and overcrowding with its attendant evils made its appearance.
- 16. Year by year the population continued to increase, immigration being accelerated by unrest in China. The great majority of immigrants were ignorant working people with a small wage earning capacity, accustomed to poverty, overcrowding and insanitary conditions. Victoria was the centre of trade

and therefore the centre of attraction. There was little room to build further accommodation and the newcomers had to squeeze into the already overcrowded premises. Rooms were divided into cubicles which to a certain extent provided privacy but which interfered both with lighting and ventilation. Little space was reserved for kitchens, and latrine accommodation was often limited to one or more pail closets on the roofs of the buildings.

- 17. In the west-central and western districts where the bulk of the the masses find accommodation there are two hundred acres where the density is at least one thousand to the acre.
- 18. It goes without saying that the maintenance of a satisfactory standard of sanitation under such conditions is a most difficult problem and one which cannot be solved without the willing co-operation of the people. One thing is certain, so long as buildings are overcrowded and insanitary, no amount of external sanitation will give immunity from disease.
- 19. Year by year the Sanitary Department and the Building Authority made efforts to improve the situation with a considerable amount of success both as regards palliative and radical treatment. The task almost sisyphean in itself was rendered more difficult by paucity of water and by opposition put forward both by property owners and by occupiers.
- 20. A Commission on Overcrowding is at present enquiring into the situation in the hope of finding some practical scheme which will offer a solution of the problem. There is no room for lateral expansion, and accommodation for those dehoused during a reconstruction scheme would be difficult to find.
- 21. Within the last few years some 70 acres have been added to the eastern section of the town by reclamation from the sea. This locality which is known as the Praya East Reclamation has been laid out in accordance with modern town planning principles, with wide streets, short lots and back-lanes. The greater part of it is now covered with dwelling houses which satisfy sanitary requirements. The density here is not more than 300 per acre.
- 22. Kowloon which is a comparatively new city has been town-planned on up-to-date lines with straight broad streets and back lanes. During the intercensus period 1921-1931 it increased in population 113.06 per cent. It is still rapidly growing and in a few years will equal Victoria or even exceed it. According to the census the density of population is 300 per acre.

Influence of traditional beliefs.

23. The traditional beliefs of the uneducated Chinese as to the cause of diseases, the means of spread and the factors which affect its course are so at variance with modern teaching that there is little chance of promoting voluntary co-operation between them and the authorities in the matter of the prevention and control of disease until they can be brought to understand the true nature of the problems and are conscious of the usefulness of the measures advocated. The proximity of China and the constant intercourse make it harder to overcome prejudices than is the case in countries further afield. The greatest hope lies in propaganda and education brought to the homes through public health nurses working as district visitors, or infant welfare centres and school welfare centres.

24. Propaganda which does not arouse the interest of the mother and her children has little practical value. However, leaders of opinion in China and leaders of Chinese thought in Hong Kong are making vigorous efforts to promote public health and public welfare along lines which have proved successful in the Occident, and the outlook is far more hopeful than was the case a few years ago when Chinese thought on matters of health was unduly swayed by old traditions and theories.

Quarantine impractical between Hong Kong and the River Ports.

25. So closely related are Hong Kong, Canton, Macao and the River Ports, in the matter of trade, and such is the amount of traffic both human and goods which passes between them that up to date it has been found impossible to devise any system of quarantine which would effectually safeguard one city against introduction of disease from the other and at the same time preserve that freedom of commercial movements on which these cities depend for prosperity. It has been deemed best to treat them as forming one unit, as suburbs the one of the other, and to strive for a working agreement between the various health organisations to the end that some means, other than imposing restrictions against a whole port, may be found to prevent the spread of infection.

The Government Organisation for the promotion and maintenance of the Public Health.

26. The Colony has no Municipality in the accepted sense of the term, the Governor himself being head of the city and head of the port. The functions of a Municipal Council are to some extent exercised by an Urban Council whose powers are advisory rather than executive. Colonial Heads of Department perform duties which in a Municipality would be carried out by Municipal Heads of Department. The execution of the various public health laws is effected partly by the Medical Department, partly by the Sanitary Department, and partly by the Public Works Department.

27. The Director of Medical Services is the official adviser to Government and to the Urban Council on all medical and sanitary matters. Under a scheme which came into force at the beginning of the year the Medical and Sanitary Departments were brought into close relationship by the Director of Medical Services becoming Vice-Chairman of the Urban Council and assuming general direction over the activities of the Health Officers under whom were grouped the various sanitary inspectors.

28. The Urban Council and the Sanitary Department are concerned with:—

- (a) the Public Health (Sanitation) Ordinance which deals with sanitation generally;
- (b) the Public Health (Food) Ordinance which deals with slaughter houses, markets, dairies, food factories, food shops, restaurants and eating shops.
- (c) the Adulterated Food and Drugs Ordinance.
- (d) the Public Health (Animals and Birds) Ordinance which deals with animal quarantine and prevention of disease.

29. The Medical Department is responsible for: -

- (a) registration of births and deaths in co-operation with the Police.
- (b) quarantine and prevention of disease.
- (c) vaccination.
- (d) venereal diseases clinics.
- (e) leprosy control.
- (f) maternity and infant welfare and the supervision of midwives.
- (g) school hygiene in co-operation with the Education Department.
- (h) prison medical service in co-operation with the Prison Department.
- (i) Government hospitals and dispensaries.
- inspection of Chinese hospitals and dispensaries, in co-operation with the Secretary for Chinese Affairs.
- (k) the activities of the Bacteriological Institute and the Malaria Bureau.
- (1) the activities of the Government Laboratories.
- (m) medico legal work.

- 30. The Public Works Department is responsible for:
 - (a) surveys, town planning streets and roads.
 - (b) buildings and building operations.
 - (c) water works, drainage, and sewerage.
 - (d) harbour engineering works.
 - (e) Crown lands.
- 31. The Police and Fire Department is responsible for Ambulances and the transport of the sick and wounded.
- 32. The following are the Government institutions for medical relief:—

STORY OF BUILDING	Accommo- dation.	Authority in Control.
On the Island:-		
Government Civil Hospital.	246 beds.	Medical Department.
Mental Hospital	32 ,,	,,
Victoria Hospital	72 ,,	,,
Tsan Yuk Maternity		
Hospital	60 ,,	,,
Infectious Diseases	26	
Hospital	30 ,,	11
Violet Peel Health Centre.		,,
Venereal Diseases Centres		STREET,
(two in number)	-	,,
In Kowloon:—		
Kowloon Hospital Maternity & Infant Welfare	131 ,,	11
Centre	-	**
Venereal Diseases Centres (two in number)	-	,,
In the New Territories: —	-	
Jubilee Dam Hospital Ruttonjee Dispensary,	24 ,,	,,
Sham Tseng	_	,,
Un Long Dispensary		"
Lady Ho Tung Welfare Centre	_	,,
Taipo Dispensary and		
Maternity Ward	5 ,,	,,
Sai Kung Dispensary	-	,,
Tai O Dispensary	And the second second	,,

- 33. In the New Territories there is a well equipped motor travelling dispensary which visits those villages which are on the road and which are situated at a distance from the institutions listed above. Each village is visited three times a week. Cases requiring in-patient treatment in hospital are sent to the Kowloon Hospital by motor ambulance.
- 34. Maternity and Child Welfare is carried out at two special centres one in Victoria the other in Kowloon.
- 35. School Hygiene and medical examination of school children is carried out by the school medical branch of the Medical Department working in co-operation with the Education Department.
- 36. A special branch of the Medical Department working in close association with the Secretariat for Chinese Affairs makes periodical inspections of the Chinese Hospitals and Chinese Public Dispensaries.
- 37. Bacteriological and serological investigations are carried out at the Bacteriological Institute where vaccine lymph, antirabic vaccine and anti-meningococcic serum are prepared.
- 38. The Malaria Bureau carries out investigations with regard to mosquitology and malariology and supervises anti-malaria oiling and draining. It co-operates with the Sanitary Department and with the naval, military and air force authorities.
- 39. Quarantine and Port Health Activities, including the fumigation and disinfection of ships, the examination of emigrants and vaccination, are carried out by the Port Health Branch.
- 40. Registration of Births and Deaths is controlled by the Medical Department working in association with the Police and the Chinese Public Dispensaries.

Non-Government Organisations engaged in Public Health Works.

- 41. In addition to the Government organisation there are in the Colony a number of Benevolent Societies and Associations whose activities in the cause of public health are of great benefit to the community. The chief among these are:—the Tung Wah Hospital Charity, the Chinese Public Dispensaries, the various Missionary Societies, the Granville Sharp Estate, the Society for the Protection of Children, the St. John Ambulance Association, the St. John Ambulance Brigade, the Y.W.C.A. and the Y.M.C.A.
- 42. A description of the Tung Wah Hospital and the Chinese Public Dispensaries will be found in the body of the report.

- 43. The St. John Ambulance Association teaches first aid and home nursing and issues certificates after examination to successful candidates. Many hundreds of certificates have been issued. Under the aegis of the Association a number of centres have been established in the New Territories, staffed by full time Nurse-midwives. These include a hospital at Cheung Chau, three small maternity hospitals with dispensary attached and six separate dispensaries.
- 44. The St. John Ambulance Brigade, which is distinct from the Association, is a body which practises in the field the theory taught by the latter. The Brigade which holds a strong position in the Colony does excellent work both in the training of personnel and in the performance of first aid duties. The Brigade renders valuable assistance to the Government especially with regard to vaccination and propaganda.

The Government Medical Department co-operates as far as possible with the Association and the Brigade. A number of Government Medical Officers hold commissioned ranks in the Brigade and assist the Association by lectures and demonstrations. Probationary home nurses receive practical instruction in the Government Civil Hospital.

In the New Territories arrangements have been made whereby Government Medical Officers pay routine visits to some of the centres and all can be called at any time for emergency work.

Medical Education.

- 45. The Faculty of Medicine of the University of Hong Kong provides a six years' course in premedical and medical sciences leading to the degrees of Bachelor of Medicine and Bachelor of Surgery which are awarded on examination. Most of the clinical teaching is carried out at the Government Civil Hospital and the Tsan Yuk Maternity Hospital where beds have been placed under the care of the clinical professors who are consultants to the Government and who have been appointed respectively Surgeon, Physician and Obstetric Physician to the Government Civil Hospital. The degrees of the Medical Faculty are recognised by the General Medical Council for registration in Great Britain.
- 46. Courses of training for nurses and midwives have been established at a number of hospitals in the Colony. Examinations are held and certificates issued by the Midwives Examination Board and by the Nurses Examination Board.

Progress with regard to Reorganisation and Expansion.

47. On the first of the year ordinances necessary to give effect to the scheme for the reorganisation of the medical and sanitary services came into force.

- 48. The omnibus and out of date Public Health and Buildings Ordinance was replaced by a number of ordinances each dealing with its own side of the public health complex. The Sanitary Board was replaced by an Urban Council of which the Director of Medical and Sanitary Services became vice-chairman and adviser on all matters of public health including sanitation. It is now the duty of the D.M.S. to superintend the enforcement and observance of all Ordinances relating to the Public Health and of the by-laws and regulations made thereunder. For this purpose the Sanitary Inspectors will be grouped under the Health Officers who will be under the general direction of the D.M.S.
- 49. The scheme represents for Hong Kong the organisation which has proved successful in municipalities such as Glasgow and Toronto modified to suit local conditions and local opinion. If carried out fully by each department concerned working in the spirit of sympathetic co-operation it should give satisfaction.
- 50. The financial depression which commenced in 1930 and which has continued ever since delayed progress very considerably and a number of things which otherwise would have been done had to be postponed. A new mental hospital, a new infectious diseases hospital, a leper asylum, much needed expansion to the Kowloon hospital, urgently required accommodation and equipment for radiological work and physiotherapy and a teaching centre near the University could not be provided.
- 51. It was found impossible to include in the estimates provision for the emoluments of a Senior Health Officer, a post absolutely essential for the proper running of the new scheme. The appointment of a Dental Surgeon and an Ophthalmologist had again to be postponed.
- 52. The Queen Mary Hospital:—Work on the Queen Mary Hospital was continued and at the end of the year it was nearing completion. It should be ready for occupation towards the middle of 1937. This fine institution of 500 beds will take the place of the Government Civil and the Victoria Hospitals which ultimately will be closed. Situated on the south side of the Island in open surroundings and five hundred feet above mean sea level the hospital commands an uninterrupted view of the sea and islands to the south and west. The site is sufficiently elevated to catch the full benefits of the summer breezes but low enough to escape the hill fogs which are so prevalent in the hot season.

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SECTION I.

Administration.

53. The total authorised establishment of the Medical Department for the year 1936 was as follows:—

Administrative Staff. The Director of Medical Services 1 Deputy Director of Medical Services Clerical Staff. Secretary Assistant Secretary Stenographer Accountant Clerk Class I II III IV V VIA VIB 20 Special Class 2 Investigative Division. Bacteriological Institute. Bacteriologist 1 Assistant Bacteriologist 1 Senior Laboratory Assistant 1 Laboratory Assistants 5 Malaria Bureau. Malariologist 1 Assistant to Malariologist 1

Malarial Inspectors 5

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Chemical Division.

Government Analyst 1
Assistant Analysts
Assistant Analyst (Chinese) 1
Assistant Analyst (Chinese) Class II 1
Sampler
HEALTH DIVSION.
Urban Branch.
Health Officers
Chinese Health Officers 1
Lady Medical Officer (Part time) 1
Port Health Branch.
Port Health Officers and Inspectors of Emigrants 2
Chinese Port Health Officers 2
Port Health Inspector 1
Health Inspector 1
Public Vaccinators
Fumigating and Disinfecting Bureau.
Fumigator
Venereal Diseases Branch.
Venereal Diseases Officer
Chinese Venereal Diseases Officer 1
Venereal Diseases Technical Assistant
Dressers
Venereal Diseases Nurse 1
Maternity and Child Welfare Branch.
Lady Medical Officer 1
Chinese Lady Medical Officer 1
Infant Welfare Nurses 7
Interpreter 1

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School Hygiene Branch.

Health Officer for Schools	1
Chinese Medical Officers for Schools	2
School Nurses	5
Chinese Hospitals and Dispensaries Branch.	
Visiting Health Officer	1
Lady Visiting Medical Officer	1
Chinese Resident Medical Officers	3
Chinese Lady Medical Officers	3
Stenographer	1
Dispensary Nurse	1
Midwives	6
Medical Division.	
Clinical Branch.	
Government Consultants	3
Senior Medical Officer	
Medical Officers	
Chinese Medical Officers	
House Officers	
Nursing Staff (General).	
Principal Matron	1
Matrons	
Assistant Matron	1
Home Sisters	
Tutor Sister	
Nursing Sisters	
Nurse (Staff)	
Nurses (Probationers)	44
Midwives	2
Dressers (Charge)	
Dressers (Probationers)	
Linen Maid	

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Nursing Staff (Mental Hospital).

Nursing Staij (Mentat Hospitat).	
Head Attendant	1
Assistant Attendant	1
Mental Nurses	3
Wardmasters	1
Kennedy Town Hospital (Infectious Diseases).	
Nurses (Staff)	3
Dresser (Charge)	1
Dressers (Staff)	2
Steward	1
Tsan Yuk Maternity Hospital.	
House Medical Officer	1
Matron	1
Assistant Matron	1
Midwives	4
Pupil Midwives	13
Stewards.	
Steward	
Assistant Steward	
Pharmacy Branch.	
Apothecary	1
Assistant Apothecary	1
Storekeeper	1
Dispensers (Charge)	
Dispensers (Staff)	
Dispensers (Probationers)	6
D. II. L. D. L.	
Radiological Branch.	
Radiologist	1
Radiographers	
Masseuses	
Masseuses	2 1
Masseuses	2 1

New Territories Branch.

Medical Officer	1
Chinese Medical Officers	2
Midwives	. 10
Dresser (Charge) for Travelling Dispensary	1

Miscellaneous.

- 54. The following were the principal changes in personnel: -
- Dr. W. B. A. Moore, O.B.E., Deputy Director of Medical Services went on leave on 22nd February prior to retirement. Dr. D. J. Valentine acted as Deputy Director of Medical Services during Dr. Moore's absence.
- Dr. I. Newton, Medical Officer, acted as M. O. i/c. Surgical Unit from 15th March to 14th October during Prof. K. H. Digby's absence.
- Dr. T. W. Ware, Visiting Health Officer Chinese Hospitals and Dispensaries, went on leave 18th September. Dr. (Mrs.) G. R. Nash acted as Visiting Medical Officer Chinese Hospitals and Dispensaries from 18th September to 10th November during Dr. Ware's absence.
- Dr. J. E. Dovey acted as Visiting Medical Officer Chinese Hospitals and Dispensaries from 11th November.
- Dr. R. B. Jackson went on leave on 7th March to 9th December. Dr. J. B. Mackie acted as Malariologist during Dr. Jackson's absence.
- Miss S. I. Summerskill went on leave on 21st April. Miss J. A. Davis acted as Principal Matron from 21st April to 2nd June during Miss Summerskill's absence.
- Miss J. A. Davis went on leave on 3rd June prior to retirement. Miss S. F. Sutton, Home Sister, acted as Principal Matron from 3rd June.
- Miss I. N. Watkins went on leave on 6th March. Miss A. I. Smith acted as Tutor Sister from 6th March to 9th December during Miss I. N. Watkin's absence.

Miss A. M. Davies, Nursing Sister, acted as Matron Civil Hospital from 3rd June.

Miss D. P. Geen, Senior Sister, acted as Matron Kowloon Hospital from 3rd June.

Miss M. A. Wilson, Nursing Sister, acted as Home Sister from 21st April.

Miss A. M. Cullinan, Nursing Sister, acted as Assistant Matron, Civil Hospital, from 21st April.

Mr. A. Jackson, Assistant Analyst, was transferred to Straits Settlements on 24th January.

The Title of Director of Medical and Sanitary Services and Deputy Director of Medical and Sanitary Services were changed to Director of Medical Services and Deputy Director of Medical Services respectively in the latter part of the year. The change was one of title only, the powers and duties of the two officers were not altered.

55.

APPOINTMENTS.

Name of Officer.	Designation.	Date of assumption of duty.
Dr. D. A. Smith	Medical Officer	27. 5.36
Dr. (Mrs.) L. Fehily	Lady Medical Officer and Supervisor of Midwives	
	(Part-time)	22. 2.36
Mr. W. Littlewood	Port Health Inspector	6. 2.36
Mr. J. Redman	Assistant Analyst	5. 3.36
Mr. C. W. Haynes	Assistant Attendant,	
	Mental Hospital	30. 9.36
K. Trickett	Nursing Sister	6. 2.36
A. C. Hill	do.	19. 6.36
J. H. McLellan	do.	19. 6.36
M. S. Thompson	do.	26.11.36
O. S. Jeffery	do.	26.11.36

RESIGNATIONS OR RETIREMENTS.

Name of Officer.	Designation.	Date of Resigna- tion or Retirement
Dr. W. B. A. Moore	Deputy Director of Medical Services	21.10.36
Miss J. A. Davis	Matron,	21.10.00
	Kowloon Hospital	29. 9.36
Dr. (Mrs.) A. L. J. Dovey	Lady Medical Officer and Supervisor of Midwives	
	(Part-time)	22. 2.36
Miss L. C. Mallows	Nursing Sister	17. 4.36
Miss F. Berkeley	do.	16. 8.36
Miss H. M. Griffiths	do.	5.12.36
Miss J. E. Robson	do.	24.10.36
Miss V. P. C. Weightman	do.	29. 4.36

57.

PROMOTION.

Name of Officer.	Designation.	Date of Promo- tion
Dr. D. J. Valentine	Deputy Director of	
	Medical Services	21.10.36
Miss S. I. Summerskill	Principal Matron	30.11.35
Miss S. F. Sutton	Matron, Civil Hospital	30.11.35
Miss D. P. Geen	Matron,	
	Kowloon Hospital	30. 9.36
Miss M. A. Wilson	Home Sister,	
	Kowloon Hospital	30. 9.36
Mr. L. A. Collyer	Head Attendant, Mental	
	Hospital	1. 1.36
Miss A. M. Davies	Assistant Matron	1. 1.36

58.

NEW YEAR HONOURS.

O.B.E. (Civil)

DR. WILLIAM BROWNLOW ASHE MOORE, Deputy Director of Medical Services, Hong Kong, to be an officer of the Most Excellent Order of the British Empire, Civil Division.

59. Expenditure for 1936 and 1935 Compared.

OS. EXPENDITURE FOR 1990 AND		1936.
Personal Emoluments\$1,	007,818.43	\$1,187,718.31
Other Charge	s.	
A.—Staff.		
Conveyance Allowances \$	15,050.91	\$ 14,488.45
B.—General.		
Artificial Limbs\$	34.50	\$ 90,00
Bedding and Clothing	15,888.74	
Board for 5 House Officers	1,825.00	1,830.00
Board and Lodging for 6 Pupil		
Midwives	368.00	432.00
Books	279.11	419.12
Bonuses to Dispensary Licentiates and Clerks for vaccination of children and registration of		
births	4,638.10	4,825.30
Cleansing Materials	6,770.67	5,317.57
Dental and other Special Treat- ment	1,677.00	3,740.83
Expenses of Courses of Study and attendance at Medical Con-		A T. C. STA
gresses	3,732.83	4,945.14
Fuel and Light	59,205.62	63,424.51
Grants to Protestant and Roman		
Catholic Chaplains for Religious Services	1,800.00	1,800.00
Incidental Expenses	2,894.31	2,997.65
Maintenance of lunatics at Canton.	8,943.46	11,485.63
Medical Comforts	343.52	259.72
Medicines, Surgical Appliances and Instruments	64,580.21	79,568.75
Notification Fees, Infectious diseases		133.00

B.—General,—contd.

Nursing Board Expenses	1,926.90	2,389.50
Provisions for Patients	99,432.02	96,684.35
Rent of Premises for Dispensaries,		
and Infant Welfare Centre	4,940.00	3,994.50
Transport	1,424.37	1,431.92
Treatment of Opium addicts	2,069.50	2,056.00
Upkeep of Hospital Equipment, etc.	9,556.68	8,144.81
X-Ray Apparatus, Running Expenses and Maintenance	12,542.70	11,608.76
Running Expenses of Travelling Dispensary and Motor bus for	987.40	1 916 00
Lady Ho Tung Welfare Centre.	867.40	1,316.00
Ventilation of Operating Theatre	389.15	407.45
Washing	17,145.03	18,701.44
C.—Port Health Offic	er's Office.	
	1935.	1936.
Conveyance Allowances \$	130.82	\$ 252.59
Incidental Expenses, etc	338.81	333.03
Uniforms	188.52	170.60
Disinfecting & Furnigating Bureau, Running Expenses	14,189.53	3,967.43
Repairs and Replacements	13,014.00	466.63
D.—Bacteriological		
Animals and Fodder \$	2,406.79	\$ 2,249.90
Anti-rabic work	104.74	371.56
Apparatus and Chemicals	986.75	875.66
Books and Journals	40.60	34.62
Conveyance Allowances	173.71	351.27
Fuel and Light		
ruer and Digite		1,244.97
Incidental Expenses		1,244.97 573.74

D.—Bacteriological Instit	ute,-conto	l.	
Preparation of Vaccines, Serum,	1 105 00		700 50
etc	1,165.80		729.56
Uniforms	177.21		160.37
E.—Mortuaries, Victoria d	and Kowloo	n.	
Conveyance Allowance for Kowloon			
Messenger\$	18.00	\$	24.00
Fuel and Light	81.82		97.22
Uniforms	20.64		42.42
F.—Malaria Bure			
Anti Malarial Field Work \$		\$	800.91
Conveyance Allowances	1,907.40		1,739.96
Equipment	1,368.83		636.91
Incidental Expenses	251.11		167.33
Uniforms	576.82		643.28
G.—Analytical Labo	ratory.		
Apparatus and Chemicals \$	2,383.79	\$	3,607.47
Books and Journals	175.17		185.87
Conveyance Allowances	180.00		178.00
Fuel and Light	707.77		729.03
Incidental Expenses	309.56		314.70
Uniforms	74.15		87.84
Total Personal Emoluments			
and Other Charges\$1,	399,472.30	\$1,5	74,761.35
DECEMBER OF THE PARTY OF THE PA	NAME OF	-	370,000
SPECIAL EXPENDIT	URE.		
	1935.	Trans.	1936.
Anti-gas Equipment\$	-	\$	682.50
Equipment for Kowloon Hospital	2,792.01		-
Steel Office Equipment	635.00		566.00
Equipment for Tai Po Dispensary	2,089.16		_

SPECIAL EXPENDITURE,—Contd.

OFECIAL LAFEADITURE	, Conta.	
Refrigerator for Tsan Yuk Hospital.	774.00	_
Miscroscope for V.D. Clinic	495.65	-
X-Ray Apparatus	7,347.82	_
Emulsifying Machine	_	2,168.45
Equipment for Queen Mary Hospital	_	5.688.33
Repairs and Calibration of Instru- ments for Govt. Laboratory	_	10.62
Suction Hose for Disinfecting & Fumigating Bureau	_	450.00
Total Special Expenditure\$	14,133.64	\$ 9,565.90
Total Medical Department\$1	,403,605.94	\$1,584,327.25
60. REVENUE FOR 1935 AND 19		
60. Revenue for 1935 and 19 Medical Treatment	1935.	1936,
	1935.	1936,
Medical Treatment\$	1935. 88,800.31	1936, \$ 101,995.86
Medical Treatment\$ Bacteriological Examination	1935. 88,800.31 8,071.25	1936, \$ 101,995.86 6,096.80 34,797.25
Medical Treatment\$ Bacteriological Examination Chemical Analyses	1935. 88,800.31 8,071.25 30,773.50	1936, \$ 101,995.86 6,096.80 34,797.25
Medical Treatment\$ Bacteriological Examination Chemical Analyses Bills of Health	1935. 88,800.31 8,071.25 30,773.50 8,856.00	1936, \$ 101,995.86 6,096.80 34,797.25 9,102.00 164,046.00
Medical Treatment\$ Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants.	1935. 88,800.31 8,071.25 30,773.50 8,856.00 156,310.30	1936, \$ 101,995.86 6,096.80 34,797.25 9,102.00 164,046.00 2,291.00
Medical Treatment\$ Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants. Official Certificates	1935. 88,800.31 8,071.25 30,773.50 8,856.00 156,310.30 1,625.00	1936, \$ 101,995.86 6,096.80 34,797.25 9,102.00 164,046.00 2,291.00 5,227.00
Medical Treatment\$ Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants. Official Certificates Births and Deaths Registration	1935. 88,800.31 8,071.25 30,773.50 8,856.00 156,310.30 1,625.00 4,288.00 2,988.50	1936, \$ 101,995.86 6,096.80 34,797.25 9,102.00 164,046.00 2,291.00 5,227.00 2,662.50
Medical Treatment\$ Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants. Official Certificates Births and Deaths Registration Consultants Fees	1935. 88,800.31 8,071.25 30,773.50 8,856.00 156,310.30 1,625.00 4,288.00 2,988.50	1936, \$ 101,995.86 6,096.80 34,797.25 9,102.00 164,046.00 2,291.00 5,227.00 2,662.50
Medical Treatment\$ Bacteriological Examination Chemical Analyses Bills of Health Medical Examination of Emigrants. Official Certificates Births and Deaths Registration Consultants Fees Fumigration and Disinfection Fees.	1935. 88,800.31 8,071.25 30,773.50 8,856.00 156,310.30 1,625.00 4,288.00 2,988.50 9,678.37	1936, \$ 101,995.86 6,096.80 34,797.25 9,102.00 164,046.00 2,291.00 5,227.00 2,662.50 12,613.68

Total\$ 311,391.23 \$ 338,866.09

61.	EXPENDITURE	AND	RE	VENUE	3 ME	EDICAL	DEPARTMENT
	F	OR T	THE	PAST	TEN	YEARS.	

Year.	Personal Emoluments & Other Charges.	Special Expenditure.	Total Expenditure.	Total Revenue.
1927	8 721,623,32	\$ 16,409.47	\$ 738,032.79	\$ 307,744.48
1928	808,412.61	23.37	808,435.98	306,347.62
1929	878,058.19	17,061.08	895,119.27	299,524.51
1930	1,172,791.22	51,305.06	1,224,096.28	267,887.66
1931	1,325,353.30	52,697.76	1,378.051.06	243,256,99
1932	1,316,575.34	6,689.20	1,323,264.54	260,164.87
1933	1,409,905.40	4,176.19	1,414,081.59	265,859.34
1934	1,483,969.06	21,294.99	1,505,264.05	300,900,18
1935	1,389,472,30	14,133.64	1,403,605.94	311,390.23
1936	1,574,761.35	9,565.90	1,584,327.25	338,866.09

62. In drawing comparisons between the expenditure and revenue of different years it should not be forgotten that the Hong Kong dollar is based on silver and its value rises and falls with the place of that metal. Most of the European officers draw stering salaries and the bulk of the drugs, dressings and instruments are obtained from England and paid for in sterling. With the exchange at a shilling, the number of dollars expended on sterling priced material is double what it would have been had the exchange been two shillings to the dollar.

RATIO OF EXPENDITURE ON MEDICAL SERVICES TO TOTAL REVENUE FROM ALL SOURCES.

- 63. The total Revenue of the Colony from all sources was estimated at \$29,598,148.00.
- 64. Because of the overlapping which occurs when a work serves both a utilitarian and a sanitary service it is impossible to assess exactly the amounts which have been spent for purely medical and sanitary purposes. Including all water works and drainage works as sanitary works, the following (which include the salaries of the P.W.D. staff concerned) shows the commitments as laid down in the Estimates for 1936.

Expenditure	by	Medical Department\$	1,651,378.00
"	11	Sanitary Department	
,,		Public Works Department	
"		Police Department	300.00
,,,		Motor Ambulance Service	26,797.91
	,,	Subsidies to Charities	179,836.00

Total\$ 5,860,689.91

65. Ratio of expenditure on Medical Services to total revenue = $\frac{5,860,689.91}{29,598,148.00} = 19.80 \text{ per cent.}$

66. If the expenditure on Water Works be not taken into account the ratio is 17.33 per cent.

SECTION II.

Public Health.

PART I.—VITAL STATISTICS.

CIVIL POPULATION.

67. The estimated civil population for the whole of the territories under British jurisdiction at the middle of the year was 988,190 of which 966,358 or 97.8 per cent was Chinese and 21,832 or 2.20 per cent non-Chinese. The distribution was as follows:—

Urban area of Victoria:-		
Europeans and Americans	4,347	
Other non-Chinese races	5,958	
Chinese	382,119	
_		392,424
Villages of Hong Kong:—		
Europeans and Americans	357	
Other non-Chinese races	120	
Chinese	50,605	
_		51,082
Total for Hong Kong Island		443,506
Urban area of Kowloon including New Kowle	oon:	
Europeans and Americans	4,909	
Other non-Chinese races	6,116	
Chinese	327,858	
Total for Kowloon & New Kowloon		338,883
Junks and Sampans:-		
Chinese		100,000
New Territories exclusive of New Kowloon:-	_	
Europeans and Americans	25*	
Chinese		
-		105,801
Total civil population	-	988.190
Population	-	

^{*} In addition there were 26 engaged temporarily at Shing Mun Dam.

68. During the year 2,977,205 persons entered and 2,987,772 left the Colony, by steamer and by railroad, making a surplus of emigrants over immigrants by these routes of 10,567. Fuller details are as follows:—

Arrived.	Departed.
1,310,763	1,384,220
1,107,284	1,069,997
559,158	588,555
2,977,205	2,987,772
	1,310,763 1,107,284 559,158

69. This does not represent the total movement between Hong Kong and the neighbouring provinces of China for there are many who arrive and depart by coasting vessels, junks and sampans. It is estimated that on an average over 8,000 arrive and depart daily.

BIRTHS AND DEATHS REGISTRATION.

- 70. The Registration of Births and Deaths Ordinance has since 1911 applied to the whole territory under British jurisdiction but until 1932 no action was taken to enforce it in the New Territories where registration of both births and deaths had been the exception rather than the rule.
- 71. As a result of the better enforcement of the law and still more as a result of the introduction of a new Births and Deaths Registration Ordinance, which did away with certain fees and penalties, the registration of births increased throughout the Colony, more particularly in the New Territories.
- 72. Registration of births is however still far from complete and many births, especially of females, are never recorded.
- 73. In view of the increased numbers of the births and deaths registered in the New Territories, it was decided from 1934 to calculate the birth and death rates on the population of the whole Colony and not to exclude the New Territories as theretofore.
- 74. Death registration in the Colony being a necessary preliminary to a permit to bury, it may be taken for granted that practically all deaths are registered. Bodies found dumped or abandoned in the streets and open spaces, are taken to the Public Mortuaries where they are examined by the Medical Officer who fills in the necessary certificates which go through the Coroners' hands to the Registrar. All certificates of deaths are scrutinized by the Medical Officer of Health.

BIRTHS.

75. The following table shows the number of births registered during the last five years:—

1932.	1933.	1934.*	1935.*	1936.*
Chinese13,166	14,909	20,424	24,510	26,853
Non-Chinese 431	453	462	527	530
Total13,597	15,362	20,886	25,037	27,383

^{*} Include those from New Territories,

DEATHS.

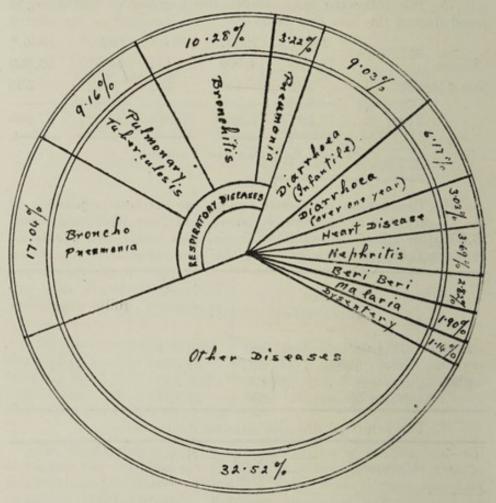
76. The deaths registered among the civilian population of the Colony (including New Kowloon and New Territories) was 26,356 (including 976 stillbirths) giving a crude death rate of 26.60 as compared with 22.90 for the previous year.

Year	Deaths	Estimated population	Death rate per mille population
1935	Chinese21,913	944,971	23.19
	Non-Chinese 220	21,370	10.25
1936	Chinese26,120	966,358	27.0
	Non-Chinese 236	21,832	10.8

77. The principal diseases causing deaths were:-

Disease.	No. of deaths.	Percentage of total deaths.	Death rate per mille population.	
			1935	1936
Broncho-pneumonia	4,493	17.04	4.33	4.54
Pulmonary tuberculosis	2,416	9.16	2.31	2.44
Pneumonia	851	3.22	0.48	0.86
Bronchitis	2,712	10.28	2.28	2.74
Diarrhoea (infantile)	2,381	9.03	1.31	2.40
Diarrhoea (over one year).	1,628	6.17	1.21	1.64
Dysentery	302	1.14	0.24	0.30
Nephritis	978	3.69	0.68	0.98
Heart disease — heart	-			
failure	800	3.03	0.77	0.80
Beri-beri	745	2.82	0.58	0.75
Malaria	503	1.90	0.41	0.50
Notifiable Diseases:-				
Smallpox	16	0.06	0.04	0.01
Enteric	136	0.51	0.09	0.13
Diphtheria	214	0.81	0.14	0.21
Cerebro-spinal meningitis.	65	0.24	0.05	0.06
Cholera	_	_	_	-
Plague	-	111 - 12	1	_

78. Death Clock showing percentage of total deaths caused by different diseases:—



Infantile Mortality.

79. The numbers of deaths of infants under one year were:—

Chinese		9,905
Non-Chinese		19
	· Total	9,924

- 80. If the figures for the Chinese births registered represented the total births, which they do not, the infantile mortality rate for this race would be 372.42 as compared with 316.36 which was the equally incorrect rate for the previous year. Allowing that only one-third of the births are registered this would still mean a very high infantile mortality figure.
- 81. The mortality rate among the non-Chinese was 38.83 as compared with 56.92 in 1935.

The Dumping of the Dead.

82. The following table shows the number of unknown dead bodies found by the Police in the streets and elsewhere during the last five years:—

	1932	1933	1934	1935	1936
Victoria	383	357	289	214	270
Kowloon	884	881	679	708	690
Harbour	79	47	27	52	46
Elsewhere	82	62	61	64	85
	1,427	1,347	1,056	1,038	1,091

83. All but 10 of the bodies dumped were children the majority being infants. The number of males exceeded that of females.

VITAL STATISTICS OF EUROPEAN CIVILIAN POPULATION.

84. The Europeans and Americans resident in the Colony are estimated to number 9,638 of whom 7,446 were British. The majority of Europeans and Americans are treated by private practitioners when ill, and figures are not available for calculating incidence rates.

85. There were 138 deaths among the 9,638 giving a death rate of 14.31 per mille.

86. Vital Statistics of European Officials.	
Number of Europeans (excluding temporary school mistresses)	989
Average number resident in the Colony	866
Number invalided during 1936:—	
(a) when on leave at home 2	
(b) in the Colony 8	
-	10
. Number died during 1936:—	
(a) in the Colony 6	
(b) when on leave at home 1	

PART II.—HEALTH CONDITIONS.

GENERAL REMARKS.

- 87. In the absence of some general system of registration of sickness, the only sources of information available for gauging the state of the public health in the Colony are the returns relating to deaths, the notifications of infectious diseases and the records of Government and Chinese hospitals. Judging from the death returns the health of the Colony was not so good as that of the previous year. The crude death rate was 26.60 per mille as compared with 22.90 for 1935.
- 88. Respiratory diseases accounted for 39.70 per cent of the total deaths; the percentage for 1935 was 41.62. The principal diseases causing death were broncho-pneumonia, pulmonary tuberculosis, bronchitis, infantile diarrhoea and diarrhoea.
- 89. The overcrowded houses, the expectorating habits of the people, and poverty, furnish sufficient explanation for the prevalence of respiratory troubles.

MALARIA.

- 90. This disease which in the early days of the Colony was the great cause of death and from which Hong Kong derived its reputation of unhealthiness, has now practically disappeared from the populous centres of Victoria and Kowloon as the result of the destruction of the breeding places of the carriers through efficient drainage. There is still some malaria in the outskirts of the two towns and a considerable amount in the rural areas of both the Island and Mainland.
- 91. Very extensive work in the way of investigation and research has been carried out by the Malariologist and his staff. Many thousands of anopheline larvae have been examined and identified and many thousands of anopheline adults have been captured and dissected. Serum tests with the contents of mosquito stomachs have shown what animal blood is preferred by each species. As a result of this work it is now known what species of anophelines exist in the Colony, where they breed, on what they feed and their malaria carrying powers.
- 92 The Colony now possesses all the knowledge necessary to successfully combat malaria. Any particular area can be freed from the menace of mosquitoes, and kept free provided there be the power to act, the machinery to carry out the necessary measures and the means to pay the costs.

- 93. For many years the chief Vector in the Colony and New Territories was believed to be A. maculatus. The researches of Dr. Jackson have proved this to be incorrect. A. maculatus is a carrier but is of far less importance in the spread of malaria than A. minimus and A. jeyporiensis.
- 94. It appears that species of mosquitoes, like races of men, can under different conditions of climate and surroundings develop differences in habits and tastes for food. A. maculatus in Malaya readily takes human blood and is a very potent agent in the spread of malaria. In Hong Kong, where it is very prevalent, it seems to prefer animals to humans and its importance as a Vector of paludism is much less pronounced.
- 95. A. hyrcanus the principal carrier in Shanghai is here of little importance in the spread of disease. Its rate of infection under natural conditions is low and it has a preference for animal blood.
- 96. Investigations have shown that swamps, ponds and other collections of water in the open plains away from the hills are more or less harmless and that the real danger lies within mosquito flight distance of the hills in the vicinity of which are to be found the breeding places of A. minimus, A. jeyperiensis and A. maculatus. Why it is we do not know, but spring water which has not lost its sparkle does seem to have some attraction for these three species. As a rule such water has a faint acid reaction due to dissolved carbonic acid gas. When it loses its CO₂ and becomes flat it ceases to attract.
- 97. Though paddy swamps on the open plains are factors of little importance in the spread of malaria the same cannot be said of the irrigated terraces which form the rice fields of the hilly country. These have been shown by the Malaria Bureau to be, under certain conditions, prolific breeding places for that powerful carrier A. jeyporiensis. The irrigation ditches leading to and from the rice fields harbour both A. jeyporiensis and A. minimus. Both of these species have a range of flight of at least half a mile.
- 98. Malaria not being a notifiable disease few figures are available to measure the actual extent of incidence throughout the Colony and New Territories.
- 99. On the hospital returns and on the returns furnished by certain government departments, such as the Police, it is possible to base a guess as to whether the disease is on the increase or decrease generally, but that is all.
- 100. The cases admitted to Government Hospitals numbered 581 of which 21 or 3.6 per cent died. In the Chinese Hospitals there were 1,341 admissions of which 242 or 18 per cent died.

- 101. Among those admitted to Government Hospitals there were 150 benign tertian, 266 sub-tertian and 7 quartan infections.
- 102. The cases admitted to the Government Hospitals during the last ten years were as follows:—

1927		670
1928		485
1931	• • • • • • • • • • • • • • • • • • • •	585
1932		465
1933		475
1934		457
1935	***************************************	384
1936		581

- 103. Many of the Police Stations are screened and every man is provided with a mosquito net. Prophylactic quinine is issued and the living rooms are regularly sprayed with an insecticide in an endeavour to kill any adult mosquitoes that may be present. The police on night patrols are of course liable to infection.
- 104. The total number of deaths attributed to this disease was 503 giving a death rate of 0.50 per mille over the whole population. The low death rate is, of course, due to the fact that the great bulk of the population residing in the drained urban area is not subject to risks of infection. If figures for local districts were available it would be found that in some areas the incidence and death rates were very considerable.
- 105. During the year the Malaria Bureau continued its investigations into the life history, habits and carrying powers of the local anophelines. The results obtained were both interesting and instructive. As in previous years there was no obstruction from the local Chinese; on the contrary they took an interest in the proceedings and showed their eagerness to be of assistance. The Chinese Inspectors have shown ability and zeal.
- 106. The Bureau co-operated fully with the Army, the Royal Air Force, the Sanitary Department and Public Works Department. A full account of the activities of the Bureau will be found in Appendix "B".

Infectious Diseases.

107. During the year there were reported 23 cases of small-pox, 123 cases of cerebro-spinal fever, 375 cases of diphtheria and 418 cases of enteric. There were no cholera cases and no plague.

Plague.

- 108. For the last seven years no cases of plague have been reported in Hong Kong. The disappearance of this disease not only from this Colony but from the greater part of China and its decline throughout the world are due to factors which are not understood.
- 109. Systematic rat-catching and periodical cleansing of houses were carried out throughout the year. Total number o rats collected was 212,947 of which 17,967 were alive, as compared with 192,251 and 21,820 in 1935. The number collected each year shows that there is no diminution in the rat population. All the rats collected were sent to the Public Mortuary for examination. None was found infected.

Smallpox.

- 110. Every year in the cold season this disease manifests itself in outbreaks which are sometimes sporadic, sometimes epidemic. Whatever the prevalence there is always a tendency for the morbidity rate to decline or disappear with the advent of summer. In the year under review there were 23 cases and 16 deaths. 11 cases only were treated in hospital the remainder did not come under the notice of the authorities until after death.
- 111. The vaccination campaign was continued and during the year 274,784 persons were vaccinated. Valuable assistance was afforded by the St. John Ambulance Brigade and by the Chinese Public Dispensaries. Both bodies engaged in active propaganda and through their efforts many were persuaded who otherwise would have kept aloof. The various sections of the Brigade again carried out street vaccination with excellent results.
- 112. The Chinese have a preference for vaccination in the spring as being the auspicious season, and for a month or two after Chinese New Year the Chinese Public Dispensaries are crowded with children waiting to be done.
- 113. The majority of Chinese still hold the opinion that the herbalist treatment of smallpox gives better results than the methods adopted by practitioners qualified in Western medicine. An analysis of the statistics of (a) the Tung Wah Infectious Diseases Hospital where only herbalist treatment is carried out, and (b) the Government Infectious Diseases Hospital where western treatment only is provided shows that this view is not correct.

Cerebro-Spinal Fever.

114. The following table shows the monthly incidence of this disease for the last 5 years:—

Month.	1932	1933	1934	1935	1936
January	6	15	15	10	10
February	2	39	27	16	23
March	9	30	69	22	27
April	111	88	53	23	36
May	26	17	25	10	4
June	16	14	15	11	9
July	9	7	11	5	7
August	7	5	3	1	3
September	5	8	13	. 1	1
October	3	0	5	4	1
November	7	9	2	1	. 2
December	8	14	8	6	-
Total	209	191	246	110	123

115. The disease is most prevalent in the cold weather. It dies down when the real summer heat sets in and people sleep more out of doors at night thus lessening overcrowding. Of the 123 cases reported, 65 or 52.84% proved fatal. Ever since the severe outbreak of this disease, which occurred in 1917, a supply of serum, made at the Bacteriological Institute from the local strains of meningococcus, is kept in stock. This serum gives very good results when used early in the disease.

Diphtheria.

- 116. Cases of this disease occur throughout the year, but the majority of those notified occur during the cold weather of December, January and February.
- 117. 875 cases were reported of which 214 proved fatal, as compared with 266 with 136 deaths in 1935.

Enteric.

118. Cases of this disease are notified throughout the year, there is usually some increase in the number reported during the summer months. The cases are usually sporadic and the source of infection is seldom discovered. 418 cases were notified with 136 deaths as compared with 319 in 1935 with 95 deaths.

Pulmonary Tuberculosis.

- 119. This disease continues to rank second to bronchopneumonia as the principal cause of death. It is probable that some of the cases of the latter were of tuberculous origin.
- 120. The total number of deaths was 2,416, that for 1935 was 2,237. The death rate per mille was 2.44 as compared with 2.31 for the previous year.
- 121. There is need for more hospital or infirmary accommodation for tuberculosis patients, especially for those of the poorer classes.

Leprosy.

- 122. Very few cases of this disease are notified. The number of lepers in the Colony is not known but assuming that the incidence rate is the same as that of the neighbouring countries the total number cannot be less than 500 and may approach 1,000. To many, these figures will appear to be exaggerations, nevertheless they are accepted by all who are authorities on the subject and have taken the trouble to make the necessary enquiries.
- 123. The factors geographical, physical, political and commercial which render impractical quarantine measures against the River Ports have also an important bearing on the leprosy problem. Under the circumstances prevailing it is impossible to put into operation here certain measures adopted by other countries for the control of the disease.
- 124. Considering the great movements of population and the fact that the majority of the population of Hong Kong are Chinese subjects whose movements are practically unrestricted and who can cross and recross the border without hindrance the control of leprosy presents peculiar difficulties.
- 125. How to deal justly with the afflicted who are already within our borders and at the same time avoid any risk of attracting sufferers from neighbouring provinces who may become a burden on the rates is a problem which has exercised the minds of many and one which is most difficult to solve satisfactorily.
- 126. Before 1910 there was no law with regard to lepers. In that year the Lepers Ordinance was passed with the object of controlling the situation through the segregation of lepers who were British subjects and the expulsion of others. The Government was given the sole right of providing a refuge for the afflicted and it was made an offence for any one to harbour a leper.

127. No asylum or refuge was built and the net result of the 1910 act was to make the position worse than it was before. Under the law, except in the case of the man rich enough to provide for himself in his own domain sufficient isolation, no treatment by a private practitioner or treatment as an outpatient at a hospital was permissible however slight the symptoms. The Police had at once to be notified and the unhappy victim taken into custody to be expelled from the Colony if he were unable to prove himself a British subject or to be released to hide himself in hopeless isolation if he could so prove.

128. On the 13th of June, 1935, was passed the Lepers Ordinance 1935 which repealed that of 1910. The new Ordinance looks upon leprosy less harshly than its predecessor. The unfortunate individual who has contracted the loathsome affliction through no fault of his own is now regarded as a human case of disease who has a claim to receive the same sympathetic treatment for his trouble as is accorded to any one suffering from any other disease of a contagious nature such as tuberculosis or venereal disease.

129. It is the intention of Government to establish a proper leper settlement in a suitable situation when the necessary funds are available. Unfortunately the severe financial depression prevented anything being done in 1936 or any provision being entered in the estimates for 1937. The settlement when built will not be solely a place of segregation but in addition a centre for inpatient treatment and retreat for those who are unable to provide for themselves.

130. In May, 1935, arrangements were made with the Tung Wah Hospital Committee for the use of the Smallpox Hospital as a refuge for lepers. During the year 1936–129 cases were admitted (106 males and 23 females). 15 remaining at end of 1935.

131. The subsequent histories of those admitted were:-	919
Discharged for treatment as outpatients at one or	
other of the Government Hospitals	12
Transferred to Shek Lung Leper Settlement	82
Discharged at their own request	7
Ran away	21
Died	12
Discharged not leper	2
Remaining at the end of the year (1936)	8
	144

132. A European Medical Officer attended twice a week for the purpose of administering treatment.

Rabies.

133. No human cases were reported during the year. One infected dog from the New Territories was notified.

Dysentery.

- 134. During November there occurred a serious epidemic of Shiga Dysentery.
- 135. The outbreak commenced on the 8th of November when twe ve European children developed symptoms so severe that seven of them subsequently died.
- 136. From the 8th up to and including the 19th there were forty-seven cases all but four of whom were European children under ten years of age. The causative organism was in twenty-five cases proved to be the bacterium dysenteriae of Shiga, in four that of Flexner and in the remainder the organism was not isolated and identified though in the majority of cases the severity of the symptoms pointed strongly to Shiga infection.
- 137. There were altogether eight deaths, seven of which as mentioned above were cases which developed symptoms on the 8th. The remaining death was that of a Chinese infant the son of a Chinese servant engaged in a house where two children had died of the disease.
- 138. There being some indication that the infection was milk borne the public were advised to boil all milk and the various dairies were instructed to take special precautions. One of them the Dairy Farm decided to institute pasteurisation of all milk and cream before issuing, thus obviating any risk there might be of infection spreading from that source.
- 139. It having been ascertained that all the twenty-four cases taken ill on the 8th and 9th had consumed a special brand of milk designated "Nursery Milk" issued by the Dairy Farm—special attention was directed to this institution. The fact that thousands of individuals had daily consumed milk from this dairy without suffering any deleterious effects showed that the milk as a whole had not been at fault. It was assumed that one batch of nursery milk had accidently become infected with Shiga bacilli, a thorough inspection of the premises failed to bring to light any source of contamination.
- 140. The farm could fairly be described as a high class institution where special precautions were taken to produce a clean milk. It appeared to be the case that the milk was handled in a sanitary manner from the cow to the consumer and would be called Grade A in England.
- 141. A search was made to discover the source of infection and the stools of 113 workers were examined in an endeavour to find among them any Shiga carriers. No Shiga bacilli were isolated from any of the stools.

SECTION III.

Hygiene and Sanitation.

GENERAL REMARKS-ADMINISTRATION.

142. The Urban Council and the Sanitary Department deal with the greater part of the sanitation of the Urban areas.

143. Under the Urban Council Ordinance and the various Public Health Ordinances which came into force at the beginning of the year considerable changes were made in the machinery governing the administration of hygiene and sanitation. Under the new scheme the Medical Department and the Sanitary Department were brought into closer relationship by the Director of Medical Services becoming Vice-Chairman of the Urban Council which took the place of the Sanitary Board and assuming general direction over the activities of the Urban Health Officers under whom are grouped the Sanitary Inspectors.

144. The Urban Council and the Sanitary Department are responsible for:—

- (i) Work under the Public Health (Sanitation) Ordinance dealing with nuisances, street and house sanitation, the collection and disposal of refuse, Latrines and the collection and disposal of night soil, the control of wells and pools, the sanitary maintenance of eating houses, factories, workshops and places of public instruction, recreation and assembly, public baths and workhouses, stables and animal houses, mosquito breeding control, cemeteries and the disposal of the dead.
- (ii) Work under the Public Health (Food) Ordinance dealing with slaughter houses, markets, dairies and milk shops, food factories, food shops, eating houses and restaurants.
- (iii) Work under the Adulterated Food and Drugs Ordinance.
- (iv) Work under the Public Health (Animals & Birds) Ordinance.
- (v) Work under the Hawkers Ordinance.

The staff of the Sanitary Department includes:-

- (i) Two European and one Chinese Health Officers seconded from the Medical Department.
- (ii) Two Veterinary Surgeons.
- (iii) Forty-nine European Sanitary Inspectors and twelve Asiatic Sanitary Inspectors.

- 145. There are a number of interpreters and a large staff of subordinates.
- 146. For the purpose of sanitary administration by the Sanitary Department, the Island and the Peninsula have been divided into local sanitary areas, each with a sanitary office, and these in turn have been sub-divided into Health Districts each in charge of a Sanitary Inspector.
- 147. The City of Victoria is divided into four Sanitary areas and seventeen health districts. The villages on the south side of the island are in charge of one Inspector. Kowloon Peninsula has three health areas and ten health districts. It is estimated that on an average each Inspector has to deal with a population of 28,000, a very high figure for a tropical city, and especially for one so overcrowded as Victoria.
- 148. The Sanitary Department has no jurisdiction in any part of the New Territories with the exception of the urban area next to Kowloon and known as New Kowloon.
- 149. The following general review of work done and progress made in matters of sanitation is, so far as the Sanitary Department is concerned, based on facts supplied by the Health Officer. The Annual Report of the Sanitary Department is issued independently by the Chairman, Urban Council.

PREVENTIVE MEASURES AGAINST MOSQUITOES AND INSECT BORNE DISEASES.

- 150. The law on the subject is contained in the Public Health (Sanitation) Ordinance under which adequate powers are given to deal with nuisances caused by mosquito propagation. At present this law does not apply to the New Territories.
- 151. There are no special Sanitary Inspectors engaged in anti-mosquito work and the anti-mosquito brigade consists of two overseers and a squad of oiling coolies.
- 152. The routine work of inspection of premises for the presence of mosquito breeding was carried out by the the district inspectors. Oiling of pools and destruction of mosquito breeding places was carried out by the anti-mosquito gangs, which in some cases functioned under the supervision of Inspectors from the Malaria Bureau.
- 153. The usual cutting of undergrowth in May and October was done in co-operation with the Botanical and Forestry Department as regards Crown Lands, and with the Military Authorities on Military lands.

- 154. The Malaria Bureau of the Medical Department continued to function throughout the year. The work done included:—
 - (a) General survey of the Colony and New Territories for the purpose of ascertaining what species of mosquitoes exist and the life history of each.
 - (b) Research regarding insect borne diseases to determine the insect hosts and the conditions influencing the spread of infection.
 - (c) Special investigation in malarious districts with a view to the eradication of diseases.
 - (d) Local mosquito surveys for the abatement of mosquito nuisances.
 - (e) Co-operation with Government Departments, the Military, Naval and Air Forces, Public Companies and private individuals with regard to the investigation and eradication of malaria.
 - (f) The teaching of mosquitology.
- 155. A full account of the activities of the Bureau will be found in Appendix B.

GENERAL MEASURES OF SANITATION.

Domestic Cleanliness.

- 156. Every domestic building or part of a building occupied by the members of more than one family must, unless especially exempted by the Urban Council, be cleaned and limewashed throughout by the owner, to the satisfaction of the Council not less than once in every year, and notice in writing that such cleaning and limewashing has been completed shall be sent by the owner to the Secretary within three days after the date of completion.
- 157. It is the duty of the occupier of any domestic building to cause such building to be kept in a cleanly and wholesome condition and to see that the drains, traps, gratings, fall pipes, and sanitary fittings and appliances, are free from obstruction and in an efficient state of repair.
- 158. In Hong Kong there are 14,024 Chinese houses with 47,490 floors; in Kowloon there are 10,317 houses and 31,390 floors. During the year 149,994 floors in Hong Kong and 83,408 floors in Kowloon were cleansed. During the cleansing process all the furniture is moved and the floors and woodwork washed with kerosene oil emulsion.
- 159. Considering that each Inspector has to supervise a district with approximately 28,000 inhabitants, most of whom are ignorant of the rudiments of sanitation, the thoroughness of the cleansing operation is remarkable.

Scavenging.

160. Scavenging is carried out departmentally. There are twenty-three refuse lorries in use, fifteen being for Hong Kong and eight for Kowloon. 467 tons of refuse was collected daily and removed to the various refuse depots. The bulk of the refuse was ultimately disposed of by dumping in the sea at a shallow inlet with the ultimate object of reclaiming a large area and forming sites for factories.

Conservancy and Sewerage Disposal.

- 161. The collection and disposal of night-soil in the Colony is carried out partly by the bucket system and partly by water carriage.
- 162. The excrement is removed by night from the latrines to a special fleet of junks which convey it up river to China where it is utilised as manure for the mulberry trees on which the silk worms feed.
- 163. Owing to the limitations of the water supply on the Island and the need for economy in the matter of consumption, it is necessary to restrict the number of water closets served by the public mains.
- 164. Where a sufficiency of water can be obtained from other sources, such as wells or streams, and the conditions otherwise are suitable, water closets are allowed. With regard to effluents, some enter the public sewers direct, some pass to biological tank systems to be treated before final discharge.

Drainage.

165. Drainage both surface and subsoil is controlled by the Public Works Department. \$154,000 was entered in the 1936 Estimates for a programme which included drainage, training of nullahs and sewerage. \$20,000, which includes costs of resumption, was provided for anti-malaria works.

Water Supplies.

- 166. The water supplies of Hong Kong and Kowloon are in charge of the Water Works Branch of the Public Works Department.
- 167. All the water is surface water and most of it is collected from catchment areas which are free from ordinary risks of pollution. The water, after storage for a longer or shorter period in impounding reservoirs, is filtered in some cases by slow sand filters, in others by the rapid system, and finally it is chlorinated.

168. Routine examinations are carried out by the Government Bacteriologist and Government Analyst and the results furnished to the Water Authority. The results show that the water as supplied to the consumer is of excellent quality.

Common Lodging Houses.

- 169. Boarding Houses which include every place where any person is harboured or lodged for any kind whatsoever of hire or reward and where any domestic service whatsoever is rendered by the owner, lessee, principal tenant, occupier, or master to the person so harboured or lodged, but which do not include any boarding house for non-Chinese seamen within the meaning of the Merchant Shipping Ordinance, are licensed and controlled by the Secretary for Chinese Affairs under the Boarding House Ordinance.
- 170. They include hotels, common lodging houses, places where employers lodge their employees and the premises of societies within the meaning of the Societies ordinance, where persons pass the night.
- 171. In practice the Sanitary Department report on the condition of the house and if declared sanitary the Secretary for Chinese Affairs, if he be satisfied, registers it and licenses the keeper.
- 172. As mentioned above Boarding Houses include Common Lodging Houses. Some 550 Chinese Boarding House licences have been issued by the Secretary for Chinese Affairs. They vary in class from 3rd class lodging houses to 1st class hotels.

LABOUR CONDITIONS.

- 173. There are no estates or plantations, few mines, and comparatively few large factories. The majority of the urban labouring classes are engaged in matters connected with commerce, shipping or public works and the bulk of the remainder find employment in shops or workshops or independent businesses. There is no need for recruitment of labour, the supply being more than sufficient to satisfy all demands.
- 174. Labourers find their own accommodation in the many tenements and lodging houses which exist in Hong Kong and Kowloon.
- 175. The Factories and Workshops Ordinance administered by the Secretary for Chinese Affairs contains sections bearing on the health of factory workers. The Public Health (Sanitation) Ordinance also contains sections bearing on the health of factory workers.

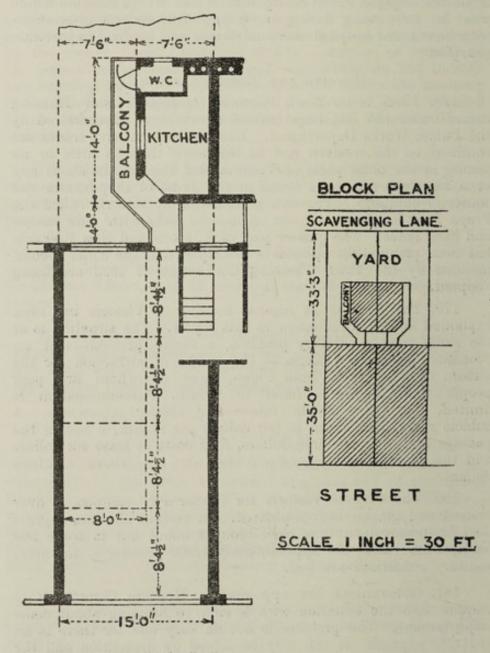
- 176. Ordinarily there are no special arrangements for the medical care of labourers other than the Government Hospitals, the Chinese Hospitals, the Chinese Dispensaries and the Mission Hospitals. The total number of third class beds in these institutions available for general diseases are about 1,200 or 1 to 700 approximately.
- 177. Special arrangements were made for the care of the labourers engaged in the Shing Mun Water Works Scheme which was in full swing during the year. Anti-malaria precautions were taken and hospital accommodation and medical supervision provided.

Housing and Town Planning.

- 178. There is no Town Pianning Ordinance and Housing comes under the Buildings Ordinance which is administered by the Public Works Department. Except that offensive trades are confined to the western end of the town there is little or no zoning in the older parts of Victoria and blacksmiths shops and even foundries are to be found in the midst of shop-houses and domestic buildings. The new reclamation in Victoria called the Praya East has been laid out on modern lines with wide streets and back lanes. The greater part of Kowloon and New Kowloon has been planned on up-to-date principles and the zones recommended by the Town Planning Committee of 1923 are being adopted.
- 179. The position as regards housing in Victoria has been explained in the introduction to this report. The situation is at the same time a sanitary problem, a social problem and an economic problem, Victoria is the centre of attraction for the stream of immigrants from China, most of whom are poor people who live from hand to mouth. Accommodation is limited, but the people must find shelter somewhere. A cubicle rents from seven to ten dollars per month, a bed in the passage costs two to three dollars, food costs at least six dollars and the average earnings of a coolie are not above eighteen dollars.
- 180. The City of Victoria for the area it occupies is over housed and grossiy over-populated. In certain districts a great deal of improvement has been brought about but in some 200 acres, where there are approximately 1,000 persons to the acre, sanitary conditions are bad.
- 181. Government has appointed a Housing Committee to enquire into the situation with a view to bringing about some improvement. The problem is not an easy one for there is no space to expand. It can only be solved by demolition and the erection of a new type of house which will be sanitary and at the same time more commodious.
- 182. One hopeful sign is that the people are being more and more attracted by Kowloon, Praya East and North Point where concentration is much less marked.

183. The plan below shows the most modern type of Chinese tenement house approved by the Building Authority.

184. Provided the occupants keep the premises clean, the windows free from obstruction to the light and ventilation and avoid overcrowding the building is hygienic. There are however many houses which are below this standard.



PLAN OF A FLOOR IN A
MODERN CHINESE TENEMENT

SCALE I INCH = 10 FT.

185. The following list shows some of the work done during the year by, or under the supervision of the Sanitary Department (items 1 - 3) and the building branch of the Public Works Department (items 4 - 10).

Nature of Work.	No. of	Cases.
	1935.	1936.
 Obstructions removed from open spaces. Obstructions to light and ventilation 		615
removed		1,793
3. Rat holes stopped	2,451	1,811
4. Water closets installed in private building		904
5. Houses demolished (domestic)		134
6. Houses demolished (non-domestic)		9
7. Houses erected (domestic)	297	205
8. Houses erected (non-domestic)	55	14
9. Houses re-constructed (domestic)	176	150
 Houses re-constructed (non-domestic) 	—	1

FOOD IN RELATION TO HEALTH AND DISEASE.

186. The laws dealing with this subject are: -

- (a) the Adulterated Food and Drugs Ordinance,
- (b) the Public Health (Food) Ordinance,
- (c) the Hawkers Ordinance.

187. Under the Adulterated Food and Drugs Ordinance "Officer" means any person authorised in writing by the Urban Council on the recommendation of the Director of Medical Services for the purpose of this Ordinance. The Health Officers, the Veterinary Surgeons and a number of Sanitary Inspectors have been so authorised.

188. Under this Ordinance the following samples were taken and submitted for analysis:—

Fresh milksamples	17
Unsweetened evaporated milk ,,	14
Sweetened condensed milk :,	21
Tinned cream,	13
Butter,	8
Ghee,	4
Cheese,	19
Lard,	8
Tea,	21
Coffee,	16
Peanut Oil,	8
Olive Oil,	3
Mustard,	11
Pepper,	10
Vinegar,	19
Tincture iodine,	2
Camphorated oil,	3

- 189. Seven out of the seventeen samples of milk were below standard, the other articles were found to satisfy the legal requirements.
- 190. The Public Health (Food) Ordinance deals with slaughter houses, markets, dairies and milk shops, bake houses, food factories, food shops, eating houses, and restaurants. Under this Ordinance:—
- "Food Officer" means any person appointed by the Urban Council on the recommendations of the Director of Medical Services for the purposes of the Ordinance.
- "Technical Services" include inspections and examinations, the taking of samples, seizures, prosecutions, and all other duties of a supervisory nature carried out by the Veterinary Surgeons, Sanitary Inspectors and Food Officers under powers conferred by this Ordinance and the by-laws made thereunder. The execution of the various technical services are carried out under the general supervision of the D.M.S.
- 191. The following foodstuffs were seized and destroyed under Section 4:—

fish 1 lb., tea 10,378 lbs.

192. The following foodstuffs were voluntarily surrendered and destroyed:—

flour 67 lbs., fruit 77 lbs., confectionery 1,000 lbs., meat 106 lbs., vegetables 43 lbs. and fish 2 lbs.

Markets, Slaughter Houses and Dairies.

- 193. Markets:—The markets are supervised by the Veterinary Branch of the Sanitary Department. There is urgent need for better and larger markets in the city of Victoria and these are being provided as funds permit.
- 194. During the year a new market was in course of erection at Wanchai to take the place of the present one which is too small and too out of date.
- 195. The Central Market in Victoria has been condemned and will be demolished next year to make room for a new structure.
- 196. Slaughter Houses:—Slaughter houses and animal depots are controlled by the Veterinary Branch of the Sanitary Department. There is a Government depot at Kennedy Town (Hong Kong) for the reception of all cattle, sheep, swine and goats brought into the Colony for slaughter. The Government abattoirs are situated at Kennedy Town (Hong Kong) and at Ma Tau Kok (Kowloon). There are Government controlled slaughter houses at Aberdeen and Sai Wan Ho.

197. Dairies and Milk Shops:—There are a number of dairies and milk shops in the Colony all of which are licensed by the Urban Council and regularly inspected by officers of the Sanitary Department.

DEFICIENCY DISEASES.

198. The only information available regarding deficiency diseases is furnished by the death returns and returns of diseases furnished by the Government Hospitals and Chinese Hospitals. The Hospitals deal with only a small proportion of the sick and the whole truth regarding the incidence of disease among the masses cannot be deduced from their figures. The death returns also are misleading in that the majority of cases were not treated by competent physicians prior to death and the Medical Officer examining a body in the mortuary had no history to assist him in coming to a conclusion as to the cause of death.

199. Beri-Beri.—Polished rice is the staple food of the masses yet beri-beri is not epidemic and the deaths from this disease formed only 2.81% of the total deaths. The total number of deaths recorded was 745 and the death rate per mille population 0.75. The total number treated in the Government Hospitals for this disease was 45, those treated in the Chinese Hospitals numbered 1,255.

Measures taken to Spread the Knowledge of Hygiene and Sanitation.

200. The measures taken to spread the knowledge of Hygiene and Sanitation among the populace of Hong Kong are as follow:—Every year during "Health Week" the Y.M.C.A. arranges for a series of lectures to be given. The St. John Ambulance Brigade from time to time spreads the gospel concerning some particular subject. A number of the schools teach elementary hygiene. The Chinese Public Dispensaries arrange periodically for popular lectures to be given by their medical officers. The "Schools" Branch of the Medical Department have a small demonstration centre and the school medical officers and nurses give lectures and demonstrations. At the Infant Welfare Centres endeavours are made to instruct the mothers who attend.

201. Health instruction to serve any useful purpose must arouse and retain the interest of those for whom it is intended. With regard to the masses little of practical value can be accomplished without the active assistance of the mothers of the families, and the quickest and surest way of obtaining the confidence of the mothers is through health centres where free medical advice and treatment form the primary attraction and where the mothers make the acquaintance of tactful and sympathetic nurses who also act as home visitors. The second best

means of influencing the mother is through the school clinic where her children are medically examined by the doctor and school nurse and where opportunity is taken to add propaganda to advice.

TRAINING OF SANITARY PERSONNEL.

- 202. The Medical Officers of Health hold classes and give lectures. Courses in chemistry, physics and sanitary engineering were held at the Technical Institute of the Education Department. At the Bacteriological Institute instruction is given to Sanitary Inspectors in elementary biology and at the Malaria Bureau in elementary mosquitology.
- 203. Hong Kong is an examining centre for the Royal Sanitary Institute, and every year examinations are held for the Sanitary Inspector's Certificate and the Sanitary Science Certificate. Candidates come from Shanghai to take these examinations.

SECTION IV.

School Hygiene.

- 204. The Ordinances which apply to school hygiene are the Education Ordinance 1913 and the Public Health (Sanitation) Ordinance 1903. The former is administered by the Education Department and the latter by the Sanitary Department. To some extent the two overlap. Government schools, Military schools and schools exempted by the Governor-in-Council are not subject to the provisions of the Education Ordinance.
- 205. There is a tendency in some quarters to look upon school hygiene as a special branch of public health which should be administered apart from the general public health administration. This is a mistake. School hygiene forms an inseparable part of general public health and though there are aspects of the work which are best done by officers specially qualified, this should not be used as an argument for confining all matters relating to sanitation and the prevention of disease among school children to a particular body dealing exclusively with schools.
- 206. Because of the close connection between the school child and his home and through his companions with other homes, school hygiene and school welfare have an important influence on the general public health complex and especially is this the case where knowledge of hygiene and public health is of low standard among the working classes forming the bulk of the population, as happens in Hong Kong.
- 207. Not only is care of the school child's health of importance in preventing the development and spread of disease but the education of his mind in matters of hygiene and public health is the surest method known of spreading the gospel of health among the people. The two great propaganda centres for health are the school and the Infant Welfare Centre. That the child of to-day is the man of to-morrow is just as true in public health as it is in politics and this important fact should be more clearly recognised than it is at present.
- 208. In Hong Kong as elsewhere there should be the closest possible co-operation between the School Medical Officer, the Medical Officer of Health and the Education Officer, for without such co-operation it is impossible to get the best results. Education Officers can greatly assist the Health Officers by stimulating those in charge of schools to take prompt action where such is required in the interest of sanitation and the prevention of disease.

- 209. The schools of the Colony are divided into four classes, viz., Government schools, grant schools, subsidised schools and unaided schools. Where the medium of instruction is English they are called "English" schools; where it is Chinese they are called "vernacular" schools.
- 210. Government schools are those which have been provided by Government and which are staffed by members of the Education Department. Grant schools are institutions owned and administered by one or other of the several Missionary Organisations which function in the Colony and which receive grants from Government. Subsidised schools are private institutions which receive a subsidy from Government when the conditions warrant it. Unaided schools are those which receive no support from Government.

211. The following table shows the classification of schools and the distribution of scholars:-

MI ou							
Total	Scholars.	n de sa	6,781 9,916 1,282	17,979	59,977 1,211 512	61,700	79,679
ools ded.	Scholars on Roll.		4,695 893 375	5,963	40,022	40,323	46,286
Schools Unaided.	No. of Schools.		115 6	128	960	661	789
ubsidised Schools.	Scholars on Roll.		111	1	19,955	19,955	19,955
Subsidised Schools.	No. of Schools.		111		294	294	294
Grant Schools.	Scholars on Roll.		248 6,785	7,028	964	964	7,992
	No. of Schools.		14*	16	4	4	20
ment ols.	Scholars on Roll.		1,843 2,238 907	4,988		458	5,446
Government Schools.	No. of Schools.		I 4 52	17	1 2 2	60	20
Class of Institution.		English.	Primary Secondary Vocational	Total:	Vernacular. Primary Secondary Vocational	Total:	Grand total

* This includes Ying Wa College whose primary department receives a Grant in Aid

- 212. Government schools and grant schools are institutions designed and constructed on the lines of good class schools in Europe and America. Having been planned on approved lines and being conducted by teachers possessing a knowledge of modern hygiene they are usually well up to the mark in matters of hygienic importance.
- 213. Many of the subsidised schools and most of the unaided schools are institutions occupying one or more floors in old or newer tenement buildings. Such were designed for domestic purposes and not for schools and in many of them it is impossible to provide for the pupils satisfactory hygienic conditions.
- 214. Lighting and ventilation depend largely on the plan of construction and on proximity of neighbouring buildings. In narrow buildings of the shop-house type forming units in a block facing a narrow street and backing on a narrower lane, it is often impossible to get natural lighting and ventilation satisfactory for school purposes and this particularly applies to houses constructed before the 1903 Building Ordinance came into force. There are many schools where the lighting conduces to sight defects and where the ventilation leaves much to be desired.
- 215. The School Hygiene Branch of the Medical Department consists of the School Medical Officer, two Chinese School Medical Officers, one Lady Medical Officer (part time) and five School Nurses.
- 216. The purposes of a school medical service are not only to detect the sick and ailing in their early stages, but to seek for anomalies of growth and development, so that measures may be taken to prevent not only the progress of ill-health but also its causes. Its basis is the routine medical inspection of school children, and since they are collected together for definite periods they form a section of the community whose health conditions are comparatively easy to ascertain.
- 217. Except that they have been gazetted Inspectors under the Education Ordinance to give them power of entry into certain classes of schools the School Medical Officers have no powers under either the Education Ordinance or the Public Health (Sanitation) Ordinance. They co-operate with the Medical Officer of Health and with the Education Officers. They act as advisers to the Education Department but it rests with the latter to decide whether or not to accept the advice offered.
 - 218. The duties of the School Medical Branch include: -
 - (1) inspection of school premises.
 - (2) physical examination and re-examination of pupils.

- (3) medical treatment with regard to (a) general diseases, (b) defects of ear, nose and throat, (c) eye defects.
 - (4) health instruction and propaganda.
 - (5) office work, i.e., correspondence, reports, statistics, etc.
- 219. With the limited staff available for the purpose it is only possible to deal with a small part of the total hygiene work calling for attention, and this applies equally to inspection of premises, examination of personnel, treatment of disease and general health instruction and propaganda.
- 220. With regard to inspection of premises 848 visits were paid to buildings in which it was proposed to establish vernacular schools and concerning which application had been made to the Education Authority for registration. It not infrequently happens that several visits have to be paid to one building to ensure that the conditions demanded as a precedent to registration have been carried out.
- 221. It was quite impossible to carry out routine inspections of schools already registered and only where circumstances arose which demanded a special visit was one made.
- 222. During the year a sanitary survey of 320 private schools in the Victoria urban area was carried out by a Sanitary Inspector specialy lent for the purpose by the Sanitary Department. The data collected formed the material for a special report which was submitted to Government. The inspector was recalled to the Sanitary Department on the 1st of April, 1936.
- 223. With regard to physical examination of pupils attention was confined to 17 Government schools containing 4,988 pupils. The primary vernacular schools containing 59,977 pupils were left more or less untouched though it is here that the need for health measures is most urgent: for by the time these pupils have reached secondary school age and come under the eye of the medical officer their physical abnormalities, which perhaps might have been rectified if seen and treated sufficiently early, have become established as definite health defects.
- 224. In the year under review 6,538 medical examinations were made of which 5,776 were routine inspections and 762 re-inspections. Adnormalities discovered at the time of routine inspection are classified into two groups, viz., defects in need of treatment, and conditions placed on an observation list for further consideration.

- 225. The incidence of defects in need of treatment (excluding dental defects) varies with the type of school, the average being 20.3%. Dental disease has a very high incidence rate. The incidence rate of myopia varies from a small figure at seven years of age to 38% between sixteen and seventeen. The incidence in Government schools was 22% and most cases have been provided with the necessary correction glasses.
- 226. Postural deformities of chest and spine are extremely common among entrants to Government schools.
- 227. X-rays which were used as an aid to the diagnosis of pulmonary tuberculosis showed 37 positive in 1,903 examined for the first time, or 1.9%.
- 228. Treatment of Government school children is undertaken at three general and two special clinics which deal with visual defects. Attendances were as follows:—

Ellis Kadoorie School Clinic	973	
Violet Peel Health Centre	565	
Yaumati School Clinic,	1,238	
Special Clinics for eyes	335	(persons)
Special Clinics for ear, nose and throat.	689	
Total	3,800	

- 229. School nurses in addition to assisting at the clinics paid 112 visits to the homes of pupils.
- 230. Two members of the medical staff are engaged at Government Hospitals on two forenoons and three afternoons in the week for the examination and treatment of eye defects. A third member on two afternoons attends the ear, nose and throat clinic to deal with cases which are sent from the local school clinics.
- 231. The teaching of hygiene in private vernacular schools leaves much to be desired. Most of the teachers have grown up in insanitary surroundings and having received no training in the subject regard it as one of little importance. The few who are sympathetic are handicapped by the fact that the school premises do not demonstrate the principles of hygiene. Where pupils are crowded together in badly lighted and badly ventilated rooms, where the only latrine accommodation is a commode in a small kitchen, and where the kitchen drain is used as a urinal by both teachers and pupils, the atmosphere can hardly be considered as favourable for the teaching of hygiene.

SECTION V.

Port Health Work and Administration.

GENERAL.

- 232. Reckoned in terms of shipping tonnage, Hong Kong is one of the five greatest ports in the world. It is the principal commercial entrepot of Southern China and is the termination of steamship lines running between China, Japan and North America.
- 233. In 1936, 4,616 British ocean-going steamers and 6,364 foreign ocean-going steamers entered and cleared the harbour. In addition there were 8,963 river steamers, 5,487 launches, and 15,196 foreign trade junks. The total tonnage of vessels entering and clearing was 40,063,663.
- 284. The Medical Staff engaged in Port Health duties consists of two European Health Officers, two Chinese Medical Officers, one European Port Health Inspector and one Chinese Health Inspector.
 - 235. The work of the department includes:-
 - (a) Routine inspection of ships.
 - (b) Quarantine duty.
 - (c) Medical inspection of emigrants.
 - (d) Disinfection and fumigation of ships
 - (e) Vaccination.
- 236. The laws dealing with the subject of Quarantine and Port Health are contained in the Quarantine and Prevention of Disease Ordinance, the Asiatic Emigration Ordinance and the Vaccination Ordinance.
- 237. During the year 5,481 inward bound ocean-going vessels were boarded by the Health Officers. Of these 2,306 were on the British register and 3,175 of foreign registry.
- 238. River boats from Canton, Macao and West River Ports, also junks and small craft are normally visited only when cases of sickness or death are reported. However all river steamers are regularly inspected by a Health Inspector, whose duties are mainly concerned with the cleanliness and sanitation of such vessels.

- 239. During the year 86 special visits were made to ships for the purpose of examining persons suffering from infectious but non-quarantinable diseases.
- 240. 46 permits for the landing of corpses for burial were granted and 23 bodies were sent to the mortuary for postmortem examinations. 15 cases of leprosy were detected amongst Chinese passengers. 20 Chinese, 3 European, 1 Indian, and 1 Filipino lunatics arrived in the Colony during the year. Bills of Health numbering 1,540 were issued.

QUARANTINE.

- 241. Hong Kong has no quarantine station for ships' passengers or crews. When segregation is necessary it carried out on board ship at the Quarantine Anchorage. A limited number (26) of infectious cases can be accommodated at the Government Infectious Diseases Hospital at Kennedy Town but there is no room for contacts.
- 242. All vessels arriving from "infected" ports and those having infectious or suspicious cases on board fly the "Q" flag and go to a quarantine anchorage for examination.
- 243. The monthly return of quarantine ships is given in Table IV.
 - 244. During the year no vessel was detained in quarantine.
- 245. The total number of person medically inspected during 1936 was 235,807 or an average of 646 examinations per day.

EMIGRATION.

- 246. The Asiatic Emigration Ordinance No. 30 of 1915 requires that emigrant ships shall have:—
 - (1) Proper and sufficient living accommodation.
 - (2) Proper and sufficient sanitary requirements.
 - (3) Proper and sufficient hospital accommodation.
 - (4) A sufficient supply of drugs, medical equipment and disinfectants.

It also makes provision for:-

- (1) A proper diet scale.
- (2) The prevention of the export of the unfit.
- (3) The prevention of the export of infectious diseases.
- 247. The Vaccination Ordinance 1923 requires that all emigrants from the Colony shall be protected against Small-pox by vaccination.

- 248. The duty of carrying out the sanitary and medical inspection and for vaccinating those who are insufficiently protected falls on the Port Health Officers.
 - 249. Emigarnts are classified as:-
 - (1) "Free emigrants" or those who pay their own passages.
 - (2) Assisted emigrants or those whose passages are paid by their prospective employers.
 - (3) Women and children.
- 250. The total number of emigrants examined during the year was 164,077 of whom 158,571 were free and 5,506 assisted. The number of rejections was 1,289.
- 251. The number of emigrants proceeding to the Straits Settlements was slightly less than in 1935—101,499 as against 102,674 in 1935, 86,192 in 1934 and 20,324 in 1933. The total number of emigrants leaving Hong Kong in 1936 was 164,077 as against 158,300 in 1935, 138,240 in 1934 and 64,181 in 1933.

DISINFECTION AND FUMIGATION.

- 252. Ship disinfection and disinfestation which was at one time carried out by a private company is now done by the Disinfection and Fumigation Bureau of the Port Health Office.
 - 253. The Disinfecting and Fumigation Plant consists of: -
 - (a) The hulk "Aldecoa" housing two large steam disinfectors and providing accommodation for the bathing and cleansing of a large number of passengers and the disinfection and disinfestation of their effects.
 - (b) One dumb barge carrying a large B. Type Clayton apparatus.
 - (c) One A. Type Clayton machine.
 - (d) Dutch ovens, sprays and other apparatus used in ship disinfection and ship disinfestation.
- 254. Since the arrival in the Colony on the 6th February of the Port Health Inspector who had undergone special training in the Port of London, this Branch has been able to issue deratization exemption certificates. 79 Deratization and 58 Deratization Exemption Certificates were issued during the year.

VACCINATION.

255. The Government Vaccinators are members of the Port Health Staff and work under the general supervision of the Port Health Officer. They work at the Vaccination Centre and on board ships, but are detailed for work wherever required. 256. The number of vaccinations performed by these officers was 84,315 of which 79,233 were emigrants.

TABLE I.

Showing Emigration Passes and Rejections for 1936.

Port of Destination.	Pas- sengers.	Crews.	Rejects
Straits Settlements	101,499	2,354	960
Canada	3,874	13,280	51
United States of America.	1,785	9,244	. 31
Honolulu	665	-	3
Dutch East Indies	24,898	10,624	52
British North Borneo	5,899	2,641	81
Shanghai and Japan	4,298	-	38
Australia	776	2,420	9
South Sea Islands	852	150	-
Panama	578	-	10
Havana	58	1,945	-
Brazil	350	211	-
Argentine	12	318	-
Chile	4	91	_
Mauritius	768	158	6
Reunion	121	324	_
Madagascar	160	239	. 2
South Africa	11	143	-
India	9,990	14,198	22
Hoihow	2,761	-	4
Portuguese East Africa	40	854	_
Mexico	8		_
Peru	440	562	-
Saigon	11	-	-
Manila	3,216	_	21
Total	164,077	59,756	1,298

— **M** 68 — TABLE II.

Showing Monthly Returns of Emigrants, Crews and Rejections.

Months.	Ships Examined.	Pas- sengers.	Crews.	Rejects
January	18	7,099	3,085	24
February	30	11,122	4,866	37
March	33	20,182	5,494	178
April	33	15,990	5,114	186
Мау	31	13,437	5,456	171
June	33	11,082	5,456	112
July	38	13,615	5,360	171
August	29	12,781	4,951	55
September	33	13,732	5,288	101
October	32	15,508	5,953	115
November	29	14,034	4,625	73
December	27	15,495	4,108	80
Total	360	164,077	59,756	1,298

TABLE III.

Showing Causes of Rejections of Emigrants.

Diseases.	No. Reected.
Skin Discases:—	
Scabies	66
Tinea	5
Impetigo	3
Favus	2 4
Dermatrus	-
Eye Diseases:—	
Trachoma	741
Acute Conjunctivitis	5
Ophthalmia	5
Iritis	1
Infectious Diseases:—	
Chicken pox	11
Measles	4
Vaccinia	1
Leprosy	10
Fever	392
Debility	1
Catarrhal Jaundice	4 3
Deformity	10
Phthisis	8
Chronic Nephritis	1
Cellulitis	7
Cardiac Disease	2
Mastoiditis	1
Necrosis of jaw	1
Seurvy	1
Abortion	$\frac{1}{2}$
Dysentery	1
Epithelioma	î
Lunacy	3
Total	1,298

TABLE IV.

Showing Number of Passengers, Crews and Ships arriving in Quarantine in each month, 1936.

Months.	No. of Passengers.	No. of Crews.	No. of Ships.
January	416	801	7
February	227	327	5
March	266	569	12
April	237	1,095	20
May	1,091	818	13
June	1,017	1,568	20
July	586	465	7
August	200	288	4
September	-	and the same of	-
October	_		_
November	-	the same of	-
December	402	303	4
Total	4,442	6,234	92

TABLE V.

Showing Quarantine Notifications issued by the Hong Kong Government for 1936.

Port of Locality.	Diseases.	Date of Notification.	Date of Cancellation.
1. Bangkok .	Cholera	No. 673 of 9. 8.36	-
2. Pakhoi	Small-pox	No. 1002 of 21.12.36	-

THE SANITARY CONTROL OF AERIAL NAVIGATION.

257. By virtue of a notification deposited by His Majesty's Government the International Sanitary Convention for Aerial Navigation was made to apply to Hong Kong from the 1st of August, 1935.

258. The local laws with regard to the sanitary control of Aerial Navigation are contained in the Quarantine and Prevention of Diseases Ordinance No. 7 of 1936.

- 259. By a Gazette notification dated 4th June, 1936, the Governor in Council declared Kai Tak Civil Airport, situated at Latitude 22° 19' North and 114° 11' East, to be an "Authorised Aerodrome" on which aircraft may make their first landing on entering the Colony and which they may make their place of departure on leaving the Colony, and also to be a "Sanitary Aerodrome" organised and equipped as provided in paragraphs (i) to (viii) of the definition of "Sanitary Aerodrome" in the said section of the said Ordinance.
- 260. The Port Health Staff have been appointed the Sanitary Staff for the "Authorised Aerodrome" and the "Sanitary Aerodrome" and arrangements have been made for medical service, medical inspection, laboratory service, disinfecting service and for isolation of sick and contacts.
- 261. Regulations concerning aircraft are under consideration.
- 262. On March 24th the first Air vessel of the Imperial Airways arrived in the Colony and thus commenced a weekly service between Hong Kong and Penang which has contained ever since.
- 263. On the 24th of October the Pan-American Clipper arrived in Hong Kong on completion of its journey across the Pacific. It left the following day.
- 264. On the 5th of November the China National Aviation Corporation commenced to use Hong Kong as a port of arrival and departure. Since then they have maintained a regular tri-weekly service.

SECTION VI.

Maternity and Child Welfare.

265. MATERNITY HOSPITAL ACCOMMODATION.

Hospital.	Authority in Control.	Beds.
Government Civil	Government Medical Dep	ot. 21
Victoria Kowloon Tsan Yuk	Do. Do.	26
Kowloon	Do. Do.	34
Tsan Yuk	Do. Do.	46
Tai Po Dispensary	Do. Do.	5
Wanchai	Chinese Committee.	31
Tung Wah	Do.	24
Tung Wah Eastern	Do.	14
Kwong Wah	Do.	59
Kwong Wah Ailce Memorial	London Mission.	12
St. Paul's	French Mission.	9
Canossa	Italian Mission.	2
Matilda		8
War Memorial	Do.	6
Hong Kong Sanatorium &	E CONTRACTOR OF THE PARTY OF TH	
Hospital	Board of Directors.	6
Cheung Chau	St. John Ambulance Ass'	n. 12
Kam Tin	Do. Do.	8
Sha Tau Kok	Do. Do.	8 7 7
Tsun Wan		7
	Total	337

266. The maternity hospitals will be described under Section VII.

MIDWIVES.

- 267. Under the Midwives Ordinance 1910 a Midwives Board was established with powers to make regulations regarding (a) the course and training of midwives, (b) the certification of approved persons and (c) the regulation of midwifery practice.
- 268. No one whose name is not on the Midwives Register may practise midwifery habitually for gain or describe herself as one specially qualified to carry on the work of a midwife.

- 269. Training Schools for Midwives have been established at the Government Hospitals, Alice Memorial and Affiliated Hospital, Tung Wah Hospital, Tung Wah Eastern Hospital, Kwong Wah Hospital and the H.K. Sanatorium and Hospital.
 - 270. The course of training is as follows:-
 - (a) for those who have less than two years general training, two years at a Maternity Hospital recognised as such by the Board.
 - (b) for those who have had two years training in general nursing, one year at a recognised maternity hospital.
 - (c) for those who are Registered Nurses (by examination) under the Nurses Registration Ordinance, Hong Kong, six months at such Maternity Hospital as aforesaid.
- 271. During the year seventy-four candidates satisfied the examiners at the Midwives Board Examinations and were certified.
- 272. The total number of names on the Midwives Register. at the end of 1936 was 404 as compared with 330 in 1935.

GOVERNMENT MIDWIVES.

- 273. There are fifteen Government midwives, six of whom are attached to Chinese Public Dispensaries at Shaukiwan, Aberdeen, Yaumati, Shamshuipo and Kowloon City, and the remainder to Government Dispensaries at Sham Tseng, Un Long, Ko Tung, Tai Po, Tai O and Sai Kung.
- 274. The services of Government midwives are free and are available to the poor for confinements in their own homes.
- 275. Government midwives are responsible for the welfare of mother and child throughout the puerperium and for this purpose must make daily visits for a period of seven days after the confinement. During the year they made 14,890 such visits during which 14,270 baby washings were carried out.
- 276. Whenever complications arise the midwives call in the Medical Officers attached to the various dispensaries and in case of necessity send the patients to hospital by ambulance.
- 277. In 1936 the total number of cases attended by Government midwives was 2,212, these cases including 8 abortions, 10 miscarriages, 29 premature births and 46 stillbirths. 52 patients were sent to hospital, mostly owing to delayed labour.
- 278. Of the live-births 7 infants died during the first week mostly on account of prematurity. The maternal mortality was nil as complicated cases were sent to hospital.

279. In addition to their maternity work Government midwives assist in the dispensaries by doing simple dressings. Where M.O.s are not always available, e.g., Sai Kung and Tai O, midwives holding Nurses Board Certificates render first aid and give simple treatments for minor ailments. In 1936 the total number of dressings made by Government midwives amounted to 57,412.

280. The work of the Government midwives is supervised by the Supervisor of Midwives, who visits them regularly, inspects their bags, quarters and records of all cases attended to. In addition she investigates all cases of abnormal confinements, causes of deaths of infants, and all complaints made against the midwives.

ANTE-NATAL AND INFANT WELFARE WORK.

281. The ante-natal and infant welfare centres in the Colony are:—

The Government Infant Welfare Centre, Wanchai.

The Government Infant Welfare Centre, Kowloon.

The Tsan Yuk Hospital Centre.

The Tung Wah Hospital Centre.

The Alice Memorial Hospital Centre.

The Military Centre.

282. Infants are of course seen and treated at all hospitals both as inpatients and outpatients and at all the Chinese Public Dispensaries.

283. With regard to the New Territories, Government has made provision for infant welfare at the six Government Dispensaries. The Government Travelling Dispensary which stops at road-side villages dispenses advice and medicines free.

284. The St. John Ambulance Brigade have established 9 centres in the New Territories where infants and mothers can receive treatment.

GOVERNMENT INFANT WELFARE CENTRES.

285. Infant Welfare Work was continued at the two Government Infant Welfare Centres during the past year.

286. The Centre in Victoria is situated in one part of the Violet Peel Health Centre, Wanchai, the Centre on the mainland is in rented premises at 225, Nathan Road, Kowloon.

287. The attendances at both Centres exceeded those of previous years.

288. Attendance.—The attendance at the two Centres and other particulars of interest are shown in the following tables:—

Wan	chai	Kowloon					
Total attendance	The state of the s						
1,566	68	1,197	50				
	67	1,260	50				
The second second	77	1,360	50				
1,926	84	1,394	58				
1 10 10 10 W	93	1,654	66				
70 H 1 4	106	1,660	72				
	109	1,894	73				
	83	1,514	63				
	79	1,680	67				
	77	1,728	66				
1,742	78	1,787	74				
1,812	76	1,826	76				
Interest.	Wand	ehai K	owloon				
	Total attendance 1,566 1,614 2,008 1,926 2,325 2,541 2,831 2,170 2,093 1,990 1,742	attendance average 1,566 68 1,614 67 2,008 77 1,926 84 2,325 93 2,541 106 2,831 109 2,170 83 2,093 79 1,990 77 1,742 78 1,812 76	Total attendance Daily average Total attendance 1,566 68 1,197 1,614 67 1,260 2,008 77 1,360 1,926 84 1,394 2,325 93 1,654 2,541 106 1,660 2,831 109 1,894 2,170 83 1,514 2,093 79 1,680 1,990 77 1,728 1,742 73 1,787 1,812 76 1,826				

289. Particulars of Interest.	Wanchai	Kowloon
Total attendance for the year	24,618	18,900
Number of infants under super- vision	1,811	1,217
Maximum attendance on one day	138	95
Average age of infant at first visit	3 months and 4 days	3 months and 8 days.
Percentage breast-fed at first visit	70%	72%
Percentage of males	55%	55%
Percentage living near centre	73%	62%
Number of vaccinations per- formed	292	206
Number of Wasserman reactions (of mothers) tested	1,388	878
Percentage of Positive Wasser- man reactions	8%	8%
Number of Home Visits paid	1,114	511
Average daily attendance for soup	78	30

290. Diseases.—Most infants attending the Centre for the first time were found to require medical treatment. The numbers suffering from the more prevalent diseases and disorders are shown in the following table:—

The state of the s	Wanchai	Kowloon
Digestive disturbances	784	652
Malnutrition	858	485
Infected Umbilicus	63	60
Umbilical Hernia	37	30
Conunctivitis	499	268
Discharging Ears	30	37
Thrush	258	246
Skin diseases	371	286
Phimosis	308	90
Jaundice	64	24
Anaemia	35	47
Congenital syphilis	104	64
Rickets	6	
Respiratory diseases	749	496

291. Venereal Diseases.—The routine examination of the blood of the mothers of all new cases for Wasserman reaction was continued with the following results:—

20102 12001 1 2001	Wanchai	Kowloon
Number of examination made	1,388	878
Number of positive reactions	8%	8%

- 292. At the Wanchai Centre it has been found a great assistance having the Venereal Disease Clinic in the same building, and cases requiring treatment have been referred there.
- 293. At Kowloon, such cases have been sent to the Kowloon Hospital Clinic or to that at Tsim Sha Tsui.
- 294. Soup Kitchen.—The free distribution of soup to poor nursing mothers and older babies was continued at both centres. The members are as follows:—
 - At Wanchai-an average of 73 per day.
 - At Kowloon—an average of 30 per day.
- 295. The Society for the Protection of Children.—This society continued to give us valuable help by supplying milk for artificial feeds to poor mothers who were referred to them by us.

- 296. A certain number of cases were referred by the Society to the Medical Officer at the Infant Welfare Centres, for advice regarding artificial feeds, and for medical treatment.
- 297. Infant Feeding.—The importance of feeding in infant welfare work has been commented upon in each annual report, and it is now possible to give some figures arising from investigations made during the past year.
- 298. The investigations were started by having samples of breast milk, and samples of five brands of Sweetened Condensed Milks analysed, for comparison with Dried Milks, and the breast milk of European women. The advertised analysis of four brands of Dried Milk were used, and an average analysis calculated from them.
- 299. For the purpose of comparison of these different types of milk, a dilution of 1 in 8 was allowed for in the case of Condensed Milks and Dried Milks. The average analysis of each type of milk is shown in the following table:—

TABLE I

	European Breast Milk	Chinese Breast Milk	Sweetened Condensed Milk	Dried Milk
Protein	1 - 2%	1.46%	1.06%	2.64%
Fat	3 - 4.5%	3.26%	1.05%	3.10%
Carbohydrate	6 - 7%	6.70%	6.86%	5.80%

- 300. From a study of this table the close similarity between the milk of Chinese and European women is at once apparent, as is also the serious deficiency in the fat content of condensed milks compared with breast milk.
- 301. The next part of the investigation was to ascertain the progress of infants for whom we had kept reliable records for a number of weeks. The infants were divided into three groups according to their feeds and the following particulars were ascertained for each group:—
 - (a) the average gain in weight per week.
 - (b) the average period under supervision.
 - (c) the average percentage of days of illness.
 - (d) the numbers of infants in each group.

302. These particulars are shown in the following table:—

Table II.

Ourlite of Mills since	Group I	Group 2	Group 3		
Quality of Milk given.	Breast Milk	Condensed Milk	Dried Milk		
Average gain in weight	4.2 oz, per week	2.8 oz. per week	3.4 oz. per week		
Average period of Super- vision	27 weeks	32 weeks	28 weeks		
Average days of illness	16%	18%	9%		
Number of infants in group	21	86	14		

303. It would appear from the above table that condensed milk is not a very suitable food for infants. The average gain in weight is small, and the percentage of illness high. However, it must be remembered that the parents in this group are generally very poor, and there is a strong suspicion that they do not give enough milk in the feeds. It will also be observed that the infants in Group 3 have a lower percentage of days of illness than those in Group 1. This may be explained by the fact that the infants in Group 3 belong to better class parents, who can afford to buy the more expensive Dried Milk, and who look after their children carefully.

304. Having regard to the information at present at our disposal, it would seem almost impossible to arrive at any definite conclusions. However, it appears that Dried Milks provide satisfactory feeds for these infants. As regards Condensed Milks; in spite of the suspicion that infants in this group are underfed, the poor progress shown by them, in conjunction with the low fat content of these milks, would make it appear that Condensed Milks are far from ideal.

305. Home Visits.—Two nurses from each Centre spend the afternoons paying visits to the homes of babies who are attending the Centre.

The number of home visits paid last year were:-

- 1. From the Wanchai Centre 1,114
- 2. From Kowloon Centre 511

306. Staff.—The Infant Welfare Staff consists of one European Lady Medical Officer, assisted by two Chinese Lady Medical Officers, seven nurses, two part-time apprentice-dispensers, one interpreter-assistant, three amahs and two coolies.

307. Voluntary Helpers.—Valuable assistance has been given by several voluntary helpers, among whom must be mentioned Mrs. D. Cuthbertson who has attended regularly twice a week for nearly two years.

THE TSAN YUK INFANT WELFARE CENTRE AND ANTE-NATAL CLINIC.

- 308. The Clinic is restricted to babies who have been born in the hospital. The number of new cases was 826 (718 in 1935) and the number of old cases, 2,390 (1,847 in 1935). The average attendance per clinic was 51.95 (52.35 in 1935).
- 309. The ante-natal clinic has been in existence for more than five years. The total number of patients who attended the clinic was 235 and the total number of visits paid was 399. The Chinese look upon pregnancy as a normal occurrence and as a rule they come to the clinic only to find out the probable date of delivery.

THE ALICE MEMORIAL INFANT WELFARE CENTRE AND ANTE-NATAL CLINIC.

- 310. The Alice Memorial Infant Welfare Centre like that of the Tsan Yuk deals only with babies who have been born in the hospital. There were 325 first visits and 865 return visits.
- 311. At the Ante-Natal Clinic there were 241 first visits and 87 return visits.

THE CHINESE HOSPITAL INFANT WELFARE CENTRES.

- 312. The Tung Wah Infant Welfare Centre is held once a week under the supervision of the Western trained medical officers. The babies are weighed and the mothers advised concerning feeding and care of infants. The total number of attendances was 1,726 that for 1935 was 2,523.
- 313. The Children's Clinic at the Kwong Wah Hospital is held twice a week. The number of cases seen was 7,812. An Ante-Natal Clinic is held weekly in the Maternity Block, where 134 cases were seen during the course of the year.

SECTION VII.

Government Hospitals, Institutes, Etc.

GOVERNMENT INSTITUTIONS.

314. The Medical institutions provided by Government for the use of the populace include:—

Hospitals—general 3
,, —mental 1
,, —for maternity & gynaecology 1
,, —for infectious diseases
Centres for radiology & electro-therapeutics. 3
Social Hygiene or V.D. Clinics 4
Infant Welfare Centres 2
Rural Dispensaries 6
Travelling Dispensary 1

GOVERNMENT CIVIL HOSPITAL.

- 315. The Government Civil Hospital, which was built in 1874 and which occupies a site in the middle of the most populous area, is the largest Government hospital in the Colony. It has accommodation for 246 patients, including the 21 maternity beds, which are in a Bungalow separated from the main buildings. The majority of the maternity beds and about 100 beds in the main building are under the control of the Clinical Professors of the Hong Kong University, who have been appointed respectively Physician, Surgeon, and Obstetric physician to the hospital and who are responsible to the Director of Medical Services for the duties they perform in the hospital. They have also been appointed consultants to Government. The University Clinic do all the outpatient work except that connected with the Eye Clinic and Venereal Diseases Clinic which are attended to by the Government Specialists.
- 316. Dr. I. Newton was Medical Officer in charge until 14.2.36, when he was relieved by Dr. K. H. Uttley. Dr. I. Newton took over the duties on 14.10.36 and continued in the office until the end of the year. Dr. G. H. Thomas, and Dr. S. F. Cheung were assisting.
- 317. The number of inpatients, exclusive of those in the maternity block, was 5,875 (5,047 in 1935), of which 1,067 were treated by the University staff and 4,808 by the Government Medical Officers.

318. The 1,067 patients treated by the University staff were made up as follows:—

Medical	cases		440
Surgical	cases		485
Gynaeco	logical	cases	142

319. The daily average number of inpatients was 204, that for the previous year was 189.

320.	The	national	ity	of	the	patients	was:-
------	-----	----------	-----	----	-----	----------	-------

Chinese	4,121
Indian	1,326
European	336
Russian	26
Other nationalities	66
The state of the same of	5,875

- 321. A large proportion of the total patients receive treatment free of charge.
- 322. There were 409 deaths of which 193 died within 24 hours of admission. The case death rate was 69.62 per mille (84.21 per mille in 1935).
- 323. 1,290 major operations were performed (1,257 in 1935). Of these 652 were from the University Surgical Clinic, 264 from the University Gynaecological Clinic and the remaining 374 were performed by the Government Medical Officers.
- 324. There were 1,336 accidents of a nature so serious as to require treatment as inpatients (1,403 in 1935).
- 325. Police Wards.—The total number of admissions and deaths were as follows:—

A	dmissions.	Deaths.
British	. 91	1
Russian	. 16	
Indians	. 786	6
Chinese (Cantonese)	74	3
Chinese (Wei-hai-wei)	. 186	100 100
Total	1,153	10

326. The number of Government Servants and their families treated by the Government Medical Officers as outpatients was 10,291.

327. Outpatients.—Outpatients are treated both in the general block and in the special outpatients department. The number of attendances, exclusive of venereal Diseases cases, was 103,266 (106,435 in 1935). The number of prescriptions dispensed was 92,625 (79,727 in 1935). The number of vaccinations was 1,629 and the number of dog-bite cases treated was 167.

Maternity Bungalow at the Government Civil Hospital.

- 328. The Bungalow has accommodation for twenty-one patients and is mainly for the use of Asiatic women.
- 329. There are three general wards with a total of sixteen beds, two private wards with two beds each and one isolation ward with one bed.
- 330. The majority of patients are under the care of the Professor of Obstetrics of the University, he being at the same time Obstetric Physician to the Government Civil Hospital.
- 331. The admissions during the year were 993 (1,041 in 1935), making a total of 1,010 cases treated. There were altogether 929 deliveries of which 224 cases were under the care of the Government Medical Officers and 705 under the Professor of Obstetrics and his Assistants.
- 332. The daily average number of patients in the hospital was 15 excluding infants.
 - 333. The Nationalities of the patients were as follows: -

			7	Гс	rte	al		 	 	 	 	 		1,010
Chinese		 					 	 	 	 	 	 		922
Indians		 					 	 	 	 	 	 		73
Japanese		 					 	 	 	 	 	 		13
Portugue	ese	 		• • •			 	 	 	 				2

- 334. There were 4 Maternal deaths. 40 infants were stillborn.
- 335. The reports of the Professors in charge of the various University Clinics will be found in Appendix D.

The Mental Hospital.

336. The Mental Hospital which is an annex to the Government Civil Hospital has accommodation for 14 Europeans and 18 Asiatics.

337. This institution is intended for use only as temporary abode for the mentally affected pending arrangements being made for their transfer to Europe or Canton.

338. The Medical Officer of the Government Civil Hospital is in administrative charge.

339.	Patients.		
	Remaining from 1935	43	
	Admissions during the year	376	
			419
	Discharged apparently cured	75	
	Discharged relieved	131	
	Transferred to the Canton Mental		
	Hospital	141	
	Died	21	
	Remaining at end of 1935	51	
	The second secon		419

Daily average number of patients 58.

VICTORIA GENERAL AND MATERNITY HOSPITAL.

- 340. The Victoria Hospital which was originally built for the accommodation of women and children is now a general and maternity institution. Situated in the residential area well above the level of the town it has a clear view across the harbour of Kowloon and the hills beyond. There are 46 general beds and 26 maternity beds.
- 341. Dr. J. E. Dovey was Medical Officer in Charge until February 6th when he was relieved by Dr. Court.
- 342. During the year 644 cases were treated, 579 in the General Block and 65 in the Maternity Block. The patients treated in the General Block were men 114, women 287 and children 208. There were 7 deaths.
- 343. The daily average number of patients exclusive of maternity patients was 21.2.

344. The Nationality of those treated was:-	
European	559
Chinese	5
Other nationalities	15
_	
Total:—	579

The Maternity Block.

- 345. The Maternity Block which stands in its own grounds has a separate staff. Private Practitioners have the privilege of making use of this institution for the treatment of their cases.
- 346. The admissions to the hospital during the year were 62 of which 15 were patients of private practitioners. The corresponding numbers for 1935 were 65 and 11.
- 347. The daily average number of patients was 2.8 adults and 2.8 infants.
 - 348. There were 54 deliveries with no maternal deaths.
- 349. The total number of anæsthetics administered for the year was 275. The number of outpatients treated was 1,064.

KOWLOON HOSPITAL.

- 350. This institution which is situated on an elevated site towards the base of the Kowloon Peninsula occupies a portion of a hospital reserve of 30 acres.
- 351. This reserve will ultimately contain a five hundred ded general hospital, a mental hospital and an infectious diseases hospital.
- 352. The hospital is being built block by block as finances permit. At present it consists of three general blocks, a maternity block, an outpatients block, two sets of quarters for Medical Officers and two sets of quarters for Sisters and Nurses. There are 97 general beds and 34 maternity beds.
- on March 11th, 1935. This building which measures 136' × 60' over all is divided into a major section for general diseases and a minor section for venereal diseases each with its own entrance. The main section contains a clerks office, a large waiting hall, consulting rooms, examination rooms, a laboratory and a dispensary. The Venereal diseases section which is complete in itself comprises a waiting room, a clerks office, consulting rooms and treatment rooms. In addition to the general entrance there is a special one through which patients can pass from the general section for treatment without the nature of their ailments becoming known to others. The daily number of General cases treated in the New O.P.D. was 149.
- 354. Dr. J. T. Smalley, Senior Medical Officer, was in charge until 2.5.36 when he was relieved by Dr. G. V. A. Griffith who continued in the office until 10.12.36 when Dr. Smalley returned from leave. Dr. L. D. Pringle assisted Dr. G. V. A. Griffith during Dr. Smalley's absence. Dr. C. H. Luk, Dr. C. K. Yu, and Dr. Y. K. Ng, were assisting throughout the whole year. Dr. G. H. Henry gave part time assistance.

- 355. Dr. G. M. Hargreaves was in charge of the Eye Clinic assisted by Dr. Au King.
- 356. Dr. J. A. R. Selby was in charge of the V. D. Clinic assisted by Dr. K. L. Cheung.
- 357. Dr. (Miss) P. Ruttonjee was in charge of the Indian V. D. Clinic which caters for Indian women and children only on Wednesday afternoons.
- 358. The total number of cases treated in hospital was 3,367 as compared with 2,536 in 1934 and 3,077 in 1935.
 - 359. The nationalities were made up as follows:-

	Male	Female	Total
European	494	370	864
Chinese		614	2,217
Indians	20	9	29
Others	136	121	257
	2,253	1,114	3,367
	-	-	

- 360. The deaths numbered 300 of these 200 being males and 100 being females. The daily average number of patients was 104.
- 361. During the year 1,033 operations were performed under general anaesthesia (1,308 in 1935).

Out-patients Department.

362. The number of out-patients' visits recorded as compared with previous years was as follows:—

1933	1934	1935	1936
12,439	13,813	23,053	25,796
7,040	8,986	14,143	13,591
8,331	9,512	16,998	23,115
27,810	32,311	54,194	62,502
	12,439 7,040 8,331	12,439 13,813 7,040 8,986 8,331 9,512	12,439 13,813 23,053 7,040 8,986 14,143 8,331 9,512 16,998

- 363. To these figures must be added those of the Eye Clinic 2,002 and those of the V. D. Clinics 1,689.
 - 364. Vaccinations for the year totalled 1,272 (1,120 in 1935).
- 365. 42,038 prescriptions were dispensed during the year (30,159 in 1935).
- 366. During the year, 41 flying officers presented themselves at K. H. for physical examinations. 2 of them were examined for "A" Pilot Licences while the remaining number were for "B" Licences.

Maternity Block.

- 367. The number of beds is 34.
- 368. Patients treated during the year numbered 1,137.
- 369. The daily average number of patients was 23.2 (15.6 in 1935).
- 370. There were 1,023 deliveries. There were 42 stillbirths and 7 maternal deaths. The causes were: 2 Eclampsia, 2 acute nephritis, 2 mitral imcompetence, and 1 placenta praevia.
- 371. The Ante Natal Clinic Section was in the charge of Dr. G. H. Henry. The number of cases examined was 365. It was open only on Monday mornings.

THE TSAN YUK MATERNITY & GYNAECOLOGICAL HOSPITAL.

- 372. This hospital which was formerly administered by the Committee of the Chinese Western Dispensary, was handed over, as a gift, to Government on January 1st, 1934.
- 573. The administrative control is vested in the Medical Officer in Charge of the Government Civil Hospital, but all treatment both of inpatients and outpatients is carried out by the obstetrical and gynaecological unit of the University under the direction of Professor W. C. Nixon, Professor of Obstetrics and Gynaecology.
- 374. The total number of beds is 60, of which 46 are reserved for maternity cases and 14 for gynaecological patients.
- 375. The total number of cases treated was 1,936 of whom 36 remained from 1935 and 1,900 were admitted.
- 376. The maternity cases numbered 1,636 of whom 1,539 were delivered. 15 Mothers and 20 infants died and there were 68 still-births.
- 377. The number of cases treated in the Gynaecological Department numbered 264. 163 operations were performed. 7 cases died.
- 378. The following table shows the attendances at the Outpatient Department:—

Clinic	New cases	Return	Average attendance at clinic	Total 1936	Total 1935
Gynaecological Antenatal Infant Welfare	721 235 826	558 164 1,668	24,59 8.01 51,95	1,279 399 2,494	1,334 289 2,565
NO TELEVISION OF	1,782	2,390	28.18	4,172	5,250

THE GOVERNMENT INFECTIOUS DISEASES HOSPITAL.

- 379. This was originally a Police Station but was adapted as a hospital and has accommodation for 26 beds in six wards. The hospital is situated very close to the extreme western end of the Island and next door to the Tung Wah Infectious Diseases Hospital. It is admirably situated for its purpose being more or less isolated yet convenient for access by ambulance, by bus, or by launch.
- 380. Seven cases of small pox and one case of chicken pox were admitted during the year.
 - 381. Dr. G. Ingram Shaw was Medical Officer in Charge.

RADIOLOGY, MASSAGE AND ELECTROTHERAPEUTICS.

- 382. Dr. F. J. Farr, Radiologist, was in charge of this branch during the year. He was assisted by Mr. J. Skinner, M.S.R., B.P.A. and Mr. J. Robertson as Radiographers, and Miss L. M. Siggins, C.S.M.M.G., B.P.A., and Miss M. H. Hughes, C.S.M.M.G., B.P.A., as Masseuses and Electrotherapeutists.
- 383. The scheme for training local pupils in massage and radiological technique was continued. Three probationer massage assistants and two probationer radiographic assistants received instruction.
- 384. Mr. Hong Ping Yuen, seconded from the Electrical Department, P.W.D., continued to act as technician in charge of X-Ray and Electrical apparatus. He was most successful in maintaining the apparatus in good condition and in expediting repairs.
- 385. The activities of this branch are carried out partly at the Government Civil Hospital, partly at Kowloon Hospital and partly at Victoria Hospital. Victoria Hospital has no X-Ray plant.
- 386. Year by year the work of this department has shown a steady increase despite the limited accommodation, the paucity of equipment, and the efforts made in the interests of economy to reduce expenditure to a minimum. The following shows the figures for the last five years:—

	1932	1933	1934	1935	1936
Massage and electric treat- ments	9,498	10,579	12,947	18,077	10,465
Radiological examination	2,696	3,076	3,991	4,897	5,511
Films exposed	4,521	5,477	8,208	8,577	9,193

- 387. Of the 5,551 radiological examinations 3,900 were done at the Government Civil Hospital, and 1,611 at the Kowloon Hospital as compared with 3,682 and 1,215 in the previous year.
- 388. The decrease in the number of treatments for massage and electro-therapy is due to a change in the method of computation. It is common for a patient to receive more than one treatment under one or the other heading, or under both, at one visit. In former years each treatment was counted separately and as many as four might be recorded for one sitting. This year treatments were recorded as massage or electrotherapy with the result that the maximum for one visit was two not four.
- 389. On both sides of the harbour there is need for more extensive and more appropriate accommodation both for X-Ray work, for massage and for electro-therapy. The new Queen Mary Hospital will provide the necessary accommodation on the Island. A new block at Kowloon is urgently required.
- 390. Most of the X-Ray work was done by one or other of the three X-Ray machines installed during 1935. One, a combined screening and radiographic unit is intended ultimately for use in the operating theatre of the Queen Mary Hospital. The other two sets are mobile units, one for Kowloon Hospital and the other for Queen Mary Hospital.
- 391. The "Victor" X-Ray tube fitted to the machine at the Kowloon Hospital has given excellent service and appears not to suffer as much from excessive humidity as the Metalix "S.A." tubes.
- 392. The routine use of X-Ray paper was continued for suitable cases A total of 4,848 sheets were exposed resulting in a saving of £253.11.0.
- 393. The quantity of Radium needed for the treatment of cancer patients applying to the Government Hospitals for relief is much greater than that available. Most cases require in addition Deep X-Ray Therapy, in fact, in the majority Deep X-Ray therapy is the method of choice. The Government Medical Department has no machine for Deep X-Ray therapy and only twenty milligrammes of Radium. For a time a certain amount of Radium was loaned to the Government Civil Hospital by the Trustees of the Matilda Hospital but this supply was withdrawn on the 22nd of May.
- 394. It is sincerely hoped that the financial situation will permit of provision being made in the estimates to allow of the purchase of a sufficiency of radium and the installation of an up to date Deep X-Ray machine to treat the many cases of malignant disease who might be saved but who are doomed to a lingering death owing to the lack of equipment.

VENEREAL DISEASES CLINICS.

395. There are four Government V. D. Clinics in the Colony. The first was opened at the Government Civil Hospital Outpatient Department in 1928, the second, an ad hoc centre at South Kowloon close to the docks, in April 1933, the third at Kowloon Hospital Outpatients Department in March 1935, and the fourth at the Violet Peel Health Centre in Wanchai district, Victoria, in September 1935.

396. All treatment is given free of charge.

397. Clinics are held daily as follows:-

- (a) At the Government Civil Hospital:— Monday and Wednesday.—10 a.m. for Chinese. Tuesday.—9 a.m. for Europeans. Friday.—10 a.m. for women only.
- (b) At the Violet Peel Health Centre, Wanchai:—
 Monday.—5.15 for male cases.
 Wednesday.—10 a.m. for European males.
 Thursday.—2 p.m. and Saturday.—10 a.m. for Chinese males.
 Thursday.—10 a.m. for females.
 Friday.—10 a.m. for Indian males.

This Clinic is open daily from 8 a.m. to 11 a.m. and from 1 p.m. to 8 p.m. for the treatment of males and from 11 a.m. to 1 p.m. for the treatment of females. A trained dresser attends to males and a trained nurse to females.

(c) At the South Kowloon Centre near the docks:—

Monday 2.30 p.m. for women only.

Tuesday.—10 a.m. & Friday.—2.30 p.m. for Chinese males.

Tuesday.—2.30 p.m. & Saturday.—10.30 a.m. for Europeans.

Thursday.—2 p.m. for Indians.

This Clinic is open daily from 8 a.m. to 9.30 a.m. and from 11 a.m. to 8 p.m. for the treatment of males and from 9.30 a.m. to 10.30 a.m. for the treatment of females. A trained dresser attends to male patients and a trained nurse attends to female patients.

(d) At Kowloon Hospital:— Tuesday.—2.30 p.m. for males only. Friday.—2.30 p.m. for women only.

398. New cases treated in 1936:-

	Euro	peans	Chinese		Indians		Others		Total	
1,071,21	М.	F.	М.	F.	M.	F.	M.	F.	M.	F.
G. C. H	71	1	1797	662	41	1	4	2	1913	666
Violet Peel	35	2	620	603	104	2	16	4	775	611
South Kowloon.	137	0	1181	439	105	_	9		1432	
Kowloon Hosp.	5	8	259	568	6		2	-	272	576
Taipo	_	-	11	12	5		-	_	16	12
Un Long	-		45	3	9			-	54	8
	248	11	3913	2287	270	3	31	6	4462	2307

399. Number of Attendances in 1936:-

	Europ	peans	Chi	inese	Indi	ans	Otl	iers	To	tal
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
G. C. H	714	2	7207	2851	740	10	6	2	8677	2865
Violet Peel	309	2	2696	3210	1371	25	98	21	4469	3258
South Kowloon.	1094	-	5231	2150	1800	9	50	-	7675	2159
Kowloon Hosp.	60	63	1320	2148	96		2		1478	2211
Taipo	-		67	54	307	-	-	-	874	54
Un Long		_	168	13	224	-			387	18
	2177	67	16684	10426	4038	44	151	23	23050	10560

- 400. At the Violet Peel V. D. Clinic 14,068, at the South Kowloon Clinic 16,969 and at the Kowloon Hospital Clinic 2,266 patients received dressings and irrigations.
- 401. The 24 beds reserved for male V.D. cases at the G.C.H. were kept occupied during the year. There is an urgent need for beds for female patients and children.
- 402. A number of children diagnosed at Infant Walfare Centres to be suffering from venereal disease were referred to the V.D. Clinics for treatment. This was specially the case at the Violet Peel Welfare Centre where the Infant Welfare Centre and the V.D. Clinic occupied adjacent quarters under the same roof.

403. 11,196 specimens of blood were sent to the Bacteriological Institute for the Wasserman test. The results were as follows:—

Strong positive		Females. 760	Total. 2,776
Positive	685	331	1,016
Weak positive	583	203	786
Doubtful	757	199	956
Negative	3,617	2,045	5,662
	7,658	3,538	11,196

404. 13,210 injections of N.A.B. and 1,500 injections of Bismuth were given to outpatients. 4,159 smears were examined for gonorrhoea.

Staff.

405. Dr. J. A. R. Selby was in charge during the year. He was assisted by Dr. Cheung Kung Leung (Chinese Medical Officer) and Mr. A. Steven (Technical Assistant). The Government Chinese Lady Medical Officers, Doctors Lai and Ruttonjee assisted in the clinics for women. Miss Ivy Soong was nurse for the year.

INFANT WELFARE CENTRES.

406. The Infant Welfare Centres, two in number, have been described in Section VI.

GOVERNMENT RURAL DISPENSARIES.

407. The Dispensaries maintained by Government during the year under review were the Taipo Dispensary, the Un Long Dispensary, the Ruttonjee Dispensary, the Lady Ho Tung Welfare Centre, the Sai Kung Dispensary and the Tai-O.Dispensary, all in the New Territories. Details with regard to these will be found in Section XII which deals with the New Territories.

SECTION VIII.

The Chinese Hospitals (Tung Wah Group) and the Chinese Public Dispensaries.

- 408. The Chinese Hospitals and Chinese Dispensaries are institutions established by the Chinese for the benefit of the poor of Chinese nationality. Intended to be additional to, not in substitution of, the Government Hospitals they serve a very useful purpose not only in the matter of medical relief but in that of health education.
- 409. An enormous and ever-increasing number of sick too poor to pay a doctor's fee or to buy proper medicine, are successfully reached.
- 410. There are three general hospitals each with maternity wards attached, one infectious diseases hospital, one maternity hospital and nine public dispensaries.
- 411. They are maintained by subscriptions from the public, by donations from the Chinese General Charities Fund and by direct grants from Government. They are controlled by Chinese Committees who work in close co-operation with the Secretary for Chinese Affairs.
- 412. In the three general hospitals both Western Medicine and Chinese medicine are practised the former by graduates of the Hong Kong University the latter by a staff of local herbalists. The patient when entering is given the choice of treatment.
- 413. In the Infectious Diseases Hospital any treatment of smallpox cases is carried out by herbalists.
- 414. Western medicine only is practised in the Chinese Public Dispensaries.
- 415. Both Hospitals and Dispensaries are subject to inspection by the Government Medical Department. There are four officers of the Department whose duty it is to visit the various institutions and to give advice and assistance. These officers work in close touch with the Secretary for Chinese Affairs.

THE TUNG WAH GROUP OF HOSPITALS.

416. The Tung Wah group of hospitals comprising the Tung Wah Hospital, the Tung Wah Infectious Diseases Hospital, the Kwong Wah Hospital and the Tung Wah Eastern Hospital are Chinese institutions whose relation to Government has been established by Ordinance. They are subsidised by Government and are subject to inspection by certain Government officials.

- 417. The authority in administrative control is a Committee of Chinese gentlemen elected each year by the subscribers.
 - 418. The activities of the Chinese Hospitals include: -
 - (a) The care of the sick and treatment by Western methods or Chinese methods according to the wishes of the patients.
 - (b) Maternity benefits and infant welfare by Western methods only.
 - (c) Vaccination.
 - (d) Health propaganda.
 - (e) Assistance to the destitute.
 - (f) The provision of coffins for the burial of the dead.
- 419. Much progress has been made in all departments of the hospitals during the last few years. These improvements include:—
 - (a) The appointment of University graduates as fulltime Resident Medical Officers.
 - (b) The foundation of training schools for female nurses.
 - (c) Extensions and improvements in the male nursing section.
 - (d) The establishment of clinical laboratories.
 - (e) The provision of radiological apparatus.
 - (f) The establishment of up-to-date operating theatres.
 - (g) The purchase of motor ambulances.
 - (h) Improvements in the accommodation for patients.
 - (i) Improvements in quarters for the staff.
- 420. To-day each of the three Chinese Hospitals has a good operating theatre where operations are performed daily, many of which are major in character.
- 421. In charge of the medical side (Western) of each hospital is a Medical Superintendent, a graduate of the University, whose salary is paid by Government, and who is a member of the Medical Department.

THE TUNG WAH HOSPITAL.

422. The Tung Wah Hospital situated in the centre of the most thickly populated area in Victoria was founded by the Chinese in 1872 with the help and encouragement of the Government. It took the place of a Home for the Dying which had

been conducted by charitable Chinese, and it was intended to provide treatment by Chinese herbalists, and accommodation in sanitary surroundings for the poor of the Chinese race. Originally intended for the accommodation and treatment of those Chinese whose fears and prejudices against Western Medicine prevented their applying for relief at the Government Hospitals, the Tung Wah at a later period introduced and encouraged scientific methods. As prejudice disappeared and confidence grew the demand for Western medicine increased until now the number of inpatients being treated by this method is nearly double that which still pins its faith to the plasters and decoctions of the herbalists.

- 423. In 1933 and 1934 the older and more insanitary of the buildings comprising the hospital were demolished and their place taken by structures of more modern design. A few old wards still remain but these will be replaced when financial circumstances permit of this being done.
- 424. In the present stage there is accommodation for 470 beds and this number will be increased when the back wings of the new six storey block are completed.
- 425. In 1935 the outpatient departments both for western treatment and herbalist methods were transferred from the gloomy and unhygienic quarters formerly used to new premises well lighted and ventilated on the opposite side of the road.
- 426. Early in the year the Directors converted a portion of the old outpatient department into a children's ward of twenty beds. By increasing the area of the windows and doors a dark and dismal space became a light and airy ward. Another portion of the O. P. Department was converted into a fracture ward of 16 beds.
- 427. The waste land in front of the main entrance was made into a garden adding considerably to the general appearance.
- 428. The staff consists of a Chinese Medical Officer of the Government Medical Department and three Assistant Medical Officers whose salaries are paid by the Hospital. There are in addition a number of Chinese Herbalists who practice Chinese medicine for the benefit of those who prefer that treatment.

429.	Inpatients (General)	

	t	Western reatment.	Chinese treatment.	$_{Cases.}^{Maternity}$	Total.
1936		. 9,251	5,723	2,034	17,008
1935		. 7,157	4,984	1,833	13,974

430. There were 1,586 operations including 303 major cases.

431.	Outs	natients ((General).
101.	Vul	Justoneo 1	acreciaej.

			Wester treatme		Chinese treatment	. Total.
	1936		33,48	6	165,370	198,568
	1935		34,74	8	170,584	205,332
432.		Eye	Clinic.			
	1936				16,996	
	1935				16,312	
433.		Bob	y Clinic.			
	1936				1,726	
	1935				2,523	
434.		Vace	cinations.			
	1936				4,196	
	1935				2,658	
435.		1	Deaths.	Bro	ught in de	ad.
	1936		3,326		990	
	1935		2,539		645	

436. A large proportion of the deaths in the Hospital occur within 24 hours of admission. The sick poor go there to die. Those brought in dead include bodies sent from ships in harbour, from neighbouring hospitals, from the Public Dispensaries and from private houses. All are taken to the Tung Wah for the benefit of free coffining and free burial.

THE KWONG WAH HOSPITAL.

- 437. Established in 1911 this hospital does for Kowloon and the Peninsula what the Tung Wah and the Tung Wah Eastern do for the Island of Hong Kong. There is official accommodation for about 326 beds, of which 229 are for general diseases, 40 are for tuberculosis cases and 59 are for maternity cases. There are 18 private wards including 7 for maternity cases.
- 438. The accommodation cannot keep pace with the growth in population. Kowloon has considerably more than doubled itself during the last ten years. No patient is turned away for want of room and in both medical and surgical wards it is common to find two in a bed, and others sleeping on the floor.

- 439. The staff consists of a Chinese Resident Medical Officer whose salary is paid by the Government, and three Assistant Medical Officers paid by the Directors.
- 440. There are also a number of Chinese Herbalists who practise Chinese medicine and are paid out of Hospital funds.

441.	Inpatient.	8
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	Western treatment.	Chinese treatment.	$_{Cases.}^{Maternity}$	Total.
1936	 . 9,155	4,436	4,173	17,764
1935	 . 7,365	3,364	4,439	15,168

442. There were 316 operations including 106 major ones.

443. Outpatients.

	Western treatment.	Chinese treatment.	Total.
1936	 48,106	182,813	280,919
1935	 47,700	162,779	210,479

- 444. There were 3,661 eye cases as compared with 3,590 for the previous year.
- 445. There were 1,450 vaccinations as compared with 1,858 in 1935.
- 446. The number of deaths in hospital was 4,828 of which 1,206 were admitted in a serious condition and died within 48 hours. 1,330 bodies were brought for burial.
- 447. There is a small laboratory where facilities are available for ordinary routine microscopic examination.
- 448. A children's clinic is held twice a week. The attendance numbered 7,812 as compared with 5,288 in 1935.
- 449. There is also an antenatal clinic held once a week in the Maternity Block. The number of cases seen was 134.

THE TUNG WAH EASTERN HOSPITAL.

450. This hospital is situated at the eastern part of the City of Victoria. It was built in 1929: and overlooks the Sookunpo Valley playing-fields. It has modern fittings and equipment. All the wards have through ventilation and there is a modern well-lighted operating theatre. It has accommodation for 236 beds, of which 194 are for general, 14 for maternity and 28 for tuberculosis patients. A ward of 14 beds has been closed temporarily.

451. The staff consists of a Chinese Medical Officer whose salary is paid by Government, and two Assistant Medical Officers appointed by the Directors. There are also herbalists.

452.		Inpatie	ents.		
	t		Chinese treatment	Maternity t. Cases.	Total.
	1936	5,110	2,715	1,210	9,035
	1935	4,847	2,185	1,154	8,186
453.	Ma	jor Operat	ions under		
	G	eneral And	iesthesia.		
	1936			204	
	1935			127	
454.		Outpati	ents.		
AUT:			Western reatment.		Total.
	1936		36,569	62,849	99,418
	1935		28,122	61,358	89,480
455.		Vaccino	ition.		
	1936			532	
	1935			438	

- 456. Two wards have been set aside (one male and one female) for patients who are able to make some payment but who cannot afford a private room. The charge in these wards is \$1.40 per day including food and medicine. Each patient can, if he desires, bring in an attendant to help in looking after him. There are 14 beds in the Male ward and 8 in the Female.
- 457. There are 24 small private wards where the inclusive fee per day is \$3.00. The wards are popular.
- 458. A ward of 12 beds has been reserved for the treatment of opium addicts. Treatment by autogenous serum injections have been tried with apparently encouraging results. It is however impossible to assess the permanency of the results as no following up system has been devised which will give sufficient reliable information. The course is usually completed within two weeks. During the year 404 cases were treated the cost of the treatment being defrayed by Government.

459. Deaths in 1936 numbered 1,935. A large proportion of these (1,024) died within 24 hours of admission. 804 bodies were brought in for burial.

THE TUNG WAH INFECTIOUS DISEASES HOSPITAL.

- 460. The Tung Wah Infectious Diseases Hospital, erected in 1902 for the herbal treatment of plague cases, consists of six wards arranged in three two-storied blocks and faced by another group of three two-storied blocks intended for staff quarters and for administration purposes.
- 461. At a distance and separated by a yard are the kitchens, the servants' quarters and the mortuary. The whole is contained in a large compound.
- 462. This hospital at the time of its construction was considered to have all the requirements necessary for the proper treatment of Plague cases by Chinese methods. From 1903 until 1910 plague cases only were admitted. From 1910 to 1935 it was used for the herbalist treatment of smallpox.
- 463. There is room for 60 cases without overcrowding but there is no arrangement for heating the words and no water carriage system.
- 464. The staff consists of a Chinese coolie as a caretaker and an amah. There is no resident doctor and no clerk and there are neither dressers nor nurses.
- 465. Considered to be a herbalist hospital it is seldom visited by any of the Western-trained Tung Wah staff, and for all practical purposes it is controlled by the caretaker. There being no trained staff resident and the control being such as it is there must be grave doubts regarding the efficiency of the disinfection processes and the means taken to prevent dissemination of disease by patients, contacts and formites.
- 466. When there are any patients requiring his attentions a herbalist from the Tung Wah visits daily and prescribes infusions but there is no attempt at nursing. Certain hospital clothing is provided but the patients as often as not wear their own clothes.
 - 467. No cases of smallpox were admitted during the year.
- 468. There can be no doubt that conditions at this so called hospital are most unsatisfactory both from the point of view of the public and the patients. For some time past it has been badly upkept and it is now unworthy to be called a hospital. As an institution for the segregation and treatment of the infectious sick it has outlived its usefulness and is obsolete.

469. There being in the Colony no accommodation for the housing of lepers the Directors consented to Government temporarily using a portion of the institution as a refuge for these unfortunates. Since May, 1935, it has been so used.

THE CHINESE PUBLIC DISPENSARIES.

- 470. The origin of the Chinese Public Dispensaries was a movement made in 1904 by certain leading Chinese citizens to stop the practice of dumping dead bodies by providing receiving houses for the sick and for the dead which would act also as information bureaux where the poor could obtain advice and asistance in matters connected with:—
 - (a) the removal of patients to hospital.
 - (b) certification as to cause of death.
 - (c) removal of corpses to mortuaries.
 - (d) supply of coffins and arrangements for burial.
 - (e) the registration of births.
 - (f) vaccination.
- 471. In 1905 two depots were established, the Western and the Eastern under a Committee, consisting of the Chairman of the Tung Wah Board of Directors and two unofficial Chinese members of the Sanitary Board.
- 472. In immediate charge of each depot was a Chinese doctor qualified in Western medicine and his staff consisted of an English-speaking clerk and a number of subordinates.
- 473. In 1908 the movement ceased to be connected with the Tung Wah and the Committee became the Chinese Public Dispensaries Committee under the Chairmanship of the Registrar General, now the Secretary for Chinese Affairs.
- 474. It was declared at the time that the work of the depots or dispensaries was not hospital work and that the Chinese doctors employed were simply to diagnose disease and not to treat it. However, treatment centres were needed and treatment, commenced in a small way, gradually developed until now the principal function of the dispensaries is medical relief.
- 475. It is worthy of note that as far back as 1896 a Commission appointed by Government to advise regarding the Medical Department recommended the establishment under Government control of dispensaries in different parts of Victoria and Kowloon. However, none were built and the Chinese Public Dispensaries today occupy the positions which under other circumstances would have been filled by departmental institutions.

- 476. There are now nine Chinese Public Dispensaries five of which are situated on the Island of Hong Kong and four in Kowloon. In some cases they occupy buildings which were designed and constructed for the purpose, in others adapted premises. During the year the ShamShui Po Dispensary moved from the old temple it had so long occupied to the new and commodious institution specially built for it.
- 477. Situated in the most thickly populated districts these dispensaries fulfit a most useful purpose, not only in the treatment of disease but also as foci for the spread of knowledge concerning the cause of disease, the means of spread and the value of Western drugs and methods both in prevention and cure.
- 478. Once a week at each of the Dispensaries a gynaecological clinic is held by one of the Government Lady Medical Officers. In some there are two clinics a week.
- 479. Investigations are carried out at the Government Bacteriological Laboratory for the various dispensaries. The work consists largely of examination of bloods for malaria.
- 480. Each dispensary is an official registry office for the births occurring in the district served by it. During the year 18,493 births were registered at Dispensaries.
- 481. Last but not least, each dispensary has a room attached to it where dead bodies can be received for transport to the mortuaries preliminary to burial. Coffins are provided free.
- 482. Very good propaganda work was done during the year by four "street orators" appointed by and paid by the Chinese Public Dispensaries Committee for the purpose of spreading the gospel of public health to the people. They rendered valuable service to the police by lecturing and distributing pamphlets during the "Safety First" campaign held at the beginning of the year.

SUMMARY OF WORK DONE IN THE DISPENSARIES DURING 1986.

Gynaecological cases seen by Lady Docfor	Old cases.	675	929	1	1,228	282	1,920	1,583	383	972	7,972	8,111
Gynaecologica cases seen by Lady Docfor	New cases.	299	582		902	309	1,347	888	346	509	5,183	5,237
Vaccina-	10011.	5,449	5,030	5,585	6,733	1,447	10,290	13,807	4,340	4,570	57,251	60,893
Dead infants- brought	to dis-	45	227	396	255	1	136	225	186	162	1.632	1,360
Corpses removed from	for free burial.	14	. 37	26	61	1	60	5	60	18	108	115
Patients removed to hosp.	by ambu- lance.	10	. 4	00	1	61	9	1	1	10	34	64
Patients sent to	hospital.	88	12	12	87	123	91	45	118	88	620	391
Certifi- cates of cause of	death issued.	ro	4	47	16	1	40	60	02	623	247	193
ents	Old cases.	30,405	23,412	20,367	51,643	069'6	35,272	30,550	3,030	17.924	222,383	194,743
Patients	New cases.	42,032	18,733	29,426	30,113	8,960	48,694	38,698	16,000	19,788	352,444	217,811
Dispensaries.		Central	Eastern	Western	Shaukiwan	Aberdeen	Harbour & Yaumati	Shamshuipo	Hung Hom	Kowloon Gity	Total for 1936	Total for 1935

WORK DONE		AT THE	GYNA	GYNAECOLOGICAL CLINICS IN 1986.	HCAL (STINICS	IN 198	6.		
C. P. D.	No. of	of Clinics	Total	Total Number	New	Cases	PIO	Old Cases	Average	ge Attendance per day
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
Central	49	69	066	974	311	299	629	675	20.2	19.9
Eastern	43	97	1,450	1,511	541	582	606	929	34.0	35.0
Shaukiwan	101	26	2,089	2,130	801	905	1,288	1,228	20.7	22.0
Aberdeen	49	48	623	591	308	908	315	282	12.7	12.3
Yaumati	66	100	3,340	3,267	1,508	1,347	1,832	1,920	33.7	32.7
Shamshuipo	68	96	2,746	2,472	885	688	1,861	1,583	80.9	25.7
Hung Hom	42	48	808	729	449	346	359	383	19.2	15.2
Kowloon City	48	69	1,302	1,481	434	909	898	972	27.0	30.2
Kwong Wah Hospital	47	47	1.080	1,154	507	994	573	694	23.0	24.5
Total:-	299	280	14,428	14,309	5,744	5,643	8,684	8,666	24.6	24.2
				IND	INDIAN CLINICS.	ICS.				
6. С. П.	23	42	295	922	102	145	193	411	13.0	13.2
V. P. H. G	49	52	1,057	1,176	230	230	827	946	21.6	22.6
Kowloon Hospital	20	20	833	840	167	189	999	651	16.6	16.8
Total:	112	144	2,185	2,572	499	564	1,686	2,008	17.1	17.4

SECTION IX.

Prisons.

- 483. The principal prison in the Colony is Victoria Gaol where there is accommodation for 650 males. At Lai Chi Kok on the Kowloon side of the Harbour is the Lai Chi Kok Prison where there is accommodation for 640 males. The Female Prison is situated near to the Lai Chi Kok Prison and has accommodation for more than 100.
- 484. All male prisoners are admitted to Victoria Gaol where they are carefully examined by the Medical Officer. Some, including all who are not passed as medically fit, remain in Victoria, others are transferred to Lai Chi Kok. Female prisoners go direct to the Female Prison.
- 485. The total number of admissions to all prisons was 16,106 of which 13,291 were males and 2,815 females. Of these 1,398 males were fifty years of age or over.
- 486. In Victoria Gaol there is a small hospital of 30 beds. At the Lai Chi Kok Prison there are 12 beds for non-serious cases, serious cases are transferred to Victoria Gaol Hospital. The Female Prison has 9 beds for sick cases.
- 487. For cases which require special treatment there are prison wards in the Government Civil Hospital and in the Kowloon Hospital.
- 488. 70 cases were transferred to the Government Civil Hospital (33 for X-ray examination) for treatment not available in the Prison Hospital, while 6 cases were transferred to the Mental Hospital.
- 489. There were 26 deaths amongst the male prisoners and none amongst the females. The causes of deaths were:—

Pulmonary	Tuberculosis	 17
Tubercular	Enteritis	 1
	carditis	2
	oscess	1
	Feverbscess	1
	Aortitis	1
Aortic Valv	ular disease	 1
	a	

490. 5 male prisoners were released on medical grounds, all of whom were lepers, one female prisoner was released on account of pernicious anaemia.

REMAND HOME FOR JUVENILES.

- 491. The Belilios Reformatory, which for many years had been used for other purposes, was on the 20th November, 1933, re-occupied as a Remand Home for Juveniles.
- 492. There were 34 boys remaining in the home at the end of 1935 and 1,381 were admitted during the year, making a total of 1,415, of whom 43 remained at the end of 1936.
- 493. The Prison Medical Officer visits the home weekly and at other times, if required.
- 494. The general standard of health of the inmates was good. 421 boys were vaccinated on admission. Cases of minor mjury and sickness were treated in the Home and 26 cases were sent to the Government Civil Hospital. Scabies, 87 cases, was the commonest ailment treated. The majority of the remaining cases were minor injuries and septic skin infections.

Prison.	Total Prisoners Admitted.	Daily Average No. of inmates.	Total admissions to Hospitals.	Daily Average No. of Prisoners to Hospital.	Total Outpatients.	Daily Avereag number of Outpatients.	Deaths due to disease.	Death rate i.e. % of deaths to total admissions to Prison.
Victoria (Male)	13,291	1,127	1,441	23.95	21,741	72.54	25	0.188
Lai Chi Kok (Male)	-	600	712	10.05	4,945	13.51	1	0.0076
Lai Chi Kok (Female).	2,815	190	305	6.24	2,198	6.00	-	-

^{495.} All male prisoners are admitted to Victoria Gaol in the first instance and no prisoner is transferred to Lai Chi Kok unless he is passed medically fit.

^{496.} Serious cases from Lai Chi Kok are transferred to the Victoria Gaol Hospital for treatment.

SECTION X.

Meteorology.

- 497. Situated just within the northern limits of the tropics occupying an insular position immediately to the south of the great land mass of China, Hong Kong's climate is very materially influenced by the direction of the prevailing winds.
- 498. The North East Monsoon blows from November to May and during this period the weather is dry, cool and invigorating. From May until October, the season of the South West Monsoon, the air is highly charged with moisture and the climate is hot.
- 499. The mean annual temperature is 72°F. During the summer months the average maximum temperature is 87°F, and there is little difference throughout the twenty-four hours. Situated on the north side of the Island the City of Victoria gets all the heat and moisture of the South West Monsoon but not the breeze itself which is cut off by the mountain behind the town. During the winter months the range of temperature is from 70°F, to 45°F, with an average of 66°F.
- 500. The table on the following page gives the means or totals of the meteorological data for the several months of the year 1936. The data for this table were kindly supplied by the Director of the Royal Observatory, Hong Kong.

METHOROLOGICAL DATA.

The following Table I gives the means, totals or extremes of the Meteorological Data for the several months of the year 1936.

	Barometer		1	Temperature.	7		Hum	Humidity.	oins oins			Wind.	.p1
Month.	at M.S.L. Mean.	Absolute Max.	Mean Max.	Mean.	Mean Min.	Absolute Min.	p.c.	Abs.	Cloudiness	Sunshine.	Bain.	Direction.	Velocity.
	ins.	٥			0	0	Rel.	ins.	p.c.	hours.	ins.	Points.	Miles p.h.
January	30.18	69.1	63.2	. 57.7	58.7	44.7	1.75	0.36	68	177.6	0.580	E/N	11.0
February	30.06	76.0	64.1	59.3	55.9	45.9	85	0.44	95	48.6	8.845	E/N	14.0
March	30.16	79.9	61.5	0.70	53.8	43.2	81	0.39	- 85	€65.4	0:465	E/N	15.8
April	29.94	85.7	76.5	70.9	6.99	58.0	87	0.67	98	-98.5	4:600	H	10.6
Mav	29.87	87.9	81.5	76.7	78.5	0.89	88	0.80	64	143.2	10.160	E	10.3
June	29.78	92.4	87.5	82.6	79.4	75.6	-84	0.93	7.1	198.1	5,700	SE	8.6
July	29.74	91.7	88.6	88.2	79.8	76.4	88	0.94	- 68	247.7	8.810	SE	9.4
Angust	29.72	91.5	87.8	82.3	78.1	74.0	88	0.91	- 68	219.2	21.305	ESE	10.9
Sentember	29.83	90.1	86.3	81.0	6.92	70.0	92	0.81	28	224.8	12.880	H	11.2
October	80.00	87.9	82.6	0.97	. 71.0	65.0	68	0.55	-38	253.4	1.885	ENE	11.8
November	80.18	988	76.3	70.5	66.1	60.1	73	0.55	: 39	228.0	0.165	E/N	12.1
December	80.18	81.2	70.5	6.19	60.7	52.9	7.2	0.47	64	156.8	0.875	ENE	10.6
Mean total or extreme	29.96	92.4	77.2	71.8	67.9	48.2	62	0.65	- 67	2,060.3	69.770	E	11.4

SECTION XI.

Scientific.

A.—BACTERIOLOGICAL INSTITUTE.

501. The activities of the Institute include: -

- (a) the preparation of vaccine lymph.
- (b) the preparation of anti-meningococcic serum.
- (c) the preparation of bacterial vaccines.
- (d) the preparation of anti-rabic vaccine.
- (e) examination of pathological material.
- (f) examination of waters, milks, etc., etc.
- (g) medical research.

502. The Institute is under the charge of the Government Bacteriologist who is assisted by the Assistant Bacteriologist, one Chief Laboratory Assistant and five Laboratory Assistants.

503. Particulars of the work done during the year are contained in the Annual Report of the Bacteriologist which is appended.

B .- THE PUBLIC MORTUARIES.

504 There are two public mortuaries, one being situated in Victoria and the other in Kowloon.

505. At these places for the reception of the dead are received:—

- (a) bodies from the Chinese Hospitals and Chinese Public Dispensaries for diagnosis.
- (b) bodies forwarded by Convents which have received them either moribund or dead, from relatives and friends.
- (c) dumped bodies, that is to say, bodies which have been taken from the place of death under cover of the night and dumped in the streets or in the harbour to save the trouble and expense of burial. The great majority of these cases have died a natural death and there is no need for concealment.
- (d) bodies sent by the Police for medico-legal examination.
- (e) bodies sent by the Medical Officer of Health for examination for signs of infectious disease or for simple diagnosis.

- 506. In all cases where a diagnosis cannot otherwise be made a sectio cadaveris is performed.
- 507. All dead rats collected by the Sanitary Authorities are taken to the mortuaries for examination with regard to plague.
- 508. During the year both Mortuaries were in charge of Medical Officers who had been detailed for this work in addition to their other duties.

Public Mortuary, Victoria.

509. Report on Post-mortem Examinations, 1936:-	
Number of examinations performed	2,547
Male bodies examined	1,232
Female bodies examined	1,314
Sex unknown owing to advanced decomposition.	1
Claimed bodies sent from hospitals, etc	138
Unclaimed bodies mostly abandoned	759
Bodies of infants sent from Italian Convent	1,650
Number of Chinese bodies examined	2,540
Number of Non-Chinese bodies examined	7
Male. Female. Number of bodies under	Total.
2 years of age 717 1,026	1,748
Number of bodies over 2 years of age 515 288	803
510. Bodies were received from the following source	es:
Vietoria	2,420
Shaukiwan District	80
Other Villages	47
511. Number of rats examined	100 050
	100,259

- M 104 -

Public Mortuary, Kowloon.

513. Report on Post-mortem Examinations, 1936:-	_
Number of examinations performed	3,389
Male bodies examined	1,906
Female bodies examined	1,470
Bodies of unknown sex (indistinguishable)	13
Claimed bodies sent from Hospitals, etc	43
Unclaimed bodies mostly abandoned	3,346
Number of Chinese bodies examined	3,376
Number of Non-Chinese bodies examined	13
Male. Female. Unknown	. Total.
Number of bodies under. 2 years of age 1,375 1,226 4	2,605
Number of bodies over 2 years of age 531 244 9	784
514. Bodies were received from the following source	es:—
Kowloon District	3,098
Harbour Police	195
Elsewhere	96
515. Number of rats examined	109,992
516. Number found plague infected	Nil.

SECTION XII.

The New Territories.

PUBLIC HEALTH AND SANITATION.

- 517. The New Territories comprise the mainland between Kowloon and the Sham Chun River and a number of islands including Lantau which is larger than Hong Kong. The mainland is so indented by bays, harbours and coves that it may be said to consist of a number of irregular peninsulas many of which are almost islands. Both mainland and islands are of similar geological formation, being barren granite hills or mountains separated by fertile valleys.
- 518. For general administrative purposes the New Territories have been divided into two districts—North and South each under its District Officer. The Northern District which is chiefly mainland is approximately 200 square miles in extent. The Southern District has roughly 100 square miles of which 40 only are mainland, the rest being islands.
- 519. For the purposes of medical administration it has been found convenient to divide the Territories into a Western Medical District and an Eastern Medical District, the boundary line being the range of hills which extends from North to South and which separates the waters running East from those going West or South.
- 520. The Western District includes the West Coast and the South Coast with the hinterlands stretching back to the hills. The circular road crosses the boundary at the 3rd mile and at the 32nd mile. The islands of Tsing, Lantau, Cheung Chau and Lamma form part of this district.
- 521. The Eastern District includes the whole of the East Coast with its hinterlands.
- 522. Each medical district has approximately 150 aquare miles.
- 523. With regard to population the only information available is that contained in the Census Report where the figures refer to police districts only. The populations of the various villages in those districts are not known. The following is taken from the 1931 Census Report:—

Western Medical District.

POLICE DISTRICT.	POPULATION.	
Mainland: —		
Tsun Wan	5,335	
Ping Shan	12,660	
Au Tau		
Lok Ma Chau	4,377	
		35,249

Islands: -

Lantau Tung Chung Cheung Chau (5,477 land, 7,045 floating)	7,409 1,713 12,522	21,644
	individual.	56,893

Eastern Medical District.

Police District. Mainland:—	POPULATI	ON.
Sha Tau Kok Sheung Shui Taipo Shatin Saikung	8,941 10,208 12,684 4,346 7,585	43,764
Islands:—		
Po Toi Group and Cheung Kwan O District	3,100	3,100
	WHEN !	46,864

- 524. The population is grouped into villages which are situated mostly on the lower levels, viz., on the flats facing the sea or in the valleys leading up to and between the hills. Some of the villages are easy of access by rail or road but some are only reached after hours of walking and there are those which are only easily accessible by boat.
- 525. The rules and regulations governing village life are nowhere laid down in print but have been handed down from generation to generation. There are no heads of villages appointed by and responsible to Government, for the conduct of village affairs, but there are "Village Elders" who are accepted as arbiters in petty disputes and who have acquired their position through age, experience, wealth or family rank. These elders have no executive power and are regarded by the villagers and by Government as advisers only.
- 526. From time to time co-operative efforts are made for the good of the community—some contributing money, some materials and some labour. In this way the paving of streets or paths, the construction of a bridge or the digging of a village well is brought about.

Public Health.

- 527. Under section 3 of the Interpretation Ordinance all public health ordinances extend to the New Territories unless it otherwise appears from the express provisions or by necessary implications. The Public Health (Sanitation) Ordinance, which deals with most aspects of sanitation, does not apply to any part of the New Territories, as section 99 states—"This Ordinance and the regulations made thereunder shall not apply to any part of the New Territories except Kowloon, unless and to such extent the Governor in Council shall by order otherwise direct." Up to date no order has been made.
- 528. With regard to sanitary measures which are the concern of the District Officers, markets have been constructed at Taipo, Cheung Chau and Un Long. In these important market villages organisations, rather primitive in nature, have been established for dealing with sanitary matters but in the other villages there is no sanitary machinery and pigs are still the natural scavengers. There are no antimosquito laws and there is no labour code.
- 529. Figures for diseases incidence during the years the New Territories have been under British jurisdiction are not available so that incident rates for particular diseases cannot be calculated. Such being the case the health conditions of the people can only be gauged by inspection and deduction.
- 530. Past reports of District Officers or of the Police make little mention of diseases or of deaths and the natural conclusion is that there was little out of the normal to note.
- 531. Enquiries made at the villages elicits little that can be called alarming. Some sick can be found but they are few compared with the number of heaithy looking men, women and children one sees going about attending to their various occupations.
- '532. Near the hills there is a considerable amount of malaria but judging from the appearance of the people, the number of chubby children and the lowness of the spleen rates, the ravages of this disease are mild when compared with other tropical countries.
- 533. Abnormalities and accidents in connection with pregnancy and child birth must occur, but from all accounts they are few in proportion to the numbers of norma! cases.
- 534. Skin diseases there are, but judging from the returns of the dispensaries and travelling dispensary they are not very prevalent.
- 535. Trachoma varies with the village. In some it is common in others it is not.

- 536. With regard to Tuberculosis the population is mostly engaged in agriculture or fishing. The people as a whole live an open air life and Tuberculosis cases are not common.
- 537. Though made applicable to the New Territories in 1911 the Registration of Births and Deaths Ordinance was not enforced until 1932 and it was not until 1935 that death registration became sufficiently universal to warrant death rates being calculated. Assuming that all deaths were registered in that year the death rates for the different districts were as follows:—

Western Medical District.

Police District. D	eaths.	Death rate per mille population.
Tsun Wan	214	39.96 (29.09 if Shing Mun Dam population included).
Ping Shan	298	23.54
Au Tau	385	29.87
Lok Ma Chau	83	29.88
Tai O (Lantau Island)	172	23.22 if boat population included.
Cheung Chau Island.	285	22.75

Eastern Medical District.

Police District. 1	Deaths.	Death rate per mille population.
Sha Tau Kok	236	26.40
Sheung Shui	186	18.22
Taipo	242	19.08
Shatin	108	24.85
Saikung	175	23.07

538. Taking everything into consideration there is no evidence that the population of the New Territories is an unhealthy one.

The Medical Department's Organisation during 1936.

539. Under the scheme for medical expansion the New Territories were divided into Western and Eastern districts with headquarters respectively at Un Long and Taipo. Each district is in charge of a Chinese Medical Officer who is responsible to the Medical Officer of the New Territories.

- 540. The duties of the District Medical Officer include :-
 - Supervision of the Government dispensaries in his district.
 - (2) Domiciliary visits to indigent cases too ill to attend the dispensary.
 - (3) Emergency calls for all classes.
 - (4) Accompanying the Travelling Dispensary three times a week visiting villages in the district.
 - (5) Reconnaissance and propaganda.
 - (6) Spleen surveys.
 - (7) Periodical visits to Police Stations.
- 541. The Staff for the New Territories included: -
 - 1 European M.O. resident in Kowloon.
 - 1 Chinese M.O., 1 dresser and 1 nurse-midwife resident at the Government Dispensary at Un Long.
 - 1 Chinese M.O., 1 dresser and 2 nurse-midwives resident at the Government Dispensary at Taipo.
 - 1 First grade dresser attached to the Travelling Dispensary.
 - 2 Nurse-midwives at Lady Ho Tung Welfare Centre, Ku Tung.
 - 1 Nurse-midwife at Sai Kung.
 - 2 Nurse-midwives at Sham Tseng.
 - 1 Nurse-midwife at Tai-O.
 - 1 Charge dresser at Pat Heung construction works.
- 542. The Shing Mun Dam area, where 2,000 workers were engaged on large construction works, continued to be a special medical problem —being under the Medical Officer New Territories for medical work and the Malariologist for anti-malaria measures.
- 543. The special staff for the Shing Mun Dam area included:—
 - 1 Chinese Medical Officer and two dressers for medical work.
 - 1 Chinese Medical Officer and two anti-malaria inspectors for anti-malaria works.

544. Fully equipped dispensaries were maintained at Sham Tseng, Un Long, Ko Tung, Tai Po. Sai Kung and Tai-O.

545. Dr. G. H. Henry was the Medical Offier in charge of the New Territories throughout the year.

The Government Travelling Dispensary.

546. The Government Motor Travelling Dispensary was put on the road on the 16th of June, 1932. At first it visited all the villages on the road side once or twice a week, later, on representations from the voluntary aid societies, it ceased to call at the villages where they had established centres. The usefulness of this well equipped dispensary was thus considerably curtailed for the societies established centres in all the principal villages easy of access and there remained only the smaller hamlets. A Medical Officer and a dresser accompanied it on its rounds. There was a fixed itinerary and time-table so that the people should know where and when to expect it.

547. On Mondays, Wednesdays and Fridays it visited the Western District from San Tin to Shing Mun inclusive. On Tuesdays, Thursdays and Saturdays it visited the Eastern District from Sha Tin to Sha Tau Kok and back to San Tin inclusive. In this way there was a minimum of mileage and overlapping and a maximum of hours of work in the villages.

548. The following table shows the results obtained: -

	1934.	1935.	1936.
New cases	5,526	5,542	6,780
Old cases	2,753	1,900	2,296
Malarial cases	636	865	1,252
Vaccinations	_	1,644	1,271

549. Total miles travelled 14,820.

Sham Tseng Dispensary.

- 550. This dispensary, which had been built by Mr. Ruttonjee and presented to the Government, was formally opened on January 30th, 1934.
- 551. The resident staff consists of two nurse-midwives and an amah.
- 552. The Chinese M.O. of the New Territories (West) visits the Dispensary three times a week on his rounds with the Travelling Dispensary.

553. The following is a summary of the cases dealt with at the dispensary:—

	1934.	1935.	1936.
New cases	1,549	1,631	1,516
Old cases	1,988	3,117	2,645
Vaccinations	123	271	135
Maternity cases	21	32	29
N. A.	Ialaria	cases	390

Un Long Dispensary.

- 554. This unit consists of three shop houses side by side. Ultimately it will afford accommodation for a dispensary, an infant welfare clinic, a maternity ward and quarters for the staff. At present the quarters intended for the infant welfare centre and the maternity ward are utilised as a garage for the travelling dispensary and quarters for the dresser and driver.
- 555. The resident staff consists of the Chinese Medical Officer, one midwife and a dresser.

556. The following table shows the cases dealt with: -

his house some out the	1934.	1935.	1936.
New cases	4,130	5,174	5,630
Old cases	3,998	4,722	4,909
Vaccinations	1,417	1,343	1,243
Maternity cases	202	187	218
7	Ialaria	cases	415

Lady Ho Tung Welfare Centre, Ko Tung.

- 557. This Centre was opened on the 14th of May, 1934. The staff consists of two nurse-midwives, an amah and a coolie. Lady Ho Tung also supplies a watchman. A daily visit is made by one of the District Medical Officers before he starts his round with the Travelling Dispensary.
- 558. Being situated in the open some distance from the nearest village a bus has been provided for the transport of cases.

559. The following are the cases dealt with during the year at the Centre:—

ages their tees	1934.	1935.	1936.
New cases	1,323	3,067	3,599
Old cases	2,101	4,029	2,488
Maternity cases	33	139	120
Vaccinations	_	406	799
N	Ialaria	cases	340

The Taipo Dispensary.

- 560. This unit consists of a dispensary, an infant welfare centre, and a maternity ward.
- 561. The resident staff consists of the Chinese Medical Officer, two nurse-midwives and a dresser.
- 562. The midwifery ward of five beds was opened in June 1935, and has proved to be very popular. From its opening until the end of the year 237 cases were delivered. Many of the cases come from the boat population to whom it makes a special appeal. Contrary to expectations it has not caused any appreciable diminution in the number of midwifery cases treated in their own houses.
- 563. The following table shows the year's work compared with that of previous year:—

	1934.	1935.	1936.
New cases	5,581	5,874	6,682
Old cases	9,220	10,069	10,178
Vaccinations	2,538	2,062	2,120
Maternity cases (ext.)	116	112	116
Maternity cases (int.)	_	85	287
1	Malaria	cases	832

Sai Kung Dispensary.

564. In August 1934 a Government Dispensary was opened in Sai Kung, staffed by a nurse-midwife and an amah. It consists of the lower floor of a two-storey building near the centre of the village, the front part being the waiting-room and examination room combined, and the back portion being the nurse's and amah's quarters.

565. Sai Kung is a very difficult village to reach, and the journey occupies the Medical Officer's whole day. It is visited once a week by a Chinese Medical Officer.

566. The following is a summary of the work at the dispensary since it was opened:—

	1934.	1935.	1936.
New cases	961	2,206	1,867
Old cases	1,333	3,127	1,672
Vaccinations	64	645	642
Maternity cases	40	119	79
)	Ialaria	cases	641

The Tai-O Dispensary.

- 567. A Government dispensary was opened on 14.8.34 at the fishing village of Tai-O, situated at the West end of the Island of Lantau. A resident nurse-midwife was placed in charge.
- 568. Once a week the Chinese Medical Officer from Un Long visited and prescribed. Some of his patients come from distant villages.
- 569. The following is a summary of the work done during the years 1934, 1935 & 1936.

	1934.	1935.	1936.
New cases	1,614	3,405	3,192
Old cases	1,015	2,985	2,993
Vaccinations	684	· 431	1,243
Maternity cases	41	92	118
7	Ialaria	cases	312

Shing Mun Dam Construction Works. (Jubilee Reservoir).

570. The general health of the labour force employed on the construction of the Dam is shown in the following tables:—

(a) Monthly Sickness Rate Table.

1000	19	1935		35	1936	
Month,	Popula- tion	Percentage off duty owing to sickness	Popula- tion	Percentage off duty owing to sickness	Popula- tion	Percentage off duty owing to sickness
January	797	4.5	1,884	1.5	2,064	2.8
February	1,074	2.9	1,949	1.7	2,028	2.9
March	1,120	3.6	1,891	2.0	1,970	2.9
April	959	3.4	1,988	2.3	2,006	2.9
May	1,002	2.4	1,955	2.4	2,049	2.9
June	891	2.7	2,037	3.3	1,989	3.0
July	1,016	4.0	2,011	3.3	1,914	3.3
August	1,192	3.9	1,895	3.6	1,480	2.7
September	1,761	3.8	2,013	3.8	1,096	3.0
October	1,893	3.2	2,159	3.6	894	3.8
November	1,921	2.7	2,160	3.5	994	3.8
December	1,816	2.4	2,066	3.3	960	2.9

(b) Analysis of the Shing Mun Hospital Returns for 1936.

photo and	January	February	March	April	May	June	July	August	September	October	November	December	Total
No. of malaria cases	44	48	28	12	24	39	49	85	34	64	105	37	509
malaria Deaths from	340	357	365	841	400	325	425	257	250	227	221	112	3,620
malaria Deaths from	1	-	-	-	-	1	-	-	-	-	1	1	8
other causes Admitted to	3	3	3	2	3	5	3	1	2	1	-	2	28
S.M. Hospital	78	71	64	42	60	56	85	40	38	39	58	31	652
other hospitals. Per cent ratio of malaria to	6	8	9	3	2	5	3	3	3	1	-	2	45
Per cent ratio of malaria to the total popula-	12.9	12	6.3	3.5	6.0	12.0	11.5	13.6	13.6	28.1	47.5	88	
tion	2.1	2.1	1.1	0.6	1.1	1.9	2.5	2.8	3.1	7.1	10.5	3.8	

Pat Heung Construction Works.

- 571. The Medical Department in co-operation with the engineering authorities engaged in construction works at Pat Heung took steps to safeguard the health of the labour forces employed on the works.
- 572. Anti-malaria measures including mosquito surveys, mosquito proofing, draining, oiling, and the training of water courses were carried out under the advice of and under the supervision of the staff of the Malaria Bureau.
- 573. The treatment of the sick was the concern of the staff under the direction of the Medical Officer New Territories. A small field dispensary was constructed and equipped and placed in charge of a resident dresser. Three times a week the Chinese Medical Officer visited from Un Long.
- 574. At first the number of malaria cases caused considerable anxiety. As time went on and the situation became more and more under control the incidence of malaria decreased and the health of the labour force improved. A scheme to free and keep free of mosquito breeding an area extending to half a mile of the residential area is under consideration. If this scheme be put into operation there should be little trouble from malaria.
- 575. The following shows the number of cases treated at the dispensary since its opening on the 25th of September.

	-2		
New cases		 	787
Old cases .		 	634
Malaria cas	ies .	 	194

New Territories Police Stations.

- 576. These have been inspected periodically by the M.O. i./c. Kowloon and New Territories, and, in addition the A.M.Os. visit them once a month.
- 577. Many of the Police Stations are screened and every man is provided with a mosquito net. Prophylactic quinine is issued and the living rooms are regularly sprayed with an insecticide in an endeavour to kill any adult mosquitoes which may be present. The men on night patrol are of course exposed to the bites of mosquitoes. A table showing the incidence of malaria amongst the whole police force will be found in Appendix B.
- 578. During the past year Totaquine has been used prophylactically at the Police Stations in the New Territories.

A. R. WELLINGTON, D. M. S.

APPENDIX A.

GOVERNMENT BACTERIOLOGICAL INSTITUTE.

Report for the year 1936.

By A. V. Greaves, M.B., (Tor.), M.C.P. & S., (Ont.), D.T.M., (Liverpool).

Introductory.

- (1) Administrative.—There is nothing of interest to record under this heading for the period under review.
- (2) Buildings and Equipment.—(a) No additions or alterations to the Laboratory buildings were carried out.
- (b) No additions to the permanent equipment were made during the year.
- (3) Library.—The following books were added to the library:—
 - 1. Surgical Pathology of the Mammary Gland, A. F. Hertzler, 1933.
 - 2. Cytological Technique, Jno. R. Baker, 1933.
 - 3. Modern Criminal Investigation, Soderman and O'Connel, 1936.
 - Bacteriology of Typhoid, Salmonella, and Dysentery Infection and Carrier States, L. C. Havens, 1936.
 - 5. How to Stain the Nervous System, J. Anderson, 1929.
- (4) Research.—(a) Dysentery: Some work was done on a group of inagglutinable strains of B. dysenteriae Flexner, collected during the past two years, in an effort to identify them with those strains isolated in India of which the antigenic pattern has been definitely established. Comparison was made possible through the kindness of Lieut. Colonel R. F. Bridges, R.A.M.C., Officer-in-Charge, Enteric Laboratory, Kasauli, who has kindly furnished us with the type cultures and anti-sera of the eight strains, forming Boyd's sub-groups A and B. Colonel Bridges also was most helpful in giving us his experience of the pecularities of each strain. Rather disappointingly it was found that none of our strains were agglutinated by any of the anti-sera of

the Indian organisms, and we can only conclude that the inagglutinable strains of the Flexner group in Hong Kong do not conform to any of those identified in India. We are exchanging our cultures with Colonel Bridges in order that he may perhaps throw some further light on the subject.

- (b) Typhoid: A study was commenced during the latter part of the year in order to get some idea of the titre of agglutinins against B. typhosus existing in the average hospital population in Hong Kong as measured by the serological reaction to the "O" and "H" antigens in use for the Widal test performed at the Institute. The cases chosen are patients attending the Venereal Diseases Clinics, who may reasonably be supposed to be free of active infection with the organism. So far as we have gone it appears that immune bodies, either natural or acquired only exist in very small quantities in the sera of this group as measured by our antigens. The study will be continued in the coming year.
- (5) General.—It becomes tedious year after year to record in this report continued increase in work performed, yet it is a fact which is assuming greater and greater import yearly, involving as it is bound to do questions of an administrative nature.

The summary of tests carried out this year shows a total figure of 39,134, as against 27,463 in 1935, an increase in a single year of over 40%. Careful scrutiny of the summary at the end of the report shows that the increase is not contributed by any single test but is generally distributed throughout the list, and reflects the all round increased use which is being made of the diagnostic service of the Institute by the medical officers of the Department. Up to the present time this growth has been welcomed as a healthy sign and a reflection of good work, but it is felt that our machinery is becoming inadequate for any further load and a halt must be called in expansion. It is almost impossible to consider an increase in personnel, as there is no room for further workers in our present quarters. The only conclusion which can be reached is that either fresh quarters must be provided for the Institute or a halt called in the continued expansion of our activities. The latter course is most abhorrent to the writer but there seems practically no hope of any other solution.

Another point on which it seems necessary to comment is the cost of running the Institute. In spite of the enormous annual increase in the amount of work performed our annual estimates have been consistently curtailed for the past three years, so that even with the rigid economy practised it is felt that our work must be either curtailed or our allowance for materials increased. The reserve stocks now carried are at a danger point below which we simply cannot go.

The work of the staff is as usual highly satisfactory.

A. PROTOZOOLOGY AND HELMINTHOLOGY.

(1) Blood films for malaria.—Eight thousand four hundred and eighty-one films were examined for the presence of malarial parasites. Of this total four thousand and ninety-two were positive-roughly about half. It seemed of interest to determine the exact type distribution of these infections month by month in order to see how great an influence is exerted by season on the prevailing type. In examining the table no particular statistical value should be attached to the actual totals from month to month but only to the percentage relation of the different types to one another in the same month, and the relative percentage of types contrasted with other months. It is highly interesting to note the incidence of quartan infection. An abrupt rise occurs in the month of January and the rise steepens to a maximum of 53% of all infections in March; thereafter there is a gradual fall through April and May until June, in which month the fall is more rapid, to drop still more abruptly in July to 2.88%, which appears to be practically the basic rate which prevails for the rest of the year. It is thus essentially an infection of our winter months. Coinciding with the peak of the incidence of quartan in March we find a remarkable drop in the incidence of sub-tertian infection to 9.85%, to go still lower in April to 4.22%. This drop is the more striking when it is observed that the average comparative incidence of sub-tertian for the whole year is 52.41%.

The curve of incidence of simple tertian infection is more smooth than either quartan or sub-tertian.

Month.	Simple tertian		Sub-tertian		Quartan		Total	
January	28.25%	(19)	55.22%	(37)	16.41%	(11)	67	
February	27.14%	(19)	34.28%	(24)	38.57%	(27)	70	
March	36.61%	(26)	9.85%	(7)	53.52%	(38)	71	
April	53.52%	(38)	4.22%	(3)	42.25%	(30)	71	
May	44.00%	(33)	29.33%	(22)	26.66%	(20)	75	
June	61.66%	(74)	25.83%	(31)	12.50%	(15)	120	
July	52.17%	(180)	44.92%	(155)	2.88%	(10)	345	
August	48.32%	(259)	49.62%	(266)	2.05%	(11)	536	
September	40.12%	(126)	56.05%	(176)	3.82%	(12)	314	
October	38.13%	(233)	57.44%	(351)	4.41%	(27)	611	
November	35.78%	(384)	60.57%	(650)	3.63%	(39)	1,073	
December	38.97%	(288)	57.23%	(423)	3.78%	(28)	739	
Total cases	1,0	679	2,:	145	2	68	4,092	

Parasites	European	Indian	Chinese	Total
Sub-tertian	48	138	1,959	2,145
Simple tertian	49	99	1,581	1,679
Quartan	2	2	264	268
Unclassified	11	29	598	638
Double Infection	1	2	96	99
Negative	417	330	2,905	3,652
Grand total	528	600	7,353	8,481

- (2) Filaria.—Forty-one blood films were specifically examined for filarial embryos—nineteen were positive.
- (3) Faeces.—One thousand nine hundred and nineteen specimens of faeces were examined for the presence of intestinal ova and the exudate of bacillary dysentery.

Examination of Stools for Intestinal Parasites.

	European	Indian	Chinese	Total
Ascaris	42	25	73	140
Clonorchis	5	1	79	85
Trichuris	21	4	29	54
Ankylostoma	3	8	22	33
Taenia	1 -	_	-	1
Fasciolopsis buskii	-	_	2	2
Multiple infestation.	2	5	85	92
E. histolytica	7	9	9	25
Negative	783	175	529	1,487
Grand total	864	227	828	1,919

B. Serology.

(1) Serological Reactions for Syphilis.—Sixteen thousand eight hundred and forty-one sera were tested. The results are shown in the table.

EXAMINATION OF BLOOD SERA FOR SYPHILIS.

	Europ	ean.	Indi	ian.	Chir	iese.	m
	М.	F.	М.	F.	М.	F.	Total
Strong positive	58	1	112		2,308	1,063	3,542
Positive	7	1	50		680	384	1,122
Weak positive	22	3	101		675	321	1,122
Doubtful	25	1	107		744	281	1,158
Negative	277	28	667	2	4,243	4,680	9,897
Grand total	389	34	1,037	2	8,650	6,729	16,841

(2) Agglutination tests.—One thousand four hundred and forty-five sera were examined for agglutinins against various organisms as follows:—

AGGLUTINATION TESTS.

	European		ean		India	in		Chine	ese	
Organisms	Pos.	Neg.	Doubt- ful	Pos.	Neg.	Doubt- ful	Pos.	Neg.	Doubt- ful	Total
B. Typhosus	89	98	18	4	16	10.4	318	789	75	,
B. Para A	3	134	13		20		10	1097	75	
В. " В	1	186	13		20		4	1103	75	1435
Enteric fever type undetermined	10			2			71			
B. Dysenteriae		1	1							1
B. Melitensis		1							1000	1
B. Abortus		1								1
Weil Felix reaction.		1						6		7
Grand total	58	872	39	6	56	Jan	403	2995	225	1445

C. BACTERIOLOGICAL EXAMINATIONS.

(1) Faeces.— Eight hundred and twenty-four cultural examinations were made of stools.

The high proportion of positive cultures of B. dysenteriae shiga as compared with other years, is due to the small explosive outbreak of dysentery of this type which occurred in the latter part of the year. The figures otherwise do not call for comment.

STOOLS EXAMINED FOR ORGANISMS.

10 10 10 10 10 10 10 10 10 10 10 10 10 1	Euro	pean	Ind	ian	Chir	nese	Total.
Organisms	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	
B. typhosus	4	18		3	7	162	194
B. dysenteriae (Group)		158		15		292	465
,, ,, (Flexner) .	35		2		79		116
,, ,, (Shiga)	23		1		7		31
,, ,, (Schmitz).	5				9		14
,, cholerae		1				3	4
Grand total	67	177	3	18	102	457	824

(2) Sputum.—Seven hundred and eighty-five sputa were examined for b. tuberculosis.

SPUTA EXAMINED FOR TUBERCULOSIS.

1420 Miles	European	Indian	Chinese	Total
Positive	11	18	164	193
Negative	115	75	402	592
Grand total	126	93	566	785

- (3) Urine.—Routine chemical and microscopic examination was made on five hundred and fifty-five urines.
- (4) Urethral and cervical smears.—One thousand three hundred and fifty-one urethral and cervical smears were examined, chiefly for the presence of the gonococcus.
- (5) Nasal scrapings, etc.— One hundred and fifty-three examinations were made of scrapings for the presence of b. leprae. Fifty-two were positive.
- (6) Throat swabs.—Two thousand and fifty-eight throat swabs were cultured for the presence of C. diptheriae. This number is about 75% greater than in 1935 and about 200% greater than in 1934. This increase is in part accounted for by the fact that all contacts are swabbed as far as possible now. Nevertheless the number of positive results is greatly in excess of the previous year.

THROAT SWABS EXAMINED FOR DIPHTHERIA.

	European	Indian	Chinese	Total
Positive	91	4	312	407
Negative	436	23	1,192	1,651
Grand total	527	27	1,504	2,058

(7) Cerebro-spinal fluid.—Two hundred and eighty-one fluids were cultured for organisms; seventy-four of these showed the presence of the meningococcus. This compares with eighty positives recorded in 1935.

C.S.F. Examined for Meningococci.

	European	Indian	Chinese	Total
Positive		3	74 192	74 281
Grand total	12	3	266	207

- (8) Friedmann test for pregnancy.—Five Friedmann tests were carried out. Of these three were positive.
- (9) Miscellaneous materials.— Two hundred and ninetyseven miscellaneous examinations were carried out; they call for no comment.

D. PREPARATION OF VACCINE LYMPH.

Our preparation of lymph was again on a rather modest scale this year as our stocks were still a little higher than seemed advisable. The issue was slightly lower than usual. We expect to resume preparation on a larger scale again next year.

E. PREPARATION OF VACCINES AND SERA.

- (1) Antimeningococcus scrum.—The amount of serum issued this year was 10,820 c.c., a fairly large amount considering that no epidemic existed in the Colony. Preparation proceeded as usual, 22,850 c.c. being added to stock. Amount in stock at the end of the year totalled 41,450 c.c.
- (2) Gonococcus vaccine.—The amount prepared and issued was 9,190 c.c. This is almost as much again as we issued last year. The Venereal Clinic appears to use it in increasing quantity year by year.

Total	amoun	t iss	sued	 9,190	c.c.
1000 3	million	per	c.c.	 5,550	e.e.
100	,,	,,	,,	 3,640	,,

(3) Anti-rabic vaccine.—Activity in this department was no more than may be considered normal. Only nineteen unimal brains were examined and of these only three proved to be positive. All of the positive cases were from points outside the Colony. As foreshadowed in our last Report the scheme of treatment now in use calls for the administration of 2% brain substance to Class I and Class II cases and of 4% to Class III and IV. No instances of untoward reactions have come to our notice.

Race incidence of cases	Treatment not completed	Treatment completed	Total
Chinese	151	54	205
British	18	15	33
Portuguese	2	4	6
Japanese	3	0	3
Indian	2	1	3
Filipino	2	1	3
Swiss	1	0	1
Eurasian	1	0	1
Australian	1	0	1
Siamese	0	1	1
Unknown (outport cases)	0	18	18
Grand total	181	94	275

Total No. of doses issued 2,577

The appended table shows the amount of vaccines and serum issued during the year.

Vaccine & Serum	Amount issued.
Gonococcus vaccine	9,190 c.c.
Г. А. В. ,,	870 ,,
Cholera ,,	120 ,,
Autogenous ,,	49 vaccines
Anti-meningococcus serum	10,820 c.c.

⁽⁴⁾ Autogenous vaccines.—Forty-nine autogenous vaccines were prepared.

F. Examination of Water and Milk.

(1) Bacteriological analysis of water.—One thousand four hundred and eighty-four samples of water from various sources, chiefly public supplies, were examined during the year.

The results do not call for comment.

Total	1,484
Water from other than public supplies	88
Well water	7
Filtered and chlorinated water from service taps throughout the Colony.	1,167
Filtered , ,, ,,	115
Unfiltered raw water	107

(2) Bacteriological analysis of milk.—Forty samples of milk were bacteriologically examined; one of these was from a human source.

During the latter part of the year routine examinations were instituted of the milk of one important dairy of the Colony. It is proposed to perform these twice weekly.

G. Medico-Legal Investigations.

Forty-six investigations were carried out on materials furnished by the Police Department. Forty-two involved the identification of blood stains, three of semen and one of saliva. This work takes up more and more of our time and attention as time goes on. Particularly is this true of work on blood stains. The newer knowledge of the individuality of blood has opened up avenues of investigation which are of great medico legal interest, and the police are now asking for information along these lines. This involves very onerous and painstaking work of a highly technical and difficult nature. We are glad to acknowledge the great assistance in the way of advice on technical points of procedure given us by Prof. Ride of the Department of Physiology of the University of Hong Kong. Prof. Ride's work on genetics is too well known to require any detailed mention.

H. MORBID HISTOLOGY.

Two hundred and ninety-six tissue sections were prepared and reported upon. Forty-one of these were of malignant tumours, twenty-five of benign tumours and the remainder of general pathological interest.

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Analysis of Clinical and Other Examinations.

FORM OF TAXABLE AND TAXABLE AN	Total	Total
Nature of examination	for	for
	1936	1935
(B. Typhosus		
5 , Paratyphosus A }	1,435	1,100
jag [,, ,, B]		
,, Paratyphosus A ,, , , , B \ Weil Felix Reaction	7	_
B. Dysenteriae	1 1	5
,, Melitensis	1	6 5
		-
Serological Reaction for Syphilis	16,841	12,768
z (Malaria	8,481	4,604
Kalaria Filaria Blood count, etc.	41	8
Blood count, etc.	102	48
(Naso-pharyngeal swabs (Bacillus		
Diphtheria)	2,058	1,208
Spinal fluids (Meningococcus)	281	216
Diphtheria) Spinal fluids (Meningococcus) Faeces (Typhosus, Paratyphosus, Cholera, etc.)	824	415
Blood	1,435	1,100
Urine	185	-
3 (Intestinal Parasites	1,919	1,721
Occult blood Tubergle Bacillus	37	37
Occult blood Tubercle Bacillus	8	7
l'issue Sections	296	295
Friedmann test for pregnancy	5	hodei
(Sputa	785	666
Pus Urine		52
§ Urine	555	399
Smear for Gonococcus ,, ,, B. leprae Animals for Rabies	1,351 153	550 102
Animals for Rabies	19	44
Medico-legal Examinations	46 40	35 5
,, Analysis of Water	1,484	1,470
Rideal Walkers Test of Disinfectants		2
Autogenous vaccine prepared	49	52
Filter candles sterilized for domestic filters.	337	345
Miscellaneous	297	198
Total	20 124	97 489
10081	39,134	27,463

APPENDIX B.

Annual Report of the Work of the Malaria Bureau for the year 1936.

by

R. B. Jackson, M.D., D.P.H., Malariologist.

Staff.

- 1. The staff consisted of the Malariologist, Assistant to Malariologist, five Inspectors, one clerk, and four coolies. The Malariologist was on leave from 7th March until 10th December, during which period Dr. J. B. Mackie acted.
- 2. The services of two vaccinators were placed at the disposal of the Bureau. They assisted in larval surveys, identification of larvae, collecting of mosquitoes from habitations, and in other work.

Scope of Activities.

3. The scope of activities of the Bureau included the following undertakings:—

I.

A general investigation of malaria and other mosquito borne diseases.

II.

General mosquito survey of the Colony and New Territories in order to determine what species exist, their life histories, and, as far as possible, their identification in the larval and adult stages.

III.

The catching of mosquitoes frequenting human habitations, cow byres, pigsties and goat pens, and the dissecting of such anophelines as were found for malarial and filarial infections and for obtaining precipitin reactions.

IV.

Investigations as to the prevalence of malaria in certain areas and the conditions under which it was existing with a view to its abolition,

V.

Supervision of measures directed against malaria at Shing Mun, Patheung, Kai Tak, Shek O, Tytam Tuk, and Repulse Bay.

VI.

Local surveys for the abatement of mosquito nuisances and the supervision of anti mosquito measures affecting Shek O, Repulse Bay, Mount Kellett, Pokfulam, and Kai Tak Aerodrome.

VII.

The teaching of mosquitology and the instruction of inspectors in this work and other matters bearing on the subject.

VIII.

Co-operation with Government Departments, the Military, Naval, and Air Force, public companies and private individuals in the investigation and eradication of malaria.

I.—Malaria and Mosquito Borne Diseases.

Malaria.

- 4. The important vectors in the Colony are A. minimus, and A. jeyporiensis var. candidiensis. As in former years, infections were encountered in A. hyrcanus var. sinensis, and in A. maculatus in the Shing Mun dissections.
- 5. In 1935 A. minimus, A. jeyporiensis and A. maculatus were experimentally infected with sub-tertian malaria at the Bureau.
- 6. Attempts to infect A. hyrcanus did not succeed. It is noteworthy that out of three A. minimus, four A. maculatus, seven A. hyrcanus fed upon the same patient, at the same time under the same conditions, one A. minimus, two A. maculatus became infected, but none of the A. hyrcanus.
- 7. In areas where the masses of the population reside, extensive training of hill streams has been carried out, and in consequence as a rule there are no facilities for the breeding of Anophelines, but where such exist as in suburban and rural areas on the Island and mainland, the possibility of malaria must always be reckoned with.
- 8. The bulk of the malaria appears to be caused by Anophelines breeding in hilly country—(a) in fallow rice fields, (b) in rice cultivation during October and November, (c) in the flattish portion of certain hill streams, and (d) in irrigation ditches.

- 9. As malaria is not a notifiable disease, incidence rates cannot be given for the general population.
- 10. Statistics for 1936 show that 503 deaths were ascribed to malaria in the Colony and New Territories, this being 19% of the total deaths. The death rate per thousand for malaria is given as 0.50.
 - 11. No cases of blackwater fever were reported.
- 12. Table I shows hospital admissions for Malaria from the Police, including Water Police. Certain stations are situated in areas where malaria is unlikely to be contracted, others in rural areas where night patrol work adds to the risk of infection.
- 13. Records obtained from the R.A.M.C. authorities regarding incidence of malarial infection amongst the troops, British and Indian, are as follows (relapses not being taken into account).
- 14. British Troops:—number of fresh cases during the year was 193, of which 2 occurred in the first quarter, 9 in the second, 55 in the third, and 127 in the fourth. In the first quarter 2 of the cases were amongst troops who had been in Camp, in the fourth quarter 41. Calculated on an average strength of 3730, the yearly admission rate was 51.74 per thousand.
- 15. Indian Troops:—there were 12 fresh cases amongst these, of which there were none in the first quarter, 1 in the second, 5 in the third, and 6 in the fourth. The admissions work out for the year as 8.57 per thousand on an average strength of 1400.

Dengue.

- 16. According to returns received, 15 cases of Dengue were admitted to Government Hospitals during the year.
- 17. No larvae or adults of A. (S) aegypti were encountered, those of A. (S) albopictus were commonly met with.

Filaria.

- 18. Ten cases of disease ascribed to filarial infection were reported from Government Hospitals.
- 19. Larval filariae were encountered in dissections of A. hyrcanus, A. maculatus, A. minimus, A. jeyporiensis, and C. fatigans.
- 20. The following mosquitoes were experimentally infected with W. bancrofti at the Malaria Bureau in 1935:—A. minimus, A. maculatus, A. hyrcanus, C. fatigans, and A. (F) togoi.

II .- GENERAL MOSQUITO SURVEY OF THE COLONY.

Anophelines.

- 21. The number and species of the various Anopheline larvae examined are given in Table II. Table III gives the number and species of the imagines obtained from pupae collected and from pupae obtained from the larger larvae.
- 22. A. maculatus. Larvae were collected from the usual breeding places, streams, seepages, and ditches. Many adults were obtained by night catching done in the Dairy Farm cow byres and in pigsties at Little Hong Kong; also by day catching done in the screened lines at Shing Mun. Under ordinary circumstances this mosquito does not figure to any extent in day catches owing to its partiality for the blood of cattle and pigs, and to its disinclination to remain a long time in the building in which it has fed.
- 23. A. minimus. Larvae were mostly met with in hill streams and irrigation ditches, sometimes in seepages. Few were collected from those portions of streams in which the grade is steep. In morning catches adults were readily captured in human habitations made of bamboo and roofed with thatch, also in dark ill-ventilated village cow byres and pigsties.
- 24. A. fluviatilis. The larvae of this species are practically indistinguishable from those of A. minimus. Adults have been obtained in the course of routine catches mainly during the dry months of the year.
- 25. Adult specimens have been encountered by the staff of the Bureau, and by Capt. Burke R.A.M.C. whilst working at this Laboratory, which it is difficult to allocate to either of the species A. minimus or A. fluviatilis. A number of these were taken to London by the Malariologist and submitted for opinion to Dr. Edwards, British Museum, and to Sir R. Christophers. The matter is awaiting further investigation.
- 26. A hyrcanus var. sinensis. The larvae were met with in stagnant water with vegetation, in wet cultivation especially rice at certain times of the year, in pools amongst rice stubble, and in sluggish streams and ditches.
- 27. The adults formed a high proportion of the Anophelines obtained in night catches done in pigsties at Little Hong Kong. In the last quarter of the year large numbers were obtained from screened lines at Shing Mun and Patheung. Like A. maculatus and for the same reasons, they do not figure to any great extent in day catches under ordinary circumstances.

- 28. A. jeyporiensis var. candidiensis. Larvae were collected from grassy ditches and grassy seepages areas. Like A. minimus the adults were obtained without difficulty in morning catches done in thatched bamboo huts or in matsheds within flying distance of breeding places.
- 29. Few larvae of A. karwari, A. splendidus, or A. aitkenii var. bengalensis were collected, and none of either A. tessellatus or A. vagus. Some adults of A. karwari, A. splendidus and A. tessellatus were captured. No infections, malarial or filarial, were met with in any of the specimens dissected.
- 30. Larval and adult Anopheline specimens were sent to Dr. Y. T. Yao, Nanking; Culicine specimens and specimens of infected glands and midguts to Dr. T. R. Kesavan, Health Officer, Singapore. Specimens of Anophelines were received from Lieut. Colonel J. A. Sinton, V.C., O.B.E., Director Malaria Survey of India. Micro-photographs of sporozoites, oocysts, etc. taken by the Chinese Staff with a projector in a dark room, were sent to Squadron Leader J. B. Gregor, Singapore, Dr. J. W. Scharff, Singapore, and Professor Patton, Liverpool School of Tropical Medicine. Identifications of Anopheline larvae and adults were made on behalf of the Lingnan University, Canton.

III.—THE CATCHING AND DISSECTION OF MOSQUITOES.

Pokfulam Cattle Byres. Night Catching.

- 31. Many surveys have been done in this locality which is within a radius of half a mile from the new Queen Mary Hospital. Larvae of A maculatus were found in abundance at all times, larvae of A. minimus were scarce or absent, except in surveys done during the colder months.
- 32. A. maculatus can only be obtained in insignificant numbers under ordinary circumstances in day or night catching done in human habitations, or in day catching done in village cow byres and pigsties.
- 33. In April 1935, night catching was started in the cattle byres with the permission of the General Manager of the Dairy Farm. A cattle attendant who was provided with a catching bottle and electric torch, and had been instructed by the Bureau Staff, caught for 1½ hours from dusk onwards.
- 34. A. maculatus were taken feeding on the cattle or resting upon the walls of the byres, usually gorged with blood. During 164 nights, 2819 A. maculatus, 19 A. hyrcanus, 31 A. vagus, 6 A. minimus, 1 A. jeyporiensis were captured.

- 35. The mosquitoes were brought to the Laboratory, blood taken from the midguts and sent to Dr. Toumanoff, Chef du Laboratoire d'Entomologie de l'Institut Pasteur de Saigon, who kindly had the samples examined for precipitin reactions. The results are given in Table IV.
- 36. The salivary glands of 712 A. maculatus whose midgute had been used for precipitin preparations, were examined for sporozoites, but none were found. No infections were found in the salivary glands or midguts of another batch of 597 A. maculatus.
- 37. Catching operations were continued during 255 nights in 1936, 5643 Anophelines were captured, 1377 dissected and 116 examined for precipitin reactions at the Laboratory of the Bureau. Of those caught 5539 were A. maculatus, 46 A. hyrcanus, 42 A. minimus, 1 A. fluviatilis, 10 A. jeyporiensis, 1 A. splendidus, 4 A. tesselatus. Of these dissected 1314 were A. maculatus, 27 A. hyrcanus, 29 A. minimus, 4 A. jeyporiensis, 1 A. tesselatus. No infections were found. The results of the precipitin reaction are given in Table V. Taking all the facts into consideration, it seems that A. maculatus does not carry malaria in this locality owing to its partiality for cattle blood.

Wong Chok Hang Village (Little Hong Kong).

- 38. Catching operation were continued throughout the year. The locality is surrounded by hills on all sides. A stream with several branches flows through it. A ravine which was formerly a rice swamp drains into the main stream. At the end of 1933 most of this swamp was ditched and divided into rectangular plots for growing crops such as Indian corn. During the present year no rice was grown. In surveys done at the beginning of the year, A. jeyporiensis larvae were found in good numbers in some of the ditches between the plots. The village people live in houses built of stone and roofed with tiles, the market gardeners in huts made of bamboo and roofed with thatch. All are engaged in growing crops and rearing pigs. The pigsties here are as a rule unsuitable as day time resting places for Anophelines owing to their exposure to wind and weather. No cattle are kept in the locality, and dogs are now a scarce luxury on account of taxation.
- 39. From 8.30 a.m. until 11.30 a.m. collections were made by a catching coolie in two groups of huts on alternate days. These groups were situated north and south of Island Road, the northern group along the stream banks close to places A. minimus larvae had been found in abundance, the southern group about 440 gards down stream where few larvae of A. minimus had been found.
- 40. of A. minimus, 2521 were obtained in 154 morning catches done in the northern group or 16.37 per morning. 792 were collected in 152 mornings from the southern group or 5.21

per morning, about one-third of the catch obtained from the northern group. It would thus appear that habitations closest to the breeding places receive most attention from this Anopheline.

- 41. As in former years the majority of the A. jeyporiensis were obtained in the last quarter of the year although there is now no rice cultivation in the area. No A. fluviatilis were captured in the rainy months. Table VI gives the results of morning catches, and Table VII of the dissections.
- 42. In this locality A. minimus adults can be obtained throughout the year without difficulty, but comparatively few A. maculatus or A. hyrcanus were ever got in either day or night catches from human habitations, in spite of the fact that their larvae can be collected in abundance in the neighbourhood.
- 43. During the latter half of 1935 catching was done in two pigsties, one at the head of the main valley near the village of Little Hong Kong, the other at the head of the former Rice Ravine. The catchers remained in the pigsties for an hour and a half from dusk onwards and by means of a torch light and catching apparatus, collected such mosquitoes as could be seen resting on the walls or roof. Catching was done every night except Saturdays, Sundays, and holidays. Out of 524 Anophelines thus obtained, approximately 40% were A. maculatus, 45% A. hyrcanus, 7% A. minimus, 7% A. tessellatus, 1% A. jeyporiensis. No infections were found amongst 493 dissected.
- 44. These operations were repeated throughout the present year. Catching was done during 301 nights 2319 Anophelines were captured, 2088 dissected, 78 were subjected to precipitin tests. Of those captured 1211 were A. hyrcanus, 874 A. maculatus, 106 A. minimus, 71 A. jeyporiensis, 33 A. tesselatus. 24 A. fluviatilis. The majority of the dissections were done in the malarious season, no infections were found in 101 A. minimus, 16 A. fluviatilis, 70 A. jeyporiensis, 754 A. maculatus, 1123 A. hyrcanus, 24 A. tessellatus.
- 45. The results of the precipitin tests are given in Table X. All the A. hyrcanus and A. maculatus tested reacted to anti-pig serum.
- 46. Taking all these factors into consideration, it would appear that A. hyrcanus and A. maculatus are of no importance in the spread of malaria in this locality, owing to their partiality for pig blood.

Shing Mun, Patheung.

47. An account of the catching at Shing Mun and Patheung is given under heading V "Supervision of Anti Malarial Measures Shing Mun, Patheung".

Other Localities.

48. Catches were also done from time to time in the course of malarial investigations, as the presence of A. minimus and A. jeyporiensis in a locality especially in the rainy season, can often be determined more readily by searches made in the right type of buildings then by larval surveys, provided that these buildings are within flying distance of breeding places. Results of catches are given in accounts of these investigations.

Dissections of Mosquitoes for filaria.

49. Mosquitoes obtained from Shing Mun Camp, Little Hong Kong, and elsewhere were examined for larval filaria. The results are shown in Table VIII.

Precipitin Reactions.

- 50. A full report upon the material sent to Dr. Toumanoff Chef du Laboratoire d'Entomologie de l'Institut Pasteur de Saigon during the years 1934, 1935, has been furnished by him in his publication "L'Anophelisme en Extreme Orient". The results extracted are given in Table IV and are of the utmost importance and interest.
- 51. As Dr. Toumanoff went to Europe on leave in 1935, no further material was forwarded to him. During the present year the Government Bacteriologist was good enough to arrange for the preparation and supply of certain anti sera for the use of the Bureau, tests were afterwards carried out under the direction of the Acting Malariologist on mosquitoes caught in various places. The results are given in Table V.
- 52. The mosquitoes obtained from Pokfulam were taken at night in the Dairy Farm cattle byres, those from the pigsties at Little Hong Kong and Kowloon Tong were also obtained at night. All other mosquitoes were taken in day catches.
- 53. At Shing Mun, with the exception of a few dogs whose European owners resided in screened houses and about a dozen goats kept by the Indian police, there were no animals within half a mile of the Camp; attempts had been made to render the coolie lines mosquito proof. From the precipitin results obtained it would seem that in the absence or scarcity of suitable animals, A. maculatus, A. hyrcanus, A. minimus, A. jeyporiensis feed upon man.
- 54. The great majority of Anophelines captured at Wo Li Hop and Sheung Kwai Chung were taken in dark ill-ventilated village cow byres and pigsties, those at Shek O from cow byres only, as none could be obtained from the village houses or pigsties.

- 55. The material examined by Dr. Toumanoff from Little Hong Kong was obtained from the market gardeners' huts, there are no cattle in the neighbourhood, but many pigs.
- 56. No Anophelines were captured at the Sun Wai dog kennels.
- 57. From the evidence submitted in both Tables, it would seem that A. hyrcanus and A. maculatus have a marked partiality for the blood of cattle and pigs, but that this partiality is not so marked as regards A. minimus or A. jeyporiensis.
- 58. A factor requiring to be taken into consideration in any given area is the respective number of human beings and animals, and its alteration may be one of the reasons why outbreaks of malaria are so liable to occur in large bodies of labourers when their camp is located in the vicinity of a village which had hitherto only suffered slightly from malaria owing to the amount of protection afforded by its animals.
- 59. From results obtained at Little Hong Kong, it would seem that pigs whilst attracting A. hyrcanus and A. maculatus, do not appear to have the same attraction for A. minimus. In 1931 a high spleen rate 82.25% out of 62 children examined was found at Little Hong Kong where there are no cattle but many pigs; at new Shek O in 1932 where there are cattle as well as pigs no enlarged spleens were found in 25 children tested. It may be that cattle are a better protection against A. minimus then pigs. Further investigation on these lines may prove interesting.

IV .- Investigations as to the Prevalence of Malaria

IN CERTAIN AREAS.

Cheung Chau Island.

- 60. A request was received from the A.D.M.S. China Command, for information regarding the incidence of malaria during the summer months.
- 61. The Inland was visited on the 7th and 8th May by the Assistant to Malariologist and four Inspectors. Larval collections were made from ditches and sumps in the ravines all of which are cultivated, 95 A. maculatus, 34 A. hyrcanus were obtained. No Anopheline mosquitoes were captured from the habitations searched.
- 62. The Assistant to Malariologist examined 544 children, and found only 2 with enlarged spleens. The Cheung Chau police station has a low malarial incidence in comparison with others.
- 63. Arrangements have been made for further investigations in the coming year.

Chung Hue and Tung Lung Islands.

- 64. A request for information regarding the incidence of malaria in the neighbourhood of search light stations on the above, was received from the Military authorities.
- 65. Investigations were made in September, larvae of A. hyrcanus, A. maculatus, A minimus, A. jeyporiensis were found in rice fields, ditches, and streams near the station on Chung Hue. No Anophelines were caught in the adjacent village but the inhabitants informed the Inspectors that malaria was not uncommon.
 - 66. No evidence of malaria was found on Tung Lung Island.

Tai Po Rural Orphanage.

- 67. Complaints of the occurrence of malaria were received from this Institution in September.
- 68. The Orphanage is sited on a spur overlooking the Kowloon Canton Railway and is close to the Tai Po Road. On either side of the spur is a ravine with a rocky bedded stream. The ravine valleys contained rice and other cultivations as well as swampy areas.
- 69. A larval survey was made of the ground within half a mile radius of the Orphanage; 27 A. minimus, 123 A. jeyporiensis, 8 A. maculatus, 181 A. hyrcanus, and 2 A. karwari were collected from the 8th to 11th September. There had been heavy rain previously.
- 70. During the same period morning catches were made in the matshed housing the labourers engaged on building operations, 110 Anophelines were captured, 4 of which were A. maculatus, 39 A. jeyporiensis, 63 A. minimus, 4 A. hyrcanus. All were dissected, 5 A. minimus and 1 A. jeyporiensis were found infected.
- 71. The labourers complained of malaria. Blood smears taken from two contained no parasites. The blood of a boy residing in a neighbouring village was found infected with subtertian malaria. Mosquito proofing of the building was recommended.

Green Island (situated near the coast of Hong Kong).

72. The occurrence of five cases of malaria during October and November was reported by the Hon. The Harbour Master Hong Kong. Nine blood smears were taken from Chinese living on the Island, one from a man who had resided there for three years, contained sub-tertian parasites. Larvae of A. minimus and A. maculatus were found in rock pools near the shore. Recommendations were made for dealing with these pools and for treatment of the infected person.

Li Ma Hang Lead Mine (close to Frontier.)

- 73. A request was received from Dr. H. Talbot for a malaria survey around the residential area on the mine. Larval surveys were made from the 17th to the 20th November. As the rice fields and most of the ditches were dry, no larvae were found in them. In one stream 12 A. maculatus were found, in another 95 A. maculatus, 31 A. minimus, 26 A. hyrcanus.
- 74. No mosquitoes were caught in the quarters of the labourers engaged on the site, but 29 A. minimus, 5 A. jeyporiensis, 2 A. hyrcanus were collected in adjacent villages. All were dissected, two of the A. minimus were found infected.
- 75. Owing to the large amount of hill paddy near the Camp, a certain amount of which lies within Chinese Territory, anti-larval measures would be difficult to carry out. It is understood that the coolies will be housed in brick built mosquito proofed structures.

Fort Street. (North Point. H.K.)

76. The occurrence of a case of malaria at No. 26 Fort Street was notified in December. From enquiries made it was ascertained that the disease was contracted at the above address. The diagnosis had been made by blood examination. Breeding places of A. jeyporiensis and of A. minimus had been found previously in this neighbourhood.

Mount Cameron (The Peak).

- 77. An outbreak of malaria occurred towards the end of the year. On the 3rd and 14th December blood smears were taken from fifty three residents mostly house servants. Three smears contained parasites. One servant in whose blood no parasites were found, had been previously treated in Hospital for malaria, another servant whose blood was not taken, had also been treated.
- 78. By the 17th December six Europeans were said to have contracted the disease.
- 79. Larval surveys were made in adjoining streams, from the 11th December onwards, many larvae of A. minimus were found in one which runs from the Aqueduct east of Bennett's Hill to Island Road.
- 80. Arrangements were made for the clearing and oiling of streams harbouring A. minimus.

Aberdeen Industrial School.

S1. Complaints were received on the 10th December of the occurrence of malaria cases from November onwards.

- 82. On the 11th December a visit was paid to the School. As it was ascertained that the 8 cases had been mainly diagnosed without blood examinations, arrangements were made for the instruction of a member of the Teaching staff in the taking of blood films.
- 83. Thick blood films were taken by the Bureau staff from 237 boys resident at the School, malaria parasites were found in 9.
- 84. From 19th to 31st December, 18 blood films taken by a teacher, were sent to the Bureau for examination, 8 contained parasites.
- 85. In the course of larval surveys done in the locality, a swamp half a mile from the School was found to harbour larvae of A. jeyporiensis in fair numbers. Several searches done on previous occasions in this swamp had yielded little or no results. Arrangements were made for ditching and oiling the swamp.
 - V .- SUPERVISION OF MEASURES DIRECTED AGAINST MALARIA.

Shing Mun Camp (Jubilee Dam).

- 86. The measures constitute a continuation of those commenced in 1933.
- 87. The coolies engaged on the construction of the Dam were housed in lines mostly of permanent construction, situated about 500 feet above sea level in hilly country of granite formation.
- 88. The average monthly labour for the year was 1620. It varied between 2064 in January and 894 in October. The majority were Cantonese, but there was a considerable number of coolies from Shanghai and a few Tamil artificers, natives of Southern India.
- 89. In addition there was a small police force housed in mosquito proofed quarters at the Camp, and several European employees living in the neighbourhood in screened bungalows.
- 90. The nearest village is Wo Li Hop which is half a mile distant as the crow flies.
- 91. A Resident Chinese Medical Officer was in charge of the anti malarial operations, under the supervision of the Malariologist. His staff for this purpose consisted of two Inspectors and ten coolies.
- 92. Streams and ditches were kept in order and oiled regularly. Blood films were taken, stained, examined, and reported upon by the Medical Officer and Inspectors, when time permitted larval surveys were carried out by them. Areas under permanent drainage were inspected regularly to ensure that no defects arose.

- 93. The Hospital for the sick and injured was also under the charge of the Resident Medical Officer, two dressers being provided to assist him. Treatment was supervised by the M. O. i/c New Territories.
- 394. On reference to the map it will be seen that the Shing Mun River rises east of Tai Mo Shan mountain, flows south to Pineapple Pass and thence to Jubilee Dam. There are no human habitations in its upper reaches, the villagers having migrated, flooded fallow rice fields were formerly a feature of the stream and its tributaries from Pineapple Pass upwards.
- 95. A wide stream marked A flows south from Tai Mo Shan, it has numerous branches some of which take origin near the Camp. These water courses are rocky redded, and strewn with granite boulders of all sizes and shapes, sometimes they flow through deep gorges, in places the grades are steep, in others flat. In many of the valleys plots for rice and other cultivations arranged in terraces, have been constructed by building a series of stone walls across the valleys in order to retain the soil, the valley streams being usually diverted to one side and used for irrigation purposes, in other instances the water for irrigation is derived from seepages which drains into ditches. There were formerly some flooded fallow rice fields along streams A and A5 north of the Access Road.
- 96. A stream marked B runs alongside the Access Road to the village of Tsun Wan, at its head are abandoned rice fields which were formerly undrained. The remainder of the valley is in rice and other cultivation.
- 97. At the end of 1935 anti malarial operations were extended beyond the half mile circle up to the right bank of A2 as far as the Castle Peak Road and from thence along both banks of A4 to the village of Sheung Kwai Chung, irrigation ditches were cleared of vegetation and the flow improved by better grading in order to make them less suitable for A. minimus larvae, rice fields were drained as soon as the second crop was cut, so as to destroy any larvae of A. jeyporiensis present.

98. The results of 347 morning collections and of the dissections were as follows:—

Species.	Number caught.	Number dissected.	Percentage infected.
A. minimus	1,273	1,159	3.28
A. jeyporiensis	2,774	2,646	2.34
A. hyrcanus	4,590	4,012	0.40
A. maculatus	856	819	0.85
A. splendidus	37	35	-
A. karwari	25	24	_

- 99. The average monthly population for the year was 1620. The malaria case rate per 1,000 of the population was 314.
- 100. During the present year there was no extension of the area under anti malarial treatment, oiling and upkeep of the streams and ditches dealt with in previous years were continued.
- 101. As in former years routine surveys were done in the swampy area at the head of A2, Anopheline larvae were met with in small numbers only. Surveys were also repeated in the tributaries, of the Shing Mun beyond Pineapple Pass and in the ditches of the drained fallow fields, larvae of A. maculatus were collected, but not in great numbers.
- 102. About the middle of the year rice planting took place in some of the fields north of the Access Road between A5 and the head of B. These fields had formerly been allowed to go out of cultivation and had been drained.
- 103. Owing to the waters of the Shing Mun being impounded at Jubilee and Pineapple Pass Dams, low lying areas formerly drained were covered with water, and frequent use was made of the boat purchased by the Malaria Bureau in 1935.
- 104. The results of 352 morning catches in the coolie lines are indicated in Table IX, the results of the dissections in Table X. The numbers of A. minimus and A. jeporiensis taken were less than those of former years, but the numbers of A maculatus and A. hyrcanus much larger. The majority of the A. minimus, A. jeyporiensis, A. hyrcanus were caught in the last quarter of the year. The infection rates of A. maculatus and A. hyrcanus were as usual low in comparison with those of A. minimus and A. jeyporiensis.
- 105. Morning catches were also done in goat pens, the goats being the property of the Indian police. 258 Anophelines were captured, 104 were A. maculatus, 108 A. hyrcanus, 41 A. jeyporiensis, 2 A. minimus, 3 A. fluviatilis. No infections were found in 227 dissected. Precipitin tests were done on a few, the results are given in Table V.
- 106. Table XI gives the estimated population of the Labour Force month by month, its distribution according to race the number of cases treated due to malaria and to all causes, also the results of examination of blood films for malaria. The figures have been supplied by the Resident Medical Officer. The malaria case rate was low in March and April, high in October and November—when the A. minimus and A. jeyporiensis catches were high.
- 107. Table XII gives the monthly malaria case rates for the years 1933, 1934, 1935, 1936, also the annual malaria case rates. In 1933 the malaria at Shing Mun was epidemic, in the following

years owing to the anti malaria work done then and since, it has been reduced to endemic proportions. In 1933 the malaria case rate per 1,000 population was 1,842, in 1936 it was 314.

- 108. The anti malarial and hospital staff were housed in mosquito proofed quarters, none of them contracted malaria.
- 109. From 25 to 14 European employees resided in mosquito proofed quarters, no cases of malaria were reported.
- 110. A police force, 8 in number resided in mosquito proofed quarters; 1 hospital admission for malaria was recorded.
- 111. Very few mosquitoes were ever captured in numerous searches done in the screened buildings occupied by 17 Tamil artificers. As the line was not over-crowded, doors and windows could be kept shut during the hot weather without discomfort.
- 112. The Malariologist paid 2 visits during the year, the Acting Malariologist 48, the Assistant to malariologist 4, three Inspectors made 5, 5, 2 visits. These were made for the purpose of inspection of anti malaria works and of checking the Anopheline catches.

Aerodrome Site, Patheung Valley.

- 113. This valley is situated near Au Tau Police Station 27th mile Castle Peak Road, except on the west it is surrounded on all sides by high hills, the valley is flat and is used mainly for rice cultivation. The villages are mostly situated near the hills. The Aerodrome site is close to and south of the village of Shek Kong. A report upon the surroundings was furnished in 1935.
- 114. Work was commenced on the approach road to the site on 12th May and on the landing ground 14th June. The road coolies were at first housed in matsheds near the villages of Kam Tin and Shek Kong, the Kam Tin matsheds were destroyed in the August typhoon, later on the Shek Kong matsheds were replaced by permanent lines. The works and building coolies engaged on levelling the landing ground, were at first housed in the villages of Shek Kong and Kam Tin, afterwards some were housed in permanent lines.
- 115. A coolie force was employed in the cutting of a nullah for the diversion of a stream which flowed through the landing ground, some of these were housed in permanent lines from the beginning, others in villages. The nullah work was commenced on 13th June.
- 116. Attempts were made to render all permanent lines mosquito proofed. The usual results were attained namely conversion of the lines into mosquito traps.

117. The average monthly population of the lines were given as follows:—

Road contractor coolie lines	110
Works and building coolie lines	70
Nullah contractor coolie lines	100

- 118. On the 9th July the Acting Malariologist was informed by a foreman at Patheung that there had been a number of cases of malaria amongst his workers. On the 24th July the Acting Malariologist reported the occurrence of 90 cases of malaria in 10 days, and the catching of 64 A. minimus in the Shek Kong matsheds.
- 119. Arrangements were made for the appointment of a Resident Dresser for the treatment of the sick, and for the cooperation of the M. O. i/c New Territories with the same object. An Anti Malaria Inspector was appointed and a gang of 12 coolies engaged for anti malaria work. The Inspector assumed duty on 19th August.
- 120. From 4th August to 9th December, the Assistant to Malariologist visited daily, (holidays excepted) and superintended the anti-malarial operations. Streams and ditches were cleared of obstacles and oiled, special attention being paid to places where larvae of A. minimus had been found, rice fields were drained after cutting of the second crop.
- 121. There is no proper control over the area in which antimalarial operations are required and until this has been effected, good results cannot be expected.
- 122. During the period July to December, 734 blood films taken from the labour force were sent in by the M. O. i/c Un Long Dispensary to the Bureau for examination, 433 contained parasites.
- 123. Several morning catches were done in the coolie lines, and in Shek Kong village houses inhabited by coolies. In the nullah contractor's lines 490 A. minimus, 107 A. jeyporiensis, 1754 A. hyrcanus were caught in 63 morning searches.
- 124. In 24 mornings, in the matsheds near Shek Kong, only 4 A. minimus, 1 A. jeyporiensis were taken. In the Shek Kong houses, 69 A. minimus were taken in 24 mornings.
- 125. During the year 39 larval surveys were made in the streams and ditches, 362 A. minimus, 1 A. jeyporiensis, 81 A. maculatus, 1,258 A. hyrcanus were collected. A. minimus larvae were also met with in scanty numbers (considering the time spent in the surveys) in 1935.

- 126. Considering the small numbers of A. minimus larvae and adults which were obtained in the collections and catches, it is difficult to account for the numerous cases of malaria reported.
- 127. Table XIII gives the number of Anophelines caught and number dissected at the Bureau.

Kai Tak Aerodrome Officers' Mess and Men's Quarters.

128. A survey within half a mile radius of the Officers' Mess was done in January. In September work was commenced, clearing was done in the streams, ditching in the swamps, and oiling in the streams and ditches. The labour and material were supplied by the Air Ministry, the work being supervised by an Anti Malaria Inspector from the Bureau. Owing to the proximity of a large market garden area, there was a marked mosquito pest due to C. fatigans. Sumps which were ascertained to breed these mosquitoes were oiled, and other breeding places dealt with as far as possible.

Shek O.

- 129. The anti malaria work commenced at this seaside resort in 1935, was continued. A well for the water supply of the village has been provided, formerly the water was obtained from an A. minimus breeding stream, oiling of which was objected to by the villagers. This lack of oiling may account for a minor outbreak of malaria during the year.
- 130. The swampy ravines around the Shek O Club have been ditched since 1935, but unfortunately the main drainage is still obstructed by a sand bar. The building of a groyne or drainage by a culvert with tidal flap, or the diversion of the main channel through rock with a wall to keep out the sand appears to be the remedy.
- 131. Anti mosquito work was carried out in the locality as well as anti malaria work.

Tytam Tuk Pumping Station.

132. Owing to a minor epidemic of malaria in 1935, antimalaria work was started. Streams were cleared and oiled, the labour and material were supplied by the P. W. D. These operations were continued during the present year. No complaints were received.

Repulse Bay.

133. A beginning was made of anti malaria and anti mosquito work in November. The coolies and oil were supplied by the Chairman Urban Council. Clearing and oiling were done in the streams. Rock pools in which A. (F) togoi were breeding, were dealt with.

VI.—Local Surveys for the Abatement of Mosquito Nuisances and the Supervision of Anti Mosquito Measures affecting Mount Kellett,

Pokfulam, etc.

- 134. Anophelines have been seldom found to cause a mosquito nuisance in this Colony, the common culprits being the Culicines—C. fatigans, A. (S) albopictus, and A. (F) togoi.
- 135. In areas where there is a likelihood of malaria being contracted, the Culicine pest has its uses, as it compels residents, especially servants, to make use of mosquito nets and thus the chances of contracting malaria are considerably lessened.
- 136. C. fatigans and A. (S) albopictus often breed in receptacles containing water in or around houses, occupied or unoccupied. Chinese villages and settlements of market gardeners swarm with them, unless there is a trained and efficiently supervised staff to deal with the situation. C. fatigans often breeds in septic tanks, and in stream pools and wet cultivation when the water is polluted. A. (F) togoi favours pools by the seashore.
- 137. During the year, complaints of mosquito nuisances were received from the R. A. F. Kai Tak, Diocesan Boys' School, Fanling Golf Club, Tai How Wan (Telegraph) Bay, Government House, Stanley Gaol, Kowloon Hospital, Torpedo Station Laichikok, Gascoigne Road, 25 The Peak, and Gap Road.
- 138. At Telegraph Bay and Laichikok the mosquitoes causing the nuisance were A. (F) togoi, at 25 The Peak A. (S) albopictus, in the other instances C. fatigans. Recommendations were made for dealing with the breeding places.
- 139. Anti mosquito work was carried out at Mount Kellett and Pokfulam, also at various other places already mentioned in connection with anti malarial operations.

Mount Kellett (Peak).

- 140. On the western side of the Mount Kellett ridge is a stream which flows into Mount Kellett Bay. Its lower portion is polluted with drainage from cattle byres.
- 141. C. fatigans larvae were formerly found in enormous numbers in the polluted pools but none were found above the pollution. Since 1934 oiling has been regularly carried out in the stream after removal of stones and boulders.
- 142. On the eastern side of Mount Kellett ridge is a stream flowing into Aberdeen Bay and polluted by drainage from pigsties, cesspits, etc. *C. fatigans* larvae formerly abounded in

the pools. After the first mentioned stream had been dealt with, C. fatigans could still be caught on the Mount Kellett area of the Peak in small numbers, when the second stream was dealt with, the nuisance ceased.

Pokfulam.

143. At the Dairy Farm Pokfulam, a cesspit discharges into the stream which receives the overflow from Pokfulam Reservoir and the drainage from Pokfulam village. Formerly C. fatigans bred plentifully in the polluted pools and in wet cultivation irrigated by the stream. Since 1934 the stream has been oiled and the wet cultivation dried out one day a week. The market gardeners gave every assistance. The results have been satisfactory.

VII.—THE TEACHING OF MOSQUITOLOGY AND INSTRUCTION OF INSPECTORS IN THIS WORK.

- 144. The instruction of the Inspectors was continued throughout the year.
- 145. They assisted in the supervision of measures undertaken for the prevention of malaria and of mosquito nuisances, and carried out investigations relative to these matters. They performed dissections and precipitin tests, identified mosquitoes and their larvae, and kept records of such undertakings.
- 146. Demonstrations in collecting mosquito larvae and adults were given to classes of R.A.M.C. men, also instruction in the elements of malaria prevention. Classes were held for students of the Hong Kong University and demonstrations of anti-malaria field work given.
- 147. A Key to the Identification of the Anopheline mosquitoes of the Colony has been prepared.
- 148. Two papers were written for the Chinese Medical Journal, one dealing with the habits and pathogenicity of Anophelines, the other with the occurrence of filarial infection in mosquito and man.

VIII.—Co-operation.

- 149. Visits were paid to Wong Ma Kok Stanley Penisula with Capt. Burke R.A.M.C., to Kai Tak with the Drainage Engineer, P.W.D., to Stanley, Repulse Bay, Aberdeen, and Telegraph Bay with the Assistant M.O.H. and District Sanitary Inspector.
- 150. Castle Peak was visited to advise on a question of drainage and an inspection made of the Volunteer Camp Fanling.

- 151. Inspections were made of the Mount Parker valley drainage, and of drainage works at Kowloon Tong.
- 152. Capt. Burke R.A.M.C., who had been engaged upon detailed surveys of certain sites and had been working at the Bureau since February 1935, completed his investigations at the end of July. The resources of the Laboratory and the knowledge and experience of the staff were placed at his disposal during the above period.
- 153. The results of his investigations have been of great value in checking and confirming those obtained by the Bureau staff. He has furnished a most interesting report upon his findings.

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Table I.

Police Force & Malarial Admissions.

Station.	Average Strength.	Malarial Admissions
Central	724	22
Upper Levels	78	2
Gough Hill		4
Sai Ying Pun		11
Pokfulam		
Aberdeen	20	
Wanchai	103	8
Bay View	21	1
Shing Mun sub station	3	-
Shing Mun sub-station	18	1
Shaukiwan	11	5
Stanley	1	9
Tai Tam Tuk	20	3
Quarry Bay	200	5
Yaumati		
Shamshuipo	77	18
Mongkok		4
Kowloon Water Works	1	2
Hunghom	32	The IT
Kowloon City	59	1
Water Police	271	5
Tsim Sha Tsui	50	2
Tsun Wan		13
Cheung Chau	12	
Гаі О	15	6
Green Island	1	-
Police Training School	72	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Au Tau	21	9
Castle Peak	10	7
Lok Ma Chau	18	6
Ping Shan	15	4
Sha Tin	10	3
Sai Kung	10	8
Sha Tau Kok	15	13
Sheung Shui	39	23
Гаі Ро	21	5
Га Ku Ling	4	2
Lin Ma Hang	2	2
Totals	2,153	195

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Table I,—(Continued).

SUMMARY OF ADMISSIONS.

Nationality.	Strength.	Malarial Admissions.	Malarial Admissions per 1,000.
Europeans	229	13	56.76
Indians	688	166	241.28
Chinese	1,236	16	12.94
Total	2,153	195	90.57

MALARIA ADMISSIONS.

During		Diagnosed microscopically.	Diagnosed clinically.
1st Quarter	6		
2nd ,,	16	150	45
3rd ,,	74		
4th ,,	99	ME 7 4 4 4	
Totals	195	150	45

Table II.

ANOPHELINE LARVAE EXAMINED MICROSCOPICALLY.

Totals.	2,088	1,628	138	580	809	460	519	57	347	2,144	1,698	1,599	11,866
A. splendidus.	7	1	ſ	1	1	1	Γ	1	1	1	1	1	7
A. aitkenii var. ben- galiensis.	1	1	1	1	1	1	9	1	-	1	1	1	9.
A. karwari.	26	1	1	1	1	1	1	1	1	12	10	1	48
A. jeypori- ensis var. candidi- ensis.	366	. 165	1	1	1	1	1	1	7	98	54	155	784
A. hyrca- nus var. sinensis	467	1,296	1	200	259	106	117	18	121	598	689	99	3,888
A. minimus.	424	80	1	193	1	6	22	1	62	799	322	310	2,150
A. maculatus.	798	159	136	186	349	345	374	39	157	669	673	1,068	4,983
Month.	January	February	March	April	May	June	July	August	September	October	November	December	Totals

Table III.

ADULT MOSQUITOES HATCHED OUT FROM LARGE LARVAE AND PUPAE.

Totals.	359	150	72	171	153	111	485	30	1	37	295	133	1,996
A. fluviatilis.	26	1	1	1	1	1	1	1	1	1	1		27
A. splendidus.	1	1	1	1	1	1	1	1	1	1	1	1	1
A. aitkenii.	1	1	1	1	1	1	1	1	1	1	1	1	1
A. karwari.	30	1	1	1	1	1	1	1	1	1	9	3	18
A. jey- poriensis.	25	24	24	1	1	1	1	1	1	60	28	19	123
A. hyrcanus.	52	28	1	39	15	61	69	6	1	භ	48	7	362
A. minimus.	36	7	1	99	4	1	11	1	1	17	20	32	215
A. maculatus.	212	29	46	92	184	20	405	20	1	14	163	72	1,251
Month.	January	February	March	April	May	June	July	August	September	October	November	December	Totals

Table IV.

RESULTS OF PRECIPITIN TESTS MADE BY DR. TOUMANOFF OF THE PASTEUR INSTITUTE, SAIGON, ON BLOODS TAKEN FROM ANOPHELINES CAUGHT AT VARIOUS PLACES.

	1.0.5	NOPHE	LINES CA		r Vari	ous P	LACES		
Species.	No. exa- mined.	No. found positive.	77						
		N a	Human	Buffalo	Pig	Dog	Horse	Mixed	Observations
		SI	HING M	IUN (C	ollie I	ines).			
A. hyreanus	137	117	113		-	3		1 (1)	
A. jeyporiensis	76	60	58		-	1	-	.1 (1)	1. with anti- goat serum.
A. maculatus	42	41	39	7	-	-	-	-	2 with anti- goat serum.
A. maculi- palpis	2	1	1	=	-	-	-	-	
A. minimus	21	10	10		-	-	-	- 4	
Total	278	229	921	-	-	4	-	2	3. reactions with anti-
			WO LI	HOP.				139	goat serum.
A. hyrcanus var. sinensis	7	7	-	1	8	1		2 (1)	
A. jeyporiensis	93	87	43	43	-	-	-	1 (1)	
A. reinimus	34	31	3	28	-		-	-	18
A. maculatus	130	127	2	117	5	-	1	2 (1)	18
Total	264	252	48	189	8	1	1	5	
			LITTLI	E HON	G KO	NG.			
A. hyrcanus var. sinensis	20	20	1	-	19		-	-	
A. maculatus	10	10	-	-	10	-	-	-	
A. jeyporiensis	1	1	1	-			-	-	
A. minimus	232	182	141	1-1	33	4	-	4 (4)	
Total	263	218	148		62	4	-	4	
				SHEK	0.				
A. hyreanus		230		227	3			-	
A. jeyporiensis		42	1	1	-			-	
A. maculatus		46		45	1			1 (1)	
Total	-	320	1	314	4			1	
						T. T. A. N			
A. hyrcanus	1	DA 1	IRY F.	ARM, J	OKF	ULA	1.		
A. maculatus		617		617					
Total	618	618	-	618	-		-	-	
		8	SHUNG	KWAI	CHI	JNG.		-	
A. hyrcanus	1	1		1		-	-		
A. jeyporiensis	29	28		28		-	-	-	
A. maculatus	28	28	-	28	-	-	-	-	
A. minimus	-	72	12	58	1	-	-	1 (1)	
Total	136	129	12	115	1		-	1	
			FAR		VLOO	N CI	TY.		
A. hyrcanus		4	+	4		-	-	-	
A. maculatus	- 8	.8		8		-		7	
palpis	1	1		1			-	-	
A. minimus		5	-	5	-	-	-	-	
Total	18	18	-	18		_	-	-	

Note. The figures in brackets in the "mixed" column show the mixed reactions containing human blood.

Table V.

RESULTS OF PRECIPITIN TESTS ON BLOOD TAKEN FROM MOSQUITOES CAUGHT AT VARIOUS PLACES.

Species.	No.	with tive ions.		Reactio	ns Po	sitive to	serum of
Species.	nined.	No. with positive reactions.	Man.	Dog.	Pig.	Cattle.	Mixed.
GOAT PE	NS,	SHIN	G MU	IN CA	MP ((Mornin	g Catches).
A. minimus	1	-	-	-	-	-	-
A. jeyporiensis	2	-	-	-	-	-	- 1
A. maculatus	7	-	-	-	-	-	
Totals	10	_	-	-	_	-	
cow Housi	ES, D	AIRY	FAR	м Ро	KFU.	LAM (1	Night Catches).
A. minimus	3	1	-	- 1		1	
A. jeyporiensis	4	1	-	-	-	1	- 1
A. maculatus	99	95	-	-		94	1(Dog & Cattle)
A. hyrcanus	7	7	-	-	-	7	- 12
A. tessellatus.	8	8	-			3	- 3
Totals	116	107	-	-	-	106	1(Dog & Cattle)
PIGSTIES, V	VONG	CHO	КН	ANG	VILL	AGE (N	Night Catches).
A. minimus	4	2	-	- 1	2	-	-
A. jeyporiensis	5	2	-	-	2	-	-
A. maculatus	14	18	-	-	13	-	-
A. hyrcanus	46	45	-	-	44	-	1 (Dog & Pig)
A. tessellatus	9	8	-	-	8	_	-
Totals	78	70	-	-	69	-	1 (Dog & Pig)
PIGST	TES,	KOW	LOON	V TON	NG. (Night C	Catches).
A. minimus	1	1	-	-	1	-	_
A. maculatus	2	2	-	-	2	-	
Totals	3	8	-	-	3	-	-
DOG	KEN	NELS	s, su	N W	AI, (I	Day Cat	ches).
C. fatigans	21	19		17	-	-	2 (Man & Dog)
C. bitaeni- orhynchus	6	6	-	6	-	_	-
C. tritaeni- orhynchus	9	7		7	_		_
Totals	36	32	-	80	-	-	2 (Man & Dog)

Table VI.

RESULTS OF MORNING CATCHES OF ANOPHELINES AT WONG CHOK HANG VILLAGE & SURROUNDINGS

(LITTLE HONG KONG).

	A. fluviatilis	17	78	35	18	1	1	1	1	1	1	9	11	162
	A. tessellatus	1	1	1	1	5	1	1	1	1	1	1	1	ō
ES.	A. hyrcanus	61	4	1	60	23	1	1	1	1	2	I	1	15
SPECIES	A. maculatus	1	1	1	1	1	1	1	1	1	1	1	-	1
	A. jeyporiensis	10	00	6	-	CI	60	1	1	4	29	88	33	186
	A. minimus	48	21	13	165	553	889.	459	177	196	568	310	166	8,818
No. of mornings	when catching took place.	25	25	36	233	26	26	27	25	26	27	25	25	306
Month during	which catching took place.	January	February	March	April	May	June	July	August	September	October	November	December	Totals

Table VII.

Record of Dissections for Malarial Infection of Anophielines caught at Wong Chok Hang Village and Vicinity (Little Hong Kong).

Month.	Species	No. of dissec- tion.	No. with infected glands only.	No. with infected midgut only.	No. with infected glands & midgut.	Percentage of infection.
	A minimum	47				
	A. minimus A. jeyporiensis.	5	_			_
120000000000000000000000000000000000000	A. maculatus	-	-			-
January	A. hyrcanus	2	-	-		-
	A. tesselatus		-	-	200	-
	A. fluviatilis	17	-	-	-	-
1	A. minimus	18		_	-	-
	A. jeyporiensis.	8	-		-	_
February	A. maculatus			-	-	73
	A. hyreanus	4		-		
	A. tesselatus A. fluviatilis	76		1		1.32
				-		
1	A. minimus	12		-	-	-
19 19 1	A. jeyporiensis	9		-	-	
March	A. maculatus		-		-	
	A. tesselatus	-	-		-	
1	A. fluviatilis	32		-		-
		4.00				5.07
1	A. minimus	159	_1	6	_ 1	5.03
	A. jeyporiensis A. maculatus			-		
	A. hyrcanus	2	-	-	-	-
	A. tesselatus		-	-	-	
(A. fluviatilis	18	1	-		5.56
	A. minimus	535	3	5	12.14	1.50
	A. jeyporiensis.	1	-	-	_	_
May	A. maculatus	-	-	-	-	-
34.0	A. hyrcanus	2	-	-	-	-
	A. fluviatilis	5				-
	AA. MUVINGILIS					
1	A. minimus	605	9	5	6	3.30
	A. jeyporiensis.	3	-	-	-	
June {	A. maculatus	- 1	_		_	_
	A. hyrcanus A. tesselatus			_		
-	A. fluviatilis	2000	_	-	1	-
				400		
-	A. minimus	430	10	17	2	6.75
2000	A. jeyporiensis					
July {	A. maculatus A. hyrcanus	1	-	_	-	_
	A. tesselatus	-	-	-		-
	A. fluviatilis	-	-	-	-	
		171	3	12	3	10.53
	A. minimus A. jeyporiensis		_			
August	A. maculatus		-	-	-	-
August	A. hyrcanus		-	-	-	-
	A. tesselatus			=		_
	A. fluviatilis			10.77	_	
	A. minimus	187	6	13	1	10.69
	A. jeyporiensis	4	-		-	
September -	A. maculatus				-	-
- 10- 10-	A. hyrcanus A. tesselatus		-	-	-	-
	A. fluviatilis		-	-	-	-
		539	12	29	7	8.91
	A. minimus A. jeyporiensis	0.00	1	2	-	10.71
Outshare	A. maculatus	1	-		8000	-
October	A. hyrcanus	1	-	-	-	_
	A. tesselatus	-	=	=	1	_
	A. fluviatilis .					
	A. minimus	305	8	19	4	10.17
	A. jeyporiensis.	91	2	7	1	11.00
November	A. maculatus	-	-			
	A. hyrcanus A. tesselatus	_			-	
	A. fluviatilis .		name .	_	-	-
		***		11		7.41
	A. minimus	162		1	_1	3.03
	A. jeyporiensis. A. maculatus		-		-	_
December.	A. hyreanus		-			-
	A. tesselatus	-	-	-		_
	A. fluviatilis .	. 11	-	1		
	A. minimus		52	117	25	6.12
	A. jeyporiensis	182	3	10	_ 1	7.69
Total	A. maculatus			-	100	_
	A. hyrcanus A. tesselatus			-	_	-
	A. fluviatilis .	400	1	1	-	1.25
-		-				

Table VIII.

RESULTS OF DISSECTIONS FOR LARVAL FILARIAE OF MOSQUITOES CAUGHT AT VARIOUS PLACES.

Locality.	Species.	No. dissected.	No. infected.	Percentage of infection.
Wong Chok Hang Village (Little Hong Kong)	A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. tessellatus A. fluviatilis C. fatigans	182 1 13 5	35 	1.10 - - - - 0.32
Shing Mun Camp	A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. fluviatilis A. splendidus A. karwari C. fatigans	2,094 1,472 7,164 34 33	1 4 2 5 — — —	0.16 0.19 0.14 0.07
Patheung Area	A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. tessellatus A. fluviatilis A. splendidus A. karwari	53 11 547 3 17		
Rai Tak Pokfulam (Queen Mary Hospital site).	C. fatigans	62 72	-	-

Table IX.

RESULTS OF MORNING CATCHES, SHING MUN CAMP.

	A. karwari.	1	1	1	1	1	1	00	cı	1	9	ଦୀ	1	16
	A. splendidus.	1	1	1	61	7	1	1	61	4	6	60	9	38
	A. fluviatilis.	9	12	ũ	1	1	1	1	1	1	1	9	7	36
Species.	A. hyr-canus.	148	159	199	980	381	156	78	19	187	3,163	1,636	1,827	8,293
	A. maculatus.	19	16	7	99	124	. 164	170	62	151	357	289	141	1,533
	A. jey- poriensis.	29	27	43	16	09	49	92	29	98	1,101	813	202	2,589
	A. minimus.	222	12	6	21	14	22	6	1	32	253	198	112	704
No. of mornings	when cat- ching took place.	29	29	31	27	29	29	30	30	29	30	30	29	352
Month during	which catching took place.	January	February	March	April	May	June	July	August	September	October	November	December	Totals

Table X.

RESULTS OF DISSECTIONS FOR MALARIAL INFECTION OF ANOPHELINES CAUGHT AT SHING MUN CAMP.

	Anophelines	CAUGHT	AT SHIN	G MUN	CAMP.	
Month.	Species.	No. of dissec- tion.	No. with infected glands only.	No. with infected midgut only.	No. with infected glands & midgut.	Percen- tage of infection.
January	A. mininus A. jeyporiensis A. maculatus A. hyreanus A. fluviatilis A. splendidus A. karwari	17 26 17 138 5 —	_ _ _ _ _		11111111	0.72 —
February	A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. fluviatilis A. splendidus A. karwari	-	HILLI	1111111	нини	HHHH
	A. minimus A. joyporiensis A. maculatus A. hyrcanus A. fluviatilis A. splendidus. A. karwari	9 40 7 189 5	HIIIII	11111111		1111111
April	A. minimus A. jeyporiensis. A. maculatus A. hyrcanus A. fluviatilis A. splendidus A. karwari	348	1 - - - -		HEILER	4.76 — 0.58
i	A. minimus	- 6	ПППП	11111111	1111111	HHHH
	A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. fluviatilis A. splendidus A. karwari A. karwari	22 47 161 151	- 1 = = =	-1 -1 		4.54 2.13 1.24 —
July	A. minimus	76		-1 	1111111	3.26 — — —
August	A. minimus A. jeyporiensis. A. maculatus A. hyrcanus. A. fluviatilis A. splendidus A. karwari	19	_1 	-1	1111111	6.90
September	A. minimus A. jeyporiensis A. maculatus A. hyreanus A. fluviatilis A. splendidus A. karuari	151		1 = = =	-1 - - - -	3.13 4.44 — — —
October .	A. minimus A. jeyperiensis. A. maculatus A. hyreanus A. fluviatilis A. splendidus A. karwari	2,531 2,531 5	9 - - - - -	5 25 1 9 —	- 4	4.42 5.44 0.31 0.36
November	A. minimus A. jeyporiensis, A. maculatus A. hyrcanus A. fluviatilis A. splendidus A. karvari	233 1,498 5	4 16 — — — —	8 39 2 5 - - -	2 9 - - - -	7.26 8.65 0.86 0.33
December.	A. minimus A. jeyporiensis A. maculatus A. hyrcanus A. fluviatilis A. splendidus A. karwar	194 133 1,547	1 - - - -	3 6 1 8 - -	шиш	3.74 3.61 0.75 0.52
Total	A. minimus A. jeyporiemis A. maculatus A. hyrcanus A. fluciatilis A. splendidus A. karwari	1,472 7,164 34 33	8 32 1 1 -	18 73 5 24 —	3 14 — — —	4.71 5.68 0.41 0.35

Table XI.
SICKNESS RETURNS FOR THE SHING MUN LABOUR FORCE.

Month.	Race.	Average popula- tion.	Malaria cases diagnosed micros- copically.	No. of cases of sickness from all causes.	No. of deaths.
January	Cantonese Shanghai Indians	1,402 620 17 2,039	9 35 —	127 252 5	18 29 —3
February	Cantonese Shanghai Indians Totals	1,180	14 29 	135 260 5 400	15 25
March	Cantonese Shanghai Indians Totals	1,101 827 17 1,945	7 16 ———————————————————————————————————	167 214 7 388	3§ 3§
April	Cantonese	826 17	3 9 ———————————————————————————————————	111 236 6 353	15 15
May	Cautonese	860	20 24	122 298 4 324	35
June	Cantonese Shanghai Indians Totals	837	8 31 — 39	90 274 364	36 25-1*
July	Cantonese	806 17	20 29 — 49	160 310 4 474	1 § 2 § 3
August	Cantonese Shanghai Indians Totals	573 17	14 20 1 35	126 159 7 292	15
September	Cantonese Shanghai Indians Totals	356	16 18 ——————————————————————————————————	134 149 1 284	15
October .	Cantonese	185	34 30 64	151 136 4 291	15 15 H
November	Cantonese Shanghai Indians Totals	17	34 70 1 105	115 204 7 326	
December.	Cantonese Shanghai Indians Totals	213	16 21 — 37	73 76 — 149	15-1' 15 3
	Totals		509	4,029	2853*=31

DETAILS OF EXAMINATION OF BLOOD FILMS FOR MALARIA,

Nationality	B.T.	S.T.	Q.	S.T. & B.T.	Type not classi- fied.	Totals.
Cantonese	69	59	2	-	49	179
Shanghai	122	136	3	1	66	328
Indians	2	-				2
Totals	193	195	5	1	. 115	509

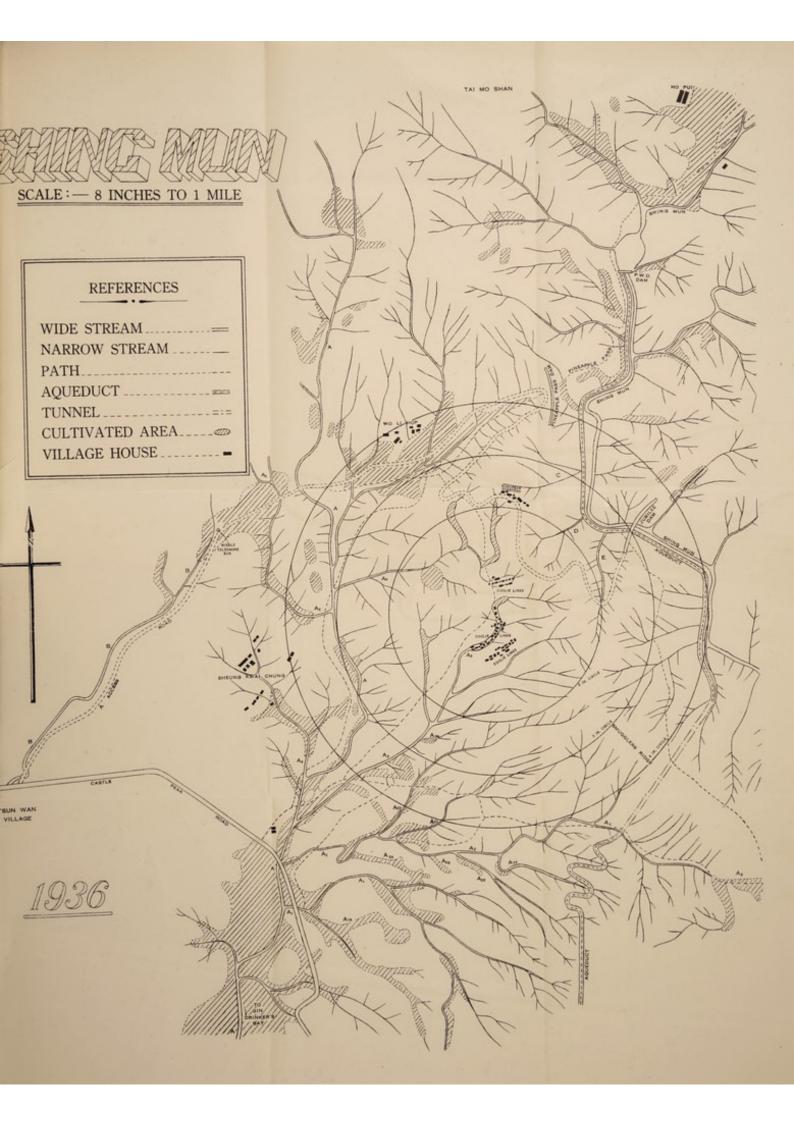
[§] Deaths due to other causes.

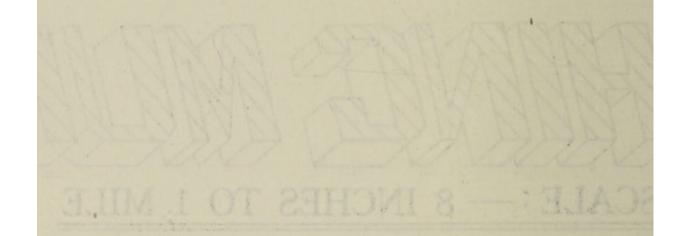
^{*} Deaths due to malaria.

Table XII.

MALARIA CASES RATE PER 1,000 POPULATION 1938, 1984, 1935 and 1936, SHING MUN CAMP.

41.		Ŧ i	1 464
41.5 1.986 141 48.5 1.870 107 59.4 1.988 98 62.1 2.134 125 45.4 2.135 218 38.2 2.041 89 463. 1,975 985	41.5 1,986 1 48.5 1,870 1 59.4 1,988 1 62.1 2,134 1 45.4 2,135 2 38.2 2,041 2 463. 1,975 9	103 59.4 1.988 116 62.1 2.134 1 86 45.4 2.135 2 68 38.2 2.041 596 463. 1,975 9	1,464 71 48.5 1,870 1 1,734 103 59.4 1,988 1,866 116 62.1 2,134 1 1,894 86 45.4 2,135 2 1,779 68 38.2 2,041 1,286 596 463. 1,975 9
2 4 1 4 2	41.5 48.5 59.4 62.1 45.4 38.2	71 48.5 103 59.4 116 62.1 86 45.4 68 38.2 596 463.	5 1,464 71 48.5 9 1,734 103 59.4 7 1,866 116 62.1 9 1,894 86 45.4 1 1,779 68 38.2 1,286 596 463.
41.5 48.5 59.4 62.1 45.4 45.4 463.	4	71 103 116 86 68 68	1,464 71 1,734 103 1,894 86 1,286 596 4
	41 71 103 116 86 88 68		1,464 1,734 1,866 1,894 1,286
247.8 276.6 237.9 239.9 95.4	г	1177 1188 1195 1166 64 1,096	
247.8 276.6 237.9 244.7 239.9 95.4	171 177 188 195 166 64 1,096		640 797 692 671 595





REFERENCES

WIDE STREAM NARROW STREAM PATH

AQUEDUCT TUNNEL CULTIVATED AREA VILLAGE HOUSE

Table XIII.

RESULTS OF MORNING CATCHES AND DISSECTIONS FOR MALARIAL INFECTION OF ANOPHELINES CAUGHT IN MOSQUITO PROOF AND NON-MOSQUITO PROOF LINES, PATHEUNG AREA.

Month Species Caught dissected glands midgod midgod		Non-mosqui	TO TRUC	F LINES				
A. A. A. A. A. A. A. A.	Month.	Species.			infected glands	infected midgut	infected glands &	Percen- tage of infection.
A. A. A. A. A. A. A. A.		A. minimus			1	3	1	5.26
July					-	-	-	
A.					-	-		-
A. tesselatus C. C. C. C. C. C. C. C	July {					_	_	
A. minimus		A. tesselatus	-	-	_	_	-	_
August A. minimus 25 21 2 9.52 A. jeyporiensis A. hyrcanus A. hyrcanus A. maculatus A. hyrcanus A. peporiensis A. minimus 26 18 A. minimus 26 18 A. maculatus A. maculatus A. hivranus 184 110 A. fluviatilis A. karwari A. hyrcanus 105 38 2 A. hyrcanus 105 38 2 A. hyrcanus 11 4 A. hyrcanus 1,227 257 1 A. fluviatilis A. hyrcanus 255 56 A. karwari A. hyrcanus 241 A. hyrcanus 3 1 A. hyrcanus 60 A. h	1000		-	-	-	-	-	-
August A. hyrcanus		A. karwari		_	-	_		-
August A hyrcanus				21	-	2	-	9.52
August A. hyrcanus — .		A. jeyporiensis	_		-	-		_
Angust { A. flaviatilis			_	_				
A. splendidus. — — — — — — — — — — — — — — — — — — —	August ?	A. fluviatilis	-	-	_	_	-	-
A. kiarwari		A. tesselatus	-		-	_	-	-
A. minimus	line.				-	-	. =	-
A. jeyporiensis.		A. Raiwaii			-		_	
A. maculatus				18	-	-	-	-
September A. fluviatilis A. tesselatus A. spiendidus A. maculatus 11		A. maculatus			-			
A. tesselatus — — — — — — — — — — — — — — — — — — —	Cantambar	A. hyrcanus	184	110	_	_	_	
A. spiendidus. A. karwari	September			-	-	-	-	_
A. karwari		A. tesselatus		-	-	-	-	-
October A. jeyporiensis. A. maculatus 34 19	3843		_	_	_	_	_	_
October A. jeyporiensis. A. maculatus 34 19			105	7.0		0		5.06
October A. inaculatus 11						_ z		
A. fluviatilis A. tesselatus 2			2.2		_	_		
A. tesselatus 2	October	A. hyrcanus	1,227	257	-	1		0.39
A. splendidus		A. fluviatilis	- 0	-	-	-	-	-
A. karwari	10000							_
November A. jeyporiensis.			-	-	-	-	-	-
November A. jeyporiensis.		A minimus	255	56		1	1	1.79
November { A. maculatus 241 52		A. jeyporiensis.	69		-		_	-
A. fluviatilis		A. maculatus			-	_	-	-
A. tesselatus	November	A. hyrcanus		52	-	-	-	_
A. spiendidus		A. tesselatus		3		_		
December. A. minimes			-	-	_	_	-	-
December. A. jeyporiensis A. hyrcanus A. hyrcanus A. fluviatilis A. tesselatus A. splendidus A. karwari Total A. jeyporiensis A. jeyporiensis A. jeyporiensis A. jeyporiensis A. jeyporiensis A. jeyporiensis A. hyrcanus		A. karwari	1	1	-	-	-	-
December. A. jeyporiensis A. hyrcanus A. hyrcanus A. fluviatilis A. tesselatus A. karwari Total A. jeyporiensis A. minimus A. jeyporiensis A. jeyporiensis A. jeyporiensis A. jeyporiensis A. jeyporiensis A. hyrcanus		A. minimus	81		_	1	_	1.33
A. hyrcanus 60 56 - - -		A. jeyporiensis	4	4	-	-	-	-
Total A. fluviatilis A. tesselatus A. splendidus A. karwari Total A. fluviatilis A. minimus 591 303 1 9 1 3.63 A. jeyporiensis 109 53 A. maculatus 20 11 A. hyrcanus 1,791 547 A. fluviatilis A. fluviatilis A. splendidus		A. maculatus		- 56	-	-	-	-
A. tesselatus	December.						_	_
A. splendidus				-		_	_	
Total A. minimus 591 303 1 9 1 3.63 A. jeyporiensis 109 53 — — — — — — — — — — — — — — — — — —		A. splendidus	-	-	-	-	-	
Total A. jeyporiensis 20		A. karwari	-	-	-	-	41.	-
Total A. jeyporiensis 20	-			-				
Total A. maculatus A. hyrcanus A. fluviatilis A. tesselatus A. splendidus A. splendidu					1	9	1	
Total A. hyrcanus A. fluviatilis A. tesselatus A. splendidus A. splendidus A. hyrcanus A. fluviatilis A. tesselatus A. splendidus A. splen					-	-		
A. fluviatilis 26 17	Total				-	. 1		
A. splendidus 1 — — — — — —	Total	A. fluviatilis	26	17	-	-	-	
				3		-		
11 A PAPWARI		A. splendidus A. karwari	-	- 1	2000	-	-	-

Appendix C.

GOVERNMENT LABORATORY.

Report of work done during the year 1936

by

Mr. V. C. Branson—A.R.C.S., D.I.C., B.Sc., F.I.C.,—

Government Analyst.

- (1). The year 1936 has been a record year as regards the total amount of work done by the Government Laboratory. The number of samples dealt with—4,339—was the highest ever recorded, being over 10% more than that for 1935—3,931, and the total value of work both Government and Commercial was \$96,010.75 compared with \$81,832.70 for 1935—an increase of over 17%.
- (2). The following tables show the nature of the work under the three main heads.

the three main neads.		
(3). Official work, i.e. work for other Gov ments.	ernment	Depart-
	1935.	1936.
Chemico-Legal Samples, from the Police and Medical Departments	330	333
Food & Drug Samples under the Ordinance from the Sanitary Department	288	196
and the contrary are partitions in the contract of the contrac	200	100
Water Samples, from Public Supplies	1,953	2,104
Dangerous Goods under the Ordinance from Police Department & Fire Brigade	25	58
Bio-Chemical Examinations, from the Medical Department & University	132	222
Materials from various Departments for testing:—		
Oils from P. W. D.	5	11
Coals from P.W.D., Harbour Department & K.C.R.	266	249
Building Materials from P.W.D	23	5
Foodstuffs from Medical Department	12	86
Pharmaceutical Samples from Government		

3

Apothecary ...

Chemicals from Medical Department, P.W.D. etc.	24	22
-Battery Acids from P.W.D	13	11
Mineral & Metals	33	. 9
Miscellaneous Investigations	8	
(including 95 samples of Septic tank effluents and 24 samples of Harbour		
waters)		141
Agent All Marintenant and a second	3,115	3,454

- (4). Value of work done for Government Departments as determined under the Tariff of Fees (Government Notification No. 887 of 1932) was \$60,150.00 against \$49,425.00 for 1935.
- (5). Semi-official work, i.e. work for Naval, Military and Air Force Authorities—who are charged half fees—and work done by the Government Laboratory by virtue of its being a Government Department.

	1935.	1936.
Pharmaceutical Analyses under the Pharmacy & Poisons Ordinance	7	3
Food & Drugs under the Ordinance	4	3
Examination of steamer tanks for inflammable vapour	33	18
Materials from Naval, Military & Air Force Authorities for testing:—		
Foodstuffs	32	29
Water	2	0
Coals	0	1
Oils (Fuel, Kerosene & Petrol)	20	23
Battery Acids	33	48
Chemicals	1	1
Miscellaneous	5	5
	137	131

Value of work done under this head was \$2,298.75 as against \$3,525.00 for 1935.

(6). Unofficial work, i.e. work done for local firms and individuals, for which full fees are charged.

dividuals, for which full fees are charged.	1935.	1936.
Foodstuffs	14	21
Bio-Chemical Examinations	10	23
Toxicological Examinations	4	1
Water Samples	22	20
Building Materials	2	0
Oils, Fats & Waxes, including petroleum products	231	309
Mineral & Metals	345	341
Dangerous Goods	15	15
Chemicals	29	5
Miscellaneous	7	19
	679	754

Value of work done under this head was \$33,544.00 as against \$28,850.00 for 1935.

(7). Official Work—Chemico-Legal Samples.

The following table shows the nature of the work done under this head.

under this head.		
	1935.	1936.
Toxicological Examinations	170	199
Counterfeit Coins & Materials	113	78
Bombs & Explosives	1	0
Articles for Stains	7	14
,, ,, Fire enquiries	7	- 9
,, connected with Larceny	2	6
,, ,, ,, Forgery	13	0
Articles connected with Robbery with violence.	8	8
Dangerous Goods	4	11
Other examinations	5	8

- (8). The total number of samples dealt with under this head was practically the same as for 1935. At the beginning of the year there was a large influx of counterfeit coins purporting to be the new 1935 mixed metal 10¢ pieces. Most of these coins were made of an alloy of the german silver type although one batch had practically the same composition as a genuine one. These coins were 'struck' coins not moulded and there were minor errors in design. In view of the huge amount of work involved in analysing these coins-batches were being brought in several times a week-and also as these coins could be detected as counterfeit by visual examination it was decided that, in cases of possessions only, these coins should not be brought for analysis. In one case actual dies and presses for making coins was discovered, these being counterfeit of Queen Victoria 5¢ piece and were of copper, silver plated. They were exceedingly good copies and the die was very carefully made.
- (9). Apart from these struck coins there were the normal number of seizures of moulds and coining materials for making soft metal counterfeit coins.
- (10). The laboratory has been made use of to a greater extent than ever in connection with police cases but at times we have been asked to carry out impossible investigations or to produce results in an impossibly short time especially in connection with examination of post mortem materials. It apparently is not realised that the identification and estimation of an alkaloidal poison in post mortem materials is not a task that can be completed in a few hours.
- (11). Members of the laboratory staff attended Court on 50 occasions during the year.

(12). Toxological Examinations.

Nature of poison. No. o	f $samples$.
No poison found	66
Opium (including 2 cases of morphine)	42
Heroin	1
Phenolic or Cresolic Compounds	17
Barbituric acid derivatives	17
Alkaloids of belladonna	5
,, ,, gelsemium elegans benth	5
Glycosides of nerium oleander	3
Strychnine	3
Arsenic derivatives	4

Nature of poison.	No. of samples.
Mercury ,,	3
Potassium permanganate	8
Caustic soda	2
Hydrochloric acid or Spirits of salt	4
Sodium cyanide	2
,, silicate (water glass)	2
Alcohol in urine	12
Harmless materials submitted in contion with poison cases	
Total	199 Samples

- (13). An increase of work under this head is again to be reported. For suicidal poisons opium and poisons of the lysol type are still the favourite agents but it is to be noted that there is an increase in the number of cases of poisoning involving the use of barbituric acid derivatives.
- (14). An interesting case in this connection was the finding of five bodies in a hut in the New Territories which had been dead for three months and from each of the post mortem remains crystalline barbituric acid derivatives were isolated.
- (15). Gelsemium elegans Benth, a native poisonous herb, was used on three occasions causing death. In each case the herb had been used apparently in mistake for a non poisonous Chinese herb. On two occasions infusions of datura alba were given in order to stupify the victims before robbery and on one occasion for poisoning dogs.
- (16). Potassium permanganate was used on three occasions for suicidal purposes, and in the one fatal case the deceased had swallowed the substance in a solid form.
- (17). Another unusual case arose in which the victim swallowed water-glass (sodium silicate) with fatal results.
- (18). The arsenic case arose out of the drinking of Atlas A solution by a coolie in mistake for tea and the mercury case out of the taking of corrosive sublimate in mistake for a headache powder.
- (19). In the nerium oleander case, the deceased drank an infusion of the leaves causing intense vomiting and the glycosides could be detected in the vomit and in the post mortem materials.

(20). Two serious fish poisoning cases occurred in which several people lost their lives through eating a Chinese fish known as 'Kai Po Yu' (資料) This fish is poisonous if cooked in certain ways but the actual poison gives no recognisable chemical reactions.

Food & Drugs.

(21). On July 1st the long awaited Adulterated Food & Drugs Ordinance and its attendant Regulations came into force. Unfortunately owing to shortage of staff by the Sanitary Department and a large increase in work here, it has not been possible to carry out as much work under the Ordinance as was expected. However it is hoped to be able to deal with twenty samples a week which will be a great step forward in the control of the purity of Food & Drugs.

Substance.	No. of samples examined.	No. found genuine.	No. found adul- terated.
Butter	8	8	0
Camphorated oil	3	2	1
Cheese	18	18	0
Cheese, cream	1	. 0	1
Coffee	16	16	0
Cream, tinned	13	13	0
Ghee	4	4	0
Lard	8	7	1
Milk:—			
Evaporated	14	14	0
Full-cream condensed	19	18	1
Fresh	17	10	7
Skim condensed	2	2	0
Mustard	11	2	9
Olive oil	3	3	0
Peanut oil	8	6	2
Pepper	10	10	0
Tea	20	15	5
Tincture of iodine	2	2	0
Vinegar	19	0	19
Total:—	196	150	46

(22). The adulterated teas were all old used leaves some of which had undoubtedly been collected from spittoons etc., dried, and sold again. The vinegars were all locally made and as a result of investigation carried out in conjunction with the I. & E. Department the standard for these is to be lowered as 4 grms. acetic acid per 100 ccs. is too high.

Water samples & Sewage samples.

- (23). During the year the regular routine examinations of local Government water supplies were carried out and again it is to be reported that the supplies were above reproach.
- (24). An investigation of the water supply at the Pokfulam Dairy Farm was carried out in conjunction with other investigations dealing with the dysentry epidemic in November, and it would appear that the water supply was not the cause of the trouble.
- (25). Routine examinations of the water at the new site at Kam Tin were carried out and many supplies to police stations in out districts were examined.
- (26). A prolonged investigation of the working of the septic tank at Repulse Bay, necessitating the installation of an inspection and sampling chamber with flow gauge in the outlet pipe, was carried out. Samples and readings of the volume of the effluent at intervals from dawn to dusk were taken and as a result of the investigation it can be stated that the presence of the tank is not the cause of faecal pollution of the bay.
- (27). At the end of the year an investigation was started on the state of pollution of the harbour of Refuge—Yaumati, in order to ascertain if a sewage outfall could be safely run into this area. The work is still in progress.

Dangerous Goods.

(28). These were samples of oils from lighters etc. for flash point, and explosives for identification in connection with the enforcement of the Ordinance.

(29).	Bio-chemical Examinations.		
Blood for	blood urea nitrogen	19	samples
,, ,,	,, sugar	61	,,
,, ,,	,, calcium	6	- ,,
,, ,,	carbon monoxide	1	,,
Calculii		27	,,
Stool		13	

Human milk	22	samples.
Urine	33	,,
Gastric Contents	40	,,

- (30). An increase in this work is to be reported and several new routine determinations were carried out e.g. diastatic index of urine and analyses of gastric contents after test meals.
- (31). An investigation which is still in progress was started on the composition of the breast milk of nursing Chinese mothers in order to vertify or otherwise the statement made in public that Chinese babies cannot digest milk of high fat content. This work was carried out at the request of M. O. i/c. Government Infant Welfare Centre.

Materials from Government Departments for testing.

- (32). Again it is to be reported that full use is not made by Government Departments of the facilities offered by the laboratory. One sample of paint was submitted by the P.W.D. and reported against.
- (33). All consignments of coal for Government Departments were again tested in order to arrive at the price to be paid to the contractors, and fumigation of books in several Government buildings with Hydrocyanic acid gas was carried out.
- (34). Two years ago an investigation was started on the keeping qualities of sweetened condensed milk in lifeboats of passenger carrying ships. A ship travelling between Australia and Hong Kong was selected and a batch of condensed milk placed in the boats. Every three months samples of the milk are sent to the laboratory i.e. after one complete round journey through hot and cold weather and it is to be reported that even after two years the milk, although having darkened and thickened, is still sound and fit for consumption.
- (35). Some years ago foodstuffs issued to the Police Department by the contractor were regularly examined here. This practice was stopped and this year as a result of numerous complaints at New Territories Police Stations, their supplies of ghee and atta were examined and found to be of bad quality. As a result of this, routine examination of the supplies has been started again resulting in genuine foodstuffs being supplied.

Semi-Official Work.

(36). Practically all this work is for the Naval & Military Authorities and include further tests on the atmosphere in submarine battery rooms.

Unofficial Work.

- (37). A further increase in this work occurred during the year. The amount of lard sampled and tested was nearly 4,400 tons for export mainly to England and the value of the tin sampled and tested was in the neighbourhood of £750,000.
- (38). An examination of the atmosphere in the Hong Kong Bank Building was made owing to complaints but no appreciable difference from normal of the CO₂ & O₂ contents was found. The atmosphere in another Bank building where the incoming air is cooled was also examined and in this case traces of an organic halide were detected.

Sampling.

(39). The following list gives the amount of sampling done by the Sampler attached to the laboratory.

	198	35.	19	36.
Tin	3,668	tons.	3,862	tons.
Lard	119,211	cases.	132,002	cases.
Wood oil	75	tons.	30	tons.
Anise oil	_	-	${10 \atop 10}$	cases. drums.
Cassia oil	5	drums.	10	drums.
Firecrackers	2,973	cases.	3,289	cases.
Antimony regulus	-	_	$5\frac{1}{2}$	tons.

Special Investigations.

(40). Again owing to shortage of staff no fresh investigation could be initialed. With Mr. Tetley's return in the spring the staff will be at full strength, except for occasional very short periods, for the first time for five years. It is hoped to proceed with several urgent problems e.g. accurate determination of kerosene etc. in cassia oil, the cryoscopy of local milks and correct sampling of low grade ingot tin.

Staff & Equipment.

- (41). I returned from leave on January 23rd and Mr. A. Jackson who had been acting as Government Analyst during my absence departed for Singapore on promotion on January 25th.
- (42). Mr. J. Redman joined the staff on March 6th and Mr. J. L. Tetley departed on long leave on April 8th.

(43). Owing to increase in commercial work it has been found necessary to ask for the installation of further forced draught to a hooded bench and the fan for this purpose has been ordered.

Revenue.

- (44). The fees paid into the Treasury during the year amounted to \$34,797.25 as against \$30,773.50 in 1935. The value of the work done both Government and Commercial, as determined from the Tariff of Fees (Government Notification No. 887 of 1932) was \$96,010.75 as against \$81,832.70 in 1935.
 - EXPENDITURE FOR 1935 & 1936 COMPARED

(45). EXPENDITURE FOR 1955 & 195	OO COMPARE	D.	
	1935.		1936.
Personal Emoluments\$ Other Charges:—	32,673.65	\$	40,157.56
Apparatus & Chemicals	2,383.79		3,607.47
Books & Journals	175.17		185.87
Conveyance Allowance	180.00		178.00
Fuel & Light	707.77		729.03
Incidental Expenses	309.56		314.70
Uniforms	74.15		87.84
Total other charges:\$	3,830.44	\$	5,102.91
Special Expenditure:—		-	
Repairs & Calibration of Instru- ments	_	\$	10.62
(46). Revenue for 1935 & 1936	COMPARED.		
Head of Revenue. 1935.	1936	j.	
Analyses\$30,773.5	50 \$84,79	7.2	5
(47) Expression & Device con mile	DACE MEN Y		10

(47). Expenditure & Revenue for the past ten years.

Year.	Expenditure.	Revenue.
1927	\$ 37,442.88	\$ 16,146.00
1928	29,333.98	15,562.00
1929	35,390.43	24,974.00
1930	44,677.95	19,891.50
1931	57,341.16	19,295.50
1932	50,746.44	30,604.00
1933	52,494.16	42,347.50
1934	44,526.21	32,968.75
1935	35,678.42	30,773.50
1936	44,571.03	34,797.25

Appendix D.

UNIVERSITY CLINICAL UNITS AT THE GOVERNMENT CIVIL HOSPITAL.

MEDICAL UNIT.—Report by the Professor of Medicine.
PROFESSOR WILLIAM I. GERRARD, O.B.E., M.D., Ch.B.,
F.R.C.P. (Lond.), D.P.H.

Cases treated as In-patients in the University Teaching Medical Wards:—

Men	253
Women	121
Children under 12	66
Total	440
No. of cases died during the year	49.

Cases treated as Out-patients at the University Medical Outpatient Clinics:—

- Afternoon Clinic (General Medical Cases) Mondays and Thursdays:—
 - 1,205 new cases seen and treated (men, women and children): many of these cases attended more than once, bringing to a total of 7,272 cases.
- 2. Children's Clinic, Thursday mornings:-
 - 277 new cases seen and treated: many of these cases attended more than once, bringing to a total of 1,477 cases.

The total of cases seen and treated by the Medical Unit at Out-patients Department during the year 1936 was 8,749 (this figure included old and new cases, men, women and children).

The following special tests have been carried out:-

From January to December, 1936.	
Blood Urea	36
Blood Sugar	8
Blood Sedimentation Rate	245
Fractional Test Meal	107

REMARKS:-

Pulmonary Tuberculosis:—Large numbers find admission whenever accommodation is available. Unfortunately the majority are in an advanced stage of the disease.

Peripheral Neuritis: — This condition remains all too frequent and the main aetiological factors are exposure and starvation.

Children's Diseases:—Admissions remain extremely small in number because of lack of accommodation. The Queen Mary Hospital will be a great advance in our facilities for the treatment of children.

The Anaemias:—Close observations are being made on all cases of anaemia. Fractional test meals are carried out in all cases with a view to establishing a possible correlation between a diminished or normal HC1 content and the effectiveness of haematinics taken by mouth.

The comparative values of haematinics are being recorded and particular observations are being made on the comparative value of Iron preparations given by mouth and special Iron preparations administered by injection. In connection with this work Messrs. Parke, Davis & Co. kindly supplied me with their new Iron product "Naferon"—specially prepared for use by injection. It is too soon to give any reliable figures but it appears that Parke, Davis & Co. have produced a preparation of Iron which is very effective when given by injection. Up to now it has been impossible to inject iron preparations in sufficient amount to produce clinical improvement and at the same time avoid toxic symptoms.

Peripheral Neuritis:—Clinical observations are being made on this disease. Diet factors, gastric function, blood calcium and phosphorus content and radiological examination of the bony skeleton are all closely studied—an interesting finding has been a fairly widespread decalcification of the bones in cases of peripheral neuritis.

Cerebro-spinal Meningitis:—In reference to this disease a new method of treatment is being adopted in a limited number of cases—namely that of using the newly introduced Ferry's antitoxin. Hoyne in America produced figures to show improved results by this form of therapy.

The antitoxin is used by intravenous and intra-muscular routes as early as possible and the results here have been very good but the number of cases has been small.

Again I have to thank our generous friends Parke, Davis & Co. who gave the antitoxin free of charge.

SURGICAL UNIT—Report by the Professor Surgery.
PROFESSOR KENELM H. DIGBY, M.B., B.S., F.R.C.S. (England).

485 inpatients were treated in the three wards of the Surgical Clinic at the Government Civil Hospital.

652 surgical operations under anaesthesia were performed.

The out-patient attendance in the Surgical Clinic numbered 2,993 (new patients).

1,269 patients attended the Ear, Nose and Throat Clinics (new patients).

There were also 3,177 patients who attended the Ophthalmic Out-patients Clinic (new patients).

From the middle of March to the middle of October the Professor of Surgery was away on leave and the clinical work was under the direction of Dr. I. Newton, F.R.C.S., (Edin.).

The weekly staff round from 5 to 6 p.m. on Mondays (to which general practitioners and other qualified men are invited to attend) was held before the Professor's absence and was resumed on his return from leave.

OBSTETRICAL AND GYNAECOLOGICAL UNIT.

Report by the Professor of Obstetrics and Gynaecology, Professor W. C. W. Nixon, M.D., B.S. (London), F.R.C.S. (Eng.) L.R.C.P. (Lond.), M.C.O.G.

TSAN YUK HOSPITAL.

Analysis of maternal deaths (15) Pre-eclampsia 1 Eclampsia 2 Pulmonary embolism 1 Rupture of uterus 3 Puerperal mania (sepsis) 1 Post-partum haemorrhage 4 Polyneuronitis-avitaminosis B 1 Paralytic ileus following Caesarean section 1 Intestinal obstruction 1

An attempt this year has been made to differentiate between those cases who have had no ante-natal care and those who have attended the ante-natal clinic on more than one occasion during their pregnancy. The former group are considered as Emergency cases and the latter as Booked. Of the 1,539 cases delivered only 62 had received any ante-natal supervision. Some of the patients are admitted "in extremis" either as the result of ante-partum haemorrhage, toxaemia or malnutrition.

A venereal disease out-patient clinic is no longer held since it is highly undesirable that treatment for such a disease should be conducted in a maternity hospital.

The definition of Puerperal Pyrexia as adopted at this hospital is:—"A temperature of 100.4° or over, occurring on more than one occasion during the puerperium, while the patient is under observation, not including the first 24 hours." There were 108 cases of Puerperal Pyrexia. In 17 (15.4%) of them, Streptococcus haemolyticus was cultured from a vaginal swab. It is commonly asserted that the incidence of scarlet fever and streptococcal infections are closely related so that where there is little or no scarlet fever there is similarly less streptococcal infection. The finding of Streptococcus haemolyticus in 15.4% of pyrexial cases is a high incidence and points to the need for

careful vigilance and effective isolation of pyrexial cases in the puerperium. The importance of droplet infection during labour has been realised and the wearing of masks has been insisted upon in the labour wards. Despite this three patients delivered by the same nurse developed Puerperai Pyrexia and Streptococcus haemolyticus was grown from the vagina of each. A throat culture from this nurse revealed the same organism. The administration of Prontosil as soon as possible in infection cases has given most encouraging results.

All cases of Pyrexia and all Maternal Deaths are included as Morbid, the Morbidity Rate for the year is 7.5%.

Malnutrition contributes in large measure to the serious complications that are met with in labour.

The small attendance at the ante-natal clinic is disappointing. Until pregnant women become more conscious of the value of ante-natal care there can be little hope of diminishing maternal and foetal mortality.

Research.

In collaboration with the Professor of Physiology in the University, blood-pressure in pregnancy has been investigated. An investigation into the high incidence of oedema in pregnancy and labour is still in progress and already it has been observed that malnutrition is a dominant contributory factor.

MATERNITY BLOCK, G.C.H.

Statistics of Maternity Cases:-	
Admissions (University cases)	742
Deliveries (University cases)	705
Deaths (University cases)	3
Stillbirths	30
Neo-natal deaths	12
Classification of University Cases:—	
Vertex Presentations	655
P. O. P	19
Breech	20
Transverse	5
Twins	5
Mole	1
Total:	705

Number and Nature of Abnormal Case	es.
Placenta Praevia	2
P. P. H	19
Prolapse of cord	2
Hydramnios	2
Eclampsia	1
Vesicular Mole	1
Twins	5
Forceps	10
Perforation	1
Caeserean Section	2
Causes of Maternal Deaths.	
Puerperal Septicaemia, Heart failure	1
Typhoid	1
Diffuse supperative nephritis	1
Total:—	3
=	
Ante-natal Clinics.	
Attendances:	200
New cases	290
Old ,,	254
Total:—	544
Statistics of Gynaecological Department,	1936
Number of admissions	143
Number of operations performed	95
Number of cases treated without opera-	
tions	48
Total number of attendances of outpatients department	3,690
Deaths	1

Appendix E. Appendix F.

		0		77				0	TT		-
		Gi	OVERNM	ENT II	-				E Hos	PITALS.	
	Diseases.	al at 1935.	Yearly	Total.	ases ed.	ing in al at 1936.	al at 1935.	Yearly	Total.	ases ed.	ing in al at
		Remaining in Hospital at end of 1955.	Admissions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.	Remain Hospit end of	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at
I	-Infectious & Parasitic	1									
	Diseases.										
	2 1 11 6		01	00	04	10		107	20	170	
	Cyphoid fever Paratyphoid fevers		81	20	84	10	3	167	69	170	3
3. T	Cyphus fever						-	-	-	-	
4. E	Relapsing fever	-		-	-	-	-	-	-	-	-
5. L	Judulant fever		-	-	-	-	-	000	-	-	-
6. S	Small-pox :— (a) Variola major		- 7		7			4		4	
	(b) Variola minor (Alas-	-				1		*	-	*	-
	trim	-	-			-	-	10-0	-	-	-
	Measles		10	3	10	-	-	24	2	24	-
8. S 9. V	Scarlet fever Whooping cough	2	6	100	8 4		-	4	1	4	-
10. I	Diphtheria	1	78	34	79	6	4	212	100	216	2
11. I	nfluenza	3	443	1	446	4	21	1,053	223	1,074	28
	Cholera	-	-	-	-	-	1 -		-	-	-
13. I	Dysentery:— (a) Amoebic		4		4		2	219	90	221	12
	(b) Bacillary		162	17	164	5	2	138	54	140	3
	(c) Other or unspecified.	-	24		24	1	14	42	11	56	-
14. I	Plague :						-	TO STATE OF			
	(a) Bubonic			-	-	-	-	-		-	-
	(b) Pneumonic	-	1	1	1	-	-		-		
15. I	Erysipelas	-	9	3	9	1	1	22	1	23	1
16.	Acute poliomyelitis	-	8	-	8	-	-	9	3	9	1
17. I	Encephalitis lethargica	-	1	-	1	-	-	19	2	19	1
	Cerebro-spinal fever	-	16	8	16	1	-	113	41	113	1
	Glanders		_		-		-				
	Rabies					-	-	-	-	-	
22. '	Γetanus		4	3	4	-	1	77	61	78	1
23.	Tuberculosis of the respira-		200		0.1	10	00	0.000		0.010	
24.	tory system Tuberculosis of the central		203	54	214	18	83	2,757	1,554	2,840	104
a7.	nervous system	-	15	- 12	15	1	3	211	185	214	1
25. '	Tuberculosis of Intestines			1					1	1000	1
06	and peritoneum	-	6	5	6	1	-	22	- 8	22	-
26.	Tuberculosis of vertebral column	1	5	-	5	2	1	78	4	74	17
	Column	1	0		0	2	1	10	4	14	11
		-		-		-	7				
	Carried forward	22	1,085	160	1,107	45	185	5,166	2,409	5,801	174
		1	-	-	-	-	1			-	-

Appendix E.

	G	OVERNA	ENT H	OSPITAL	LS.		CHINE	se Ho	SPITALS	
Diseases.	Remaining in Hospital at end of 1955.	Yearly -suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.	Hospital at end of 1935.	Yearly suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.
Brought forward I.—Infectious & Parasitic Diseases.—(Contd.)	22	1,085	160	1,107	45	135	5,166	2,409	5,301	174
27. Tuberculosis of other bones and joints	5	86		41	3 —	18	91	19	104	22
29. Tuberculosis of the Lym- phatic system		20		20	1	13	131	28	144	44
urinary system		1 - 8 131	- 3 12	9 146	- 1 8	=======================================	3 14 42 28	5 34 3	3 14 42 28	- ₂ - ₁
34. Syphillis:— (a) Congenital (b) Primary (c) Secondary (d) Tertiary 35. Other venereal diseases:—	1 - 5	96 9 22	- - 4	97 9 27	- 3 - 3	9 2	81 40 37 86	40 2 29	81 40 46 88	_
(a) Gonorrhoeal opthal- mia	6	6 142 51	=	6 148 58	1 5 3	- ₅	41 69 46	_1 _	41 74 46	1 1
7. Yell 7. Purulent infection: (a) Septicaemia		3 1 —	- -	3 1 —	=	=	12	5 		_4 _
37. Yellow fever	1 - 8	22 150 7 266 136		24 151 7 274 136	_ _ _ 1 17	1 5 - 11	194 204 1 922 20	40 3 - 196 3	195 209 1 933 20	6 7 — 23 3
39. Other diseases due to protozoa:— (a) Kala-azar (b) Trypanosomiasis (c) Yaws	-							111	111	
40. Ankylostomiasis	. 1	52 1	3	53 1	=	=	25	_9	25 —	=
Carried forward	70	2,249	208	2,319	91	194	7,255	2,826	7,449	291

Appendix E.

Diseases.		Yearly				nt in 5.	Yearly	Total		
Diseases.	Remaining in Hospital at end of 1955.		Total.	ses	at at	in in S.	Yearly	Total		H
	Remain Hospit end of	-50 -50		a Po	al 19	al 193		Total.	ases	al a 1936
The second secon		Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.
Brought forward	70	2,249	208	2,319	91	194	7,255	2,826	7,449	291
I.—Infectious & Parasitic Diseases.—(Contd.) 42. Other diseases due to										
helminths:— (a) Ascariasis (b) Filariasis (c) Taeniasis (d) Clonorchiasis	_	44 3 9	111	45 8 9	1 1 —	1 	90 6 46 12	1 -	91 6 46 12	3 2 —
(e) Schistosomiasis 43. Mycoses:— (a) Actinomycosis	-		-	- 1	=	_	-	-	-	-
(b) Other mycoses (Sprue)	-10	5	-	5	1	-	16		16	-
(a) Vaccinia	HIH	- 20 9 11	1 1111	- 20 9 11	111111		- 5 4 15	1 17111	- 5 4 . 15	
(h) Black water fever II—Cancer and Other Tumours.	-	100	-	To a	-	_	-	to to to	-	-
45. Cancer or other malignant diseases of the buccal cavity, and pharynx 46. Cancer or other malignant tumours of the digestive	5	12	2	17	2	1	68	30	69	3
organs, & peritoneum:— (a) Oesophagus (b) Stomach & duodenum (c) Rectum	- ₁	4 14 3	1 7	4 15 3	-		2 28 7	1 13 4	2 23 7	.111
(d) Liver and biliary passages		6	3	6	_1	-	15 —	9	15	8
organs	-	1	1	1	-	-	2	-	2	-
Carried forward	79	2,398	222	2,477	97	196	7,566	2,884	7,762	302

Appendix E.

		11								
	G	OVERNA	TENT H	OSPITAL	LS.		CHINE	se Hos	PITALS.	
Diseases.	ng in al at 1935.	Yearly	Total.	ases	ng in al at 1936.	ng in al at 1935.	Yearly	Total.	ases d.	ng in at 1936.
Discuss.	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining in Hospital at end of 1935.	Admissions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.
Brought forward II.—Cancer and other Tumours. —(Contd.)		2,398	222	2,477	- 97	196	7,566	2,884	7,762	302
48. Cancer or other malignant tumours of the uterus 49. Cancer of other malignant tumours of other female	-	20	2	20	-	-	29	16	29	2
genital organs	-	3	-	3		2	21	-	23	-
50. Cancer or other malignant tumours of the breast 51. Cancer or other malignant tumours of the male	1	16	1	17	3	1	40	8	41	3
genito urinary organs	2	3	-	5	-	1	6	2	7	-
52. Cancer or other malignant tumours of the skin 53. Cancer or other malignant tumours of organs not	-	9	-	9	1	-	45	14	45	-
specified	2	9	4	11	2	-	4	3	4	
(a) Female genital organs (b) Other sites 55. Tumours of undetermined nature:—	4	40 64	_	44 67	-3	=	7 35	_	7 35	_1
(a) Female genital organs (b) Other sites	=	11 1	_1	11 1	_1	_2	14 12	-	16 12	3
III.—Rheumatism, Diseases of Nutrition and of Endocrine Glands, and Other General Diseases.										
56. Rheumatic fever	1	1	-	2	-	-	29	1	29	-
(a) Chronic rheumatism (b) Rheumatoid arthritis 58. Gout		25 16 4		26 17 4	1	14 1	130 53 3	1 	144 54 3	3 5
59. Diabetes mellitus	1	21	3	22	1	_	21	1	21	_
61. Beri-beri 62. Pellagra 63. Rickets	_	45 —	- 8 -	45	_ _ _	43 _ _	1,212	257 —	1,255 — 1	36 —
Carried forward	95	2,686	242	2,781	109	260	9,228	3,187	9,488	357

Appendix E. Appendix F. GOVERNMENT HOSPITALS. CHINESE HOSPITALS. Remaining in Hospital at end of 1936. Remaining in Hospital at end of 1955. Remaining in Hospital at end of 1935. Remaining in Hospital at end of 1956. Yearly Total. Total Cases Treated. Yearly Total. Total Cases Treated. Diseases. Admis-sions. Deaths. Deaths. 95 .2,686 242 2,781 260 9,228 3,187 9,488 Brought forward 109 357 III.—Rheumatism, Diseases of Nutrition and of Endocrine Glands, and Other General Diseases.—(Contd.) Osteomalacia Diseases of the pitpuitary gland Diseases of the thyroid and parathyroid glands :-(a) Simple goitre (b) Exophthalmic goitre 8 8 1 11 11 1 9 2 10 17 2 19 (c) Myxoedema, cretinsim 4 (d) Tetany 2 2 2 2 (c) Other diseases Diseases of the thymus ... Diseases of the adrenal glands (excluding tuberculosis) Other general diseases 20 20 1 IV .- Diseases of the Blood and Blood Forming Organs. 70. Haemorrhagic conditions :-10 10 2 71. Anaemia, Chlorosis :-(a) Pernicious anaemia.. 1 1 1 78 78 (b) Other anaemias and chlorosis 33 6 6 33 (i) Splenic anaemia 6 6 (ii) Others 7 9 72 79 Leukaemia, Aleukaemia :-(α) Leukaemia ... Chronic myeloid ... Chronic lymphatic... 1 1 Acute Multiple myeloma .. (b) Aleukaemia Lymphadenoma) 1 Carried forward 362 9,468 3,190 9,737 98 2,786 249 2,884 112 269

Appendix E.

	l Ge	OVERNM	ENT H	OSPITAL	LS.	Chinese Hospitals.					
D'		Yearly			13	ing in al at 1935.		Total.		tal at 1936.	
Diseases.	Remaining in Hospital at end of 1955.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.	Remaining Hospital end of 197	Admis- sions.	Deaths.	Total Cases Treated.	Remaining i Hospital at end of 1956,	
Brought forward	98	2,736	249	2,834	112	269	9,468	3,190	9,737	362	
IV.—Diseases of the Blood and Blood Forming Organs.— (Contd.)											
73. Diseases of the spleen:— (a) Banti's disease (b) Other diseases of the		3	-	3	-	-	4	-	4	-	
74. Other diseases of the blood	-	6	2	6	-	-	6	-	6	-	
and blood forming organs		-	-	-	-	-	-	-	_	-	
V.—Chronic Poisoning.											
75. Alcoholism (acute or chronic)	-	12		12			4		4	_	
 Chronic poisoning by other organic substances:— 											
Opium habit	2	50	_1	52	_2	=	693	7	693	13	
77. Chronic poisoning by mineral substances:— (a) Occupational lead	7	4	-	4	-	-	-	-	-	-	
poisoning(b) Other chronic poison-	-	-	-	-	-	-	-	-	-	-	
ing by mineral		-	_	-	-	-	-	-	-	-	
VI.—Diseases of the Nervous System and Sense Organs.											
78. Encephalitis:— (a) Cerebral abscess	_			_	-		-		_		
(b) Others		-	-			-	-	-	-	-	
clude C.S.F.)	-	1	1	1		-	16	6	16	2	
ataxy)	-	4	-	4	=	1	14	2	15	2	
cord :— (a) Progressive muscular	1										
atrophy(b) Subacute combined	-	-			-	-	-	-		-	
sclerosis	-	-	-	-		-	-	-			
	100	2,816	253	2.916	114	270	10,205	3,205	10,475	379	

Appendix E. Appendix F.

-				pena					1	IV T.	-
		G	OVERN2	MENT E	IOSPITA	LS.		CHINI	ese Ho	SPITALS.	
	Diseases.	ing in al at 1935.	Yearly	Total.	Jases ed.	al at 1936.	al at 1935.	Yearly	Total.	Jases ed.	al at
		Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining Hospital at
	Carried forward	100	2,816	253	2,916	114	270	10,205	3,205	10,475	879
VI.	—Diseases of the Nervous								1		
Sy	stem and Sense Organs. —(Contd.)										
81.	Other diseases of the spinal cord :-Continued.										
	(c) Myelitis of unstated origin	1	3	2	4	1	-	20	6	20	-
82.	(d) Other diseases in- cluded under 81 Cerebral haemorrhage, Apo-	-	1	-	1	-	-	-	-	-	-
	plexy, etc:— (a) Cerebral haemorrhage (b) Cerebral embolism	-	17	18	17	1	7	809	161	316	10
	and thrombosis (c) Hemiplegia and other		1	1	1	-	-	21	8	21	-
07	paralyses of unstated		16	2	17	4	12	107	1	119	4
83.	General paralysis of the insane	1	28	4	24	2	-	4	-	4	1
84.	Other forms of insanity:— (a) Dementia praecox		36		48	6	-	2	in the	2	
85. 86.	(b) Others Epilepsy Infantile convulsions	36	817 16	17	353 16	43	-2	94 136	12 11	10 94 136	4
87.	Other diseases of the ner- vous system :—							100		100	
	(a) Chorea(b) Neuritis, neuralgia	- 3	70		78	- 5	107	2,037	210	2,144	189
	(c) Paralysis agitans (d) Disseminated scle-	-	-		-	-	-	13	1	13	1
	rosis	=	-6		-6	=	=	11	_	11	
00	(f) Neurasthenia	_1	14 9	_	15 9	-	2	3 <u>4</u> 8	_	36	-
88.	Diseases of the eye:— (a) Conjunctivitis (b) Trachoma	1	68	-	64	-1	3	234	-	287	2
-	(c) Corneal ulcer (d) Other diseases	1	16 35 35	_	16 86 41	2	7 9	382 56 283	_	389 56 292	5 2 1
	Carried forward	158	8,494	292	3,652	180	419	13,964	3,615	14,888	548

Appendix E.

								Polita		-
	-	OVERNM	ENT I	OSPITA	1		CHINE	se Hos	PITALS.	
· Diseases.	al at 1935.	Yearly	Total.	ases ed.	ing in al at 1936.	ing in al at 1935.		Total.	ases ad.	al at 1936.
	Remaining in Hospital at end of 1955.	Admissions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining Hospital at end of 1936
Brought forward VI.—Diseases of the Nervous		3,494	292	3,652	180	419	13,964	3,615	14,383	548
System and Sense Organs —(Contd.)						60				
89. Diseases of the ear and of the mastoid sinus:— (a) Otitis externa (b) Otitis media (c) Mastoiditis (d) Others	_	13 25 11 32		13 25 12 32	_ _ _	_ _ _	36 24	=	- 37 24 -	
VII.—Discases of the Circulatory System.		c	1	C	,		30	2	20	
91. Acute endocarditis:— (a) Malignant endocarditis		6	1	6	-	2	62	19	30 64	
(b) Other acute endocarditis	-	2	-	2	-	-	-	-	-	-
(a) Aortic valve disease (b) Mitral valve disease (c) Aortic and mitral		10 21	3 5	10 26	1	1 5	160 234	38 76	161 289	7 6
valve disease (d) Endocarditis not returned as acute or	-	-	-	-	_		31	1	54	1
chronic	_	_	_	_	-	-	54 6	1	6	-
dium :— (a) Acute myocarditis (b) Myocardial degenera-	-	20	9	20	3	5	32	10	37	1
94. Diseases of the coronary arteries:—	1	9	6	10		8	402	280	405	7
(a) Angina pectoris (b) Coronary sclerosis	-	1	-	1	-	_		_1	-	-
Carried forward	165	3,646	817	3,811	187	486	15,037	4,044	15,473	578

Appendix E.

Brought forward 165 3,646 317 3,811 187 436 15,037 4,044 15,473 578		G	OVERNM	ENT H	OSPITA	Ls.		CHINES	E Hos	PITALS.	
VII.—Diseases of the Circulatory System. —(Contd.) 95. Other diseases of the heart:— (a) Disordered action of heart	Diseases.	Remaining in Hospital at end of 1955.			Total Cases Treated.	Remaining in Hospital at end of 1956.	Remaining in Hospital at end of 1935.	Yearly suois		Total Cases Treated.	Hospital at end of 1936.
heart :	VII.—Diseases of the Circulatory System. —(Contd.)		3,646	317	3,811	187	436	15,037	4,044	15,478	578
VIII.—Diseases of the Respiratory System. 104. Diseases of the nasal fossae and annexa:— (a) Diseases of the nose (b) Diseases of the accessory nasal sinuses (cessory nasal sinuses	heart :— (a) Disordered action of heart	f 2	28 7 5 8 13 9 53 5 —	1 1 - -	28 7 5 10 18 9 54 6 —	2 - 1 1 - 1	_	12 8 32 20 23 181 4 18 4 179	5 -4 11 - - - -	12 8 33 20 - 23 187 4 18 4	28 24
Carried forward 172 3,934 327 4,106 197 448 15,704 4,080 16,152 613	VIII.—Diseases of the Respiratory System. 104. Diseases of the nass fossae and annexa:— (a) Diseases of the nass (b) Diseases of the accessory nasal sinus 105. Diseases of the larynx: (a) Laryngismus strid lus (b) Laryngitis	d	25		27	3	- - - 5	48 40	11811 1811	48 40	1

Appendix E.

	1 0		77				Commen	TTee	-	
Calment Results	G	OVERNM	ENT H	OSPITA	LS.		CHINES	E Hos	PITALS.	
Diseases.	Remaining in Hospital at end of 1935.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining in Hospital at end of 1935.	Yearly suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.
Brought forward VIII.—Diseases of the Respiratory System. —(Contd.)	172	3,934	327	4,106	197	448	15,704	4,080	16,152	613
(c) Other diseases of the larynx	-	-	-	-	-	-	-	-	-	-
(a) Acute bronchitis (b) Chronic bronchitis (c) Bronchitis not dis tinguished as acute	-	88 16	-8	83 16	-2	8 43	1,453 2,073	701	1,461 2,116	17 40
or chronic 107. Broncho-pneumonia 108. Lobar pneumonia	3 1	105 164 60	1 116 25	107 167 61	5 1 2	10 20 6	380 2,017 601	1,451 235	390 2,037 607	14 8
109. Pneumonia (not otherwise defined)		10	2	10	1	2	255	52	257	1
110. Pleurisy:— (a) Empyema (b) Other pleurisy 111. Congestion and haemor rhagic infarct of lung etc:—	-	7 6	_2	8 6	_1	2	32 56	13	34 56	1 1
(a) Hypostatic conges tion of lungs (b) Other diseases in		5	-	5	-	-	4	-	4	-
cluded under 111 112. Asthma 113. Pulmonary emphysema 114. Other diseases of the respiratory system:—	- 1	77 8		78	=	10	331 15	42	341 15	4
(a) Chronic interstitia pneumonia, includ i n g occupationa disease of the lung (b) Other diseases in	i _	-	-	-	+	-	-		-	-
cluded in 114:— (1) Gangrene of th lung	e e	40	1	12	-	-	-	-		-
included unde 114b		3	1	3	-	-	7	3	7	-
Carried forward	180	4,478	477	4,653	209	549	22,928	7,051	23,477	699

Appendix E. Appendix F.

		G	OVERNI	MENT H	OSPITA	LS.		CHINE	se Ho	SPITALS	
	Diseases.	al at 1935.	Yearly	Total.	ases ed.	al at 1936.	ing in al at 1935.	Yearly	Total.	ases ed.	ing in al at 1936.
		Kemaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining Hospital end of 193	Admis- sions.	Deaths.	Total Cases Treated.	Remaining Hospital
	Brought forward	180	4,473	477	4,658	209	549	22,928	7,051	23,477	699
	IX.—Diseases of the Digestive System.						1				
115.	Diseases of the buccal cavity, pharynx etc:— (a) Diseases of the teeth										
	and gums (b) Ludwig's angina	5	193 —	=	198	=	1	396 12	22 1	397 12	8
	(c) Diseases of the ton- sils	3	223		226	3	1	184	2	135	4
	(d) Other diseases in- cluded in 115	_	58		58	2	-	28	_	28	_
	Diseases of the oesophagus Ulcer of the stomach or	-	1	-	1	-	-	-	-	-	-
	duodenum:— (a) Ulcer of the stomach (b) Ulcer of the duode-	-	27	4	27	2	-	105	19	105	4
118.	Other diseases of the	4	34	1	38	1	-	8	-	3	-
	stomach:— (a) Inflammation of the	16.					1				
	stomach(b) Other diseases in-	4	42	-	46	2	9	811	38	820	12
119	cluded in 118 Diarrhoea and enteritis	-	96	-	96	-	9	241	472	250	4
	(under 2 years) Diarrhoea and enteritis	-1	173	33.	174	2	28	1,309	662	1,337	15
3	(2 years and over) :— (a) Colitis	2	44	1-	46	-	11	158	53	164	5
	(b) Otherwise defined Appendicitis	6	45 124	9	46 130	6	-2	1,519	771 12	1,519	14 2
	struction:— (a) Hernia	2	68	. 3	65	6	7	91	4	98	2
123.	(b) Intestinal obstruc- tion	1	1	-	2	-	-	66	15	66	2
	(a) Constipation	-	50	_	50	1	4	202	-	206	1
	(c) Others included un- der 123	2	66	-	68	3	10	38	-	48	2
	Carried forward	911	5,709	529	5,920	239	681	28,097	9 199	28,728	775

Appendix E. Appendix F.

		Pr										
	Ge	OVERNM	ENT H	OSPITA	LS.		CHINE	SE Ho	SPITALS			
Diseases.	Remaining in Hospital at end of 1935.	Yearly sions.	Total.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining in Hospital at end of 1956.	Yearly sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.		
Brought forward IX.—Diseases of the Digestive System. —(Contd.)	211	5,709	529	5,920	239	681	28,097	9,122	28,728	775		
124. Cirrhosis of the liver:— (a) Returned as alcoholic (b) Not returned as	_	_	-	120	_	. 1	68	22	69	9		
alcoholic	-	20	9	20	1	-	259	8	259	13		
liver:— (a) Acute yellow atrophy (b) Others included un-	-	-	-	-	-	-	-	-	-	-		
der 125 Amoebic abscess	_	11	_	11	=	-	-	I	-	-		
Hepatitis	-	7 14	- 1	7 15	_	3 4	5 8	Ξ	8 7	_		
127. Other diseases of the gall bladder and ducts	-	21	-	21	2	-	72	11	72			
128. Diseases of the pancreas 129. Peritonitis without stated cause	_	1 17	7	1 17	1	_	56	13	56	1		
X.—Non-Veneral Diseases of the Genito-Urinary System and Annexa.												
130. Acute nephritis		4 15	-2	4 18	- 1	15 36	362 807	19 170	377 843	8 59		
132. Nephritis not stated to be acute or chronic 133. Other diseases of the	-	26	7	26	1	-	810	355	810	6		
kidney and annexa:— (a) Pyelitis	1	13	1	14	1	-	27	5	27	-		
(b) Other diseases included under 133 134. Calculi of the urinary	-	21	1	21	1	-	42	4	42	-		
passages :— (a) Calculi of kidney and ureter		18	_	20	1	-	8	-	8			
(b) Calculi of the blad- der	-	41	1	41	2	5	30	-	35	2		
(c) Calculi of unstated site	-	4	-	4	-	-	-	-	-	-		
Carried forward	218	5,943	558	6,161	250	695	30,650	9,729	31,845	868		
		-								100		

Appendix E.

are complete assembly (1)	Ge	OVERNM	ENT H	OSPITA	LS.		CHINES	E Hos	PITALS.	
Diseases.	ng in al at 1935.	Yearly	Total.	ases d.	ng in al at 1936.	ng in al at 1935.	Yearly	Total.	ases d.	ng in 1 at 1936.
Diseasos.	Remaini Hospita	Yearly suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining Hospital
Carried forward	218	5,943	558	6,161	250	695	30,650	9,729	31,345	868
X.—Non-Veneral Diseases of the Genito-Urinary System and Annexa.—(Contd.)									4-1	
135. Diseases of the bladder:— (a) Cystitis	-	27	-	27	_	1	94	1	95	4
(b) Other diseases of the bladder	-	11	1	11	1	-	. 37	-	37	-
urinary abscess, etc:— (a) Stricture of the	2	22		24	1	1	69	4	70	
urethra(b) Other diseases of					1					
the urethra, etc 137. Diseases of the prostate 138. Diseases of the male	-	1 4	=	4	1	1	56 8	3	60 9	-2
genito organs :— (a) Phimosis	1	24		25	-	1 2	48	-	49	3
(b) Paraphimosis (c) Hydrocele	_	14		14	1	-	21 44	_	23 44	
139. Diseases of the female genital organs:—	1									
(a) 1. Diseases of the ovary	-	23	2	23	1	-	25	-	25	3
Fallopian tube	1	39	1	40	-	1	9		10	-
3. Diseases of the parametrium	-	10	-	10	1	-	21	-	21	3
(b) Diseases of the uterus	6	146	4	152	4	2	123	2	125	-
(c) Diseases of the breast	-	20	1	20	1	-	101	-	101	7
the female genital organs.	-	84	_	84	4	-	22	1	22	-
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State.	-								37-33	
140. Post-abortive sepsis:— Septic abortion	-	9	-	9	-	-	-	1	-	-
Carried forward	228	6,877	567	6,605	264	708	31,328	9,740	32,036	890

Appendix E.

-	-			-				-		
AND PROPERTY AND PARTY.	G	OVERNA	IENT I	IOSPITA	LS.		CHINES	se Hos	PITALS.	
Diseases.	ing in al at 1935.	Yearly	Total.	ases	ing in al at 1936.	al at 1935.	Yearly	Total.	ases od.	ng in al at 1956.
	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining Hospital a	Admis- sions.	Deaths.	Total Cases Treated.	Remaining Hospital end of 193
Brought forward	228	6,877	567	6,605	264	708	31,328	9,740	32,036	890
XI.—Diseases of Pregnancy, Childbirth and the Puerperal State.—(Contd.)										
141. Abortion not returned as septic:— (a) Haemorrhage follow-										
ing abortion		47		48	2	-	107		107	-
haemorrhage		46 17	1 2	46 17	_	1		-	1 16	-
143. Other accidents of preg-	1		-	-				1		
144. Puerperal haemorrhage:-	1	11		11			38	1	38	177
(a) Placenta praevia (b) Other puerperal		17	1	17		-	39	5	39	-
haemorrhage		56	5	56	-		35	2	35	-
(a) Puerperal septicaemis and pyaemia	-	20	2	20	-	-	26	8	26	-
(b) Puerperal tetanus 146. Puerperal albuminuria and		78	-	-	-	-	-	-	-	-
convulsions:— (a) Puerperal convul-						15.81				1153
sions(b) Other conditions in-		7	2	7	-	-	44	9	44	1
cluded in 146 147. Other toxaemias of preg-	-	10	1	10	-	-	-		-	
nancy 143. Puerperal phlegmasia alba dolens, embolism and sudden death:—		11	3	11	1		11		11	-
(a) Puerperal phlegma- sia alba dolens not										
returned as septic (b) Puerperal embolism	-	-	-	-	-	-	-	-	-	-
and sudden death 149. Conditions associated with		1	1	1	-	-	-	-	-	
labour : (a) Normal labour	1	3,293		3,362	75	80	7,099	-	7,179	79
(b) Accidents of child- birth	1	190	11	191	-	-	93	4	98	-
(c) False labour	-	225		225	- 040	700		0.505	00.005	070
Carried forward	299	10,328	596	10,627	342	189	38,836	9,765	39,625	970

Appendix E. Appendix F.

			· CII CII		TAPPOINT 21					
A PATISAL PROPERTY.	G	OVERNN	ENT H	OSPITA	LS.		CHINES	E Hos	PITALS.	
Diseases.	ng in al at 1935.	Yearly	Total.	× .	ing in tal at 1936.	ng in al at 1935.	Yearly	Total.	ases	ng in al at 1956.
Diseases.	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cas Treated	Remaining Hospital a end of 195	Remaining in Hospital at end of 1955.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining Hospital a
Brought forward	299	10,328	596	10,627	342	789	38,836	9,765	39,625	970
150. Other or unspecified conditions of the puerperal state:—										
(a) Puerperal insanity (b) Puerperal diseases of the breast	-	-	-	-	-	-	3	-	3	-
(c) Not in labour		=	_	_	-	-	=	=	=	-
XII.—Diseases of the Skin and Cellular Tissue.										
151. Carbuncle, Boil		131 85	3 5	135 89	7	4 22	250 331	22 37	254 353	5
(b) Acute abscess 153. Other diseases of the skin	6	260	1	266	6	30	845	44	875	18
and its annexa XIII.—Diseases of the Bones	10	196		206	9	14	155	1	169	2
and Organs of Locomotion. 154. Acute infective osteomye-										
litis and periostitis 155. Other diseases of the	2	22	-	24	5	5	. 66	7	71	2
156. Diseases of the joints and other organs of loco-motion:—	_	9	-	9	2	6	12	2	18	2
 (a) Diseases of the joints (b) Diseases of other 		- 86	1	39	5	3	133	9	136	4
organs of locomotion XIV.—Congenital Malforma-	-	71		71	1	-	76	-	76	
tions 157. Congenital malformations:										
(a) Congenital hydro- cephalus	_	2	2	2	_	-	6	2	6	
Carried forward	328	11,140	608	11,468	379	873	40,718	.9,889	41,586	1,044

Appendix E.

Authorit weeks)	G	OVERNM	ENT L	LOSPITA	LS.		CHINES	E Hos	PITALS.	
Diseases.	ing in tal at 1955.	Yearly	Total.	Jases ed.	ing in tal at 1936.	ing in tal at 1935.		Total.	Jases ed.	aining in spital at of 1956.
	Remaining in Hospital at end of 1955.	Admissions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining Hospital a end of 193	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.
Brought forward	328	11,140	608	11,468	379	873	40,713	9,889	41,586	1,044
157. Congenital malformations :						1000				
—Continued. (b) Spina bifida and										
Meningocele (c) Congenital malform-	1 -	1		1	-	-		-	-	-
ation of heart	_	5	-	5		_	6		6	
(d) Monstrosities	-	-			-	-	_	-	-	-
(e) Other congenital malformations		43	1	10	,					
mariormations	5	40	1	48	1	-				
XV.—Diseases of Early Infancy.	-									
158. Congenital debility	-	6	4	6	_	3	370 82	251 54	373 83	9 2
160. Injury at birth	-	-	-		-	-	-	-	_	
(a) Atelectasis			-	_			_	_	_	
(b) Icterus neonatorum (c) Other diseases in-	-	1		1	-	-	9	4	9	
cluded in 161	-				-	-	-	-	-	-
1. Diseases of the umbilicus	-	-		-	-	-	-	-	-	_
natorum	_	_				las.		-	1200	
3. Others included under 161c	-	5	1	5	-	-	8	6	8	_
XVI.—Old Age.										
162. Old Age :										
(a) Senile dementia (b) Other forms of	-	1	-	1	-	-	146	39	146	4
senile decay		.17	8	17		22	385	162	407	19
XVII.—Conditions Associated with Violence.										
163. Suicide, or attempted suicide, by poisoning						1				
(including corrosive poisoning)	-	140	18	140	-	-	28	2	28	1
Carried forward	333	11,359	640	11,692	380	899	41,747	10,407	42,646	1,079

Appendix E.

	11											
	G	OVERNM	ENT H	COSPITA	LS.	CHINESE HOSPITALS.						
Diseases.	ng in al at 1935.	Yearly	Total.	ases	al at 1936.	al at 1935.	Yearly	Total.	ases	ng in al at 1956.		
	Remaini Hospita	Yearly suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaini Hospit	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.		
Brought forward	333	11,359	640	11,692	380	899	41,747	10,407	42,646	1,079		
XVII.—Conditions Associated with Violence.—(Contd.)												
164. Suicide, or attempted suicide, by gas poisoning 165. Suicide, or attempted	-	-	-	-	-	-	-	-	-	-		
suicide, by hanging or strangulation	-	4	_	4	-	-	-	-	-	-		
suicide, by drowning 167. Suicide, or attempted	-	103	_	103	1	-	28	-	28	1		
suicide, by firearms	-	_	-		_	_	_	-	_	-		
suicide, by cutting or piercing instruments 169. Suicide, or attempted	1	3	1	4	-	-	-	-	-	-		
suicide, by jumping from a height	-	-	-	-	-	-	-	-	-	-		
suicide, by crushing 171. Suicide, or attempted	-	-	-	-	-	-	-	-	-			
suicide, by other means		-	_		-	-	-		-	-		
172. Infanticide	-		-	-		-	-		-			
firearms	1	-	-	1		-	-		-	-		
struments	9	261	6	270	3	-	-	-	-	-		
other means	-		-			-	-	-	4	-		
animals:— (a) Snake bite (b) Insect bite	_1	1 2	_	2 2	-	=	-1	-	-1			
(c) Others	-	40	- 3	40		=	2 11	-	11	-		
178. Accidental absorption of irrespirable or poisonous												
179. Other acute accidental		-	-		-	This	19129	VE	45	-		
poisoning '	1	31	-	31	-		-	-	-	-		
Carried forward	345	11,804	650	12,149	384	899	41,789	10,407	42,698	1,080		
		****	-					-	-	-		

Appendix E.

	C	OVERNA		OCRITIA		CHINESE HOSPITALS.				
	- 4	OVERNA	LENT D	OSPITAL	11111	-		SE HOS	PITALS.	-
Diseases.	Remaining in Hospital at end of 1955.	Yearly suois	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1956.	Remaining in Hospital at end of 1935.	Yearly suois	Total.	Total Cases Treated.	Remaining in Hospital at end of 1956.
Brought forward	345	11,804	650	12,149	384	899	41,789	10,407	42,698	1,080
XVII.—Conditions Associated with Violence.—(Contd.)										
180. Injuries due to conflagra tion	-	-	_	2.	1	-		-	-	-
(a) Burns by fire	2 2	48 97	6	50 99	3 2	-1	25 63	2 3	25 64	-8
substances(d) Dermatitis due to	-	-	-	-	-	-	7	-	7	-
(e) Dermatitis due to exposure to other	-	-	-	-	-	-	-		-	-
forms of radiation 182. Accidental mechanical	-	-	_		-	-	-	-	-	-
suffocation	-	-		-	-	_		_	-	-
drowning	-	-	-	-	-	-	. 7		7	-
185. Accidental injury by cut- ting or piercing instru-	-	22	4	22	1		13	-	18	2
ments 186. Accidental injury by fall, crushing, etc. (This title includes all accidental deaths from injuries by falling, on railways, by	5	11	_	16	-	2	121		123	3
vehicles, by machinery, by landslides, etc.)	39	1,781	115	1,770	45	14	614	6	628	32
188. Injury by animals (poisoning by venomous animals excepted)	1	10	-9	11	-	-	-	-	-	-
Carried forward	394	13,726	780	14,120	485	916	42,639	10,418	43,555	1,020

Appendix E. Appendix F.

		11	Jenui			Appendix 1.					
and the second	G	OVERNM	ENT H	OSPITAL	s.		CHINES	se Hos	PITALS.		
Diseases.	al at 1935.	Yearly	Total.	ases ed.	al at 1936.	al at 1935.		Total.	cases ed.	al at 1936.	
	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	Remaining in Hospital at end of 1935.	Admis- sions.	Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1936.	
* Brought forward	394	13,726	780	14,120	435	916	42,689	10,418	48,555	1,120	
XVII.—Conditions Associated with Violence.—(Contd.)											
189. Hunger or thirst	=		_ _ _	_ 2 1	=		1	=	1		
192. Lightning 193. Electricity 194. Other and unstated forms of accidental violence:—	-	7	1	7	-	_	-		-	-	
(a) Inattention at birth. (b) Other causes included under 194	-	- 19	-	19	-	20	48	-	- 68	-	
195. Violence of an unstated nature—(i.e. accidental, suicidal, etc.)		_	_		_		-		-	-	
196. Wounds of war	-	_	-	_	-	-	-	-	-	-	
XVIII.—Ill-Defined Diseases.	-	700	-		-	-			-	-	
199. Sudden death	-		-	-	-	-	1-3	-		-	
or ill-defined:— (a) Heart failure (b) Other ill-defined		-	-	-	-	-		-	-	-	
causes	-	- 360 3	111	360 3	4		5 126 51	1111	5 126 51		
203. Persons accompanying patients	1	6 27	-1	6 27		-	1	-	1	-	
	-								-		
000, 1 7 8 8 Total	394	14,151	783	14,545	441	936	42,871	10,418	43,807	1,120	

APPENDIX G.

Mortuaries-Return of Diseases for the year 1936.

Diseases.	Males.	Females.
I.—Infectious and Parasitic Diseases.		
1. Typhoid fever	4	
2. Paratyphoid fevers		_
3. Typhus fever	-	_
4. Relapsing fever	-	-
5. Undulant fever	-	-
6. Small-pox:—	e	0
(a) Variola major(b) Variola minor (Alastrim)	6	8
7. Measles		
8. Scarlet fever		_
9. Whooping cough	_	
0. Diphtheria	9	18
1. Influenza	-	_
2. Cholera	-	-
3. Dysentery:—		
(a) Amoebic	- 0	3
(c) Other or unspecified	8	_ 0
4. Plague:—		
(a) Bubonic		
(b) Pneumonic	_	
(c) Septicaemic	-	_
5. Erysipelas	-	1
6. Acute poliomyelitis	-	_
7. Encephalitis lethargica	- 0	11
9. Glanders	6	
O. Anthrax		
1. Rabies	_	-
2. Tetanus	_	-
3. Tuberculosis of the respiratory system.	191	87
4. Tuberculosis of the central nervous	40	10
system	18	. 12
25. Tuberculosis of Intestines and peri-	14	5
6. Tubercolosis of vertebral column		_ "
7. Tuberculosis of other bones and joints.	_	_
	0.00	11-
Carried forward	256	145

Diseases.	Males.	Females.
Brought forward	256	145
I.—Infectious and Parasitic		
Diseases.—(Contd.)		
28. Tuberculosis of skin and subcutaneous tissues		
29. Tuberculosis of the Lymphatic system.	_	1
30. Tuberculosis of Genito-urinary system.	_	
31. Tuberculosis of other organs	_	_
32. Disseminated tuberculosis	44	58
33. Leprosy	6	2
34. Syphillis:—		
(a) Congenital	4	4
(b) Primary	_	-
(c) Secondary	-	-
(d) Tertiary	25	4
35. Other venereal diseases:—		100000
(a) Gonorrhoeal opthalmia	-	
(b) Gonorrhoea	-	-
(c) Soft chancre	-	-
36. Purulent infection:—		
(a) Septicaemia		1
(c) Gas gangrene		1
37. Yellow fever		1
38. Malaria		
(a) Benign Tertian		
(b) Quartan		_
(c) Sub-Tertian	31	7
(d) Cachexia	_	_
39. Other diseases due to protozoa:		
(a) Kala-azar	_	-
(b) Trypanosomiasis	-	-
(c) Yaws	-	-
40. Ankylostomiasis	1	1
41. Hydatid cysts	_	-
42. Other diseases due to helminths:—		111111111111111111111111111111111111111
(a) Ascariasis	-	-
(b) Filariasis	-	-
(c) Taeniasis(d) Clonorchiasis	-	
(e) Schistosomiasis		
(v) Comovosomasis		
Carried toward	9.07	994
Carried forward	367	224

Diseases.	Males.	Females.
Brought forward	367	224
I.—Infectious and Parasitic Diseases.—(Contd.)		
43. Mycoses:—		
(a) Actinomycosis	-	-
(b) Other mycoses (Sprue)	-	-
44. Other infectious or parasitic diseases:-	_	-
(a) Vaccinia		_
(c) German measles		A STATE OF
(d) Varicella		_
(e) Mumps	-	_
(f) Dengue		-
(g) Glandular fever		
(h) Black water fever	-	-
II.—Cancer and Other Tumours. 45. Cancer or other malignant diseases of		
the buccal cavity, and pharynx	_	_
46. Cancer or other malignant tumours of the digestive organs, and peritoneum:—		
(a) Oesophagus	2	_
(b) Stomach and duodenum		-
(c) Rectum		-
(d) Liver and biliary passages	1	
(e) Other digestive organs 47. Cancer or other malignant tumours of		
the respiratory organs	_	_
48. Cancer or other malignant tumours of		
the uterus	-	-
49. Cancer or other malignant tumours of		
other female genital organs	-	
50. Cancer or other malignant tumours of		
51. Cancer or other malignant tumours of		
the male genito urinary organs		40.00
52. Cancer or other malignant tumours of the skin	_	
Carried forward	870	224

	,	
Diseases.	Males.	Females.
Brought forward	370	224
II.—Cancer and other Tumours.—(Contd.		
53. Cancer or other malignant tumours of organs not specified		207 (4. 8)
54. Non-malignant tumours:— (a) Female genital organs (b) Other sites	- 1	1 12 44
55. Tumours of undetermined nature:— (a) Female genital organs	-	
(b) Other sites	Total Co	1
III.—Rheumatism, Diseases of Nutrition and of Endocrine Glands, and Other General Diseases.		
56. Rheumatic fever	-	
(a) Chronic rheumatism		
59. Diabetes mellitus		Ξ
61. Beri-beri 62. Pellagra 63. Rickets	123	54
64. Osteomalacia		_
66. Diseases of the thyroid and pararoid glands:—		200 Th
(a) Simple goitre	sees and seed	100 _ 01
(d) Tetany (e) Other diseases	100000000000000000000000000000000000000	_
67. Diseases of the thymus		oro I to
69. Other general diseases	- W-	2702
Carried forward	494	278

Brought forward	278
IV.—Diseases of the Blood and	278
70. Haemorrhagic conditions:—	
(a) Purpura	_
(b) Haemophilia	
71. Anaemia, Chlorosis:— (a) Pernicious anaemia	1
(b) Other anaemias and chlorosis.	
(1) Splenic anæmia	_
(2) Others	-
72. Leukæmia, Aleukæmia:— /	
(a) Leukæmia —	
Chronic myeloid	_
Chronic lymphatic —	_
Acute	
Multiple myeloma	
73. Diseases of the spleen:—	
(a) Banti's disease	
(b) Other diseases of the spleen	_
74. Other diseases of the blood and blood-	
forming organs	
	_
Tr. Cl D	
V.—Chronic Poisoning.	
75. Alcoholism (acute or chronic)	
76. Chronic poisoning by other organic	
substances:—	
Opium habit	
Morphine habit	
Others	-
77. Chronic poisoning by mineral sub-	
stances:—	
(a) Occupational lead poisoning (b) Other chronic poisoning by	
mineral	4
	and the same
	000
Carried forward 499	283

ME THE PARTY REPRESENTATION OF STREET STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET,		
Diseases.	Males.	Females.
Brought forward	499	283
VI.—Discases of the Nervous System and Sense Organs.		
78. Encephalitis:— (a) Cerebral abscess		The state of
(b) Others		- 6
81. Other diseases of the spinal cord:— (a) Progressive muscular atrophy (b) Subacute combined sclerosis		_
(c) Myelitis of unstated origin (d) Other diseases included under 81		in Tar
82. Cerebral hæmorrhage, Apoplexy, etc:— (a) Cerebral hæmorrhage	3	1
(b) Cerebral embolism and thrombosis	_	_
lyses of unstated origin 83. General paralysis of the insane 84. Other forms of insanity:—		_
(a) Dementia praecox		_
86. Infantile convulsions	-	_
(b) Neuritis, neuralgia	-	=
(d) Disseminated sclerosis (e) Hysteria	_	=
(g) Others		
(b) Trachoma	=	=
Carried forward	509	290

	-	,
Diseases.	Males.	Females.
Brought forward	509	290
VI.—Diseases of the Nervous System and Sense Organs.—(Contd.)		
89. Diseases of the ear and of the mastoid sinus:—		
(a) Otitis externa	_	_
(c) Mastoiditis	=	=
VII.—Diseases of the Circulatory System.		
90. Pericarditis	1	1
(a) Malignant endocarditis (b) Other acute endocarditis	_	=
92. Chronic endocarditis, valvular disease:- (a) Aortic valve disease (b) Mitral valve disease	4 8	1 6
(c) Aortic and mitral valve disease (d) Endocarditis not returned as acute or chronic	_	_
(e) Other or unspecified valve disease	3	_
93. Diseases of the myocardium:— (a) Acute myocarditis (b) Myocardial degeneration	- 22	— 5
94. Diseases of the coronary arteries:— (a) Angina pectoris	_	1
(b) Coronary sclerosis	_	_
(b) Other diseases included under 95	-	-
96. Aneurysm 97. Arterio-sclerosis 98. Gangrene	18 7 8	1
99. Other diseases of the arteries	-	_
Carried forward	565	807

Mortuaries-Return of Diseases for the year 1936.

Diseases.	Males.	Females.
Brought forward	565	807
VII.—Diseases of the Circulatory System. —(Contd.)		No. Service
100. Diseases of the veins:—		1
(a) Varicose veins		-
(b) Haemorrhoids		-
(c) Phlebitis		_
(d) Thrombosis		
(e) Others		_
(.ymphangitis, etc.)	-	_
102. Abnormalities of blood pressure:-		
(a) Arterial hypertension	-	1
(b) Arterial hypotension		-
system		_
VIII.—Diseases of the Respiratory System.		
104. Diseases of the nasal fossae and		
annexa:—		
(a) Diseases of the nose	_	-
(b) Diseases of the accessory		
nasal sinuses	-	-
105. Diseases of the larynx:—		
(a) Laryngismus stridulus		
(b) Laryngitas	_	-
106. Bronchitis:—		-
(a) Acute bronchitis	155	230
(b) Chronic bronchitis	6	1
(c) Bronchitis not distinguished as acute or chronic		1
107. Broncho-pneumonia		783
108. Lobar pneumonia	176	125
109. Pneumonia (not otherwise defined)		- 1
110. Pleurisy:—	0	- 1
(a) Empyema (b) Other pleurisy		_ 4
Carried forward	1,660	1,451

-	-	
Diseases.	Males.	Females.
Brought forward	1,660	1,451
VIII.—Diseases of the Respiratory System. —(Contd.)		
111. Congestion and hæmorrhagic infarct of lung, etc:—		
(a) Hypostatic congestion of hungs (b) Other diseases included under 111	3	1
112. Asthma	=	_
114. Other diseases of the respiratory system:— (a) Chronic interstitial pneumonia,		
including occupational disease of the lung		- 130
(b) Other diseases included in 114:— (1) Gangrene of the lung	1	
(2) Other diseases included under 114b.	_	
IX.—Diseases of the Digestive System.		
115. Diseases of the buccal cavity, pharynx, etc:—		
(a) Diseases of the teeth & gums. (b) Ludwig's angina (c) Diseases of the tonsils	=	1
(d) Other diseases included in 115. 116. Diseases of the oesophagus	=	_
(a) Ulcer of the stomach or duodenum:— (b) Ulcer of the duodenum	. 3	- 1
118. Other diseases of the stomach:— (a) Inflammation of the stomach.	_	-
(b) Other diseases included in 118. 119. Diarrhoea & enteritis (under 2 years). 120. Diarrhoea & enteritis	668	787
(2 years & over):— (a) Colitis	79	63
(b) Otherwise defined	2,415	2,304
Surrey Jordan III	2,110	2,001

Mortuaries—Return of Diseases for the year 1936.

-	THE REAL PROPERTY OF THE PERSON NAMED IN COLUMN 2 AND ADDRESS OF T	CONTRACTOR OF THE PARTY OF THE	
and another	Diseases.	Males	. Females.
	Brought forward	2,41	5 2,804
IX.—Disease	s of the Digestive Sy —(Contd.)	stem.	- 157
121. Appendic 122. Hernia,	itis Intestinal obstruction:		8 –
(a) H (b) In	ferniantestinal obstruction		N Ta
- (a) C	seases of the intestines onstipation iverticulitis		- 4
(c) O 124. Cirrhosis	thers included under in of the liver:—	128	2 1
(b) N	eturned as alcoholic . ot returned as alcoholiseases of the liver:—		6 =
(a) A (b) O	cute yellow atrophy . thers included under	125	-
H	mœbic abscess epatitisaiculi		3 3 1
127. Other dis	seases of the gall b	ladder	1 1
129. Peritonit	of the pancreas is without stated cause	9	$\begin{bmatrix} 1 \\ 4 \end{bmatrix} = \begin{bmatrix} -2 \end{bmatrix}$
	Venereal Diseases of t nary System and Anne		
131. Chronic	phritisnephritis	1	5 4
chronic	not stated to be act		5 2
annexa (a) P			-
184. Calculi o	f the urinary passages	:	
(b) C	alculi of kidney and ur alculi of the bladder alculi of unstated site		
10%2	Carried forward	2,46	5 2,318

Property .	Diseases.	Males.	Females.
	Brought forward	2,465	2,318
	on-Venereal Diseases of the Urinary System and Annexa. —(Contd.)		
	es of the bladder:— Cystitis	_	-
(b) 136. Diseas	Other diseases of the bladder es of the urethra, urinary ab-	-	_
(a)	etc:— Stricture of the urethra Other diseases of the uretha,	_	_
	etc	_	-
	es of the prostate	A85	-
	es of the male genito organs:-	-	-
	Phimosis	_	_
	Pharaphimosis		
	es of the female genital		
	1. Diseases of the ovary 2. Diseases of the Fallopian	-	-
	tube	-	_
(1)	trium	_	_
	Diseases of the uterus	_	_
	Other diseases of the female genital organs	_	100
	ases of Pregnancy, Childbirth d the Puerperal State.		
	bortive sepsis:—		
141. Abortic	on not returned as septic:— Hæmorrhage following abor-		
149 E (b)	Without record of hæmorrhage.	-	
143. Other	c gestationaccidents of pregnancy	- 11	
TERE!	Carried forward	2,465	2,318

Mortuaries-Return of Diseases for the year 1936.

Westerley.	Diseases.	Males.	Females.
eme.	Brought forward	2,465	2,318
	ses of Pregnancy, Childbirth Puerperal State.—(Contd.)		
	eral hæmorrhage:— Placenta prævia		
(b)	Other puerperal hæmorrhage	_	- 1
(a)	Puerperal septicæmia and pyæmia		
(b)	Puerperal tetanusral albuminuria and convul-	_	3-
sions (a)	:— Puerperal convulsions	_	1000
	Other conditions included in 146		
148. Purper	toxæmias of pregnancyal phegmasia alba dolens, em-	-	-
Pue	n and sudden death:— erperal phlegmasia alba dolens		
Pue	erperal embolism and sudden eath	-	-
149. Conditi	ions associated with labour:— Normal labour		_
(b)	Accidents of childbirth False labour	= 1	_ 2
150. Other	or unspecified conditions of the peral state:—		
(a) (b)	Puerperal insanity Puerperal diseases of the	-	-
VII	breast	-	-
A11.—	Diseases of the Skin and Cellular Tissue.		
152. Cellulit	cle, Boil tis, acute abscess:— Cellulitis	-	- 6
(b)	Acute abscessdiseases of the skin and its		-
etak	Carried forward	2,465	2,327

Diseases.	Males.	Females.
Brought forward	2,465	2,327
XIII.—Diseases of the Bones and Organs of Locomotion.		
154. Acute infective osteomyelitis and periostitis	Per milita	_
155. Other diseases of the bones	-	
(a) Diseases of the joints	_	_
XIV.—Congenital Malformations.		
157. Congenital malformations:— (a) Congenital hydrocephalus (b) Spina bifida and Meningocele. (c) Congenital malformation of	_	_ 2
heart (d) Monstrosities (e) Other congenital malformations		- 9
XV.—Diseases of Early Infancy.		
158. Congenital debility	131 169	128 148
infancy:— (a) Atelectasis	4	3
(c) Other diseases included in 161. Diseases of the umbilious	20 - 1	- 9 1
Pemphigus neonatorum Others included under 161c	- 2	- 1
Still-Birth—viable Still-Birth—non-viable	19	7 8
Carried forward	2,831	2,643

Mortuaries—Return of Diseases for the year 1936.

Diseases.	Males.	Females.
Brought forward	2,831	2,643
XVI.—Old Age.		
162. Old age:—		
(a) Senile dementia	= =	- 3
XVII.—Conditions Associated with Violence.		
163. Suicide, or attempted suicide, by poisoning (including corrosive poi-		
soning)	22	4
165. Suicide, or attempted suicide, by hanging or strangulation	20	10
166. Suicide, or attempted suicide, by	Man John	
drowning	-	1
firearms	1	5) -
168. Suicide, or attempted suicide, by cutting or piercing instruments	1	2
169. Suicide, or attempted suicide, by jumping from a height	-	0
170. Suicide, or attempted suicide, by	5	2
erushing	-	-
other means	-	-
172. Infanticide	1 2	_ 1
174. Assault or homicide, by cutting or		LES TRICK
piercing instruments		_
176. Attacks by venomous animals:—	F coolers	
(a) Snake bite(b) Insect bite		
(c) Others		- 14
178. Accidental absorption of irrespirable		14
or poisonous gas	. 1	-
Carried forward	2,888	2,681

Mortuaries-Return of Diseases for the year 1936.

Diseases.	Males.	Females.
Brought forward	2,888	2,681
XVII.—Conditions Associated with Violence.—(Contd.)		
179. Other acute accidental poisoning 180. Injuries dué to conflagration 181. Accidental burns:— (conflagration excepted)—	= ,	=
(a) Burns by fire	_ 1 1	_ 2 2
(e) Dematitis due to exposure to other forms of radiation 182. Accidental mechanical suffocation 183. Accidental immersion or drowning 184. Accidental injury by firearms	8 45 1	- 3 25 1
185. Accidental injury by cutting or pier- cing instruments 186. Accidental injury by fall, crushing,	1	1
etc. (This title includes all accidental deaths from injuries by falling, on railways, by vehicles, by machinery, by landslides, etc.) 187. Cataclysm (This title includes all deaths from cyclones, volcanic eruptions, tidal waves, earthquakes	86	32
or tornadoes)	_ 1	_
189. Hunger or thirst 190. Excessive cold 191. Excessive heat 192. Lightning 193. Electricity 194. Other and unstated forms of ac-	_ _ _ 1 3	= = =
cidental violence: Inattention at birth Other causes included under 194 195. Violence of an unstated nature—(i.e. accidental, suicidal, etc.)	- ₁	=
196. Wounds of war	_	
Carrried forward	3,036	2,745

Mortuaries-Return of Diseases for the year 1936.

	Diseases.	Males.	Females.
	Brought forward	3,036	2,745
XVII.—	-Conditions Associated with Violence.—(Contd.)		
armie	tion of civilians by belligerent	-	
	II.—Ill-Defined Discases.		- 181
199. Sudder	n death		-
defin	of death unstated or ill- ed:— Heart failure		
(b) (c)	Other ill-defined causes Cause not specified	- 5	- 1
202. Maling 203. Person	erings accompanying patients	_	=
204. Decom	posed bodies	105	44
	Total	3,146	2,790
	THE RESERVE AND THE PERSON NAMED IN COLUMN 1		

Appendix H.

REPORT OF THE REGISTRAR GENERAL OF BIRTHS AND DEATHS.

The Births and Deaths Registration Ordinance of 1934 by simplifying procedure and reducing fees brought about a considerable increase in the numbers of births and deaths registered at the various centres.

Births.

Although registration is becoming more and more complete a number of births still escape registration, and this is particularly the case with females.

27,383 births were registered during 1936 (including 272 registered after 12 months) (25,037 in 1935). The following tables show the numbers registered by the various registries:—

	Births registered.								
Hong Kong Registries.	Ma	ale	Fen	nale	Total				
	1935	1936	1935	1936	1935	1936			
The General Register Office Central C.P.D.	2,598 1,269	3,125 1,348	2,118 1,168	2,384 1,144	4,716 2,437	5,509 2,492			
Western C.P.D.	415	452	408	418	823	870			
Eastern C.P.D. Aberdeen C.P.D.	1,739 216	1,932 297	1,567 183	1,630 319	3,306	3,562 616			
Shaukiwan C.P.D.	340	616	304	589	644	1,205			
Stanley Police Station	10	9	1	5	11	14			
Total	6,587	7,779	5,749	6,489	12,336	14,268			

	Births registered.								
Kowloon Registries.	M	ale	Fen	nale	Total				
	1935	1936	1935	1936	1935	1936			
Yaumati C.P.D. Hunghom C.P.D. Kowloon City C.P.D. Shamshuipo C.P.D.	3,380 237 533 724	3,740 337 566 778	2,970 156 396 495	3,002 296 450 579	6,350 393 929 1,219	6,742 633 1,016 1,357			
Total	4,874	5,421	4,017	4,327	8,891	9,748			

	-		-	-	-			
New Territories Registries.	1931 Census	Births registered.						
New Tellitories Registries.	Population.	1932	1933	1934	1935	1936		
(N.T.—North)								
Shatin Tai po Shataukok Sheung Shui Lok Ma Chau Autau Ping Shan Sai Kung	4,346 12.684 8,941 10,208 4,377 12,887 12,660 7,585	3 84 11 13 — 151	194 466 244 371 121 526 313 270	137 437 321 325 144 515 449 260	175 503 315 382 156 530 454 349	166 607 312 334 128 462 400 291		
(N.T.—South)								
Tsun Wan Cheung Chau Tai O, (Lantau Island)	5,355 5,477 7,409	53 226 46	164 538 173	234 560 182	258 526 162	190 313 164		
Total	91,929	587	3,380	3,564	3,810	3,367		

Non-Chinese births for 1936.

There were 515 births (267 male, 248 female) (excluding 15 late registration of births after 12 months) registered as follows:—

Australian	2
American	11
Annamite	4
British	214
Canadian	1
Chilian	1
Ceylonese	2
Danish	2
Eurasian	19
French	4
Filipino	20
German	7
Indian	118
Japanese	25
Mexican	2
Mauritian	1
Malayan	13
Nethorland	5
Portuguese	68
Polish	1
Russian	3
Swiss	1
Spanish	1
Total	515

Vaccination of Infants.

Under the Vaccination Ordinance the guardians of every child born must, unless there be a medical reason to the contrary, furnish to the Registrar General of Births and Deaths a certificate of vaccination, on receipt of which the Registrar General must record the facts in the Births Register. Notices containing advice on this matter are handed to the person registering the birth, and if the person notifying be not the parent notice is also sent by post.

If the necessary certificates are not received reminders are sent by post to the parents.

The non-Chinese make a good response and the majority of infants are vaccinated. The Chinese on the contrary do not make a good response and the majority of infants remain unvaccinated or at any rate uncertified. The majority of the Chinese are of course working class people who can neither read nor write English or Chinese.

Many of these people hold the belief that a child should not be vaccinated until it has experienced two Chinese New Years, which means that one born just after the New Year would be nearly two years old before the propitious time arrives.

Under the circumstances very few prosecutions are instituted for neglect to certify as to successful vaccination.

The table overleaf shows the position in detail: -

	ГезоТ	909	5,622	9,564	2,872	1,890	9,129	678	1,155	1,828	695	30,627
	Total. carried forward.	30	157	1,850	1,092	193	8,666	95	129	421	116	8,452
	Unfit.	28	32	11	1	1	46	1	9	1	1	107
	Insusceptible.	ক	14	11	1	1	1	1	1	1	1	16
936.	Had Small- pox.	1	1	1 1	1	-	1	1	-	-	1	
птнз-1	Cannot be found.	12	517	906	366	844	1,051	333	126	204	388	3,862
TERED BI	Left Colony.	15	487	504	258	Ť	19	1	06	20	41	1,484
R REGIST	Dead.	-	39	261	- 1	9	49	10	16	6	60	398
ETURN F	Vaccinated.	520	4,876	1,829	1,156	848	4,256	948	788	1,174	152	16,308
Vaccination return for registered births-1936.	Total-liable.	608	5.625		2.872		9,129	678	1,155	1,828	695	30,627
Vacci	New births.	513	4,772	3,562	2,492	1,205	6,742	688	1,016	1,357	616	23,778
	Brought forward unvaccinated.	06	850	1,002	380	185	2,887	45	139	471	79	6,849
	1986	General Register Office (Non-Chinese)	Office (Chinese)	Eastern C.P.D	0	Shaukiwan C.P.D	Yaumati C.P.D	Hunghom C.P.D	Kowloon City C.P.D.	Shamsuipo C.P.D	Aberdeen C.P.D	

Deaths

Before registering a death the Deputy Registrar or Assistant Registrar must be satisfied that the cause of death given is the true cause and in case of doubt it is his duty to institute or cause to be instituted immediate enquiries with a view to ascertaining the true cause of death.

The authorities certifying the cause of death are: -

- (a) the medical practitioners in attendance during the last illness whether in hospital practice, dispensary practice, or private practice.
- (b) the Medica! Superintendents of the Tung Wah, Tung Wah Eastern and Kwong Wah Hospitals for bodies where there has been no registered medical practitioner attending.
- (c) the Health Officer, Urban Council, for bodies found in houses and for which he is called for diagnosis.
- (d) the Coroner for all bodies examined at the Public Mortuaries—including medico legal cases and bodies dumped in the street or left at convents for disposal.

There were 26,356 deaths registered among the civilian population during 1936 (including 976 stillbirths) (22,159 in 1935), and the following table shows the number certified during 1936 by the various authorities certifying:—

Authority	Non-(Chinese.	Chinese.			
of death.	Number of Cases.	Percentage of the whole.	Number of Cases.	Percentage of the whole.		
Medical practition-				Harrie B.		
ers in Attendance.	216	91.52	14,683	56.2		
Medical Officer of						
Health	-	_	13	0.1		
Tung Wah Hospital.	_	_	990	3.8		
Tung Wah Eastern				1		
Hospital	-	-	804	3.1		
Kwong Wah Hos-			4 000			
pital	-		1,330	5.1		
Coroner from in-						
formation received from the M.O.				100		
i/c Mortuaries	20	8.47	5,916	22.6		
Asst. Registrars,	20	0.11	0,010	22.0		
N. T.	10 10	100/_	2,384	9.1		
		-				
	-					
Total	236	-	26,120	-		

DEATHS REGISTERED IN HONG KONG, KOWLOON AND NEW TERRITORIES.

The following tables show the number of deaths registered by the various registries:—

Hong Kong	Deaths registered.							
Registries.	1932	1933	1984	1935	1936			
The General Regis-								
ter Office Victoria.	11,141	8,684	9,301	9,262	10,524			
No. 2, Police Station	81	92	67	736	981			
No. 7, Police Station	77	46	38	747	1,205			
Shaukiwan Police								
Station	314	257	247	283	347			
Aberdeen Police								
Station	218	167	179	195	228			
Stanley Police								
Station	12	40	33	89	58			
Total	11,843	9,286	9.865	11,262	13,380			

m (Slas) Gualline	Deaths registered.								
- Kowloon Registries.	1932	1988	1934	1935	1936				
Kowloon Death		Day?		THE					
Reg. Office Yaumati Police	5,420	5,013	5,172	5,365	6,814				
Station	863	895	924	1,134	1,319				
Shamshuipo Police Station Kowloon City Police	1,271	1,543	1,630	1,992	2,003				
Station	432	483	382	423	515				
Total	7,986	7,934	8,108	8,914	10,651				

New Territories	1931 Census	Deaths registered.							
Registries.	population.	1932	1933	1934	1935	1936			
(N.T.—North)			1						
Shatin	4,346	16	67	92	104	108			
1 aipo	12,684	14	196	195	270	242			
Shataukok	8,941	2	98	155	117	236			
Sheung Shui	10,208	11	1111	162	175	186			
Lok Ma Chau	4,377		66	63	70	83			
Autau	12.887	9	215	232	274	385			
Ping Shan	12,660	6	156	263	252	298			
Saikung	7,585	3	85	156	167	175			
(N.T.—South)									
Tsun Wan	5,355	40	119	140	177	214			
Cheung Chau	5,477	122	179	173	194	285			
Tai O (Lantau Island)	7,409	87	78	139	183	172			
Total	91,929	310	1,370	1,793	1,983	2,384			

Non-Chinese deaths registered during 1936.

There were 236 civilian, 9 army and 8 navy deaths as follows:—

Australian	1
American	7
Annamite	1
British	68
Cingalese	1
Ceylonese	1
Danish	1
Eurasian	2
French	3
Filipino	7
Formosan	1
German	2
Hungarian	1
Hebrew	2
Italian	3
Indian	65
Japanese	28
Korean	1
Malayan	7
Mexican	6
Norwegian	1
Portuguese	39
Parsee	1
Russian	3
Swedish	1
Total	253 =
	17.00

In addition to the above there were 4 stillbirths: 1 British, 1 Portuguese, and 2 Indian.

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