Annual report of the Medical Department / Federation of Malaya.

FEDERATION OF MALAYA

REPORT

OF THE

MEDICAL DEPARTMENT

FOR THE YEAR

1953

By

DR. R. E. ANDERSON

B.Sc., M.B., Ch.B., D.P.H., D.T.M. & H.

Director of Medical Services

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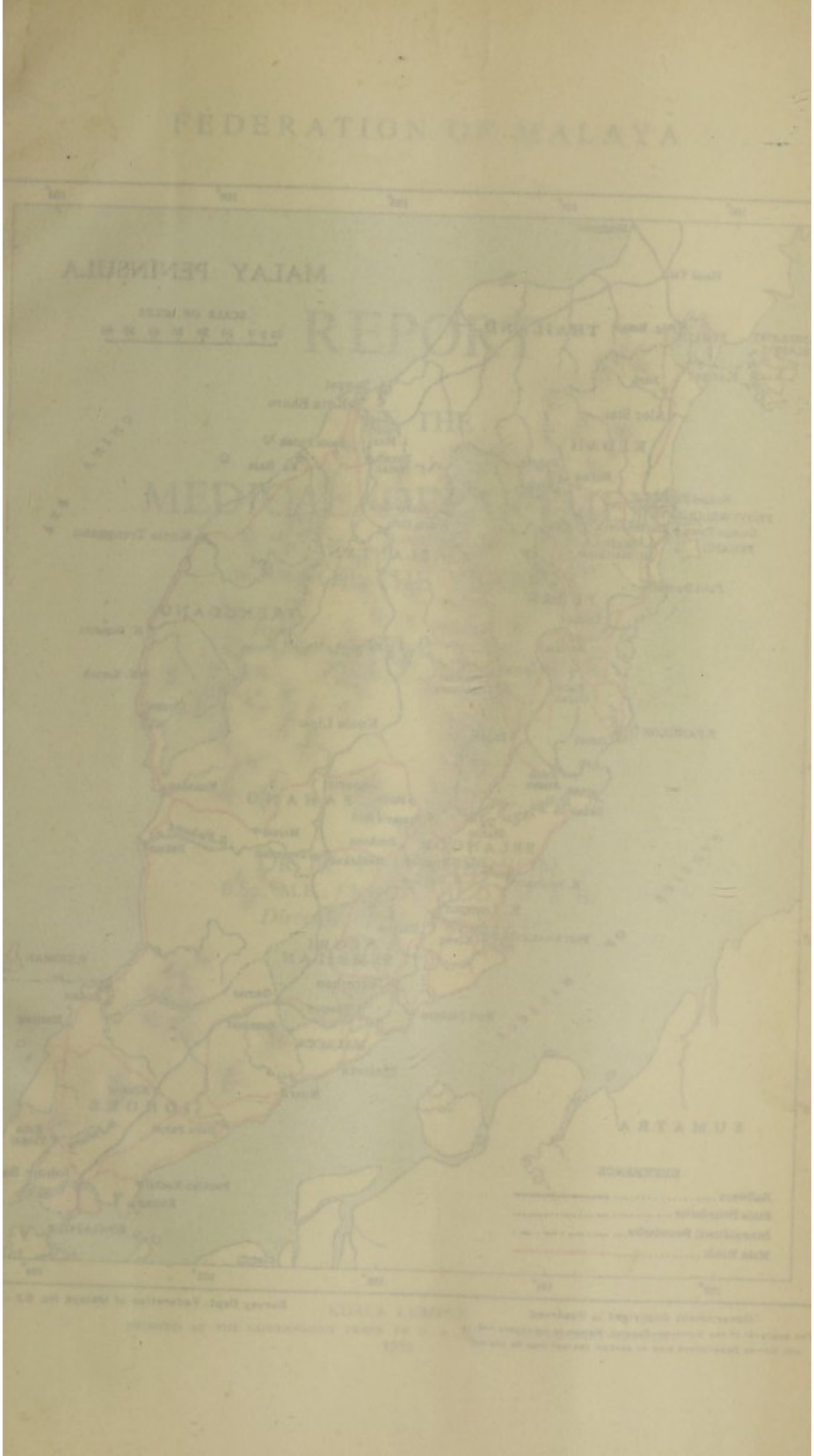

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KUALA LUMPUR

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FOREWORD

1953 was a year of consolidation throughout the Department in that the increases of staff, both timescale and specialist, were beginning to settle down to a set organisation. Funds while ample, were not so generously provided as in the previous boom years, and the pressure of services required by the emergency had begun to ease off. And indeed the time had come when a stock-taking was required. Such major changes as a large increase in specialist services, the introduction of the compulsory house doctor provisional registration period in approved hospitals required a major re-orientation of the work of the department. For specialist services call for increased facilities such as laboratory facilities, equipment, staff and a service which pre-war and immediately after the war was essentially a general duty service had been re-organised to meet the increase of specialists and the general duty posts were hard to fill. Specialization had become more attractive, the fees ordinance diverted fees devised to meet the needs of the ordinance into the pockets of the specialist officer, with a corresponding desire on the part of all officers to be specialists. This, in its turn, raised problems of training. The qualification for specialists had been laid down by the Secretary of State. The acquisition of such qualifications implied long periods of study leave abroad, and the privilege had now been extended to all officers. One of the results of this was a disinclination on the part of any officers to join the health services which indeed were much in need of staff, since no fees could be earned by Health Officers, and he could not so readily turn to general practice on retirement.

Consolidation then was taking place. The major hospitals Penang, Ipoh, Kuala Lumpur, Malacca and Johore Bahru had become specialist hospitals and were organised into units with a specialist officer, a registrar and one or more house doctors. The size of the units varied from place to place, and some obvious disadvantages were beginning to appear. In no hospital were the paying beds in a unit all close together, if they were in the same hospital they were widely separated from the non-paying beds. or they might even be in a different hospital sometimes as much as 12 miles away. The hospitals which were once adequate were now showing inadequacies.

The outpatient facilities never adequate, and often consisting of a small room with little or no waiting space, were now becoming hopelessly inadequate since each specialist demanded his own facilities. Apart from that there is an ever increasing demand for such services on the part of the population, and unfortunately this demand increases in slumps and decreases in booms, and we in 1953 were entering a slump. The number of beds in our hospitals may be adequate, and could be made more so if the outpatient facilities were such that an earlier discharge to ambulant treatment were possible. The outpatients were congesting the corridors

of our hospitals, waiting was becoming interminable, the doctors dealing with outpatients were becoming increasingly harrassed and perhaps too, short tempered. More adequate outpatient facilities, not necessarily at the hospital, and more staff to man them, is a requirement which has obtruded itself on our attention.

With the emergency appearing to be under control and need for urgent services in new villages, resettlements and kampongs stabilizing, the time had come to work out how all the varied, and miscellaneous services which were available in the rural areas could be co-ordinated and integrated with the main services. The St. John and Red Cross teams were only ephemeral, and they would need to be replaced lest a vacuum be left. Services were being run by those who were ill trained to carry them out, there was a lamentable lack of supervision for want of suitable personnel. More nurses, more midwives, more sanitary inspectors, more dispensers were required, and above all more supervision. It was becoming apparent that the health services in a district would have to be under the control of one man, the district medical and health officer, and from this the concept of district health centres, with sub-district centres, and kampong midwives arose. Funds were obtained to build some of them in 1954, and to start training specifically in rural health work the teams that would man these centres, the Jitra Rural Health Training School came into being. The muddle of the emergency was beginning to sort itself out.

But trained staff is still a vexed question and will be until the cumbersome training machine gets going. For doctors there is little alternative at present but to go abroad and acquire the qualifications necessary for specialization. The position could be ameliorated in two ways, by obtaining the recognition of the Royal Colleges of our hospitals for the necessary approved experience thus making unnecessary the protracted period abroad, or the acceptance of lesser qualifications for specialisation. (This would be retrograde and the former must be our line). For nurses training is linked with accommodation and terms of service. The former is being slowly met and the first of the big student nurse hostels (that in Penang) had begun to take shape. The output of the Penang School is limited by the accommodation at this hostel (250) to one third of that each year. For that reason until the student nurse hostel capacity is doubled, at least, and until nurses are turned out trained, not simply to meet an establishment vacancy but at a fixed rate per annum, will the problems of training be solved. Conditions of service are being improved and consolidation of emoluments in kind in the pensionable salary are being considered.

Nurses are not the only members of the departmental staff who require training for in addition to assistant nurses and midwives who will form the backbone of the future rural health services, and must have their initial training in hospitals, there are sanitary inspectors, health nurses, dispensers, laboratory assistants and anti-malarial staff, who also must be trained. Teaching accommodation and living accommodation for those attending the courses is an absolute essential, and with the possible

vacation during 1954 of the Tanglin Hospital in Kuala Lumpur by the various offices which at present occupy it, there is a hope that the buildings may revert to the Medical Department for a training school for health staff.

Laboratory services are now beginning to show deficiencies—the Institute for Medical Research, with much important research on the go, is reluctant to devote its time to routine work. Partly due to the attention drawn to this deficiency by the report of the Medical Education Enquiry Committee headed by Sir David Lindsay Keir, the question is now under discussion as to whether laboratory and research services will be combined and expanded or whether they will develop separately. The tendency at present appears to be to consider development of clinical laboratories in the large hospitals under clinical pathologists, and public health laboratories in the various regions to deal with the public health and practitioner service requirements. Research would remain concentrated at the Institute in Kuala Lumpur, but as required temporary local laboratories would be set up.

One matter causing great concern is the inadequacy of the facilities for the treatment of mental disease. The huge mental hospital at Tanjong Rambutan is very much under-staffed and has more than reached its limit of capacity. To make way for the urgent cases the less urgent are discharged only to require re-admission after a short period of time. Nothing is done in the outpatient departments of the hospitals to hold psychiatric clinics which might relieve the strain in the mental hospitals. Recent reports have shown that large hospitals such as that at Tanjong Rambutan are too big to permit effective administration, and as this state of affairs is likely to get worse, consideration may at an early date have to be given to decentralizing mental hospitals and keeping them to such a size that the psychiatrist will have time to run psychiatric clinics in the hope of reducing in-patients. Here again however staffing difficulties may prove insuperable.

The stores problem is coming no nearer to solution with the threat to deprive the Stores Organisation of the Light Street Godown in Penang, and the Batu Bulk Store at Batu Village. An adverse report on the vulnerability of our whole stores organisation to fire, makes it even more important that steps should be taken as soon as possible to improve the stores position. The work has been much increased by additional requirements of the relief teams, the police and the Federation Military Forces. While ideally the stores departments should be situated at a Port such as Port Swettenham with direct rail link, such a store would be perhaps too vulnerable in time of war. The stores department however has plans under consideration for centralization of storage and manufacture, and has also been considering the advantages and disadvantages of Federal stores in States.

The Institute for Medical Research has entered a phase of renewed activity stimulated by the approach to completion of its new laboratories. The increasing value of virus research, and in particular research into the spread of yellow fever and Japanese encephalitis have stimulated the formation of a new division and an increased interest in mammal and insect vectors of disease.

With the major problems of the spread of malaria a matter for Health Officers, attention has been turned to the incidence of filariasis and methods of dealing with it. Research pays dividends which may not be immediately noticeable, and it would be a pity if in any way on account of decreasing revenue research provision had to be cut.

The visit of the Committee of Enquiry into Medical Education has stimulated interest not only in Medical Education but many departmental problems intimately associated with medical education, and their report is eagerly awaited.

The Acting Director attended as observer for the Federation of Malaya, with the United Kingdom delegation, the Regional Committee Meeting for the Western Pacific of the World Health Organisation in Tokyo in September. The contacts with others in similar positions, and the meeting with important international figures was of great value.

The death of Dr. H. M. O. Lester suddenly in May 1953 deprived the department of the services of an officer who introduced many new ideas in the relatively short time during which he was Director. Many of the problems discussed in this foreward had attention focussed on them by his energetic method of approach to them, and his unerring faculty of putting first things first.

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FEDERATION OF MALAYA

REPORT OF THE MEDICAL DEPARTMENT FOR THE YEAR 1953

PART I

(1)—CLIMATE, AREA AND POPULATION

1. CLIMATE.—The climate of Malaya is fairly healthy but the principal features are copious rainfall, high humidity and a uniformity of temperature which rarely varies during the day by more than fifteen degrees. Rainfall averages about 100 inches a year, though the annual fall varies considerably from place to place and year to year. Coastal districts, however, have their own peculiar rainy seasons.

2. AREA.—The territories comprising the Federation of Malaya are situated in the Southern Section of the Kra Peninsula between latitudes 1° and 7° North and longitudes 100° and 105° East. The Federation of Malaya covers an area rather more than twice the size of the Island of Ceylon and slightly larger than England without Wales. Four-fifths of the surface of the Federation of Malaya is covered by dense tropical jungle. The coastline of Malaya extends for over one thousand miles and no part of the country is more than 100 miles from the sea. The area of the States and Settlements is shown below:

Kedah	3,648	sq. miles
Perlis	310	,,
Penang	110	,,
Province Wellesley	290	,,
Perak	7,980	,,
Selangor	3,160	,,
Negri Sembilan	2,580	,,
Malacca	640	,,
Johore	7,878	,,
Kelantan	5,870	,,
Trengganu	5,000	,,
Pahang	13,820	,,
Total Federation of Malaya ...	51,286	,,

3. POPULATION.—The estimated mid-year population of the Federation of Malaya was 5,705,952, comprising Malaysians 2,803,863, Chinese 2,152,906, Indians 665,503 and others 83,680. This total shows an increase of 199,505 over the mid-year figure for 1952.

By States and Settlements, the estimated mid-year population for the last three years is as follows:

States/Settlements	Estimated Population mid-year 1951	Estimated Population mid-year 1952	Estimated Population mid-year 1953
Kedah	602,278	622,506	645,817
Perlis	76,315	78,506	80,815
Penang and Province Wellesley	481,748	495,069	512,432
Perak	1,041,861	1,076,454	1,116,532
Selangor	783,545	811,757	847,098
Negri Sembilan ...	296,483	307,767	321,386
Malacca	263,953	272,820	283,140
Johore	817,121	843,668	874,766
Kelantan	470,523	481,562	493,501
Trengganu	236,335	242,889	249,468
Pahang	267,060	273,449	280,997
Total Federation ...	5,337,222	5,506,447	5,705,952

(2)—ADMINISTRATION

4. ORGANISATION.—There has been little change in the administrative set up of the Medical and Health Department during the year 1953. Medical Headquarters, re-organised by the addition of two Assistant Directors, and an Administrative Grade A Officer, was responsible through the Director to the Member for Health for all policy matters, but for staff and personnel was responsible to the Chief Secretary. Medical Headquarters, however, controls directly only certain functions such as Research, Stores, Special Diseases (Mental Disease and Leprosy), Quarantine, Transfers, Promotion and Training of Staff and, in addition, is responsible for the running of two large Federal Hospitals at Malacca and Penang. Each State and Settlement is responsible for its own medical service, but their work is co-ordinated and planned with the assistance of Medical Headquarters which gives advice according to the policy of the Member for Health.

Control of sanitation in the towns and villages over the Federation is in the hands of local authorities which, in the case of the largest towns, e.g., Penang, Kuala Lumpur and Malacca, are Municipal Councils, and in the case of other towns are Town Boards. Some of these are elected bodies, with an official chairman, others are appointed bodies, but in each case a health officer either employed independently by the Municipality or a member of the Medical Department advises the chairman on all health measures under his jurisdiction. In rural areas, the district health officer, in the absence of any local authority, advises the district officer on health problems.

The health of labour forces on estates and mines is under the care of Estate Medical Practitioners but the Government Health Department exercises supervision under the Labour Code.

Most of the labour forces on estates have now been regrouped due to the activities of communist terrorists.

The staff employed throughout the Federation on public health work, exclusive of Municipalities, Town Boards and estates, which have their own health staff, is made up as follows:

Medical Officers of Health	38
Health Inspectors or Sanitary Inspectors ...	147
Public Health Sisters	31
Public Health Nurses	103

5. Expenditure on Medical and Health Services.—The total actual expenditure incurred by Government on medical and health services was $47,124,757.56 made up as follows:

Federal	$14,230,920.00
State/Settlement	32,893,837.56
Total ...	$47,124,757.56

This figure does not take into account the vast amounts expended on projects relating to anti-malarial drainage and water supplies undertaken by the Public Works Department, and Municipal Health agencies which maintain public health covering a wide area. In addition mention must be made also of estates which run their own hospitals, undertake anti-malaria schemes and maintain their own medical practitioner service. Nor does it take into account the funds spent by the Public Works Department on buildings for the Medical Department. Expenditure on the emergency medical services in the new villages, paid for from funds administered by the Member for Health, are also not included.

6. Staff.—The big fall in revenue, which resulted in the marked fall in the price of the Federation's main revenue earners, tin and rubber, has had a depressing effect on the work of the department, has meant considerable retrenchment in the services, and will mean that in the near future at least all development will be at a standstill. As a result, recruitment has been slowed down, and recruitment of all specialist officers has had to cease. In view of the fact that recruits for most timescale vacancies can be found locally, recruitment of expatriate officers except for Health Officers of whom there is a grave shortage has also come to a standstill. In order to effect the necessary economies, considerable reductions in running costs of Federal Institutions have been made.

As a result of a vigorous recruitment campaign in 1952 quite a number of the establishment posts were filled by officers on agreement or contract or by temporary holders. Gradually as these contract or temporary posts can be filled by locally-appointed permanent officers, the holders of the posts will have their contract terminated. A decision will have to be made soon as to how many of the officers recruited on contract up to three years will be absorbed into the permanent establishment or have their contract terminated. These number sixty-four at present. While their presence has done much to ease working conditions in the

service, it is unlikely that more than thirty in all, will be admitted to the permanent service. With conditions in general practice falling off, and with the considerable improvement in prospects and conditions in Government Service it can be confidently expected that more and more local graduates on completion of their provisional registration will seek entry to Government Service.

At the end of the year the staffing position can be summarised as follows: Of the 94 Superscale Administrative and Specialist posts 69 were filled and 25 were vacant, while of the 248 Timescale posts, 149 were filled and 99 were vacant. Of the 99 vacant posts 88 were held by temporary officers on agreement and on month-to-month basis.

It is with deep regret that the death is recorded of Dr. H. M. O. Lester, O.B.E., Director of Medical Services, Federation of Malaya, which took place very suddenly on 28th May, 1953.

The following re-organisation of staff was effected at the Medical Headquarters:

Dr. R. E. Anderson was promoted as Director of Medical Services, Federation of Malaya, with effect from 29th May, 1953.

Dr. R. D. Gross, Deputy Director of Medical Services, Federation of Malaya, relinquished duty on 12th April, 1953, to proceed on leave to the United Kingdom prior to retirement.

Dr. E. D. B. Wolfe acted as Deputy Director of Medical Services from 29th May, 1953, till the end of the year.

Dr. J. E. McMahon relinquished duty from the post of Assistant Director of Medical Services (Hospitals) with effect from 29th March, 1953, on transfer to Malacca.

Dr. R. I. Macbeth assumed duty as Assistant Director of Medical Services (Hospitals) with effect from 30th March, 1953.

Dr. M. L. Bynoe assumed duty as Assistant Director of Medical Services, Federation of Malaya, with effect from 9th November, 1953.

Dr. J. C. Clearkin assumed duty in the post of Health Officer, Medical Headquarters, with effect from 11th October, 1953.

Dr. A. J. Leslie-Spinks relinquished duty as Acting Supernumerary Administrative Medical Officer, Grade "A" with effect from 31st December, 1953, on secondment to the Malayan Railway.

7. LEGISLATION.—Major legislation affecting the Medical Department passed during the year was the "Hydrogen Cyanide (Fumigation) Ordinance, 1953". This measure, based ultimately on the Hydrogen Cyanide (Fumigation) Act, 1937, of the United Kingdom enables regulations to be made requiring the fumigation of premises or ships by means of hydrogen cyanide to be carried out by responsible persons, taking all proper precautions.

Apart from the above a number of regulations and extension to existing enactments or regulations passed during the year comprised the following:

(1) The Registration of Pharmacists Regulations, 1953.
(2) The Hydrogen Cyanide (Fumigation) Regulations, 1953.
(3) The Poisons (Dangerous Insecticides) Regulations, 1953.
(4) The Registration of Dentists (Amendment) Ordinance, 1953.
(5) The Medical Registration (Amendment) Ordinance, 1953.
(6) The Sale of Food and Drugs (Amendment) Regulations, 1953.
(7) The Poisons (Amendment) Regulations, 1953.
(8) The Sale of Food and Drugs (Amendment No. 2) Regulations, 1953.

PART II

PUBLIC HEALTH—(1) VITAL STATISTICS

8. Figures of Vital Statistics for the year show a steady improvement in the health of the population. The outstanding features are the highest number of births ever to be recorded in the Federation, and a further decline in the death rates for all races. The trend of the infant mortality rates for all the races is also in a downward direction.

9. POPULATION.—The estimated population of the Federation at mid-year 1953 was 5,705,952. Details are given earlier in the report (paragraph 3).

10. BIRTHS AND DEATHS—*Births.*—The number of live births registered in 1953 was 249,365, which is 4,741 more than the number recorded in 1952, which was 244,624.

The birth rate for all races for 1953 was 43.7 per 1000 population as at mid-year 1953, which is lower than the rate (44.4) for 1952.

By races the birth rates were:

			1952 Rates
Malaysians	45.1 per 1,000	...	46.1
Chinese	42.1 ,,	...	42.5
Indians and Pakistanis ...	44.2 ,,	...	45.2
Others	32.5 ,,	...	31.7
All Races	43.7 ,,	...	44.4

DEATHS.—Deaths registered in 1953 were 70,795 which is 4,225 less than recorded for 1952 (75,020). The death rate for all races was 12.4 per 1,000 population as at mid-year 1953. This is lower than the rate (13.6) for 1952. The death rates for 1947 to 1951 were 19.4, 16.2, 14.2, 15.8 and 15.3 respectively.

The death rates by races were:

			1952 Rates
Malaysians	14.5 per 1,000	...	15.4
Chinese	10.2 ,,	...	11.6
Indians and Pakistanis ...	10.9 ,,	...	12.8
Others	9.6 ,,	...	9.7
All Races ...	12.4 ,,	...	13.6

11. INCREASE OF POPULATION.—The births registered exceeded the deaths by 178,570 and, therefore, the natural increase amounted to 3.1 per cent. of the estimated mid-year population, whereas in England and Wales with an estimated mid-year population of 44,090,000 the figure is only 0.4 per cent. resulting from a natural increase of 178,604 during the corresponding period.

12. INFANT MORTALITY.—The deaths of infants under 1 year numbered 20,796 out of 70,795 deaths of all ages. There were 249,365 live births, and the infant mortality rate was 83 per 1,000 live births. The corresponding figures for 1952 were 22,026 under 1 year out of 75,020 with an infantile mortality rate of 90.

The racial distribution of infantile mortality is as follows: (The corresponding figures for 1952 are shown in brackets)

Races	Infant Deaths	Births	Infant Mortality rates
Malaysians	12,448 (12,697)	126,479 (125,208)	98 (101)
Chinese	5,523 (6,201)	90,737 (88,974)	61 (69)
Indians and Pakistans ...	2,713 (3,032)	29,433 (27,902)	92 (108)
Others	112 (96)	2,716 (2,540)	41 (37)

An analysis of the above clearly indicates that there is an all round decrease in the proportion of deaths in the three principal racial groups except in the "other races".

13. MATERNAL MORTALITY.—The number of maternal deaths registered was 1,176 for 249,365 births as compared with 1,272 for 244,624 births in 1952. This gave a maternal death rate of 4.7 per 1,000 births and the figure for 1952 was 5.2 per 1,000 births.

14. PRINCIPAL CAUSES OF DEATH.—Out of a total of 70,795 deaths only 15,362 (about 21.7 per cent.) were certified by Medical practitioners and 4,487 (about 6.3 per cent.) were inspected after death by medical men. It may, therefore, be expected that the classification is far from accurate.

Principal causes of death are given below:

Fever of unknown origin	16,735	(16,044)
Infantile convulsion	11,316	(11,954)
Malaria (all forms)	598	(1,256)
Pulmonary Tuberculosis	1,780	(2,252)
Pneumonias	2,563	(2,474)
Premature births	1,821	(1,679)
Violence	2,668	(3,497)

(Figures in brackets are for the year 1952)

PUBLIC HEALTH—(2)—SPECIAL DISEASES

15. The main public health problems of the Federation of Malaya, are the prevention of malaria, reduction in pulmonary tuberculosis, eradication of yaws, prevention of the major infectious diseases and the treatment of Leprosy and Mental Diseases. Enforcement of quarantine and improvement of the general standard of nutrition and health especially the care of mothers and children constitute an equally important part of the Health Services.

16. MALARIA.—Malaria shows a general downward trend in number of cases from 1946 to 1950 with a slight rise in 1951. In 1952 the level of malaria admissions receded again to just below the 1949 level. The figure for 1953 further dropped to 12,716 cases with 163 deaths.

Malaria admissions to Government and Estate Hospitals with mortality figures are given below for comparison:

	Admissions to Government and Estate Hospitals	Deaths	Case Mortality per cent.
1947 ...	22,281 ...	736 ...	3.3
1948 ...	15,477 ...	428 ...	2.8
1949 ...	14,663 ...	315 ...	2.1
1950 ...	11,720 ...	236 ...	2.0
1951 ...	15,960 ...	244 ...	1.5
1952 ...	14,115 ...	192 ...	1.4
1953 ...	12,716 ...	163 ...	1.3

From the above it would be gratifying to note that the case mortality rate has fallen steadily each year from 3.3 per cent. in 1947 to 1.3 per cent. in 1953. The present low incidence of malaria is largely due to the widespread use of Paludrine and house spraying with DDT., etc.

During the early part of the year a major outbreak was recorded in Kuala Lipis; this was due to a breakdown of routine control as a result of the emergency.

It is noted with concern that the continuing low incidence of malaria over the country as a whole may be responsible for the lack of anti-malaria precautions when planning schemes such as satellite towns. It has been suggested that the question of malaria control should be given fullest consideration before schemes are planned and to achieve this the health authorities of the respective States/Settlements should be consulted.

The number of malaria cases treated in Government Hospitals was 12,962—a decrease of 3,079 cases from 1952. The distribution of types of malaria, diagnosed microscopically was:

Sub-tertian	69.7	per cent.
Benign-tertian	27.3	,,
Mixed	2.5	,,
Quartan	0.5	,,

17. THE MALARIA ADVISORY BOARD.—The constitution of the board is as follows:

Six permanent members (Medical)	The Director of Medical Services (*Chairman*).
	The Director, Institute for Medical Research (*Vice-Chairman*).
	The Senior Malaria Research Officer.
	The Entomologist, Institute for Medical Research.
	The Senior Medical Officer, Military Forces.
	The Principal Medical Officer, Royal Air Force.

Five Permanent Members representing Government Departments	Representing: Railways, Public Works, Drainage and Irrigation, Education, Agriculture.
Members nominated by His Excellency the High Commissioner.	
Five Medical Officers in the Public Service appointed by name	Government Medical Officers with experience of anti-malarial work.
Five Medical Practitioners not in the Public Service	These are all Estate Medical Practitioners with anti-malarial experience.
Two representatives of Planting Interests nominated after consultation with the United Planting Association of Malaya	One Asian and one European Planters' Representative.
One member nominated to represent labour interests.	
Four other nominated members	(One is an Administrative Officer and three are medical men).

The Board records with deep regret the death in May of Dr. H. M. O. Lester, O.B.E., Director of Medical Services and Chairman of the Board.

The Board held one meeting during the year on 14th November. In addition to members, the following guests were present: Sg. Commander C. V. Harries, R. N., Dr. J. Cameron, City Health Officer, Singapore; Professor T. A. Lloyd Davies and Dr. W. E. Nicholas, Department of Social Medicine and Public Health, University of Malaya; Mr. R. H. Wharton, Entomologist, Institute for Medical Research, Filariasis Laboratory, Kuantan, Pahang.

18. Review of Local Malaria.—Malaria admissions to hospital in 1953 were some 1,400 less than in the previous year. The increase reported for 1951 seems to have been a temporary one, and the general downward trend, obvious since 1947, has been resumed. Only three of the eleven States and Settlements of the Federation registered increases in malaria admissions compared to 1952, and in two of these, Perak and Selangor, the increase was small. The third state, Pahang, had an increase of 418 admissions, from 962 to 1380, mainly due apparently to an outbreak of malaria on the outskirts of Kuala Lipis caused by a breakdown of the routine control. This occurrence emphasises the need for continued efficiency in anti-malaria control measures, and is a warning against undue complacency.

The case mortality rate of malaria patients admitted to hospital was 1.3 per cent. a very slight decrease from 1952. Blackwater fever remained rare.

19. REVISION OF ANTI-MALARIA LAW.—At a meeting of the Board in March 1948 a sub-committee was appointed to examine the question of revising the law relating to malaria. However, owing largely to uncertainty at that time about the proper place of the new drugs and insecticides in malaria control, no progress was made. It was not until this year, when the revision of the labour code as the Employment Bill 1953, was undertaken by a Select Committee of the Legislative Council, that effective action was taken. Dr. Lamprell, as a member of this Select Committee and of the Board, asked the Board to comment on a draft of that portion of the bill relating to the prevention of malaria. The matter was discussed at the meeting in November, and a new Sub-Committee was formed to reach a decision upon the points raised at the meeting and to report back to the Board.

20. DDT HOUSE SPRAYING.—As explained in the report for last year, the conclusion from the experiments in rural malaria control seems to be that residual insecticides offer the best method of combating rural malaria carried by *A. Maculatus*, but the dramatic results are unlikely. Malaria control for towns will continue to be by anti-larval methods, whilst estates will continue to make extensive use of prophylactic drugs.

India and Ceylon commenced large scale DDT house spraying in 1946. In Malaya, which suffered invasion and occupation until late 1945, house spraying did not come into use as an important public health measure until towards the end of 1951, after the early results of field experiments had become available, and in response to the urgent needs of resettlement. A half-yearly return of house spraying introduced this year, showed that at mid 1953 some 345,000 people in rural areas were living in sprayed houses; by the end of the year the figure had risen to almost 572,000.

In September the first Asian conference on malaria control was convened in Bangkok by the World Health Organisation. Malaya was represented by two officers from the Institute for Medical Research, one being the secretary of the Board. It was evident that in comparison to most other countries of South East Asia, Malaya has still a very good record in malaria control, and is probably unrivalled in urban control by anti-larval measures. In technical knowledge about the exact effects of DDT and other residual insecticides upon the different species of mosquitoes Malaya is also among the leaders, but in the application of this knowledge to rural malaria control she is a little behind. This is not surprising in view of her late start in this field, and it is at least questionable whether the extension of DDT spraying to the maximum number of people in the shortest possible time is a necessary or a practical policy. There can be no question however, that whatever the scale on which house spraying is undertaken it must be done efficiently, and there is little doubt that at present through lack of training some of the work in Malaya is not efficient. The Bangkok Conference particularly stressed the need for training, preferably by some central organisation. Circulars such as those issued by the Board giving information and instruction on various aspects of malaria control, including DDT spraying, are of great importance, but by themselves insufficient; they need to be combined with practical training.

21. CIRCULARS AND PUBLICITY.—PALUDRINE.—As foreshadowed in the report for last year, Circular No. 5 on Paludrine was revised and re-issued as No. 8 with special emphasis on measures to check the spread of resistance. The text of the revised circular is reprinted in the annual report published separately by the Malaria Advisory Board.

REPLANTING.—At the invitation of the editor of the Planters' Bulletin of the Rubber Research Institute, a short note on replanting as a cause of malaria was published in the May number. This note replaces a similar one published before the war; copies were circulated to Government and Estate doctors.

TECHNIQUE OR RESIDUAL DDT SPRAYING.—It was realised that low standards of efficiency in DDT spraying were largely due to a lack of understanding of the subject and insufficient training. An attempt had been made to give clear instructions in the appendix to the Board's Circular No. 7 "Malaria Control by Modern Methods" reproduced in the report for 1952, but it was apparent that some part of this, in particular the method of calculating how much DDT to use, had proved difficult to follow. To try and remedy this, and to focus attention on the need for checking deposits of DDT, an interim circular was produced. This was issued as No. 31 in the cyclostyled medical circular series of the Institute for Medical Research. M. A. B. Circular No. 7 has been in considerable demand both in Malaya and abroad, and will be revised and re-issued in 1954.

WARNING AGAINST COMPLACENCY.—The continued low incidence of malaria is thought to be due partly to the widespread use of Paludrine and DDT spraying, particularly amongst those sections of the population who provide the greater proportion of recorded cases of malaria, and partly perhaps to unknown natural causes. It does not seem that lack of vector mosquitoes can be an important cause, for they are not scarce, and given a favourable opportunity can increase rapidly at any time. In these circumstances it cannot be too strongly emphasised that malaria can only be held at a low level by maintaining active control measures; any of the mistakes which have caused epidemics in the past may do so again if repeated to-day. This is not generally realised, and the long continued absence of serious malaria has led to forgetfulness or complacency. There have been instances of building and development schemes being sited beyond the boundaries of existing controlled areas, without provision being made for extending the zone of malaria control. A neglect of anti-malarial works at Kuala Lipis in Pahang due to terrorist activity and other causes, led to an outbreak of malaria in the town in 1953. In November, after the meeting, the Board drew attention to these dangers in a letter to Government, and issued a short statement to the Press.

22. PLAGUE AND CHOLERA.—There were no cases of plague or cholera recorded in 1953.

23. SMALLPOX.—Five cases of smallpox were reported during the year. Four were imported and one was a military case reported from the Military Hospital at Kluang, Johore.

During the year 301,318 vaccinations were performed and out of these 30,078 were re-vaccinations for International Certificates.

24. TROPICAL TYPHUS.—Cases occur sporadically in the Federation. Three hundred and ninety-two cases were recorded during the year, out of which 280 were scrub typhus and 112 urban typhus. Negri Sembilan and Selangor recorded the highest number of cases, 89 and 86 respectively. There were only five deaths—giving a case mortality rate of 1.3 per cent. as against 1.8 in 1952.

The total number of cases and deaths from tropical typhus for the year are shown below:

State/Settlement	No. of Cases	No. of Deaths
Kedah	1	—
Perlis	—	—
Penang	4	—
Perak	53	—
Selangor	86	1
Negri Sembilan	89	—
Malacca	14	1
Johore	48	3
Kelantan	2	—
Trengganu	2	—
Pahang	38	—
Military Headquarters	55	—
Total	392	5

25. ENTERIC FEVER.—Enteric Fever is endemic in the Federation of Malaya. There has been no major outbreak in any particular area but cases occur sporadically.

The total number of cases reported was 809 with 76 deaths. Although the case incidence varies little over the years 1946-1953, the mortality rate shows a very significant decline from 23 per cent. in 1946 to 9.39 per cent. in 1953. This decline in mortality is undoubtedly due to the use of antibiotics which began to be used about 1948 and have increased in use ever since

A summary of cases and deaths is given below:

State/Settlement	No. of Cases	No. of Deaths
Kedah	52	9
Perlis	16	—
Penang	51	6
Perak	193	19
Selangor	103	11
Negri Sembilan	94	5
Malacca	39	8
Johore	88	6
Kelantan	49	5
Trengganu	59	6
Pahang	63	1
Military Headquarters	2	—
Total	809	76

26. DYSENTERY AND DIARRHŒA.—Dysentery and diarrhœa are not notifiable diseases. Hospital statistics show admissions as 7,277 with 852 deaths as against 7,473 cases with 1,103 deaths in 1952.

27. DIPHTHERIA.—One thousand one hundred and eighty-two cases of diptheria occurred throughout the Federation with 319 deaths. A mild outbreak was reported in Malacca during the middle of the year. The occurrence of cases were not localised to any institution, but they were distributed in the towns and rural areas. Appropriate steps were taken and the outbreak was brought under control immediately.

The table below shows the summary of cases and deaths recorded during the year:

State/Settlement	No. of Cases	No. of Deaths
Kedah	110	38
Perlis	6	2
Penang	189	35
Perak	240	64
Selangor	190	54
Negri Sembilan	95	30
Malacca	108	17
Johore	204	65
Kelantan	5	1
Trengganu	4	—
Pahang	30	13
Military Headquarters ...	1	—
Total ...	1,182	319

28. CEREBRO-SPINAL MENINGITIS.—The incidence of cerebro-spinal meningitis was insignificant. There were only 4 cases reported during the year and the number of deaths was 3.

29. POLIOMYELITIS.—One hundred and thirty-three cases of poliomyelitis was recorded with 13 deaths. The corresponding figures for 1952 were 126 cases with 14 deaths. There was no epidemic in any particular area, cases occurring sporadically, but the wave of incidence was more confined to the Northern States of the Federation of Malaya.

The following table shows the total number of cases of poliomyelitis and deaths resulting thereof during 1953:

State/Settlement	No. of Cases	No. of Deaths
Kedah	17	—
Perlis	2	—
Penang	34	3
Perak	23	3
Selangor	26	2
Negri Sembilan	13	3
Malacca	3	1
Johore	5	1
Kelantan	—	—
Trengganu	—	—
Pahang	2	—
Military Headquarters ...	8	—
Total ...	133	13

30. YAWS.—The total number of cases of yaws treated during the year was 43,828.

Dr. D. R. Huggins, World Health Organisation Treponematosis Control Expert, who carried out a Yaws Survey in Kelantan and Trengganu some time in March this year has made detailed recommendations for a Yaws Control Programme.

A sum of $50,000 has been earmarked in 1954 for this purpose, and it is planned to run two teams under the guidance of a Health Officer, who at present is studying methods used in Indonesia, Thailand and the Philippines. With assistance in the form of penicillin and equipment from UNICEF and technical assistance from the World Health Organisation it is hoped that it will be possible to eradicate yaws from the East Coast States where it is especially prevalent.

31. PULMONARY TUBERCULOSIS.—The position with regard to Tuberculosis continues to improve slowly. Five thousand eight hundred and forty-seven cases were admitted to Government Hospitals for Pulmonary Tuberculosis with 968 deaths as compared with 5,492 with 1,326 deaths in 1952. The increase in numbers of cases admitted may be ascribed to increasing confidence of the public in the methods of treatment used, and in the improved facilities for treatment throughout the country. In spite of the increase in hospital admissions the number of deaths when compared with previous years shows considerable decrease. The improvement in the death rate may be partly due to the introduction of the latest drugs and the improved technique adopted in the treatment of Tuberculosis. The total deaths from Tuberculosis registered with the Registrar-General were 1,780 as compared with 2,252, during the previous year.

At the end of 1953, 2,946 beds were available for the treatment of Tuberculosis in the Federation. As the number of cases admitted was almost exactly double the number of beds available for treatment, it is obvious that the average period of occupying of a bed is six months. This was approximately the same last year, and should on United Kingdom standards meet the needs of the local population reasonably well. But there are many beds which are occupied by chronic cases, and an effort has been made to encourage the setting up of settlements for the chronics by voluntary effort to relieve the pressure in Government Hospitals for the acute cases.

The Malayan Association for the Prevention of Tuberculosis (M.A.P. TB.) has given a great deal of assistance to schemes designed to prevent the spread of tuberculosis. Its considerable funds, derived mainly from the Lotteries Board, have been used to provide assistance to the dependants of cases to enable such cases to enter hospital. In Perak a scheme for rehabilitation of cured cases run by P.A.T.A. has provided homes for a number of discharged cases. In Penang the private practitioners in the town run a diagnostic clinic, and schemes are in active preparation elsewhere to provide accommodation either in hospitals or settlements for cases of tuberculosis.

An appeal has been issued by the Board of Governors of the Lady Templer Hospital for Tuberculosis for funds to erect a 250 bed hospital in Kuala Lumpur where the treatable cases will be accepted and where facilities for research will be offered. The complete scheme is estimated to cost $5,000,000 and the running costs annually will be in the region of three-quarters of a million dollars. A start will be made to the buildings on a site already prepared at Cheras Road, Kuala Lumpur, in early 1954.

32. The tuberculosis wards in the General Hospital and the modern out-patient clinic at Malacca with its own X-ray department and laboratory continues to play an increasing part in the treatment of tuberculosis.

The importance of bronchoscopy not only as a diagnostic measure but also to ascertain the correct line of treatment in any given case cannot be overstressed and it is now used as a routine examination in all cases except the hopelessly advanced.

During 1953, 161 brochoscopic examinations were carried out making a total of 317 since the equipment became available, and although this is not a very large series it is becoming increasingly evident that tuberculosis endobronchitis is much more prevalent amongst Asians than amongst Europeans.

Pneumoperitoneuum with or without phrenic paralysis continues to give good results and it would appear the best form of collapse therapy to enable a limited staff to help the greatest number of people.

When Isonicotinic Hydrazide became available a trial was made on 50 patients of the effects of this "wonder" drug and while the immediate clinical results were excellent it was found that 8-12 weeks after the course had started there was a recrudescence of symptoms, e.g., evening temperature, loss of appetite, stationery weight, etc., indicating that M. tuberculosis very quickly acquires a tolerance to this drug. Such results have been found in nearly every other clinic in the world and now it is used in combination with Streptomycin, a combination which gives excellent results both clinically and radiologically. While these two drugs appear to act in symbiosis their joint action will prevent the M. tuberculosis from developing a resistance to the other.

PAS is being used less and less because it is considerably more expensive than INAH, causes more gastric upsets and lastly it is less effective.

During the year 265 known contacts were screened and out of which 39 showed abnormal shadows in their lungs. Altogether 2,092 fluorescopic examinations were carried out in 1953 and it is interesting to note that more and more young adults, particularly the Chinese, are coming as out-patients. It appears that the younger generation is growing more and more conscious of the need for X-ray examinations of the chest, and it is hoped that in the near future a greater number will be applying for such examinations.

33. TUBERCULOSIS SETTLEMENT, PULAU JEREJAK.—The Tuberculosis Settlement is situated in 2 separate camps on the western side of the island of Pulau Jerejak. A resident Medical

Officer is in charge of the Settlement and another Medical Officer who is in charge of the Leper Camp does part-time work here. The problem of water scarcity is the main obstacle to the expansion of the hospital from its present 400 beds to its full size of 600 beds.

The number of patients remaining at the end of the year was 382. Nearly forty per cent. of the cases were bilateral and fairly advanced.

Cases admitted to this settlement always come through the Chest Clinic, General Hospital, Penang, where they are examined by the Tuberculosis Specialist before they are sent over. The Specialist visits this hospital once a week, reviews all the new cases and checks upon the progress of all old cases periodically. He gives advice and instructions as regards the line of treatment.

General treatment is based on fresh air, good food and rest for body and mind. Since this settlement is located on the slopes of a hill overlooking a bay, there is neither brine laden wind nor high humidity. Ambulant patients are allowed short walks along the seaside twice a day.

Streptomycin, PAS and INAH were the three chemotherapeutic agents that were used in the settlement. Pneumoperitoneum, phrenic crush and artificial pneumothorax were also carried out.

Diversional Therapy is undertaken by the British Red Cross and the patients are taught handicrafts and sewing.

34. B.C.G. CAMPAIGN.—The B.C.G. Campaign inaugurated in 1951 under the guidance of a Danish Team has continued to make good progress. The public responded willingly and in 1953, 152,897 persons were tuberculin tested and of these 71,734 received B.C.G. vaccinations. Eleven thousand seven hundred and eighty new-born babies were also vaccinated.

35. VENEREAL DISEASES.—The incidence of venereal diseases is indicated in the following figures for new cases applying for treatment at Government Hospitals and Special Clinics in 1952 and 1953:

New Cases	1952	1953
Syphilis	6,997 ...	4,930
Gonorrhœa	4,306 ...	5,135
Other Venereal Diseases ...	1,532 ...	1,212
Total ...	12,835 ...	11,277

As compared with the figures for the previous year the incidence of syphilis has further decreased considerably whilst there has been a slight increase in the number of new cases of gonorrhœa.

This increase might possibly be due to the circumstance that more and more people have become aware of the fact that most gonorrhœal infections are easily cured by a simple injection of penicillin and are therefore inclined to expose themselves more readily to a risk.

A detailed Return of Venereal Diseases treated in Government Hospitals and Clinics, showing diagnosis and distribution by race and sex is included in Appendix (Table 12).

PUBLIC HEALTH (3)—NUTRITION

36. In accordance with the instructions of His Excellency the High Commissioner a committee consisting of the Social Welfare Officer, representing the Member for Industrial and Social Relations, the Director of Education, the Deputy Director of Medical Services, representing the Member for Health and the Senior Biochemist was appointed to review and to submit a report on the position of the School Feeding Scheme.

The Committee sought information from all the States and Settlements on the nutritional state of the school children and the replies received were not very helpful. It was realised that a proper assessment of malnutrition in the various areas is not possible without the use of field nutrition teams.

Although supplementary feeding of children, both of pre-school age and of school children has been undertaken by the Education, Medical and Social Welfare Departments since 1946, the results attained were far from satisfactory and this may be attributable to lack of supervision through shortage of staff.

The present financial situation precludes any attempt to continue or to embark on any large scale Government financed schemes under ordinary circumstances, but there can be no doubt that when supplementary feeding schemes are properly supervised and foodstuffs well chosen, the benefit to the health of the children is considerable.

PUBLIC HEALTH (4)—ESTATES, MINES, RAILWAYS AND QUARANTINE

37. Health on Estates.—The general health of the estate labourers and their dependants showed no abnormal variation from the previous years. The estates were regularly inspected by the Health Inspectors and action was taken to improve the general sanitary conditions, particularly in respect of housing, latrine accommodation, water supplies and medical facilities. Several estates have made good progress in re-building programmes, demolishing the existing lines with better and more modern structures. As a close liaison exists between the Labour Department and the Health Department, recommendations for improvement were forwarded to the Commissioner for Labour in the respective States for necessary action, wherever conditions were found to be unsatisfactory.

The Health Officer of the district sees that regulations made under the Sodium Arsenite Ordinance, are complied with by the estates concerned. The storing places of this poison are often inspected and proper supervision is insisted upon at all times.

38. ESTATE HOSPITALS.—The following table is a summary of the provision made by employers for the treatment of sick labourers and their dependants on estates:

States Settlements	No. of Estate Hospitals	No. of Beds	All Diseases		Malaria	
			Adms.	Deaths	Adms.	Deaths
Kedah	13	1,159	21,613	358	2,187	16
Perlis	—	—	—	—	—	—
Penang ..	3	207	2,139	19	19	—
Perak	29	1,363	16,900	269	562	1
Selangor ..	28	1,194	20,730	424	634	8
N. Sembilan ..	17	673	10,692	190	665	8
Malacca ..	9	165	2,743	25	56	—
Johore ..	12	405	6,029	133	254	4
Kelantan ..	4	88	2,272	59	435	—
Trengganu ..	1	50	612	4	59	—
Pahang ..	4	173	2,284	30	133	2
Total ..	120	5,477	86,014	1,511	5,004	39

The following table is a summary of the statistics relating to mortality amongst labourers on estates:

	Population	All Diseases		Malaria	
		Deaths	Death rate per mille	Deaths	Death rate per mille
Labourers and Dependants:					
All Nationalities	450,385	3,003	6.7	60	0.13
Labourers only:					
All Nationalities	268,812	812	3.02	15	0.06
Labourers and Dependants:					
Indians	264,283	2,224	8.4	38	0.14
Labourers only:					
Indians	150,975	578	3.8	8	0.05

39. The low incidence of disease and the low mortality amongst labourers on estates is now taken as a matter of course. It is interesting to look back and examine the conditions that existed only 30 to 40 years ago. The table below shows the comparison:

ESTATE MORTALITY RATES

F.M.S.	Total Number of Estate Labourers	Deaths	Death rate per mille
1911 ...	143,614 ...	9,040 ...	62.9
1912 ...	171,968 ...	7,054 ...	41.02
1913 ...	182,937 ...	5,592 ...	29.6
1914 ...	176,226 ...	4,635 ...	26.3
1915 ...	169,100 ...	2,839 ...	16.78
1918 ...	213,425 ...	9,081 ...	42.55
(Influenza Epidemic)			
1919 ...	216,573 ...	3,384 ...	16.16
1920 ...	235,156 ...	4,367 ...	18.57
1921 ...	175,649 ...	3,195 ...	18.19

Federation of Malaya	Total Number of Estate Labourers	Deaths	Death rate per mile
1949 ...	351,968 ...	940 ...	2.7
1950 ...	269,685 ...	779 ...	2.89
1951 ...	258,953 ...	1,292 ...	4.99
1952 ...	278,005 ...	1,085 ...	3.90
1953 ...	268,812 ...	812 ...	3.02

40. HEALTH ON MINES.—Labourers on most of the mines were required to live in re-grouped areas in accordance with the provisions of the Emergency Regulations. Inspection of these re-grouped areas was carried out and recommendations regarding sanitation were made to the authorities concerned.

The Pahang Consolidated Mines has its own hospital and medical officer who treats the sick and advises the General Manager on health and sanitation.

41. RAILWAY SANITATION.—The Health Department, Malayan Railway, is under the charge of a Health Officer, seconded from the Government Medical Service. It provides out-patient medical facilities for Railway staff and their dependants at places where State/Settlement Medical Department facilities are not readily available, namely at wayside stations and all the gang lines. It is also responsible for preventive measures against malaria throughout the railway system. The Health Officer advises the Railway Department on matters involving questions of public health.

The activities of the Department were confined largely to anti-malarial works on the Railway Reserve and on State and private lands thereto adjoining. Preventive measures adopted consist of oiling of drains by the spray and brush methods, disinsectisation of quarters with DDT., and prophylactic treatment of staff and their dependants, particularly permanent way and construction staff in outlying and isolated areas. The efficacy of these measures was controlled by frequent larval surveys held in conjunction with Anti-malarial Department of Town Boards and Municipalities.

Regular periodical inspections were made throughout the system by District Health Committees under the Chairmanship of the Health Officer. All housing areas and all gang lines especially those at isolated places were visited at least once in every four months. In addition to this, a Local Health Committee under the Chairmanship of the District Traffic Inspector visited the main stations and thickly populated railway centres periodically at shorter intervals. It has been possible to effect a slight improvement in the standard of hygiene and sanitation in housing areas and gang lines during the year but much remains to be done in this connection.

Dispensaries, some working on a whole time basis under the charge of Hospital Assistants, were maintained at the following places: Alor Star, Prai, Ipoh, Kuala Lumpur, Sentul Works, Seremban, Gemas, Johore Bahru, Krai, Gua Musang, Chegar Perah and Kuala Lipis. The number of attendances of railway staff and their dependants at these dispensaries were 84,160.

There were no cases of major infectious diseases during the year. A total of 10,856 passengers crossing the Thai frontier at Padang Besar were vaccinated.

First aid equipment boxes on passenger trains were replenished immediately after use: those at stations and workshops were inspected each month and replenished as necessary.

First aid courses of instruction based on the St. John Ambulance Handbook was attended by 174 employees of whom 75 passed the examination held on completion of the courses.

PORT HEALTH WORK

42. Port health work and quarantine are Federal functions. These are particularly important because of the number of immigrant ships which arrive from infected ports in Asia. All deck passengers are medically examined on arrival and are then re-vaccinated and quarantined until the results of their re-vaccinations are available.

During the period under review one hundred and thirty-four immigrant ships from India, ninety-three from China and Hongkong, seven pilgrim ships from Jeddah and twenty-one from other infected ports arrived carrying 84,297 saloon and deck passengers.

43. INFECTIOUS DISEASES ON SHIPS.—One case of smallpox, seven cases of chicken-pox twenty-one cases of measles and two cases of mumps were detected among the passengers during the routine examination of passengers on board.

On 6th January, 1953, the s.s. "Santhia" arrived in port with a case of smallpox. The patient, a deck passenger from Calcutta together with all the unberthed passengers were sent to the Quarantine Station for observation. Whilst in quarantine, two more cases developed—one on the 12th and the other on the 16th January, 1953. Contacts of the first case who were not contacts of the second and third cases were released from quarantine on 20th January, 1953. Contacts of the second case who were not contacts of the third case were released on the 26th and the remainder on 31st January, 1953.

On 4th May, 1953, the s.s. "Sirdhana" arrived late in the evening with 2,043 unberthed passengers from Madras. They were inspected and sent to quarantine on 5th May, 1953. On 9th May, 1953, one case of smallpox was detected among the passengers of one camp and were subsequently released after the quarantine period.

All the smallpox cases had valid international certificates of vaccination. The occurrence of this disease several days after the deck passengers had been landed shows the risk which would be taken if this quarantine were to be discontinued.

44. OUTGOING PILGRIM SHIPS.—Six pilgrim ships left the port consecutively on 17th, 20th May, 8th, 18th and 21st June and 18th July, 1953, with a total of 6,027 pilgrims.

No pilgrim was found suffering from any contagious or infectious disease. Every pilgrim was in possession of a valid International Certificate of Vaccination and Inoculation.

45. INCOMING PILGRIM SHIPS.—Six pilgrim ships carrying a total of 5,672 pilgrims arrived during the year. A total of 4 births and 35 deaths occurred on these ships during the voyages and the deaths were chiefly due to senility.

46. SUMMARY OF PORT HEALTH WORK.—

Number of visits of Inspection to ships		Total Passengers		Total Examined		Passengers		
		Cabin	Deck	Crew	Passengers	U	Q	R
Penang	255	16,177	68,120	29,316	84,297	159	31,622	41,451
Port Swettenham ..	117	2,776	10,474	10,280	13,250	—	—	12,813
Total ..	372	18,953	78,594	39,596	97,547	159	31,622	54,264

U—Signed undertaking to report
Q—Removed to Quarantine Station
R—Remained in ship

47. VACCINATION AND INOCULATION PERFORMED AT THE PORT HEALTH OFFICE.—During the year 39,123 vaccinations and 7,241 inoculations were performed, 74 were primary vaccinations and 39,049 were re-vaccinations for purposes of International Certificates and admissions to schools.

48. INSPECTION OF SHIPS.—Ninety-six ships were inspected for rats for the purposes of issuing Deratisation Exemption Certificates. All, except two, were clean and certificates were issued.

49. INSPECTION OF AIRCRAFT.—A total of 258 planes were inspected during the year. Altogether a total of 1,183 crew and 2,396 passengers were examined but no case of dangerous infectious disease was detected among them. No proper facilities are provided at any of the airports in the Federation for the handling of aircraft landing after an international voyage.

50. INSPECTION OF WATER BOATS.—Periodical examination of water from water boats that supply water to ships whilst in the port was carried out. Eleven water samples were taken for bacteriological examination and the results were: four satisfactory and seven unsatisfactory.

51. CONTAMINATION OF FOODSTUFFS BY SODIUM ARSENITE.—Seven requests were made for the survey of lighters which had transported cargoes of sodium arsenite. The lighters, after being emptied, were cleansed under the supervision of a Sanitary Inspector after which certificates were issued. The owners have been advised to use steel lighters or put a layer of metal sheetings on the lighters before the loading of sodium arsenite.

52. SAMPLING OF PRE-PACKED FOODS.—Towards the middle of the year, samples of pre-packed foods have been taken for the purposes of analysis, etc., under the Sale of Food and Drugs Ordinance, 1952. This work is made much easier by the kind co-operation of the Customs Department. The contents of the food have in most cases been found good, but quite a good number have been found to be deficient in weight. The attention of the importers has been drawn to this and they have been warned that further consignment will constitute an offence under the Sale of Food and Drugs Ordinance, 1952.

PUBLIC HEALTH (5)—RURAL HEALTH SERVICES

53. With the swing of emphasis from urban to rural health work, certain important changes are about to take place. In the first place, a rural health training school is under course of erection at Jitra, Kedah, for the training of rural health teams consisting of assistant nurse, midwife, dispenser and sanitary overseer. This school in which the staff will partly be supplied by World Health Organisation and partly by the Federation Government, and will be equipped by UNICEF will be opened by mid-year 1954. In addition to this the funds have been obtained and plans have been drawn up for four rural health centres to be built in 1954 and four more in 1955. The funds will be provided from the Colonial Development and Welfare Funds. Apart from the eight which will be erected in 1954-1955 a further seventeen it is hoped will be constructed between 1955-60. This, will be a foundation for improved rural health services, but no service can be complete until the personnel is fully found. While the Jitra Training School will supply some of the personnel, concern is being felt at present at the prospect of replacing the 60 odd Red Cross and St. John teams which have functioned in rural areas during the emergency, and discussions have taken place on the value of a district Medical Officer who would be in overall charge of the rural health services of a district.

State and Settlement Governments are also setting up centres at various parts of the country from their own funds and in many instances dispensaries have been set up from emergency funds. Spraying of houses in new villages has reduced considerably the amount of malaria, and a yaws eradication campaign is about to commence on the East Coast.

Considerable extension of the rural health services has been effected, due to the emphasis thrown on this side of the work. The *tempo* of this work has of necessity been increased by the demands of the emergency for the urgent need for services in kampong areas, new villages and resettlement areas, has caused rapid development by various means. A very large improvement in health is expected in view of the concentration of rural populations in organised communities which apart from the fact that their civic consciousness is now awaking, are increasingly being provided with water supplies, sanitary services and health clinics.

PART III

MATERNITY AND CHILD WELFARE

54. This is a State Service, particulars of which will be found in the reports of individual States and Settlements.

Maternity and Child Welfare Clinics are normally under the supervision of a Health Sister with a staff of Health Nurses and Midwives. Attendances at these clinics are large, and at the clinics advice is given on infant feeding and hygiene as well as ante-natal services are provided.

Maternity and Child Welfare work has made great strides during the year. Attendances at these clinics continued to rise and the number of homes visited also increased considerably during the year.

Modern midwifery is becoming more and more popular in kampongs as the number of trained midwives increase.

Untrained kampong bidans were encouraged to attend clinics with their baskets regularly. They were given talks on the principles of aseptic deliveries, the need of ante-natal care of pregnant mothers and the necessity for calling in our trained midwives in case of difficult labour. We hope at this way to get women-folks in the kampongs to get more used to our trained midwives and child welfare staff.

Voluntary organisations such as British Red Cross, St. John Ambulance and Missionary Teams which started to function since 1952 have rendered valuable services in the rural areas in maintaining and improving the child welfare work.

A scheme is being considered for the local training of Health Visitors to R. S. I. standard since hitherto all Health Visitors have been trained overseas. This will give further emphasis to maternity and child health projects in rural areas.

The total number of women admitted to maternity wards in 1953 was 40,833, and the total number of deaths was 368.

The attendances of mothers and children at the Welfare Centres amounted to 1,087,204 and 500,866 visits were paid to mothers and children in their homes.

A tabulated statement of Child Welfare Centres is given in the Appendix (Table 13).

Part IV

HOSPITALS AND DISPENSARIES

55. Hospitals and dispensaries are a State service, particulars of this service will be found in the Annual Reports of States and Settlements.

There are seventy Government Hospitals in the Federation, not including the Special Institutions for Mental Diseases and Leprosy.

During the year 233,286 patients were admitted. This does not include the admissions to the Leper and Mental Institutions which numbered 706 and 2,641 respectively.

There has been little expansion of hospitals within recent years, but it is becoming obvious that rehabilitation or rebuilding of some of the larger Federation hospitals cannot be much longer delayed. In many the buildings are old and not in keeping with modern conditions; their kitchens, laundries and ancillary services are well out of date and some lack modern waterborne sanitation. In view of this a scheme is being worked out, with a view to requesting assistance from Colonial Development and Welfare

Funds, for a 500-bed new Federal Hospital in Kuala Lumpur, and replacement of the existing hospitals in Ipoh, Taiping and Seremban with up-to-date hospitals. The modernisation of our hospitals is now long overdue; hospital construction is becoming increasingly expensive, and the only hope during the period of depressed revenues is to obtain outside assistance.

Specialist facilities are available in all the larger hospitals, and the only acute shortages now are Anæsthetists, Pathologists and Radiotherapists. Many of these Specialist Officers, however, have contract terms, and are really employed to cover the period until local officers with the requisite qualifications can replace them. Some concern has been expressed too at the laboratory facilities available in hospitals, and the appointment of clinical pathologists attached to the major hospitals has been considered.

56. A summary of the distribution of hospitals and beds is given below. A tabular statement of hospitals with daily averages, admissions and deaths is given in the Appendix (Table 1A).

SUMMARY OF HOSPITAL ACCOMMODATION

State/ Settlement	Number and Category of Beds					Total
	General	Obstetrics	Tuberculosis	Infectious	Mental	
Kedah	676	78	207	20	18	999
Perlis	75	22	10	8	5	120
Penang ..	890	181	655	47	30	1,803
Perak	1,876	240	416	66	—	2,598
Selangor ..	1,241	166	294	34	18	1,753
N. Sembilan ..	705	103	396	13	20	1,237
Malacca ..	397	54	309	12	6	778
Johore ..	1,153	265	405	42	43	1,908
Kelantan ..	292	30	48	10	35	415
Trengganu ..	184	18	69	13	6	290
Pahang ..	531	71	137	36	11	786
Total ..	8,020	1,228	2,946	301	192	12,687

Total excluding Special Institutions		12,687
SPECIAL INSTITUTIONS:		
Leper Settlement, Sungei Buloh, Selangor ...	2,650	
,, Pulau Jerejak, Penang ...	430	
,, Johore Bahru, Johore ...	350	
Leper Camp, Kota Bahru, Kelantan	40	
		3,470
Mental Hospital, Tanjong Rambutan	3,000	
,, Tampoi, Johore Bahru ...	1,200	
		4,200
Total—All Beds ...		20,357

57. OUT-PATIENTS.—All the hospitals have out-patient clinics. These are supplemented by small dispensaries situated in many of the towns. Treatment of rural population is carried out

through travelling motor dispensaries. A certain amount of river travelling is also carried out in Johore, Pahang, Perak, Trengganu and Kelantan. Hospital Assistants in charge of static dispensaries travel by bicycle throughout their area to deal with places which the travelling motor dispensary cannot reach.

The total number of attendances at all dispensaries for the year 1953 was 2,616,040. Out of these 755,363 attendances were at travelling dispensaries. This figure does not include attendances at Infant Welfare Centres and Venereal Disease Clinics.

Details of distribution of dispensaries and of the patients treated are given in the Appendix (Table 5).

NOTES ON CONDITIONS TREATED IN HOSPITALS, CLINICS AND DISPENSARIES

58. Full details are given in Table 1 of the Appendix. The following gives an indication of the commoner conditions treated in hospitals:

Diseases	Admissions	Deaths	Mortality per cent
Malaria*	12,962	184	1.42
Pulmonary Tuberculosis	5,847	968	16.56
Dysentery	1,865	53	2.84
Diarrhœa and Enteritis	5,412	799	14.76
Pneumonias	4,600	1,251	27.20
Bronchitis	7,923	100	1.26
Beri-beri	498	27	5.42
Venereal Diseases	1,661	84	5.06
Enteric Fever	753	69	9.16
Injuries due to external causes ...	25,373	755	2.98

RACIAL DISTRIBUTION OF HOSPITAL ADMISSIONS AND OF COMMON DISEASES

Races	Malaysians		Chinese		Indians and Pakistanis		Others	
Population	2,803,863		2,152,906		665,503		83,680	
Total admissions to Hospital	53,732		100,939		75,083		6,879	
Diseases	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
Malaria *	5,377	26	3,338	113	3,958	40	289	5
Dysentery and Enteritis	1,286	82	3,122	531	2,645	222	224	17
Pulmonary Tuberculosis	1,260	101	3,429	677	1,037	176	121	14
Pneumonias ..	669	104	2,299	840	1,517	294	115	13
Beri-Beri	136	4	246	21	112	2	4	—
Appendicitis ..	189	—	1,163	14	532	12	99	—

* Includes other and unspecified forms of malaria

59. The above statement shows the distribution of the common diseases in the three principal racial groups but this cannot be taken as a true indication of the racial distribution of disease.

Admissions of Indians into hospitals are disproportionately higher than those compared with Malaysians. The higher rate of Indians seeking admissions is due to the employment of Indians on Estates and the insistence of estate authorities in sending them to hospital for treatment, whenever necessary. On the other hand Malaysians are rather sceptical on the question of hospitalisation

and, except those employed in Government departments, the majority are reluctant to be admitted to hospital. However, they readily accept out-patient treatment. This is shown in the number of attendances of Malaysians at Out-patient Clinics which have risen from 896,541 in 1948 to 1,096,906 in 1953.

60. SURGICAL WORK.—Surgical operations, major and minor, totalled 64,147; details are given in the Appendix (Table No. 3).

61. OPHTHALMIC WORK.—Fifty-four thousand eight hundred and two patients were treated for diseases and injuries of the eye and 3,996 operations were performed. Details are given in Table 4 of the Appendix.

62. RADIOLOGICAL WORK.—Almost all the district and general hospitals are now provided with efficient X-ray equipment.

X-ray examinations numbered 135,872 and 19,595 patients were treated in the X-ray and Electro-therapeutic departments.

PART V

TRAINING OF NURSES

63. Nurse training as in the past has had priority and the first step, that of providing suitable accommodation for nurses is well under way. Three nurse training schools are functioning at present, at Penang, Kuala Lumpur and Johore Bahru, but shortage of nurse teachers may enforce the closure of the last. At present six nurse teachers are being supplied under technical assistance from WHO, but the department feels some concern at their inability to recruit permanent replacements for these or even find local trainees of the calibre required.

The training of local nurses is now based on the new syllabus of the General Nursing Council of England and Wales.

Nurses (male and female) and Hospital Assistants attend the same courses in basic subjects and arrangements are made for hospital assistants to attend special classes in laboratory methods and dispensing to meet their requirements of the curriculum. The course of training lasts three years and four months and the standards of training attained in the Malayan Nursing Schools allow of reciprocal recognition with the General Nursing Council of the United Kingdom.

64. SCHOOL OF NURSING, NORTHERN REGION, PENANG.—The total number of students attending the School of Nursing, Northern Region, Malaya, during the year was 293.

During each term three Blocks, i.e., P.T.S., Block I and Block II have been taught. One Post-Graduate School has been conducted for three weeks, August-September, in Surgery and allied subjects.

The P.T.S. Course has been lengthened to four months as from August/December term, to enable Block II Senior Course to be shortened to two months. It is generally agreed that this is a more satisfactory arrangement.

Twenty-three Dental Nurses (recruits) attended two separate terms in conjunction with Block I to receive tuition in Anatomy and Physiology, Bacteriology, Psychology, First Aid and Elementary Principles of Surgery and Medicine.

Coaching classes were held for students going overseas studies and for the students who failed their examinations.

During the year 189 nurses, 85 male nurses and 19 hospital assistants attended the school. The total numbers passing through the school were 138 nurses, 83 male nurses and three hospital assistants.

The number of nurses who passed their final examination in General Nursing throughout the Federation in 1953 was 129.

65. NURSES' HOSTEL.—A large hostel to house 250 student nurses is in the course of construction in Penang; the cost of this building is defrayed from Colonial Welfare and Development Funds. It is hoped that the building will be completed by the end of 1954.

Under the Colombo Plan, Australia has offered to train in Australian Hospitals 50 student nurses from the Federation. A preliminary selection of about half that number has been made from student nurses who have passed their preliminary examination, since it is felt that to send raw recruits to Australia might not be a success. If 50 girls eventually are accepted by Australia this will release 50 places in our training school hostels for new recruits and will tide over the period until the hostel mentioned above is completed.

Action is also being taken by the State and Settlement Governments to expand and improve hostel accommodation for Assistant Nurses at Batu Gajah, Kuala Trengganu, Port Dickson, Kuantan, Johore and Bukit Mertajam.

66. TRAINING OF ASSISTANT NURSES.—Assistant Nurses with a lower educational standard who are not admissible to the register under the Nurses' Registration Ordinance, 1950, are now being employed in the Federation. The various State and Settlement Medical Services are planning to expand rapidly their facilities for training assistant nurses. They undergo a two-year course of practical training in the vernacular or in English in hospitals where registrable nurses are not trained and pass a local practical examination prior to completion of training.

While the assistant nurses' scheme has some obvious disadvantages these are more than offset at this stage of the development of the country's health services by the shorter course of training and the lower standard of education required for girls entering the service.

PART VI

DENTAL

67. STAFF.—At the end of 1953 the dental staff consisted of one Chief Dental Officer, two Specialist Dental Officers, thirty-six Dental Officers, eight Dental Housemen, forty-three Dental

Nurses and sixteen Dental Mechanics together with the Dental Nurses Training School of one Dental Officer in charge, one Sister Tutor (Dental), three Tutors and twenty-six Nurses in training.

During the year recruitment of Dental Officers to the service was very satisfactory. The eight Dental House Surgeons' posts were filled by six recruits from the University of Malaya, one from the University of Melbourne, and one from the University of Edinburgh.

68. NEW CENTRES AND CLINICS.—Five Health Centres were built during the year, each containing a well-designed and well-equipped dental wing. Three of these were erected in Negri Sembilan at Jelebu, Bahau and Astana Raja, one in Pahang at Kuala Lipis and one in Province Wellesley at Nibong Tebal.

Four new school dental clinics were opened, one in Ipoh, one in Kuala Lumpur and two in Seremban.

One additional mobile dental clinic was put into commission. This vehicle operates from Ipoh to rural areas and makes the total of such clinics working in the Federation, seven.

69. GENERAL.—The Dental Officer who had returned from a year's attachment to the Dominion School for Dental Nurses, Wellington, New Zealand, was appointed Principal of the Dental Nurses Training School, Penang.

Two Dental Nurses returned from post-graduate study in New Zealand and were posted to the School as Tutors.

The Nurses recruited from school under the new recruitment scheme show great keenness and aptitude, and it is the opinion of the teaching staff that the system is very successful.

For the first time two trainees from overseas were admitted for training. These girls come from Hongkong on scholarships sponsored by that Government and will return to work in the Hongkong Dental Department.

Mr. J. Ll. Saunders, D.S.O., F.D.S., Director, Division of Dental Hygiene, New Zealand, inspected the school and expressed his satisfaction with the standard of teaching and work performed.

PART VII

SPECIAL INSTITUTIONS

70. The Institute for Medical Research is a Federal Institution, administered as a branch of the Medical Department. Maintained by the Federation Government, with financial aid from the Governments of Singapore and North Borneo, it receives further support for special work from Colonial Development and Welfare Funds. The main buildings are in Kuala Lumpur, where the laboratories are organised on a divisional basis for bacteriology, biochemistry, pathology, entomology, malariology, nutrition, virus diseases, medical zoology and vaccine production, and there are branch laboratories in Perak, Penang, Negri Sembilan and Pahang. Founded in the year 1900 to investigate the diseases of Malaya, the

Institute remains primarily a research institution, though a closer integration with the medical services over the years has brought responsibilities for the provision of routine pathological services and the manufacture of biological products.

Outstanding events of the year were the construction of a new research block in Kuala Lumpur, the creation of a new division for the study of virus diseases, and the establishment in the laboratories of an American research team, the fifth since the Japanese occupation.

71. New Research Block.—Proposals for the creation of a new research block in Kuala Lumpur, advanced in 1950, were finally accepted by the Federation Government and approved by the Legislative Council early in 1952. Construction began in July, 1952, and was essentially complete in June, 1953. The new buildings provide a group of laboratories with workshops, a new library, and a new lecture theatre; and they free space in the older buildings for a re-designed modern unit for the production of bacterial vaccines. The laboratories house the newly-formed Division of Virus Diseases and Medical Zoology, and an American Team from the United States Army Medical Service and Graduate School, Washington. The American Team will work in close association with their Institute colleagues and there is a confident hope that the facilities which the new buildings have to offer will bring further impetus to collaborative research at an international level.

72. New Division of Virus Diseases.—In March, 1953, the Colonial Office (Scrub Typhus) Research Unit was incorporated in the newly formed Division of Virus Diseases and Medical Zoology. The formation of this division marks a new phase of work extending from the rickettsial diseases to the wider field of virus disease, particularly to the animal hosts and arthropod vectors of the virus infections of man. The future of the Division is hence likely to have a biological bias. Dr. J. R. Audy is the Head of the Division, with Mr. J. L. Harrison as Zoologist; Dr. Gordon Smith is attached as Virus Research Officer, and Mr. W. Macdonald as Entomologist.

73. United States Army Research Unit.—Since 1947, four self-supporting teams from the United States Army have been attached to the Institute on medical research projects of mutual interest. They have come for defined periods and their work has been intermittent. The arrival of a fifth team in July, 1953, marks a change of policy, for this team has plans for a prolonged stay, with the prospect of a most welcome continuity of effort. The Unit, organised through the Department of the United States Army, Office of the Surgeon-General, operates as a subsidiary group of the Army Medical Service Graduate School, Washington, in association with the University of Maryland. Laboratories in the new buildings have been placed at their disposal and collaborative research with the staff of the Institute is planned. The Head of the Unit is Captain F. R. McCrumb Jr.; assisting him are Captain F. H. Diercks and Dr. J. C. Fitzgerald. Their work during 1953 on Japanese encephalitis, leptospirosis, and fevers of unknown origin, is briefly recorded elsewhere in this report.

74. ANTIBIOTICS.—The Division of Bacteriology continues to send antibiotic-producing *Streptomyces* isolated from Malayan soil and other sources to the antibiotic station established by the Medical Research Council at Clevedon, near Bristol. Sixteen new strains were isolated and sent to this station during the year, and six antibiotics from this source are under current investigation, one inhibiting the Tubercle bacillus to a marked degree. The growing problem of bacterial resistance to antibiotics emphasises the need for continuing research in this important field.

75. MALARIA.—Experimental studies of the newer antimalarial drugs, for many years a main activity of the Division of Malaria Research, have continued, and some 450 patients have been treated under controlled conditions with chloroquine (Nivaquine), proguanil (Paludrine), amodiaquin (Camoquin), pyrimethamine (Daraprim), Azacrin and 1698-L. The results give no grounds for revising earlier views that chloroquine and amodiaquin are the most effective drugs for treating acute attacks. The drug 1698-L was almost useless. Current trials in a Malay coastal kampong of once-monthly doses of amodiaquin and primaquine for malaria suppression, started by Dr. A. J. Walker, are giving encouraging results.

Resistance to proguanil (Paludrine) in the asexual blood forms of *P. falciparum* may extend, it seems, to the pre-erythrocytic forms and gametocytes. Professor Walker of Tulane University, working at the Institute on a Fullbright Fellowship, has shown that a resistant falciparum strain from a gametocyte carrier receiving full prophylactic doses of proguanil could be passed through mosquitoes and infect human volunteers similarly "protected". This observation, made in conjunction with the Division of Entomology, may have an important bearing on future preventive policy in areas where proguanil-resistant strains are known to be prevalent.

The puzzling problem of the heavy sporozoite infections found on the Selangor coast in *A. baezai* and *A. hackeri*, whether they have a human or animal origin, has not yet been solved. The *hackeri* infections, first reported last year, were almost certainly of animal origin, and probably those of *baezai* too.

The Negri Sembilan Medical Department has now taken over the malaria control in valleys where residual spraying with DDT or Gammexane had been studied for three years by the Institute. Spraying is being continued twice a year with DDT emulsion in doses of 200 mgm per sq. foot. Malaria remains at low ebb but falls short of elimination.

A parasite and spleen survey made in Trengganu kampongs at the request of the State Government left no doubt of the reality of the malaria problem in the inland hilly country, though many of the flat riverine areas were almost malaria-free.

75. (*a*) INSECTICIDES.—Tests of the residual insecticide, Dieldrin, made against *Anopheles maculatus, A. sundaicus* and *Culex fatigans* in the window-trap huts described in last year's report, were completed during the year. The effect of Dieldrin at 40 mg per sq. foot was more lasting than that of DDT at 200 or

gamma BHC at 40 mgm per sq. foot. *Maculatus* was the most susceptible and *fatigans* the least.

The DDT emulsion introduced in 1951 as a cheap and effective larvicide has given good control of anopheline breeding but not against nuisance mosquitoes, generally *Culex fatigans*, breeding in sullage drains. It seems that the DDT is absorbed or in some way masked by organic matter. Dieldrin and BHC are probably absorbed too, but they are more toxic and larvæ tend to receive a fatal dose before these insecticides are rendered inocuous, for good immediate control of *C. fatigans* was obtained with Dieldrin emulsion and BHC wettable powder. But in the laboratory the life cycle of *C. fatigans* from egg to adult is regularly completed in seven days, and by the usual weekly larviciding routine eggs might be laid and the adults emerge between one round and the next. The cleansing of drains and good maintenance to promote flow are still important.

Comparative tests of the toxicity of insecticides for adult mosquitoes and larvæ, started in 1952 by Mr. Wharton in London have been continued. The results appear to confirm what had already been suspected from earlier work with window-trap huts, namely that the differences in mortality are due to innate differences in susceptibility to the insecticide rather than differences of behaviour affecting the degree of contact with the insecticide. In particular they showed that adult *C. fatigans* are extremely resistant to DDT.

Early in the year the Municipal Health Department, Penang, reported that nuisance mosquito breeding which had been well controlled since 1949 with BHC wettable powder was no longer controlled in this way. Comparative tests in the laboratory showed the larvæ of a Penang strain of *C. fatigans* which had been regularly exposed to BHC were much less susceptible than the larvæ of a Kuala Lumpur strain with no past exposure. This is the first proof in Malaya of resistance to an insecticide acquired by a mosquito,—here the larval stage of *C. fatigans*—though resistance in *C. fatigans* has been reported from other countries.

A deterioration in DDT wettable powders from storage under warm, humid, conditions has been reported, large quantities of DDE, the less active dichlordiethylene analogue of DDT, having been found in old samples. There seems to be little fear, however, that storage of technical DDT in Malaya will lead to serious deterioration, for tests of samples stored for seven years revealed no significant breakdown to DDE.

The hazards to health arising from the use of organophosphorus insecticides in agriculture are now well known; joint recommendations to the Director of Medical Services from the Department of Agriculture, the Rubber Research Institute and the Institute for Medical Research have led to the amendment of the Poisons List of the Poisons Ordinance, No. 29 of 1952, and the introduction of the Poisons (Dangerous Insecticides) Regulations, 1953.

76. FILARIASIS.—Endemic filariasis due to *W. malayi* is a serious focal problem in the lower reaches of the main rivers, and in certain coastal areas of Penang, Province Wellesley and

Kedah. Infections have also been reported among aborigines in the hills of the interior. Some of the most heavily infected territory is in Pahang where a programme of research, supported by Colonial Development and Welfare Funds, began in July, 1953, and a small laboratory was established at Kuantan. From this work, it is hoped, will come the basic knowledge whereby a policy of control may be defined. The kampongs chosen for our experimental work lie along the lower reaches of the Pahang river where the population is heavily infected. By the end of the year a blood survey had been made of some 4,500 persons and mosquito trapping and dissection were in full swing. The vector mosquitoes are probably species of *Mansonia* which are extremely numerous and have an overall infection rate of 1.5 per cent. among some 3,000 dissected. Experimental control will probably be based on spraying with a residual insecticide to destroy adult *Mansonia* or on Hetrazan treatment of infected persons; but much baseline information must be collected before control can usefully begin. On Penang island dissections have shown that anophelines as well as Mansonia play an important part in transmission, as they do also in Kedah and Province Wellesley.

While investigating the mosquitoes in an aboriginal clearing on a steep forested hillside many specimens identified as *Aedes* (Finlaya) *chrysolineatus* Theo were caught attempting to bite man, and it was shown that this species can be experimentally infected with *W. malayi*. This is an interesting finding in relation to Polunin's report of filariasis among aborigines from hill country where the usual vectors of filariasis might well be scarce.

Experimental treatment with Hetrazan of 78 *malayi* infections in Penang confirms that patients with microfilariae in the blood consistently develop fever after treatment; and about a fifth of them have a local reaction in the lymph glands. A small-scale trial of mass treatment in an infected kampong in Penang revealed the difficulties inherent in any attempt to control Malayan filariasis in this way.

A study of the periodicity of *W. malayi* in 27 hospital patients showed peak counts of microfilariae in the blood between 9 p.m. and 5 a.m.

The discovery of a small endemic focus of Bancroftian filariasis on Penang island is of unusual interest.

77. YELLOW FEVER.—The mosquitoes which carry yellow fever elsewhere in the world are found in Malaya but too little is known about them to assess the chances of spread should the virus, now apparently absent, gain an entrance. We need to know the distribution and biology of *Aedes aegypti* and *A. albopictus* to assess the risk of urban transmission, and of wild or forest *Aedes* to envisage whether or in what way yellow fever might become established in jungle. These gaps in our knowledge will slowly be filled; a start has been made with a study of the black *Aedes* species inhabiting the fringe of the coastal swamps, particularly of *Aedes butleri* which readily bites monkeys and man.

The control of *Aedes aegypti* in Port Swettenham has fallen short of expectations. Three sprayings with DDT by the Health Department, with some larviciding, reduced the *aegypti* index

from 63 to 20 per cent. This disappointing result, due in part to shortage of staff, draws attention to the country-wide need for more training of subordinate staff in spraying techniques.

Though there is no indication that yellow fever occurs in Malaya—the disease is certainly absent in man—there is at least a chance that the virus may be found in jungle animals, confined to the forest by the lack of a suitable vector link with man. This is apparently the situation in Madagascar. To obtain evidence on this point sera from a representative sample of jungle animals are being sent to the Virus Research Institute, Entebbe, Uganda. Here mouse protection tests will be done to find out whether or not these animals are carrying antibodies to the virus.

The potential danger of yellow fever in S.E. Asia however remote it may seem, cannot be ignored. We might take the complacent attitude that the virus having apparently found no entry in the past will fail to secure a foothold in the future. This attitude is indefensible. The only sensible policy is one of preparedness. We must know the biological background—this is the reason for research—and we must be ready to meet the first alarm with speedy and effective counter measures. Medical and health officers must know the facts; and as a contribution to this end two circulars were issued during the year describing the current outbreak of jungle yellow fever in Central America and outlining a programme for mass vaccination in Malaya in the event of an outbreak.

78. JAPANESE B ENCEPHALITIS.—A study of the biology of mosquitoes on the Selangor Coast has continued, and the blood preferences of the common mosquitoes are broadly known. In the light of this information attention is being concentrated on a few common species of *Culex* as possible vectors. Attempts to isolate virus from wild caught mosquitoes were not successful; they will be repeated later, preferably in places where serum examination or other evidence suggests active transmission of the virus. Human and animal sera collected in Malaya are being examined for antibodies by Dr. Pond in America.

Some 20 human cases of central nervous system disease clinically resembling Japanese B encephalitis have been observed by the U.S. Research Unit since July, 1953. Of this group, ten have been tentatively identified by serologic methods as Japanese B virus infection. Two of these cases ended fatally. Isolation attempts were made with material from six patients, including post-mortem nervous tissue from the fatal cases, without success. All of these cases were sporadic and it is interesting that the ten serologically proven cases were widely distributed over the Federation.

79. FOOD AND NUTRITION.—The proceedings of the Regional Meetings of the Food and Agriculture Organisation and the World Health Organisation in South and East Asia have stressed the importance of nutrition education, both for children and adults, in order to combat the effects of poverty and ignorance on the dietary pattern of the peoples in this region. For this reason close contact has been maintained with the Department

of Education, which invited WHO and Institute representatives to submit a report on the teaching of domestic science in the schools in the Federation.

Pamphlets, broadsheets, and posters, both locally-produced and adapted from those in use in other countries, have been made available to the school authorities and to organisations interested in giving simple nutrition education to women and girls. Lectures have been given to interested groups, and dietary enquiries from Government Departments and from physicians and commercial firms have been answered. An active part has been taken in discussions on the re-organisation of schemes for the supplementary feeding of school children.

Anæmia in Malaya is widespread and often severe, particularly among Indian labourers employed on estates. During the first eight months of 1953, some 2,600 cases were admitted to government hospitals, and 49,000 treated as out-patients; even these high figures may not reveal the true incidence. Simple hæmoglobin surveys on various racial and social groups have helped to define the distribution and extent of the anæmia; therapeutic trials have shown that many are normoblastic iron-deficiency anæmias responding fairly well to simple iron treatment, but there is still little precise information on the anæmias of megaloblastic type. Current interest centres on these megaloblastic anæmias, particularly on the role in treatment of folic acid and vitamin B_{12}.

Work continues on the estimation of the thiamine content of the milk of nursing mothers. Generally speaking the thiamine levels in samples from mothers with no clinical evidence of deficiency were lower than those reported from the United Kingdom. There were no significant differences due to race, though the individual range was considerable.

Kwashiorkor, a serious and often fatal form of malnutrition in infants and very young children, is thought to be due to a deficiency of dietary protein in the early months of life. The condition originally described in Africa, has been reported from the West Indies, India, Fiji, Indonesia, and the Philippines. Infants weaned too early on to a carbohydrate diet with little protein, and that of poor biological quality, are the main victims. Kwashiorkor might well be expected to occur in Malaya, and Dr. Frances Thomson has found that a serious kwashiorkor-like syndrome is not uncommon in Central Perak; few cases have been reported from Malaya as a whole and brief inspections in Selangor and Trengganu made during the year by the Division of Nutrition, revealed little evidence of the condition in the areas visited.

Damage to the liver from experimental deficiencies in the diet of animals is now well recognised. Liver cirrhosis in rats, for example, may be produced by a diet poor in protein and rich in carbohydrate, and it has been suggested that a deficiency of methionine or of some other sulphur-containing amino acid may be responsible. A study is in progress of the effects on rats of a diet with a similar lack of balance, resembling that of a Chinese market-gardening community. Four groups of rats are

being fed on the equivalent of the Chinese diet; three of the groups are receiving in addition a supplement of methionine, legumes, or fish. After twelve months no significant difference in the appearance of the liver was apparent.

The studies on the loss of thiamine from highly-milled rice during washing and cooking, recorded in 1950, have been extended to ascertain the loss of iron, calcium, phosphorus, and phytic acid phosphorus, when parboiled rice is cooked by two common methods—the Malay method whereby all the cooking water is absorbed into the cooked rice, and the Tamil method in which excess water is drained from the rice after it has been cooked. The loss of each nutrient except calcium was greater with the Tamil method of cooking. Both methods involved a considerable loss of iron. Thiamin and iron losses from enriched highly-milled rice were also studied. The results so far are somewhat equivocal, but it seems that there is a loss from washing and a further loss into the *kanji* during cooking by the Tamil method. It is possible that most of the iron and thiamin lost from washing come from the highly-milled component of enriched rice, and that the further loss during cooking is from the "premix" grains, for it is reasonable to suppose that the protective coating of these grains prevents much loss of water-soluble nutrients during the washing process.

80. SALMONELLA INFECTION.—The only organisms of the salmonella group normally transmitted direct from man to man are *S. typhi* and *S. paratyphi*, but other members of this large group are pathogenic for animals and sometimes infect man. Last year's annual report reviewed the salmonella infections isolated from man by the Division of Bacteriology. During the year 18 further human infections have been investigated, five due to members of the salmonella group hitherto unrecognised in Malaya. A small outbreak in a maternity ward of infection due to *S. typhi-murium*, was of special interest.

81. TORULA MENINGITIS.—Human infections with the yeast-like organism, *Cryptococcus neoformans*, often involving the nervous system, have been reported from other countries. The source is unknown, and the outlook is usually bad, for the organism tends to be insensitive to antibiotics and unresponsive to other forms of therapy. A fatal case of this rare infection involving the brain was investigated during the year.

82. DIPHTHERIA.—Work on the classification of Malayan strains of *C. diphtheriæ* suggests that the older differentiation into *mitis, intermedius* and *gravis* types has little validity in this country, for we have the paradox that most deaths from diphtheria are due to the so-called *mitis* type of organisms. Dr. Ferris of Melbourne has introduced a more useful classification which distinguishes 16 serological types. The commonest type in Malaya appears to be "Mitis Johnson", found in 85 of 141 infectious serologically typed in the Division of Bacteriology.

83. PUERPERAL SEPSIS.—The isolation of hæmolytic streptococci or pathogenic staphylococci from nine persons in a maternity ward staff of fifteen emphasises the value of face masks in obstetric practice.

84. LEPTOSPIROSIS.—In the course of investigations on fevers of unknown origin some 30 cases of clinical leptospirosis were seen by the U.S. Research Unit. Eighteen strains of leptospira isolated from these cases have been sent to the United States and the United Kingdom for identification and further serological studies. A trial of sonic-vibrated complement-fixing antigens for the laboratory diagnosis of leptospirosis is in progress.

85. FEVERS OF UNKNOWN ORIGIN.—The U.S. Unit is attempting, so far without success, to isolate viral agents associated with fevers of unknown origin observed in Seaport Estate or in hospital.

86. CONTROLLED POPULATION STUDY.—A controlled study designed to throw light on the incidence and pattern of sickness in a typical Indian estate community has been started by the U.S. Research Team on Seaport Estate, Selangor, with the kind assistance of the estate manager, Mr. Travers. Serological surveys to detect inapparent infections are being made every six months, with a detailed study of clinical illnesses. Primary consideration is given to the study of antibodies against Japanese encephalitis virus and other arthropod-borne viruses in addition antibody studies of poliomyelitis, typhoid fever and streptococcal infection are in progress. Examination of sera collected will be made mainly in the United States.

87. CANCER.—A preliminary study of the geographical pathology of cancer has been completed and will soon be published. In general it seems that the overall incidence of cancer in Malaya is about the same as that of other countries when allowance is made for the differences in age structure of the population, but there are great differences, apparently racial, in site incidence. Chinese, for example, are especially prone to cancer of the liver and upper respiratory passages, and Indians to cancer of the mouth. With four races exposed to differing influences under similar physical conditions Malaya is well placed for studies on the possible effects of heredity and environment, but progress in this direction will be slow until we have a central cancer registry.

88. MYCOSES.—The superficial mycotic infections of the skin are extremely common in Malaya but the more serious deep mycoses are not commonly recognised. Among the deep mycoses observed during the year were eight cases of rhinosporidiosis, two in children; a case of blastomycosis of the adrenals with the clinical features of Addison's disease; a case of maduromycosis of the foot; and a case of histoplasmosis of the mouth and neck, the first so far as is known to be recorded in Malaya.

89. TUBERCULOSIS.—A study of cervical lymphadenopathy revealed that two-thirds of the cases of tuberculosis lymphadenitis of the neck were found in persons more than twenty years old, an age incidence which in Britain is rare. The significance of this observation is unknown.

90. VACCINE LYMPH.—For many years gas-forming anærobic organisms have caused heavy losses of vaccine lymph, about one-third of all the lymph produced at the Institute, for no lymph

containing these organisms may be passed for issue. Recent trials suggest that aureomycin may inhibit the growth of these troublesome organisms without adverse effect on the potency of the lymph.

91. CLINICAL BIOCHEMISTRY.—The present range of biochemical work in the Institute includes a study by paper electrophoresis of the pattern of serum proteins in various pathological states, a trial of an electrophoretic separation of chorionic gonatotrophin in the urine for the recognition of early pregnancy, and microbiological assays of folic acid.

92. SECOND EXPEDITION TO ISLANDS IN MALACCA STRAITS.—The Sembilan Islands and Pulau Jarak investigated by the Colonial Office Unit in 1950, were revisited in January, 1953 and, in addition, a short visit was paid to Pulau Berhala by kind permission of the Government of Indonesia. The work done is part of a larger survey: it is to continue and results will not be available for several years.

93. EXPEDITION TO MT. TRUS MADI, NORTH BORNEO.—Two officers and members of the staff of the Division of Virus Research and Medical Zoology were engaged in July-August in a joint Anglo-American project financed by the Surgeon-General's Office in Washington. Evidence was gained to show that previous work on Mount Kinabalu has general application. A number of investigations were carried out and results are to be published.

94. EXTENSION AND RE-ORGANISATION OF THE ANIMAL HOUSES.—The heavy demands for animals necessary for virus research are beyond the capacity of the old animal houses. A new animal house, mosquito and ant-proofed, has been built for the accommodation of monkeys and intensified mouse-breeding: and a financial grant from Colonial Development and Welfare Funds has made possible the appointment of a whole-time superintendent.

95. LIBRARY.—With the transfer of the library to the new buildings in June a complete re-organisation was possible. By exchange through UNESCO and the Library Association some 1,000 issues of periodicals missing since the Japanese occupation have been replaced; new classifications for text books and periodicals have been introduced. Though maintained by the Institute, the library is open to the whole medical profession in Malaya.

96. INTERNATIONAL CONFERENCES.—For many years the Federation Government has accepted the policy that officers of the Institute should miss no reasonable opportunity of meeting research workers in other parts of the world and of seeing at first hand the work they are doing. During the year the following officers attended international conferences:

Dr. J. W. Field ...	...	Fifth International Congress in Tropical Medicine and Malaria, Istanbul, August, 1953.
Dr. I. A. Simpson	...	Led the U.K. Delegation at the Third Regional Nutrition Meeting, F.A.O./W.H.O., Bandung, Indonesia, June, 1953.

Dr. J. R. Audy ...	...	International Symposium on the Dynamics of Virus Infections, Detroit, U.S.A., September, 1953.
Miss E. B. Cheek	...	First International Congress on Medical Librarianship, London, July, 1953.
Mr. J. A. Reid ...	...	First Asian Conference on Malaria Control, W.H.O., Bangkok, September, 1953.
Dr. J. F. B. Edeson	...	

97. OVERSEAS GUESTS.—Overseas guests working in the laboratories during the year include:

Dr. A. J. Walker	...	Professor of Clinical Tropical Medicine, Tulane University, New Orleans, attached to the Institute for work on malaria from January to August, 1953, on a Fullbright Research Fellosship.
Dr. W. L. Pond ...	...	Army Medical Service Graduate School, Washington, from July to September, 1953, for work on Japanese encephalitis.
Dr. John H. Dingle	...	Director, Commission on Acute Respiratory Diseases, U.S. Armed Forces Epidemiological Board.
Dr. Colin M. Macleod ...		President, U.S. Armed Forces Epidemiological Board.
		Dr. Dingle and Dr. Macleod spent a part of September and October in the laboratories for the planning of collaborative work in Malaya.
Capt. F. McCrumb	...	Members of the U.S. Medical Research Unit, June to December, 1953.
Capt. F. H. Diercks	...	
Dr. J. C. Fitzgerald	...	

98. ROUTINE.—The Institute maintains a diagnostic and advisory service for the Federation of Malaya and prepares some of the more important biological products. Some 1,090,000 doses of vaccine lymph, 59,000 cc. of typhoid and cholera vaccine and 32,280 cc. of anti-rabies vaccine prepared at the Institute were issued during the year. These products were supplied without charge to the Medical and Health Services of the country. More than 100,000 examinations, bacteriological, biochemical, entomological, histological, serological, etc., were made during the year for the medical services and practitioners of the Federation.

LEPER SETTLEMENTS

There are four Leper Settlements in the Federation—Sungei Buloh in Selangor, Pulau Jerejak in Penang, Leper Settlement, Johore Bahru and Leper Camp, Kota Bahru, Kelantan.

99. LEPER SETTLEMENT, SUNGEI BULOH.—Sungei Buloh Settlement is situated in a valley some 16 miles from Kuala Lumpur in attractive surroundings. Part of the Settlement is laid

out as a hospital with wards for the treatment of the acute cases, and the rest is a village settlement consisting of small semi-detached houses each with one room, a kitchen, a verandah and a bath room. Married couples who have been admitted to the settlement are allowed to live together and a number of marriages take place each year amongst the settlement inmates. About 40 infants are born each year in the settlement and these are removed as soon as possible to a creche' in the uninfected area where they are looked after till they are adopted or taken care of by the social welfare organisations.

The general health of the inmates has been good. The improvement in the general situation in the immediate neighbourhood has been reflected here and the settlement had a peaceful year.

During the year the number of patients in the Settlement increased from 2,411 to 2,460: the distribution of the population is as follows:

Nationalities	Men	Women	Boys	Girls	Healthy Infants	Total
Chinese ...	1,171	528	116	74	18	1,907
Indians ...	213	28	9	4	2	256
Malays ...	203	49	18	8	—	278
Others ...	14	3	2	—	—	19
Total ...	1,601	608	145	86	20	2,460

The rate of intake over discharge during the year was 49 and shows no sign of slackening in spite of more and more cases getting outpatient treatment.

A small mental ward for female patients has been built and an X-ray darkroom made and equipped.

Children who have left school, are now employed as apprentices and work part time, thus learning a trade and earning pocket money from a grant-in-aid from the Social Welfare Department.

TREATMENT.—Treatment has continued on much the same lines. Diamino-diphenyl-sulphone is still the drug of choice and has proved much more effective than all subsequent drugs tried. Combinations of D.D.S. with thiosemicarbazones or isonicotinic hydrazide are inconclusive.

Research in conjunction with Prof. Hale of Singapore has been on three main lines. Firstly, the evolution of the disease in this country; secondly, the response under treatment of various types of leprosy and, thirdly, the allergic responses of the disease with particular regard to the inter-relationship with tuberculosis.

The possibility of B.C.G. inoculation proving of value in leprosy is being considered and contacts watched.

HOSPITAL.—There were 1,573 admissions into the acute hospital with 38 deaths during the year. In 1953 forty-one babies were born. Among these there were two deaths and one still born.

Cortisone has proved of great value in certain forms of lepra reaction and also in drug sensitivity.

The routine treatment is carried out in the villages. In addition to special groups and morning sick parade there is the general supervision of the whole area.

Discipline has been good and no serious crimes were recorded during the year.

The Coronation was the occassion for a tremendous display of loyalty and enthusiasm, the decorations devised by the patients were well up to the standard of those in Kuala Lumpur.

Photographs of some of the arches were shown to Her Majesty the Queen and a letter of appreciation has been received from Buckingham Palace.

100. LEPER SETTLEMENT, PULAU JEREJAK, PENANG.—The leprosy patients on the Island of Pulau Jerejak are housed in two camps situated in the west side of the Island. The nearest point of access to Penang is about two miles from Sungei Nibong. No visitors are allowed except by permit and all non-infectious cases are occasionally granted permission to visit relatives.

There are two camps with 131 semi-detached permanent huts. Each hut accommodates three patients and all married inmates are given separate huts.

During the year 63 cases were admitted against 92 during the corresponding period. The total cases remaining at the end of the year was 433 against 414. There were 30 married couples from whom five births were recorded. Babies born on the island are sent to the Maternity Hospital, Penang. After six months they are transferred to the Social Welfare Department orphanage.

Uncooked rations are supplied to all fit inmates who do their own cooking. Inmates who are disabled are supplied with cooked food.

Gardening, poultry rearing and fishing are the main occupations of the inmates. Each community has its own club room where reading and indoor games are indulged in.

The Brass Band of the Settlement consists of 14 players who provide musical entertainment to inmates and visitors. There are two English and two Chinese Adult Education Classes in the camps managed by the Penang Adult Education Association. These classes are run by the inmates.

REHABILITATION OF LEPROSY CASES.—The rehabilitation of eight cured leprosy cases from Pulau Jerejak at Jawi New Village was begun on 19th November, 1953. These patients were each allocated a house, a plot of land to cultivate and a money grant for 6 months by which period it is hoped they will be self-supporting.

This rehabilitation scheme is the first of its kind in this country and its success is largely dependant on the reaction of the residents of Jawi New Village to having discharged leper patients living as neighbours. That reaction was most favourable and right from the start none of the usual fear and suspicion of

such cases was shown although this had been expressed before the arrival in the village of these discharged patients.

The above scheme originated in 1952 and the success was due to the help and co-operation rendered by the British Red Cross.

MENTAL INSTITUTIONS

101. CENTRAL MENTAL HOSPITAL, TANJONG RAMBUTAN.—The number of admissions for the year under review was 1,928 as compared with 1,892 in 1952. There were 1,628 discharges of whom 987 were graded as recovered, 416 as relieved and 225 as not improved. Deaths numbered 311 with a death rate of 5.94 per cent. of the 5,239 patients treated.

Deep insulin and electric convulsive therapy continued to be used with good results. Number of cases treated are as follows:

Electric Convulsive Therapy	1,797
Deep Insulin Therapy	117

Occupational therapy was carried out as in previous years.

RETURN OF INMATES FOR THE YEAR 1953

SUMMARY OF NATIONALITIES

Nationalities	Remaining at end of 31-12-52	Admissions	Deaths	Total Treated	Remaining at end of 31-12-53
Europeans	3	8	—	11	1
Eurasians	14	8	—	22	15
Chinese	2,124	1,054	212	3,178	2,179
Indians	423	401	46	824	474
Malays	732	450	50	1,182	777
Others	15	7	3	22	16
Total ..	3,311	1,928	311	5,239	3,462

Daily average number of inmates for 1953 ...	3,295
Number of Beds	3,000

The cost of maintaining the Central Mental Hospital is indicated below:

(i) Personal emoluments	$1,431,925.37
(ii) O.C.A.R.	1,087,124.39
(iii) O.C.S.E.	12,830.06
	$2,531,879.82

Capital expenditure, pension and leave charges are not included. The nett maintenance cost is $768.40 per annum per patient treated.

FARMS.—The number of patients working in the farms at the end of the year was 287 as compared with 265 in 1952. More than 300 acres are under cultivation. Vegetables and fruits are extensively grown. The pig and other farms were progressing

satisfactorily and were supplying the needs of the patients in relation to pork and other produce.

102.—Mental Hospital, Tampoi.—The Mental Hospital, Tampoi, which started to function with 65 patients in 1952 had 836 cases at the end of 1953. This institution has accommodation capacity of 1,200 patients.

In spite of the opening of this mental asylum the position at the Central Mental Hospital, Tanjong Rambutan has not eased.

MEDICAL STORES AND PHARMACEUTICAL LABORATORY

103. There are two large medical stores in Kuala Lumpur and Penang. The Stores account is operated under a "Below the Line" Account with a ceiling of $12,000,000.

Two hundred and forty-six indents were sent to the Crown Agents from both the Stores and the total value of these indents was $3,475,186.27.

Due to the establishment of a large number of New Village Dispensaries and demand for supplies by the voluntary organisations the issue of medical stores has considerably increased.

Owing to the expansion of the Stores Department mechanisation of the accounts was introduced. In June, 1953, both the Stores were closed for 14 days to enable a complete stock-taking to be made. This involved extra work on the staff of the stores and the new system was put into operation on 1st July, 1953.

A report from the Chief of the Fire Services on the many hazards present in the Medical Stores which hold stocks valued at over 10 million dollars has raised the question of re-organisation and reconstruction with possible centralisation of all stores in the Federation and all manufacturing facilities. This matter is at present under consideration since the state of affairs revealed is a serious one, and a disastrous fire might deprive the country of more than a year's supply of an indispensable drug or piece of equipment.

104. Medical Stores, Kuala Lumpur.—The value of drugs issued to the Kuala Lumpur laboratory for manufacturing purposes was $111,403.56 and the manufactured products were valued at $148,000.73, making a profit of $36,597.17 on the manufacturing account.

Output from Laboratory.—Over 337,033 ampoules were made as compared with 251,105 in 1952; 104,103 pounds of galenicals and 1,028,412 injectable doses were also produced during the period under review. The production of sulphone and sulphetrone preparations for the treatment of leprosy was 377,500 and 14,849 doses respectively.

Further, 77,970 ccs of B.C.G. vaccine was issued during the year.

Routine chemical examinations and drug assays were carried out. The Chief Pharmaceutical Chemist continued his investigations with certain vegetable extracts which he had isolated and

purified; these were sent to the University of Malaya for a pharmacological report. Technical advice on various packs of medical supplies captured from communists was given to the Special Branch of the C.I.D.

105. MEDICAL STORES, PENANG.—The Government Medical Store, Penang, has its godowns in widely scattered localities and, therefore, the efficiency is greatly handicapped.

As is usual every year, there was steady and continued expansion of the store work done in 1953. Due to the absence of the Superintending Pharmaceutical Chemist on long leave manufacture of ampoules and of general preparations was somewhat below expectation.

Twenty-one thousand four hundred and eighteen pounds of galenicals, 8,100,000 tablets and 890 units of miscellaneous preparations were manufactured.

The value of ingredients and materials used in manufacturing was $92,600 and the value of the output was $121,700 so that the gross saving to Government was $29,000.

106. NARCOTICS.—The Superintending Pharmaceutical Chemist, remained the sole importer and wholesale distributor of narcotics and the system worked smoothly, apart from the problems connected with *Physeptone* which is referred to again below.

NARCOTICS STATISTICS

	1953	1952	1951
Consumption of medicinal opium as such ..	3 kg.	5 kg.	2 kg.
Consumption of opium in tinctures, etc. ..	56 „	12 „	37 „
Consumption of Morphine	nearly 3 „	1 „	3 „
Consumption of Diamorphine	under 1 „	under 1 „	under 1 „
Consumption of Cocain	nearly 2 „	1 „	1 „
Consumption of Pethidine	8 „	5 „	5 „
Consumption of Heptalgin	under 1 „	under 1 „	under 1 „
Consumption of Physeptone	272 gm.	114 gm.	70 gm.

The above figures indicate a sharp upward trend in the consumption of most of the narcotics and this is only partly explained by the fact that 1952 was a year of unusually low consumption. 1953 was a year of particularly heavy demands for narcotics from private practitioners. This does not necessarily imply a greatly increased use of narcotics, as part of the increase may be due to the need for replacement of old stocks which may have been held for many years.

107. PHYSEPTONE.—In the second half of the year, following on articles in medical journals on the use of Physeptone for the treatment of opium addiction, there was a very sharp increase in the demand for Physeptone tablets from private practitioners and stocks were quickly exhausted, and further purchases within the small annual quota of 1,000 gm. were quickly taken up. There is evidence that opium addicts (thanks to the activities of the Customs Preventive Branch in making illicit opium imports a very risky business, and also partly due to the trade recession

with its resultant effect of less money available for expensive habits) are themselves going to private practitioners and asking for prescriptions for Physeptone. There is some evidence that:

(*a*) there is a small "black market" in Physeptone tablets which have entered Malaya legally and have been distributed to doctors and pharmacists in the usual way;

(*b*) prescriptions for Physeptone have been altered so that the patient gets increased quantities;

(*c*) a number of persons have been obtaining Physeptone prescriptions from more than one doctor; and

(*d*) quite a number of persons who only obtain their Physeptone legally (i.e., on prescriptions) are, at least in a minor degree, Physeptone addicts.

It is interesting to note that the use of Physeptone in Government Hospitals is negligible, and has not increased during the year.

108. ORTHOPAEDIC APPLIANCE CENTRE.—The organisation of the Limb Fitting Centre has from time to time been reviewed depending on the circumstances necessitating it. New ways and methods have been introduced to improve the working procedure within the Centre.

The work produced in 1953 included 79 fully articulated legs with wooden foot pieces, 17 peg legs, 3 symes (for ankle amputation), 16 artificial arms and various other orthopædic appliances.

TABLE 1

IN-PATIENTS

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1953

INTERMEDIATE LIST OF 150 CAUSES FOR TABULATION OF MORBIDITY AND MORTALITY—(*See footnote below*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			I.—INFECTIVE AND PARASITIC DISEASES					
A 1		001-008	Tuberculosis of respiratory system	2,812	5,847	8,659	968	2,910
A 2		010	Tuberculosis of meninges and central nervous system	12	147	159	96	8
A 3		011	Tuberculosis of intestines, peritoneum and mesenteric glands	7	77	84	17	2
A 4		012-013	Tuberculosis of bones and joints	162	375	537	13	126
A 5	(*a*)	014	Tuberculosis of skin and subcutaneous cellular tissue	1	25	26	..	12
	(*b*)	015	Tuberculosis of lymphatic system	19	136	155	3	9
	(*c*)	016	Tuberculosis of genito-urinary system	..	30	30	3	1
	(*d*)	017	Tuberculosis of adrenal glands	..	9	9		
	(*e*)	018	Tuberculosis of other organs	5	33	38	3	2
	(*f*)	019	Disseminated tuberculosis	3	7	10	4	
A 6		020	Congenital syphilis	5	83	88	17	1
A 7	(*a*)	021.0-021.1	Primary syphilis	6	74	80	..	3
	(*b*)	021.2	Secondary syphilis	27	369	396	1	18
	(*c*)	021.3	Early syphilis, relapse following treatment	..	15	15		
	(*d*)	021.4	Early syphilis (unspecified stage)	1	33	34	1	3
A 8		024	Tabes dorsalis	69	74	143	44	71
A 9		025	General paralysis of insane	2	18	20	3	
A 10	(*a*)	022	Aneurysm of aorta	1	15	16	2	1
	(*b*)	023	Other cardiovascular syphilis	5	30	35	6	1
	(*c*)	026	Other syphilis of central nervous system	26	134	160	2	14
	(*d*)	027	Tertiary syphilis	..	22	22	..	1
	(*e*)	028	Latent syphilis	4	90	94	6	4
	(*f*)	029	Syphilis unqualified	11	363	374	1	10
A 11	(*a*)	030	Acute or unspecified gonorrhoea	3	77	80	..	2
	(*b*)	031	Chronic gonococcal infection of genito-urinary system	3	73	76	..	3
	(*c*)	032	Gonococcal infection of joint	1	54	55	..	4
	(*d*)	033	Gonococcal infection of eye	..	14	14	..	1
	(*e*)	034-035	Gonococcal infection of other sites	50	753	803	69	51
A 12		040	Typhoid fever	1	21	22	..	1
A 13	(*a*)	041	Paratyphoid fever A, B or C	..	1	1		
	(*b*)	042	Other salmonella infections	..				
A 14		043	Cholera	..	1	1		
A 15		044	Brucellosis (undulant fever)	1	142	143	5	2
A 16	(*a*)	045	Bacillary dysentery	47	1,324	1,371	37	46
	(*b*)	046	Amoebiasis	21	399	420	11	17
	(*c*)	047-048	Other protozoal and unspecified forms of dysentery	..	1	1		
A 17		050	Scarlet fever	..	3	3		
A 18		051	Streptococcal sore throat	1	52	53	1	1
A 19		052	Erysipelas	1	136	137	65	2
A 20		053	Septicaemia and pyaemia	34	1,085	1,119	299	36
A 21		055	Diphtheria	5	193	198	10	10
A 22		056	Whooping Cough	..	4	4	3	1
A 23		057	Meningococcal infections	3,176	843	4,019	58	3,333
A 24		058	Plague	5	190	195	148	
A 25		060	Leprosy	2	252	254	98	5
A 26	(*a*)	061	Tetanus of the new-born	11	103	114	14	6
	(*b*)	—	Tetanus, other forms	..	4	4	2	
A 27		062	Anthrax					
A 28		080	Acute Poliomyelitis					
A 29		082	Acute infectious encephalitis					
			Carried forward ..	6,540	13,731	20,271	2,010	6,718

The headings are taken from the Intermediate List of 150 Causes for Tabulation of Morbidity and Mortality as published in the "Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death" (Sixth Revision, 1948).

Reference should be made to the Detailed List of the Diseases published on pages 45 to 321 of the above Manual whenever there is any doubt about the entry in the list.

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	6,540	13,731	20,271	2,010	6,718
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)					
A 30		081 083	Late effects of acute poliomyelitis and acute infectious encephalitis	4	57	61	1	4
A 31		084	Smallpox	..	4	4		
A 32		085	Measles	16	620	636	4	8
A 33		091	Yeollw fever					
A 34		092	Infectious hepatitis	13	447	460	27	15
A 35		094	Rabies	..	4	4	4	
A 36	(*a*)	100	Louse-borne epidemic typhus ..					
	(*b*)	101	Flea-borne endemic typhus (murine)	1	74	75	..	2
	(*c*)	104	Tick-borne epidemic typhus ..					
	(*d*)	105	Mite-borne typhus	8	186	194	1	5
	(*e*)	102-103 106-108	Other and unspecified typhus ..	4	76	80	3	3
A 37	(*a*)	110	Vivax malaria (benign tertian)	36	2,108	2,144	16	25
	(*b*)	111	Malariae malaria (quartan) ..	2	41	43	1	
	(*c*)	112	Falciparum malaria (malignant tertian)	80	5,373	5,453	103	69
	(*d*)	114	Mixed malaria infections ..	4	190	194	4	2
	(*e*)	115	Blackwater fever	..	4	4	2	
	(*f*)	113 116-117	Other and unspecified forms of malaria	110	5,250	5,360	60	69
A 38	(*a*)	123.0	Schistosomiasis vesical (S. haematobium)					
	(*b*)	123.1	Schistosomiasis intestinal (S. Mansoni)					
	(*c*)	123.2	Schistosomiasis Pulmonary (S. japonicum)					
	(*d*)	123.3	Other and unspecified Schistosomiasis					
A 39		125	Hydatid disease	1	9	10	1	
A 40	(*a*)	127	Onchocerciasis					
	(*b*)	—	Loiasis					
	(*c*)	—	Filariasis (bancrofti)	2	34	36	..	4
	(*d*)	—	Other filariasis	2	247	249	1	7
A 41		129	Ankylostomiasis	29	1,212	1,241	2	17
A 42	(*a*)	126	Tape worm (infestation) and other cestode infestation ..	..	59	59		
	(*b*)	130.0	Ascariasis	46	2,758	2,804	9	34
	(*c*)	130.3	Guinea worm (dracunculosis) ..	..	5	5		
	(*d*)	124	Other trematode infestation ..					
	(*e*)	128	Trichiniasis	..	1	1		
	(*f*)	130.1-130.2	Other diseases due to helminths	3	274	277	1	1
A 43	(*a*)	036	Chancroid	1	52	53		
	(*b*)	037	Lymphogranuloma venereum	..	36	36		
	(*c*)	038	Granuloma inguinale, venereal	..	10	10	..	1
	(*d*)	039	Other and unspecified venereal diseases	4	25	29	1	
	(*e*)	049	Food poisoning infection and intoxication	..	71	71	1	2
	(*f*)	059	Tularaemia	..	11	11		
	(*g*)	063	Gas gangrene	..	1	1		
	(*h*)	064	(*a*) Glanders					
			(*b*) Melioidosis	1	..	1	1	
			(*c*) Other bacterial diseases ..					
	(*i*)	070	Vincent's infection	1	9	10		
	(*j*)	071	Relapsing fever					
	(*k*)	072	Leptospirosis icterohaemorrhagica (Weil's diseases) ..	..	23	23	4	
	(*l*)	073	Yaws	58	730	788	2	35
	(*m*)	086	Rubella	..	14	14		
	(*n*)	087	Chickenpox	17	584	661	2	19
	(*o*)	088	Herpes Zoster	2	220	222	..	8
			Carried forward ..	6,985	34,550	41,535	2,261	7,048

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	6,985	34,550	41,535	2,261	7,048
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)					
	(*p*)	089	Mumps	18	1,179	1,197	..	26
	(*q*)	090	Dengue	1	199	200	..	5
	(*r*)	093	Glandular fever	1	4	5	1	
	(*s*)	095	Trachoma	8	72	80	..	2
	(*t*)	096.7	Sandfly fever	..	1	1		
	(*u*)	120	Leishmaniasis					
	(*v*)	121	(*a*) Trypanosomiasis gambiensis (*b*) Trypanosomiasis rhodesiensis .. .. (*c*) Other and unspecified trypanosomiasis					
	(*w*)	131	Dermatophytosis	19	530	549	..	15
	(*x*)	135	Scabies	13	673	686	..	6
	(*y*)	054, 074 096.1-096.6 096.8, 096.9 122 132-134 136-138	All other diseases classified as infective and parasitic ..	1	99	100	2	1
			II.—NEOPLASMS					
A 44		140-148	Malignant neoplasm of buccal cavity and pharynx	7	208	215	47	12
A 45		150	Malignant neoplasm of oesophagus	7	71	78	23	5
A 46		151	Malignant neoplasm of stomach	10	239	249	80	12
A 47	(*a*)	152	Malignant neoplasm of small intestine, including duodenum	..	9	9	3	
	(*b*)	153	Malignant neoplasm of large intestine, except rectum ..	4	36	40	15	2
A 48		154	Malignant neoplasm of rectum	8	79	87	23	7
A 49		161	Malignant neoplasm of larynx	1	15	16	5	1
A 50		162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary ..	2	112	114	53	6
A 51		170	Malignant neoplasm of breast	3	68	71	8	2
A 52		171	Malignant neoplasm of cervix uteri	11	231	242	31	10
A 53		172-174	Malignant neoplasm of other and unspecified parts of uterus ..	..	33	33	6	
A 54		177	Malignant neoplasm of prostate	1	18	19	5	3
A 55		190-191	Malignant neoplasm of skin ..	10	149	159	18	12
A 56		196-197	Malignant neoplasm of bone and connective tissue	4	37	41	7	2
A 57	(*a*)	155-156	Malignant neoplasm of liver ..	7	196	203	87	8
	(*b*)	157	Malignant neoplasm of pancreas	2	15	17	6	
	(*c*)	158	Malignant neoplasm of peritoneum	..	3	3	1	
	(*d*)	159	Malignant neoplasm of unspecified digestive organs ..	1	16	17	4	
	(*e*)	175-176	Malignant neoplasm of other and unspecified female genital organs	2	30	32	5	
	(*f*)	178-179	Malignant neoplasm of other and unspecified male genital organs	1	43	44	7	
	(*g*)	180-181	Malignant neoplasm of kidney, bladder and other urinary organs	1	40	41	12	1
	(*h*)	160 164-165 192-195 198-199	Malignant neoplasm of all other and unspecified sites ..	4	145	149	32	5
			Carried forward ..	7,132	39,100	46,232	2,742	7,191

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	7,132	39,100	46,232	2,742	7,191
			II.—NEOPLASMS—(*cont.*)					
A 58		204	Leukaemia and Aleukaemia ..	3	48	51	25	2
A 59	(*a*)	200	Lymphosarcoma and reticulosarcoma	1	9	10	1	
	(*b*)	201	Hodgkin's disease	2	16	18	1	3
	(*c*)	202-203	Other neoplasm of lymphatic and haematopoietic system	..	11	11	1	1
	(*d*)	205	Mycosis fungoides	1	14	15		
A 60	(*a*)	210-211	Benign neoplasm of buccal cavity, pharynx and digestive system..	3	45	48	5	
	(*b*)	217	Benign neoplasm of other female genital organs	4	91	95	4	
	(*c*)	218	Benign neoplasm of other male genital organs	..	9	9		
	(*d*)	212-216 219-229	Benign neoplasm of other and unspecified organs and tissue	6	234	240	4	10
	(*e*)	230	Neoplasm of unspecified nature of digestive organs	..	24	24	1	2
	(*f*)	233-235	Neoplasm of unspecified nature of other female genital organs	..	34	34	1	4
	(*g*)	231-232 236-239	Neoplasm of unspecified nature of other unspecified organs ..	12	190	202	6	5
			III.—ALLERGIC ENDOCRINE SYSTEM METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS					
A 61		250-251	Nontoxic goitre	3	72	75	2	3
A 62		252	Thyrotoxicosis with or without goitre	9	134	143	5	8
A 63		260	Diabetes mellitus	41	904	945	44	53
A 64	(*a*)	280	Beri Beri..	25	498	523	27	37
	(*b*)	281	Pellagra	..	2	2		
	(*c*)	282	Scurvy	..	13	13	1	
	(*d*)	283-284	Rickets	3	16	19	1	2
	(*e*)	285	Osteomalacia	..	1	1	..	1
	(*f*)	286.0	(*a*) Sprue	1	19	20	2	1
		286.5	(*b*) Malnutrition	33	729	762	105	30
		286.1-286.4 286.6	(*c*) Other deficiency states ..	25	321	346	15	8
A 65	(*a*)	290	Pernicious and other hyperchromic anaemias	1	29	30	5	3
	(*b*)	291	Iron deficiency anaemias (hypochromic)	57	1,426	1,483	53	58
	(*c*)	292-293	Other specified and unspecified anaemias	179	2,122	2,301	96	182
A 66	(*a*)	241	Asthma	104	2,900	3,004	62	89
	(*b*)	240 242-245	Angioneurotic oedema, urticaria and other allergic disorders	4	276	280	..	3
	(*c*)	253	Myxoedema and cretinism ..	2	13	15	..	2
	(*d*)	254	Other diseases of thyroid gland	6	77	83	1	
	(*e*)	270	Disorders of pancreatic internal secretion other than diabetes mellitus	..	1	1		
	(*f*)	271	Diseases of parathyroid gland..	1	3	4		
	(*g*)	272	Diseases of pituitary gland ..	..	4	4		
	(*h*)	273	Diseases of thymus gland ..	..	3	3	3	
	(*i*)	274	Diseases of adrenal gland ..	..	3	3	1	
			Carried forward ..	7,658	49,391	57,049	3,214	7,698

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	7,658	49,391	57,049	3,214	7,698
			III.—ALLERGIC ENDOCRINE SYSTEM METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS—(*cont.*)					
	(*j*)	275-277	Other diseases of endocrine glands	..	3	3		
	(*k*)	288	Gout	3	24	27	..	2
	(*l*)	287,289	Other metabolic diseases ..	3	83	86	3	
	(*m*)	294	Polycythemia					
	(*n*)	295	Haemophilia	..	8	8	2	
	(*o*)	296	Purpura and other haemorrhagic conditions	1	32	33	8	
	(*p*)	297	Agranulocytosis	..	3	3	..	1
	(*q*)	298	Diseases of spleen	..	37	37	3	
	(*r*)	299	Other diseases of blood and blood-forming organs ..	5	60	65	7	2
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS					
A 67	(*a*)	300	Schizophrenic disorders (dementia praecox)	1,966	939	2,905	109	2,035
	(*b*)	301	Maniac-depressive reaction ..	438	338	776	34	452
	(*c*)	302	Involutional melancholia ..	80	66	146	10	97
	(*d*)	303	Paranoia and paranoid states	2	21	23	..	8
	(*e*)	304	Senile psychoses	421	235	656	86	433
	(*f*)	305-309	Other and unspecified psychoses	472	1,147	1,619	57	616
A 68	(*a*)	311	Hysterical reaction	8	181	189	..	8
	(*b*)	314	Neurotic-depressive reaction ..	3	77	80	..	2
	(*c*)	322	Alcoholism	1	343	344	2	
	(*d*)	323	Other drug addiction	20	399	419	3	5
	(*e*)	310 312-313 315-321 324 326	Other psychoneuroses and disorders of personality	268	713	981	4	478
A 69		325	Mental deficiency	166	532	698	14	162
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS					
A 70	(*a*)	331	Cerebral haemorrhage	5	265	270	192	4
	(*b*)	332	Cerebral embolism and thrombosis	19	248	267	96	26
	(*c*)	330 333-334	Other vascular lesions affecting central nervous system ..	15	123	138	16	13
A 71		340	Non-meningococcal meningitis	4	255	259	130	4
A 72		345	Multiple sclerosis	1	3	4		
A 73		353	Epilepsy	12	368	380	8	27
A 74	(*a*)	370	Conjunctivitis and ophthalmia	49	1,954	2,003	..	37
	(*b*)	371-379	Other inflammatory diseases of eye	9	660	669	..	27
A 75		385	Cataract	102	1,213	1,315	..	85
A 76		387	Glaucoma	10	99	109	..	5
A 77	(*a*)	390	Otitis externa	1	155	156	..	3
	(*b*)	391-393	Otitis media and mastoiditis ..	13	541	554	6	14
			Carried forward ..	11,755	60,516	72,271	4,004	12,244

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	11,755	60,516	72,271	4,004	12,244
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS—(*cont.*)					
	(*c*)	394	Other inflammatory diseases of ear	9	140	149	..	2
A 78	(*a*)	380-384 386,388 389	All other diseases and conditions of eye	114	1,232	1,346	1	106
	(*b*)	342	Intracranial and intraspinal abscess	1	16	17	12	
	(*c*)	343	Encephalitis, myelitis and encephalomyelitis	1	182	183	93	4
	(*d*)	350	Paralysis agitans	12	51	63	9	9
	(*e*)	352	Other cerebral paralysis ..	100	351	451	19	89
	(*f*)	356	Motor neurone disease and muscular atrophy	4	21	25	3	3
	(*g*)	357	Other diseases of spinal cord ..	4	39	43	5	5
	(*h*)	366	Other and unspecified forms of neuralgia and neuritis ..	28	1,421	1,449	..	24
	(*i*)	367	Other diseases of cranial nerves	..	27	27	..	3
	(*j*)	369	Diseases of peripheral autonomic nervous system ..	..	27	27	2	
	(*k*)	341, 344 351, 354 355 360-365 368 395-398	All other diseases of the nervous system and sense organs ..	13	390	403	7	11
			VII.—DISEASES OF THE CIRCULATORY SYSTEM					
A 79	(*a*)	400	Rheumatic fever without mention of heart involvement ..	14	236	250	4	14
	(*b*)	401	Rheumatic fever with heart involvement	11	92	103	10	16
	(*c*)	402	Chorea	..	17	17	1	
A 80	(*a*)	410-413	Diseases of valves specified as rheumatic	7	80	87	14	10
	(*b*)	414	Other endocarditis specified as rheumatic	2	16	18	6	
	(*c*)	415	Other myocarditis specified as rheumatic	1	8	9	1	2
	(*d*)	416	Other heart disease specified as rheumatic	5	31	36	3	2
A 81	(*a*)	420	Arteriosclerotic heart disease, including coronary disease ..	1	96	97	37	7
	(*b*)	421	Chronic endocarditis not specified as rheumatic	3	51	54	7	9
	(*c*)	422	Other myocardial degeneration	12	197	209	56	12
A 82	(*a*)	430	Acute and subacute endocarditis	3	39	42	13	1
	(*b*)	431	Acute myocarditis	9	281	290	77	14
	(*c*)	432	Acute pericarditis	1	55	56	19	4
	(*d*)	433	Functional disease of heart ..	23	632	655	203	28
	(*e*)	434	Other and unspecified diseases of heart	56	993	1,049	313	47
A 83		440-443	Hypertension with heart disease	17	468	485	155	18
A 84		444-447	Hypertension without mention of heart	37	802	839	61	44
A 85	(*a*)	450	General arteriosclerosis ..	1	26	27	7	5
	(*b*)	451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm	..	32	32	13	
	(*c*)	452	Other aneurysm, except of heart and aorta	..	12	12	1	2
	(*d*)	453	Peripheral vascular disease ..	..	4	4	1	
			Carried forward ..	12,244	68,581	80,825	5,157	12,735

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	12,244	68,581	80,825	5,157	12,735
			VII.—DISEASES OF THE CIRCULATORY SYSTEM —(*cont.*)					
	(*e*)	454	Arterial embolism and thrombosis	1	28	29	20	
	(*f*)	455	Gangrene of unspecified cause	6	81	87	7	2
	(*g*)	456	Other diseases of arteries ..	2	31	33	2	1
A 86	(*a*)	460, 462	Varicose veins	7	121	128	1	2
	(*b*)	461	Haemorrhoids	30	1,062	1,092	1	46
	(*c*)	463-464	Phlebitis and thrombophlebitis	..	77	77	2	3
	(*d*)	465	Pulmonary embolism and infarction	..	23	23	15	2
	(*e*)	466	Other venous embolism and thrombosis	..	24	24	7	
	(*f*)	467	Other diseases of circulatory system..	3	55	58	4	7
	(*g*)	468	(*a*) Adenitis	18	702	720	..	19
			(*b*) Lymphadenitis	4	201	205	..	2
			(*c*) Other diseases of lymph nodes and lymph channels ..	1	115	116	3	5
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM					
A 87	(*a*)	470	Acute nasopharyngitis (common cold)	27	2,265	2,292	..	22
	(*b*)	471	Acute sinusitis	5	206	211	..	2
	(*c*)	472	Acute pharyngitis	9	563	572	3	11
	(*d*)	473	Acute tonsillitis	19	1,695	1,714	3	30
	(*e*)	474	Acute laryngitis and tracheitis	2	155	157	9	7
	(*f*)	475	Other acute upper respiratory infections	5	458	463	1	17
A 88	(*a*)	480	Influenza with pneumonia ..	1	88	89	2	2
	(*b*)	481	Influenza with other respiratory manifestations, and influenza unqualified	43	3,811	3,854	..	40
	(*c*)	482	Influenza with digestive manifestations, but without respiratory symptoms	12	418	430	1	
	(*d*)	483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	1	128	129	2	2
A 89		490	Lobar pneumonia	22	726	748	109	15
A 90		491	Broncho-pneumonia	47	2,780	2,827	953	48
A 91		492-493	Primary atypical, other and unspecified pneumonia ..	29	1,094	1,123	189	18
A 92		500	Acute bronchitis	41	2,680	2,721	36	39
A 93	(*a*)	501	Bronchitis unqualified	56	3,867	3,923	13	71
	(*b*)	502	Chronic bronchitis	73	1,376	1,449	51	55
A 94		510	Hypertrophy of tonsils and adenoids	1	185	186	..	3
A 95	(*a*)	518	Empyema	7	98	105	19	7
	(*b*)	521	Abscess of lung	14	103	117	11	12
A 96		519	Pleurisy	27	495	522	21	49
A 97	(*a*)	517	Other diseases of upper respiratory tract	4	139	143	4	1
	(*b*)	520	Spontaneous pneumothorax ..	..	13	13	2	1
	(*c*)	522	Pulmonary congestion and hypostasis	1	8	9	8	
	(*d*)	525	Other chronic interstitial pneumonia	..	3	3		
	(*e*)	523	Pneumoconiosis					
	(*f*)	526	Bronchiectasis	14	353	367	24	22
	(*g*)	511-516 524 527	All other respiratory diseases ..	17	292	309	24	16
			Carried forward ..	12,793	95,100	107,893	6,704	13,314

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
		Brought forward ..	12,793	95,100	107,893	6,704	13,314
		IX.—DISEASES OF THE DIGESTIVE SYSTEM					
A 98 (*a*)	530	Dental caries	5	299	304	..	1
(*b*)	531-535	(*a*) Gingivitis	..	72	72		
		(*b*) Pyorrhoea	3	95	98	..	1
		(*c*) Other diseases of teeth and supporting structures ..	10	496	506	2	10
A 99	540	Ulcer of stomach	47	1,126	1,173	88	60
A 100	541	Ulcer of duodenum	12	341	353	18	25
A 101	543	Gastritis and duodenitis ..	36	2,191	2,227	4	53
A 102	550-553	Appendicitis	61	1,983	2,044	26	66
A 103 (*a*)	560	Hernia of abdominal cavity without mention of obstruction	44	1,246	1,290	4	43
(*b*)	561	Hernia of abdominal cavity with obstruction	4	215	219	18	6
(*c*)	570	(*a*) Intussusception	..	41	41	11	2
		(*b*) Volvulus	..	5	5	2	
		(*c*) Other intestinal obstruction	4	168	172	50	2
A 104 (*a*)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years ..	36	2,482	2,518	632	54
(*b*)	571.1	Gastro-enteritis and colitis, ages 2 years and over	55	2,732	2,787	160	49
(*c*)	572	Chronic enteritis and ulcerative colitis	9	198	207	7	7
A 105 (*a*)	581.0	Cirrhosis of liver without mention of alcoholism	36	570	606	119	26
(*b*)	581.1	Cirrhosis of liver with alcoholism	..	34	34	5	1
A 106 (*a*)	584	Cholelithiasis	..	43	43	1	1
(*b*)	585	Cholecystitis without mention of calculi	6	247	253	10	9
A 107 (*a*)	536	Stomatitis	4	212	216	..	6
(*b*)	538	Other diseases of buccal cavity	..	67	67	1	1
(*c*)	539	(*a*) Functional disorders of oesophagus	..	8	8	1	
		(*b*) Stricture or obstruction of oesophagus	5	91	96	10	6
(*d*)	544	Disorders of function of stomach	14	654	668	2	20
(*e*)	545	Other diseases of stomach and duodenum	1	215	216	5	6
(*f*)	573	(*a*) Constipation	6	586	592	..	2
		(*b*) Other functional disorders of intestines	7	1,041	1,048	9	11
(*g*)	574	Anal fissure and fistula ..	11	284	295	1	13
(*h*)	575	Abscess of anal and rectal regions	10	232	242	4	7
(*i*)	576	Peritonitis	3	182	185	97	2
(*j*)	578	Other diseases of intestines and peritoneum	3	126	129	19	1
(*k*)	580	(*a*) Acute yellow atrophy of liver	1	19	20	4	
		(*b*) Degeneration of liver ..	..	5	5	4	
		(*c*) Hepatitis	36	641	677	32	18
(*l*)	583	Other diseases of liver	19	251	270	52	9
(*m*)	586	Other diseases of gall-bladder and billiary ducts	9	222	231	21	6
(*n*)	587	Diseases of pancreas	..	11	11	2	
(*o*)	537, 542, 577, 582	Other diseases of digestive system	6	429	435	10	10
		X.—DISEASES OF THE GENITO-URINARY SYSTEM					
A 108	590	Acute nephritis	19	365	384	41	19
A 109 (*a*)	591	Nephritis with oedema, including nephrosis	4	90	94	12	3
		Carried forward ..	13,319	115,415	128,734	8,188	13,870

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	13,319	115,415	128,734	8,188	13,870
			X.—DISEASES OF THE GENITO-URINARY SYSTEM —(*cont.*)					
	(*b*)	592	Chronic nephritis	19	367	386	69	36
	(*c*)	593	Nephritis not specified as acute or chronic	33	468	501	41	24
	(*d*)	594	Other renal sclerosis	..	25	25	3	3
A 110		600	Infections of kidney	4	396	400	10	6
A 111	(*a*)	602	Calculi of kidney and ureter ..	15	258	273	1	6
	(*b*)	604	Calculi of other parts of urinary system..	7	162	169	1	9
A 112		610	Hyperplasia of prostate ..	6	77	83	4	3
A 113		620-621	Diseases of breast	6	158	164	..	2
A 114	(*a*)	603	Other diseases of kidney and ureter	15	565	580	19	10
	(*b*)	605	Cystitis	8	458	466	3	10
	(*c*)	606	Other diseases of bladder ..	2	169	171	3	6
	(*d*)	608	Stricture of urethra	17	326	343	2	18
	(*e*)	609	Other diseases of urethra ..	8	229	237	1	7
	(*f*)	612	Other diseases of prostate ..	8	164	172	5	12
	(*g*)	613	Hydrocele	5	304	309	..	15
	(*h*)	614	Orchitis and epididymitis ..	7	428	435	..	12
	(*i*)	617	Other diseases of male genital organs	15	680	695	3	8
	(*j*)	622	Acute salpingitis and oophoritis	8	329	337	..	5
	(*k*)	625	Other diseases of ovary and Fallopian tube	6	181	187	2	11
	(*l*)	626	Diseases of parametrium and pelviperitoneum (female) ..	4	87	91	3	8
	(*m*)	630	Infective disease of uterus, vagina and vulva	8	329	337	2	5
	(*n*)	633	Other diseases of uterus ..	16	519	535	5	20
	(*o*)	634	Disorders of menstruation ..	9	569	578	..	13
	(*p*)	637	Other diseases of female genital organs	18	447	465	2	11
	(*q*)	601 607, 611 615-616 623-624 631-632 635-636	All other diseases of the genito-urinary system	8	272	280	8	9
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY CHILDBIRTH AND THE PUERPERIUM					
A 115	(*a*)	640	Pyelitis and pyelonephritis of pregnancy	4	229	233	1	9
	(*b*)	641	Other infections of genito-urinary tract during pregnancy	..	19	19		
	(*c*)	681	Sepsis of childbirth and the puerperium	2	172	174	17	5
	(*d*)	682	Puerperal phlebitis and thrombosis	..	5	5		
	(*e*)	684	Puerperal pulmonary embolism	5	1	6	2	
A 116	(*a*)	642	(*a*) Albuminuria of pregnancy	8	114	122	..	6
			(*b*) Eclampsia of pregnancy ..	4	209	213	45	4
			(*c*) Hyperemesis gravidarum ..	3	216	219	2	3
			(*d*) Acute yellow atrophy of liver	..	4	4	2	
			(*e*) Other toxaemias of pregnancy	17	408	425	20	17
	(*b*)	652	Abortion with toxaemia, without mention of sepsis ..	1	31	32	2	
	(*c*)	685	Puerperal eclampsia	2	72	74	16	3
			Carried forward ..	13,617	124,862	138,479	8,482	14,186

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	13,617	124,862	138,479	8,482	14,186
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY CHILDBIRTH AND THE PUERPERIUM —(*cont.*)					
	(*d*)	686	Other forms of puerperal toxaemia	1	52	53	9	3
A 117	(*a*)	643	Placenta praevia	1	114	115	11	2
	(*b*)	644	Other haemorrhage of pregnancy	9	328	337	18	5
	(*c*)	670	Delivery complicated by placenta praevia or antepartum haemorrhage	3	174	177	36	5
	(*d*)	671	Delivery complicated by retained placenta	4	392	396	33	8
	(*e*)	672	Delivery complicated by other postpartum haemorrhage ..	7	231	238	53	3
A 118		650	Abortion without mention of sepsis or toxaemia	50	3,624	3,674	8	87
A 119		651	Abortion with sepsis	4	141	145	5	5
A 120	(*a*)	645	Ectopic pregnancy	6	204	210	15	4
	(*b*)	646	Anaemia of pregnancy ..	45	1,295	1,340	13	43
	(*c*)	683	Pyrexia of unknown origin during the puerperium	1	62	63	2	1
	(*d*)	688.1	Puerperal psychoses	..	29	29	1	3
	(*e*)	689	Mastitis and other disorders of lactation	2	55	57	..	1
	(*f*)	647-649 673-680 687 688.0 688.2-688.3	Other complications of pregnancy childbirth and the puerperium	55	2,123	2,178	57	68
	(*g*)	660	Delivery without complications	719	43,732	44,451	..	745
			XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE AND XIII.—DISEASES OF THE BONES AND ORGANS OF MOVEMENT					
A 121	(*a*)	690	Boil and carbuncle	27	959	986	4	29
	(*b*)	691-693	Cellulitis and abscess	150	5,422	5,572	22	151
	(*c*)	694-698	Other infections of skin and subcutaneous tissue	28	985	1,013	4	37
A 122	(*a*)	720	Acute arthritis due to pyogenic organisms	3	31	34	1	2
	(*b*)	721	Acute nonpyogenic arthritis ..	1	40	41	..	3
	(*c*)	722	Rheumatoid arthritis and allied conditions	12	264	276	1	19
	(*d*)	723-725	Arthritis specified and unspecified	45	1,042	1,087	1	54
A 123	(*a*)	726	Muscular rheumatism	8	430	438	..	7
	(*b*)	727	Rheumatism unspecified ..	9	295	304	3	15
A 124		730	Osteomyelitis and periostitis ..	40	532	572	6	45
A 125	(*a*)	737	Ankylosis of joint	3	35	38	..	1
	(*b*)	745-749	Other acquired musculoskeletal deformities	1	48	49	..	5
A 126	(*a*)	715	Chronic ulcer of skin (including tropical ulcer)	174	2,418	2,592	2	136
	(*b*)	700-714 716	All other diseases of skin ..	133	3,515	3,648	3	114
	(*c*)	731-736 738-744	All other diseases of musculoskeletal system	10	420	430	..	18
			Carried forward ..	15,168	193,854	209,022	8,790	15,805

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
			Brought forward ..	15,168	193,854	209,022	8,790	15,805
			XIV.—CONGENITAL MALFORMATIONS					
A 127		751	Spina bifida and meningocele	1	20	21	4	2
A 128		754	Congenital malformations of circulatory system	..	46	46	23	2
A 129	(*a*)	750	Monstrosity	..	7	7	5	
	(*b*)	752	Congenital hydrocephalus ..	1	27	28	8	2
	(*c*)	753	Other congenital malformations of nervous system and sense organs	1	10	11	2	1
	(*d*)	755	Cleft palate and harelip ..	7	269	276	1	14
	(*e*)	756	(*a*) Congenital hypertrophic pyloric stenosis	..	13	13	5	
			(*b*) Imperforate anus	1	67	68	14	
			(*c*) Other congenital malformations of digestive system	..	16	16	7	
	(*f*)	757	Congenital malformations of genito-urinary system ..	..	16	16	2	
	(*g*)	758	Congenital malformations of bone and joint	1	28	29		
	(*h*)	759	Other and unspecified congenital malformations, not elsewhere classified	3	70	73	20	4
			XV.—CERTAIN DISEASES OF EARLY INFANCY					
A 130	(*a*)	760	Intracranial and spinal injury at birth	..	30	30	28	
	(*b*)	761	Other birth injury	..	27	27	15	
A 131		762	Postnatal asphyxia and atelectasis	1	292	293	209	
A 132	(*a*)	764	Diarrhoea of newborn	..	64	64	30	4
	(*b*)	765	Ophthalmia neonatorum ..	..	17	17	..	2
	(*c*)	763	Pneumonia of newborn ..	..	25	25	13	2
	(*d*)	766	Pemphigus neonatorum ..	..	10	10	3	
	(*e*)	767	Umbilical sepsis..	..	45	45	7	1
	(*f*)	768	Other sepsis of newborn ..	1	6	7	4	
A 133		770	Haemolytic disease of newborn	..	16	16	13	1
A 134		769 771-772	All other defined diseases of early infancy	4	437	441	42	4
A 135	(*a*)	773	Congenital debility	3	37	40	22	2
	(*b*)	774	Premature birth	30	1,634	1,664	793	28
	(*c*)	775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified ..	4	71	75	22	5
			XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS					
A 136		794	Senility without mention of psychoses	209	1,104	1,313	303	247
A 137	(*a*)	780	Infantile convulsions	3	242	245	55	5
	(*b*)	788.8	Pyrexia of unknown origin ..	120	4,609	4,729	113	131
	(*c*)	793	Observation, without need for further medical care ..	298	7,382	7,680	..	301
	(*d*)	781-787 789-792 795 788.1-788.7 788.9	(*a*) Malingering	..	40	40		
			(*b*) Sudden death (cause unknown)	..	2	2	2	
			(*c*) Found dead (cause unknown)					
			(*d*) Other ill-defined and unknown causes of morbidity and mortality ..	16	727	743	34	53
			Carried forward ..	15,872	211,260	227,132	10,589	16,616

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
		Brought forward ..	15,872	211,260	227,132	10,589	16,616
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE					
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)					
AE 138	E 810-E 835	Motor vehicle accidents ..	116	2,980	3,096	214	115
AE 139 (*a*)	E 800-E 802	Railway accidents	..	34	34	5	1
(*b*)	E 850-E 858	Water transport accidents ..	1	12	13		
(*c*)	E 860-E 866	Aircraft accidents	..	3	3		
(*d*)	E 840-E 845	Other transport accidents ..	17	560	577	3	10
AE 140 (*a*)	E 870	Accidental poisoning by morphia and other opium derivatives	..	12	12	5	
(*b*)	E 874	Accidental poisoning by other analgesic and soporific drugs	..	15	15	3	
(*c*)	E 878	Accidental poisoning by other and unspecified drugs ..	..	35	35	4	
(*d*)	E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalies	3	179	182	19	9
(*e*)	E 884	Accidental poisoning by mercury and its compounds	..	4	4		
(*f*)	E 885	Accidental poisoning by lead and its compounds	..	1	1		
(*g*)	E 886	Accidental poisoning by arsenic and antimony and their compounds	..	50	50	5	
(*h*)	E 888	Accidental poisoning by other and unspecified solid or liquid substances	3	89	92	8	
(*i*)	E 890-E 895	Accidental poisoning by gases and vapours	..	1	1		
(*j*)	E871-E873, E875-E877, E879-E882, E 887	Other accidental poisoning ..	2	93	95	7	
AE 141	E 900-E 904	Accidental falls	205	5,744	5,949	97	207
AE 142	E 912	Accident caused by machinery	10	255	265	3	5
AE 143	E 916	Accident caused by fire and explosion of combustible material	9	162	171	12	6
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation	18	481	499	21	24
AE 145	E 919	Accident caused by firearm ..	15	202	217	10	15
AE 146	E 929	Accidental drowning and submersion	..	84	84		
AE 147 (*a*)	E 913	Accidents caused by cutting or piercing instruments ..	43	1,564	1,607	3	44
(*b*)	E 914	Accidents caused by electric current	..	26	26	..	1
(*c*)	E 920	Foreign body entering eye and adnexa	..	55	55	..	2
(*d*)	E 923	Foreign body entering other orifice	3	185	188	2	3
(*e*)	E 925	Accidental mechanical suffocation					
(*f*)	E 926	Lack of care of infants under 1 year of age	3	4	7	1	
(*g*)	E 927	Accidents caused by bites and stings of venomous animals and insects	15	1,059	1,074	12	17
(*h*)	E 928	Other accidents caused by animals	17	552	569	3	13
(*i*)	E 931	Excessive heat	9	3	12	..	1
		Carried forward ..	16,361	225,704	242,065	11,026	17,089

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
		Brought forward ..	16,361	225,704	242,065	11,026	17,089
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE —(*cont.*)					
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(*cont.*)					
(*j*)	E 932	Excessive cold	..	1	1		
(*k*)	E 933	Hunger, thirst and exposure ..	..	2	2		
(*l*)	E 934	Cataclysm					
(*m*)	E 935	Lightning	..	23	23	1	
(*n*)	E 936	(*a*) Accidents in mines and quarries	7	108	115	7	4
		(*b*) Agricultural and forestry accidents..	5	55	60	1	
		(*c*) Accidental injury by crushing or landslide	8	123	131	8	1
		(*d*) Other and unspecified accidents	31	802	833	5	22
(*o*)	E 940	Generalized vaccinia following vaccination	..	6	6		
(*p*)	E 941-E 942	Other complications of smallpox vaccination	..	3	3		
(*q*)	E950-E953, E955-E959	Accidents due to medical or surgical intervention.. ..	..	11	11	5	
(*r*)	E 954	Anaesthetic accidents	..	2	2	1	
(*s*)	E910-E911, E 915, E921-E922, E924-E930, E943-E946, E960-E965	All other accidental causes ..	10	282	292	3	3
AE 148 (*a*)	E 970	Suicide and self-inflicted injury by analgesic and soporific substances	..	23	23	7	
(*b*)	E 971	Suicide and self-inflicted injury by other solid and liquid substances	1	159	160	46	11
(*c*)	E 972	Suicide and self-inflicted injury by gases in domestic use ..	..	4	4	1	
(*d*)	E 973	Suicide and self-inflicted injury by other gases					
(*e*)	E 974	Suicide and self-inflicted injury by hanging or strangulation	..	15	15	6	
(*f*)	E 975	Suicide and self-inflicted injury by submersion (drowning) ..	..	12	12	1	
(*g*)	E 976	Suicide and self-inflicted injury by firearms and explosives ..	..	5	5	3	
(*h*)	E 977	Suicide and self-inflicted injury by cutting or piercing instruments	6	48	54	6	2
(*i*)	E 978	Suicide and self-inflicted injury by jumping from high place	..	7	7	5	
(*j*)	E 979	Suicide and self-inflicted injury by other and unspecified means	1	10	11	3	
AE 149 (*a*)	E 980	Non-accidental poisoning by another person	..	19	19		
(*b*)	E 981	Assault by firearm and explosive	26	206	232	19	14
(*c*)	E 982	Assault by cutting or piercing instruments	15	552	567	28	12
(*d*)	E 983	Assault by other means ..	27	1,476	1,503	11	16
(*e*)	E 984	Injury by intervention of police	..	5	5		
(*f*)	E 985	Execution (legal)					
AE 150	E 990-E 999	Injury resulting from operations of war	1	..	1	1	
		Carried forward ..	16,499	229,663	246,162	11,194	17,174

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1953—(*cont.*)

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
		Brought forward ..	16,499	229,663	246,162	11,194	17,174
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE —(*cont.*)					
		"N" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING AND VIOLENCE (NATURE OF INJURY)					
AN 138	N 800-N 804	Fracture of skull	10	218	228	63	9
AN 139	N 805-N 809	Fracture of spine and trunk ..	10	157	167	14	12
AN 140	N 810-N 829	Fracture of limbs	87	1,512	1,599	11	107
AN 141	N 830-N 839	Dislocation without fracture ..	4	142	146	..	7
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles	2	374	376	..	7
AN 143	N 850-N 856	Head injury excluding fracture	9	555	564	6	19
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis	..	47	47	7	1
AN 145	N 870-N 908	Laceration and open wounds ..	44	1,752	1,796	1	52
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface	23	919	942	..	18
AN 147	N 930-N 936	Effects of foreign body entering through orifice	5	28	33	2	3
AN 148	N 940-N 949	Burns	26	720	746	42	26
AN 149	N 960-N 979	Effects of poisons	..	13	13	2	
AN 150	N950-N959 N980-N999	All other and unspecified effects of external causes	47	533	580	2	10
		TOTAL..	16,766	236,633	253,399	11,344	17,445

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1953—(*cont.*)

Nationalities	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
Europeans	82	2,559	2,641	32	59
Eurasians	62	915	977	27	54
Chinese	9,959	100,939	110,898	7,150	10,522
Indians	3,255	75,083	78,338	2,732	3,310
Malays	3,245	53,732	56,977	1,266	3,309
Javanese	77	1,410	1,487	62	101
Japanese	1	6	7	1	1
Others	85	1,989	2,074	74	89
Total ..	16,766	236,633	253,399	11,344	17,445
Healthy persons admitted to hospitals to accompany children or friends..	170	9,833	10,003	..	78

SUMMARY ACCORDING TO MEN, WOMEN AND CHILDREN

—	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53
Men	10,913	113,638	124,551	4,909	11,325
Women	4,987	93,641	98,628	2,010	5,160
Children: (1 to 10 years)	637	17,339	17,976	1,444	722
Infants: (under 1 year)	229	12,015	12,244	2,981	238
Total ..	16,766	236,633	253,399	11,344	17,445

SUMMARY ACCORDING TO HOSPITALS AND AVERAGE DAILY NUMBER OF PATIENTS

—	Remaining at end of 31-12-52	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-53	Average daily number of patients	Number of beds
1. Kedah ..	775	26,413	27,188	920	816	872	999
2. Perlis ..	65	2,876	2,941	117	97	91	120
3. Penang..	1,348	22,332	23,680	1,223	1,284	1,365	1,803
4. Perak ..	1,968	50,728	52,696	2,585	1,822	1,989	2,598
5. Selangor ..	1,470	35,033	36,503	1,953	1,496	1,531	1,753
6. Negri Sembilan ..	1,047	22,018	23,065	938	985	1,087	1,237
7. Malacca ..	614	13,295	13,909	591	676	671	778
8. Johore ..	1,395	33,206	34,601	1,710	1,496	1,612	1,908
9. Kelantan ..	330	8,210	8,540	198	319	327	415
10. Trengganu ..	195	3,487	3,682	99	218	223	290
11. Pahang ..	615	15,688	16,303	606	629	667	786
12. Leper Settlement, Sungei Buloh ..	2,411	505	2,916	41	2,460	2,442	2,650
13. Leper Settlement, Pulau Jerejak ..	414	63	477	10	433	416	430
14. Leper Settlement, Johore Bahru ..	312	106	418	4	376	341	350
15. Leper Camp, Kota Bahru, Kelantan	24	32	56	..	40	35	40
16. Mental Hospital, Tanjong Rambutan	3,311	1,928	5,239	311	3,462	3,295	3,000
17. Mental Hospital, Tampoi, J. Bahru	472	713	1,185	38	836	720	1,200
TOTAL ..	16,766	236,633	253,399	11,344	17,445	17,684	20,357

TABLE 1A

STATEMENT OF GENERAL HOSPITALS, DISTRICT AND MATERNITY HOSPITALS

State/Settlement	Average daily number of patients	Patients remaining at the end of the year	Patients admitted	Deaths	Death rate per 100 patients treated
KEDAH					
General Hospital, Alor Star	421	387	10,829	492	4.4
District Hospital, Sungei Patani	209	156	7,387	227	3.0
District Hospital, Kulim	182	167	6,790	185	2.7
District Hospital, Baling	13	19	592	3	0.5
District Hospital, Langkawi	47	46	815	13	1.5
PERLIS					
District Hospital, Kangar	91	65	2,876	117	3.9
PENANG					
General Hospital, Penang	562	540	9,141	747	7.7
Maternity Hospital, Penang	68	73	3,771	124	3.2
Perak Road Hospital, Penang	70	67	56	15	12.2
Prison Hospital, Penang	4	2	147	1	0.7
District Hospital, Balik Pulau	16	9	217	5	2.2
Quarantine Station Hospital, Pulau Jerejak	—	—	100	—	—
Tuberculosis Hospital, Pulau Jerejak	390	397	302	32	4.6
District Hospital, Butterworth	79	80	3,266	104	3.1
District Hospital, Bukit Mertajam	99	98	3,917	110	2.7
District Hospital, Sungei Bakap	77	82	1,415	85	5.7
PERAK					
District Hospital, Parit Buntar	62	58	2,191	69	3.1
General Hospital, Taiping	367	367	8,046	480	5.7
District Hospital, Kuala Kangsar	121	96	3,459	98	2.8
Women's Hospital, Kuala Kangsar	114	113	3,615	159	4.3
District Hospital, Ipoh	517	540	11,633	745	6.1
General Hospital, Batu Gajah	259	263	4,566	227	4.7
District Hospital, Kampar	61	83	2,735	127	4.5
District Hospital, Tapah	118	92	3,843	146	3.7
District Hospital, Taniong Malim	44	31	2,169	47	2.1
District Hospital, Telok Anson	157	178	4,954	299	5.8
District Hospital, Lumut	158	139	3,072	179	5.6
District Hospital, Grik	11	8	445	9	1.9
SELANGOR					
Bungsar Hospital, Kuala Lumpur	43	39	1,155	17	1.4
General Hospital, Kuala Lumpur	562	515	17,565	1,297	7.2
Tuberculosis (Clinic) Hospital, Kuala Lumpur	88	90	320	11	2.7
Tai Wah (Decrepit) Hospital, Kuala Lumpur	387	377	99	45	9.5
Police Depot Hospital, Kuala Lumpur	14	5	555	—	—
Prison Hospital, Kuala Lumpur	17	16	170	—	—
District Hospital, Klang	216	225	7,247	387	5.2
District Hospital, Kajang	127	123	5,431	124	2.2
District Hospital, Kuala Kubu Bharu	77	80	2,491	72	2.8
NEGRI SEMBILAN					
General Hospital, Seremban	483	444	10,001	522	4.9
District Hospital, Kuala Pilah	197	198	2,703	86	2.9
Women's Hospital, Kuala Pilah	96	79	1,700	112	6.3
District Hospital, Port Dickson	132	136	2,814	83	2.8
District Hospital, Tampin	91	106	2,662	95	3.4
District Hospital, Jelebu	86	83	2,091	40	1.8
Prison Hospital, Seremban	2	1	47	—	—
Carried forward	6,935	6,673	159,400	7,736	

TABLE 1A—(*cont.*)

STATEMENT OF GENERAL HOSPITALS, DISTRICT AND MATERNITY HOSPITALS—(*cont.*)

State/Settlement	Average daily number of patients	Patients remaining at the end of the year	Patients admitted	Deaths	Death rate per 100 patients treated
Brought forward ..	6,935	6,673	159,400	7,736	
MALACCA					
General Hospital, Malacca	581	538	11,054	559	4.8
District Hospital, Alor Gajah	66	62	109	32	18.7
Federal S. C. Depot, Malacca	17	11	654	—	—
Prison Hospital, Malacca	1	3	32	—	—
Henry Gurney School, Malacca	6	—	1,446	—	—
JOHORE					
General Hospital, Johore Bahru	550	485	8,963	458	4.8
District Hospital, Kota Tinggi	96	111	1,788	60	3.2
District Hospital, Pontian	70	57	1,918	62	3.1
District Hospital, Batu Pahat	163	134	4,012	177	4.3
District Hospital, Kluang	221	175	5,338	216	3.9
District Hospital, Mersing	25	23	943	43	4.5
District Hospital, Muar	255	221	5,299	387	7.0
District Hospital, Tangkak	77	62	1,063	55	4.9
District Hospital, Segamat	155	127	3,882	252	6.3
KELANTAN					
State Hospital, Kota Bahru	283	283	6,305	168	2.6
District Hospital, Kuala Krai	37	36	1,767	26	1.4
Prison Hospital, Pkg. Chepa	7	11	138	4	2.7
TRENGGANU					
General Hospital, Kuala Trengganu ..	169	147	2,471	62	2.4
District Hospital, Kemaman	34	35	509	23	4.2
District Hospital, Dungun	20	13	507	14	2.7
PAHANG					
General Hospital, Kuala Lipis	147	111	3,555	134	3.7
District Hospital, Pekan	52	48	712	17	2.2
District Hospital, Kuantan	147	146	2,752	101	3.8
District Hospital, Raub	100	98	2,981	95	3.1
District Hospital, Bentong	118	111	2,263	135	5.7
District Hospital, Mentekab	103	101	3,425	124	3.5
	10,435	9,822	233,286	10,940	
SPECIAL INSTITUTIONS					
Leper Settlement, Sungei Buloh	2,442	2,411	505	41	1.4
Leper Settlement, Pulau Jerejak	416	414	63	10	2.1
Leper Settlement, Johore Bahru	341	312	106	4	0.9
Leper Camp, Kota Bahru, Kelantan ..	35	24	32	—	—
Central Mental Hospital, Tanjong Rambutan	3,295	3,311	1,928	311	5.9
Mental Hospital, Tampoi, Johore Bahru ..	720	472	713	38	3.2
TOTAL ..	17,684	16,766	236,633	11,344	4.5

TABLE 2

MALARIA ADMISSIONS (INCLUDING CLINICAL MALARIA) IN GOVERNMENT HOSPITALS BY STATES AND MONTHS FOR 1953

State/ Settlement	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Kedah ..	128	108	155	191	242	233	135	92	95	93	132	97	1,701
Perlis ..	39	52	52	34	86	72	35	24	25	20	38	42	519
Penang ..	61	60	24	59	88	82	66	51	66	32	47	35	671
Perak ..	222	195	193	209	269	263	294	213	211	206	177	109	2,561
Selangor ..	55	72	76	93	97	76	63	51	58	69	62	45	817
N. Sembilan..	85	74	74	98	125	114	87	67	66	67	71	69	997
Malacca ..	33	30	63	51	65	42	26	23	26	15	26	22	422
Johore ..	103	88	115	163	194	124	105	104	74	95	95	94	1,354
Kelantan ..	99	77	126	121	102	119	142	102	90	73	78	54	1,183
Trengganu ..	17	17	9	17	20	22	23	18	34	30	31	20	258
Pahang ..	167	134	155	225	260	269	282	261	225	197	173	131	2,479
Total ..	1,009	907	1,042	1,261	1,548	1,416	1,258	1,006	970	897	930	718	12,962

TABLE 2A

MALARIA (POSITIVE ADMISSIONS) IN GOVERNMENT HOSPITALS BY STATES AND MONTHS FOR 1953

State/ Settlement	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Kedah ..	92	71	109	147	188	177	88	50	70	66	87	63	1,208
Perlis ..	24	39	32	28	80	67	34	22	18	14	16	25	399
Penang ..	20	23	17	46	76	59	49	44	42	20	19	23	438
Perak ..	96	68	53	79	98	113	134	82	100	79	68	53	1,023
Selangor ..	31	49	47	62	87	72	55	48	54	60	52	39	656
N. Sembilan..	61	55	58	85	110	100	69	56	49	58	60	46	807
Malacca ..	16	10	22	32	54	40	24	16	13	9	18	16	270
Johore ..	58	41	67	84	112	58	62	52	49	53	51	64	751
Kelantan ..	70	58	78	92	83	90	104	55	47	31	51	25	784
Trengganu ..	11	4	5	11	11	15	21	4	19	9	9	10	129
Pahang ..	72	60	71	112	147	146	134	150	102	111	84	58	1,247
Total ..	551	478	559	778	1,046	937	774	579	563	510	515	422	7,712

Table 3

SURGICAL OPERATIONS FOR 1953

State/Settlement	Operations	Deaths
Kedah	3,609	34
Perlis	682	—
Penang	5,291	66
Perak	16,574	95
Selangor	17,215	67
Negri Sembilan	3,115	48
Malacca	2,320	24
Johore	9,010	73
Kelantan	2,034	26
Trengganu	1,064	1
Pahang	3,233	10
Total	64,147	444

Table 4

OPHTHALMIC PATIENTS FOR 1953

State/Settlement	Eye diseases proper	Eye injuries	Refraction	General diseases affecting eyes	Disorganised eyes	Total	Operations
Kedah	1,778	217	336	441	106	2,878	630
Perlis	29	1	—	—	—	30	—
Penang	4,283	477	823	611	81	6,275	779
Perak	5,428	634	3,856	64	54	10,036	980
Selangor	6,956	728	1,359	—	189	9,232	551
Negri Sembilan	2,804	304	580	279	12	6,016*	292
Malacca	2,277	159	1,153	24	11	3,624	132
Johore	3,197	218	2 813	165	4	6,397	318
Kelantan	7,535	55	—	612	—	8,202	258
Trengganu	—	—	—	—	—	—	—
Pahang	1,745	15	266	83	3	2,112	56
Total	36,032	2,808	11,186	2,279	460	54,802	3,996

* Includes vision testing of new recruits 2,037

TABLE 5

SUMMARY OF OUT-PATIENTS TREATED IN EACH STATE AND SETTLEMENT

(Excluding those who were treated at Infant Welfare Centres, School Inspections and Special Clinics)

Hospitals and Dispensaries	Adult Males	Adult Females	Children under 10 years	Total
KEDAH				
At Hospitals	49,860	40,631	41,221	131,712
At Static Dispensaries	47,098	35,328	42,854	125,280
By Travelling Dispensaries ..	20,554	8,939	14,825	44,318
Total ..	117,512	84,898	98,900	301,310
PERLIS				
At Hospitals	5,627	3,994	4,756	14,377
At Static Dispensaries	6,848	4,218	7,084	18,150
By Travelling Dispensaries ..	2,030	1,526	2,641	6,197
Total ..	14,505	9,738	14,481	38,724
PENANG				
At Hospitals	45,719	26,238	24,103	96,057
At Static Dispensaries	13,972	17,456	25,827	57,255
By Travelling Dispensaries ..	17,891	15,093	26,714	59,698
Total ..	77,582	58,784	76,644	213,010
PERAK				
At Hospitals	99,622	63,877	56,652	220,151
At Static Dispensaries	54,219	24,679	30,098	108,996
By Travelling Dispensaries:				
(i) Road	56,161	41,135	56,621	150,917
(ii) River	6,648	3,799	5,302	15,749
Total ..	216,650	130,490	148,673	495,813

TABLE 5—(*cont.*)

SUMMARY OF OUT-PATIENTS TREATED IN EACH STATE AND SETTLEMENT—(*cont.*)

Hospitals and Dispensaries	Adult Males	Adult Females	Children under 10 years	Total
SELANGOR				
At Hospitals	83,523	49,238	46,331	179,092
At Static Dispensaries	63,101	36,526	52,704	152,331
By Travelling Dispensaries ..	12,861	8,724	13,189	34,774
Total ..	159,485	94,488	112,224	366,197
NEGRI SEMBILAN				
At Hospitals	47,929	28,154	32,582	108,665
At Static Dispensaries	23,307	15,463	15,106	53,876
By Travelling Dispensaries ..	17,272	15,976	17,567	50,815
Total ..	88,508	59,593	65,255	213,356
MALACCA				
At Hospitals	12,252	9,551	8,172	29,975
At Static Dispensaries	23,402	8,820	11,551	43,773
By Travelling Dispensaries ..	13,506	12,399	18,782	44,687
Total ..	49,160	30,770	38,505	118,435
JOHORE				
At Hospitals	52,221	19,344	32,331	103,896
At Static Dispensaries	42,197	17,452	24,425	84,074
By Travelling Dispensaries:				
(i) Road	44,064	34,856	54,969	133,889
(ii) River	417	641	2,631	3,689
Total ..	138,899	72,293	114,356	325,548

TABLE 5—(*cont.*)

SUMMARY OF OUT-PATIENTS TREATED IN EACH STATE AND SETTLEMENT—(*cont.*)

Hospitals and Dispensaries	Adult Males	Adult Females	Children under 10 years	Total
KELANTAN				
At Hospitals	18,437	6,383	4,520	29,340
At Static Dispensaries	18,225	8,783	11,681	38,689
By Travelling Dispensaries:				
(i) Road	20,518	12,552	30,718	63,788
(ii) River	3,372	1,554	2,304	7,230
Total ..	60,552	29,272	49,223	139,047
TRENGGANU				
At Hospitals	19,895	12,037	16,529	48,461
At Static Dispensaries	21,898	15,567	17,478	54,943
By Travelling Dispensaries:				
(i) Road	23,204	16,937	26,602	66,743
(ii) River	4,749	3,470	3,192	11,411
Total ..	69,746	48,011	63,801	181,558
PAHANG				
At Hospitals	50,090	33,493	43,304	126,887
At Static Dispensaries	14,736	7,970	11,991	34,697
By Travelling Dispensaries:				
(i) Road	15,513	10,395	11,428	37,336
(ii) River	8,814	5,442	9,866	24,122
Total ..	89,153	57,300	76,589	223,042

TABLE 6

OUT-PATIENTS (FIXED DISPENSARIES)

RETURN OF DISEASES FOR THE YEAR 1953

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			I.—INFECTIVE AND PARASITIC DISEASES				
A 1		001-008	Tuberculosis of respiratory system ..	3,805	1,313	82	5,200
A 2		010	Tuberculosis of meninges and central nervous system	..	1	5	6
A 3		011	Tuberculosis of intestines, peritoneum and mesenteric glands	3	3	1	7
A 4		012-013	Tuberculosis of bones and joints ..	14	5	31	50
A 5	(*a*)	014	Tuberculosis of skin and subcutaneous cellular tissue	2	4	4	10
	(*b*)	015	Tuberculosis of lymphatic system ..	50	36	32	118
	(*c*)	016	Tuberculosis of genito-urinary system	4	1	..	5
	(*d*)	017	Tuberculosis of adrenal glands ..	1	..	..	1
	(*e*)	018	Tuberculosis of other organs	5	6	1	12
	(*f*)	019	Disseminated tuberculosis				
A 6		020	Congenital syphilis	..	..	38	38
A 7	(*a*)	021.0-021.1	Primary syphilis	195	43	..	238
	(*b*)	021.2	Secondary syphilis	858	490	3	1,351
	(*c*)	021.3	Early syphilis, relapse following treatment	2	..	..	2
	(*d*)	021.4	Early syphilis (unspecified stage) ..	142	79	..	221
A 8		024	Tabes dorsalis	10	..	..	10
A 9		025	General paralysis of insane	..	1	..	1
A 10	(*a*)	022	Aneurysm of aorta	2	..	..	2
	(*b*)	023	Other cardiovascular syphilis	1	..	..	1
	(*c*)	026	Other syphilis of central nervous system	4	1	..	5
	(*d*)	027	Tertiary syphilis	155	76	..	231
	(*e*)	028	Latent syphilis	5	3	..	8
	(*f*)	029	Syphilis unqualified	200	218	2	420
A 11	(*a*)	030	Acute or unspecified gonorrhoea ..	2,103	370	3	2,476
	(*b*)	031	Chronic gonococcal infection of genito-urinary system	204	32	..	236
	(*c*)	032	Gonococcal infection of joint	69	3	..	72
	(*d*)	033	Gonococcal infection of eye	2	..	13	15
	(*e*)	034-035	Gonococcal infection of other sities ..	99	15	..	114
A 12		040	Typhoid fever	8	3	..	11
A 13	(*a*)	041	Paratyphoid fever A, B or C				
	(*b*)	042	Other salmonella infections	..	..	3	3
A 14		043	Cholera				
A 15		044	Brucellosis (undulant fever)				
A 16	(*a*)	045	Bacillary dysentery	139	71	34	244
	(*b*)	046	Amoebiasis	355	99	87	541
	(*c*)	047-048	Other protozoal and unspecified forms of dysentery	1,601	1,017	789	3,407
A 17		050	Scarlet fever				
A 18		051	Streptococcal sore throat	32	34	25	91
A 19		052	Erysipelas	9	7	16	32
A 20		053	Septicaemia and pyaemia	3	2	..	5
A 21		055	Diphtheria	32	41	182	255
A 22		056	Whooping Cough	128	109	2,533	2,770
A 23		057	Meningococcal infections				
A 24		058	Plague				
A 25		060	Leprosy	187	38	3	228
A 26	(*a*)	061	Tetanus of the new-born	..	..	2	2
	(*b*)	—	Tetanus, other forms	9	1	2	12
A 27		062	Anthrax				
A 28		080	Acute Poliomyelitis	..	..	1	1
A 29		082	Acute infectious encephalitis				
A 30		081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis ..	1	..	3	4
A 31		084	Smallpox				
A 32		085	Measles	80	35	777	892
A 33		091	Yellow fever				
A 34		092	Infectious hepatitis	32	20	14	66
A 35		094	Rabies				
A 36	(*a*)	100	Louse-borne epidemic typhus				
	(*b*)	101	Flea-borne endemic typhus (murine)..				
			Carried forward ..	10,551	4,177	4,686	19,414

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	10,551	4,177	4,686	19,414
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
	(*c*)	104	Tick-borne epidemic typhus				
	(*d*)	105	Mite-borne typhus				
	(*e*)	102-103 106-108	Other and unspecified typhus				
A 37	(*a*)	110	Vivax malaria (benign tertian) ..	2,333	936	1,011	4,280
	(*b*)	111	Malariae malaria (quartan)	93	35	21	149
	(*c*)	112	Falciparum malaria (malignant tertian)	2,820	932	1,144	4,896
	(*d*)	114	Mixed malaria infections	127	49	36	212
	(*e*)	115	Blackwater fever				
	(*f*)	113 116-117	Other and unspecified forms of malaria	33,948	17,951	19,872	71,771
A 38	(*a*)	123.0	Schistosomiasis vesical (S. haematobium)				
	(*b*)	123.1	Schistosomiasis intestinal (S. Mansoni)				
	(*c*)	123.2	Schistosomiasis Pulmonary (S. japonicum)				
	(*d*)	123.3	Other and unspecified Schistosomiasis				
A 39		125	Hydatid disease				
A 40	(*a*)	127	Onchocerciasis				
	(*b*)	—	Loiasis				
	(*c*)	—	Filariasis (bancrofti)	18	4	..	22
	(*d*)	—	Other filariasis	59	39	9	107
A 41		129	Ankylostomiasis	4,580	3,215	4,315	12,110
A 42	(*a*)	126	Tape worm (infestation) and other cestode infestation	4	1	4	9
	(*b*)	130.0	Ascariasis	12,343	11,408	45,827	69,578
	(*c*)	130.3	Guinea worm (dracunculosis)	4	3	5	12
	(*d*)	124	Other trematode infestation	4	4	9	17
	(*e*)	128	Trichiniasis	23	31	64	118
	(*f*)	130.1-130.2	Other diseases due to helminths ..	1,517	2,474	4,301	8,292
A 43	(*a*)	036	Chancroid	63	3	..	66
	(*b*)	037	Lymphogranuloma venereum	30	4	..	34
	(*c*)	038	Granuloma inguinale, venereal ..	10	6	..	16
	(*d*)	039	Other and unspecified venereal diseases	74	36	..	110
	(*e*)	049	Food poisoning infection and intoxication	33	17	9	59
	(*f*)	059	Tularaemia				
	(*g*)	063	Gas gangrene	1	..	..	1
	(*h*)	064	(*a*) Glanders				
			(*b*) Melioidosis				
			(*c*) Other bacterial diseases				
	(*i*)	070	Vincent's infection	4	1	..	5
	(*j*)	071	Relapsing fever				
	(*k*)	072	Leptospirosis icterohaemorrhagica (Weil's disease)				
	(*l*)	073	Yaws	13,902	10,062	9,915	33,879
	(*m*)	086	Rubella	1	3	5	9
	(*n*)	087	Chickenpox	365	91	348	804
	(*o*)	088	Herpes Zoster	536	168	87	791
	(*p*)	089	Mumps	1,610	625	1,349	3,584
	(*q*)	090	Dengue	40	10	18	68
	(*r*)	093	Glandular fever	..	2	..	2
	(*s*)	095	Trachoma	248	340	44	632
	(*t*)	096.7	Sandfly fever				
	(*u*)	120	Leishmaniasis	1	7	1	9
	(*v*)	121	(*a*) Trypanosomiasis gambiensis ..				
			(*b*) Trypanosomiasis rhodesiensis ..				
			(*c*) Other and unspecified trypanosomiasis				
	(*w*)	131	Dermatophytosis	1,438	547	568	2,553
	(*x*)	135	Scabies	19,999	9,833	24,190	54,022
			Carried forward ..	106,779	63,014	117,838	287,631

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	106,779	63,014	117,838	287,631
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
	(*y*)	054, 074 096.1-096.6 096.8, 096.9 122 132-134 136-138	All other diseases classified as infective and parasitic	2,310	1,207	1,760	5,277
			II.—NEOPLASMS				
A 44		140-148	Malignant neoplasm of buccal cavity and pharynx	84	72	..	156
A 45		150	Malignant neoplasm of oesophagus ..	2	..	..	2
A 46		151	Malignant neoplasm of stomach ..	14	9	..	23
A 47	(*a*)	152	Malignant neoplasm of small intestine, including duodenum				
	(*b*)	153	Malignant neoplasm of large intestine, except rectum	2	..	..	2
A 48		154	Malignant neoplasm of rectum ..	6	1	..	7
A 49		161	Malignant neoplasm of larynx ..	1	..	..	1
A 50		162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	5	2	..	7
A 51		170	Malignant neoplasm of breast ..	..	13	..	13
A 52		171	Malignant neoplasm of cervix uteri ..	..	40	..	40
A 53		172-174	Malignant neoplasm of other and unspecified parts of uterus	..	2	..	2
A 54		177	Malignant neoplasm of prostate ..	1	..	..	1
A 55		190-191	Malignant neoplasm of skin	68	5	3	76
A 56		196-197	Malignant neoplasm of bone and connective tissue	6	..	..	6
A 57	(*a*)	155-156	Malignant neoplasm of liver	5	6	..	11
	(*b*)	157	Malignant neoplasm of pancreas ..				
	(*c*)	158	Malignant neoplasm of peritoneum ..				
	(*d*)	159	Malignant neoplasm of unspecified digestive organs	3	..	..	3
	(*e*)	175-176	Malignant neoplasm of other and unspecified female genital organs ..	..	4	..	4
	(*f*)	178-179	Malignant neoplasm of other and unspecified male genital organs ..	4	..	..	4
	(*g*)	180-181	Malignant neoplasm of kidney, bladder and other urinary organs	2	..	..	2
	(*h*)	160 164-165 192-195 198-199	Malignant neoplasm of all other and unspecified sites	61	49	2	112
A 58		204	Leukaemia and Aleukaemia				
A 59	(*a*)	200	Lymphosarcoma and reticulosarcoma				
	(*b*)	201	Hodgkin's disease	3	..	..	3
	(*c*)	202-203	Other neoplasm of lymphatic and haematopoietic system	38	22	6	66
	(*d*)	205	Mycosis fungoides	1,104	391	271	1,766
A 60	(*a*)	210-211	Benign neoplasm of buccal cavity, pharynx and digestive system ..	12	10	1	23
	(*b*)	217	Benign neoplasm of other female genital organs	..	13	..	13
	(*c*)	218	Benign neoplasm of other male genital organs	6	..	..	6
	(*d*)	212-216 219-229	Benign neoplasm of other and unspecified organs and tissue	100	48	19	167
	(*e*)	230	Neoplasm of unspecified nature of digestive organs	..	..	1	1
	(*f*)	233-235	Neoplasm of unspecified nature of other female genital organs	..	4	..	4
	(*g*)	231-232 236-239	Neoplasm of unspecified nature of other unspecified organs	90	24	8	122
			Carried forward ..	110,706	64,936	119,909	295,551

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	110,706	64,936	119,909	295,551
			III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS				
A 61		250-251	Nontoxic goitre	37	211	1	249
A 62		252	Thyrotoxicosis with or without goitre	41	100	..	141
A 63		260	Diabetes mellitus	1,058	594	..	1,652
A 64	(*a*)	280	Beri Beri	2,431	1,842	166	4,439
	(*b*)	281	Pellagra	50	45	3	98
	(*c*)	282	Scurvy	11	15	25	51
	(*d*)	283-284	Rickets	..	..	40	40
	(*e*)	285	Osteomalacia	5	5	..	10
	(*f*)	286.0	(*a*) Sprue	33	47	21	101
		286.5	(*b*) Malnutrition	1,003	1,882	3,370	6,255
		286.1-286.4, 286.6	(*c*) Other deficiency states	3,798	4,900	2,452	11,150
A 65	(*a*)	290	Pernicious and other hyperchromic anaemias	268	345	96	709
	(*b*)	291	Iron deficiency anaemias (hypochromic)	6,115	12,656	3,239	22,010
	(*c*)	292-293	Other specified and unspecified anaemias	15,701	31,967	10,059	57,727
A 66	(*a*)	241	Asthma	10,967	6,852	5,713	23,532
	(*b*)	240, 242-245	Angioneurotic oedema, urticaria and other allergic disorders	1,698	978	593	3,269
	(*c*)	253	Myxoedema and cretinism				
	(*d*)	254	Other diseases of thyroid gland ..	37	87	12	136
	(*e*)	270	Disorders of pancreatic internal secretion other than diabetes mellitus ..	1	..	..	1
	(*f*)	271	Diseases of parathyroid gland	2	..	..	2
	(*g*)	272	Diseases of pituitary gland				
	(*h*)	273	Diseases of thymus gland				
	(*i*)	274	Diseases of adrenal gland	..	..	3	3
	(*j*)	275-277	Other diseases of endocrine glands ..	3	2	..	5
	(*k*)	288	Gout	28	12	15	55
	(*l*)	287,289	Other metabolic diseases	718	669	465	1,852
	(*m*)	294	Polycythemia				
	(*n*)	295	Haemophilia	2	2	2	6
	(*o*)	296	Purpura and other haemorrhagic conditions	2	11	2	15
	(*p*)	297	Agranulocytosis				
	(*q*)	298	Diseases of spleen	17	13	39	69
	(*r*)	299	Other diseases of blood and blood-forming organs	153	132	40	325
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS				
A 67	(*a*)	300	Schizophrenic disorders (dementia praecox)	1	..	..	1
	(*b*)	301	Maniac-depressive reaction				
	(*c*)	302	Involutional melancholia				
	(*d*)	303	Paranoia and paranoid states				
	(*e*)	304	Senile psychoses	4	1	..	5
	(*f*)	305-309	Other and unspecified psychoses ..	29	9	1	39
A 68	(*a*)	311	Hysterical reaction	15	38	..	53
	(*b*)	314	Neurotic-depressive reaction	47	40	2	89
	(*c*)	322	Alcoholism	811	20	..	831
	(*d*)	323	Other drug addiction	241	2	..	243
	(*e*)	310, 312-313, 315-321, 324, 326	Other psychoneuroses and disorders of personality	4	3	..	7
A 69		325	Mental deficiency	26	20	18	64
			Carried forward ..	156,063	128,436	146,286	430,785

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	156,063	128,436	146,286	430,785
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS				
A 70	(*a*)	331	Cerebral haemorrhage	8	..	..	8
	(*b*)	332	Cerebral embolism and thrombosis ..	5	1	..	6
	(*c*)	330 333-334	Other vascular lesions affecting central nervous system	22	3	..	25
A 71		340	Non-meningococcal meningitis ..	3	..	2	5
A 72		345	Multiple sclerosis				
A 73		353	Epilepsy	284	181	76	541
A 74	(*a*)	370	Conjunctivitis and ophthalmia ..	24,471	12,960	17,415	54,846
	(*b*)	371-379	Other inflammatory diseases of eye ..	3,578	2,125	1,837	7,540
A 75		385	Cataract	852	531	33	1,416
A 76		387	Glaucoma	41	52	13	106
A 77	(*a*)	390	Otitis externa	6,501	3,466	7,840	17,807
	(*b*)	391-393	Otitis media and mastoiditis	3,542	1,830	5,157	10,529
	(*c*)	394	Other inflammatory diseases of ear ..	4,591	2,495	6,073	13,159
A 78	(*a*)	380-384 386, 388 389	All other diseases and conditions of eye	9,478	4,274	2,312	16,064
	(*b*)	342	Intracranial and intraspinal abscess ..				
	(*c*)	343	Encephalitis, myelitis and encephalomyelitis	5	3	2	10
	(*d*)	350	Paralysis agitans	3	..	..	3
	(*e*)	352	Other cerebral paralysis	58	16	8	82
	(*f*)	356	Motor neurone disease and muscular atrophy	2	1	..	3
	(*g*)	357	Other diseases of spinal cord	..	..	2	2
	(*h*)	366	Other and unspecified forms of neuralgia and neuritis	30,514	20,178	1,783	52,475
	(*i*)	367	Other diseases of cranial nerves ..	53	35	..	88
	(*j*)	369	Diseases of peripheral autonomic nervous system	130	96	..	226
	(*k*)	341, 344 351, 354 355 360-365 368 395-398	All other diseases of the nervous system and sense organs	4,548	3,232	207	7,987
			VII.—DISEASES OF THE CIRCULATORY SYSTEM				
A 79	(*a*)	400	Rheumatic fever without mention of heart involvement	1,174	287	27	1,488
	(*b*)	401	Rheumatic fever with heart involvement	4	7	5	16
	(*c*)	402	Chorea	..	1	2	3
A 80	(*a*)	410-413	Diseases of valves specified as rheumatic	7	..	..	7
	(*b*)	414	Other endocarditis specified as rheumatic	3	2	..	5
	(*c*)	415	Other myocarditis specified as rheumatic				
	(*d*)	416	Other heart disease specified as rheumatic	12	2	..	14
A 81	(*a*)	420	Arteriosclerotic heart disease, including coronary disease	4	1	..	5
	(*b*)	421	Chronic endocarditis not specified as rheumatic	31	14	1	46
	(*c*)	422	Other myocardial degeneration ..	77	47	1	125
A 82	(*a*)	430	Acute and subacute endocarditis ..	1	..	..	1
	(*b*)	431	Acute myocarditis	68	27	11	106
	(*c*)	432	Acute pericarditis	20	2	..	22
	(*d*)	433	Functional disease of heart	276	176	5	457
			Carried forward ..	246,429	180,481	189,098	616,008

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	246,429	180,481	189,098	616,008
			VII.—DISEASES OF THE CIRCULATORY SYSTEM—(*cont.*)				
	(*e*)	434	Other and unspecified diseases of heart	542	348	30	920
A 83		440-443	Hypertension with heart disease ..	122	82	..	204
A 84		444-447	Hypertension without mention of heart	1,130	665	5	1,800
A 85	(*a*)	450	General arteriosclerosis	16	2	..	18
	(*b*)	451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm	4	1	..	5
	(*c*)	452	Other aneurysm, except of heart and aorta	..	1	..	1
	(*d*)	453	Peripheral vascular disease				
	(*e*)	454	Arterial embolism and thrombosis ..	1	..	..	1
	(*f*)	455	Gangrene of unspecified cause ..	5	..	3	8
	(*g*)	456	Other diseases of arteries	17	2	..	19
A 86	(*a*)	460, 462	Varicose veins	242	142	4	388
	(*b*)	461	Haemorrhoids	2,163	759	35	2,957
	(*c*)	463-464	Phlebitis and thrombophlebitis ..	35	23	1	59
	(*d*)	465	Pulmonary embolism and infarction ..	2	8	..	10
	(*e*)	466	Other venous embolism and thrombosis	1	..	..	1
	(*f*)	467	Other diseases of circulatory system..	101	59	19	179
	(*g*)	468	(*a*) Adenitis	2,459	954	1,687	5,100
			(*b*) Lymphadenitis	349	88	189	626
			(*c*) Other diseases of lymph nodes and lymph channels	62	36	24	122
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM				
A 87	(*a*)	470	Acute nasopharyngitis (common cold)	37,137	17,906	28,759	83,802
	(*b*)	471	Acute sinusitis	855	506	140	1,501
	(*c*)	472	Acute pharyngitis	5,548	2,893	1,880	10,321
	(*d*)	473	Acute tonsillitis	7,109	4,387	7,506	19,002
	(*e*)	474	Acute laryngitis and tracheitis ..	633	295	243	1,171
	(*f*)	475	Other acute upper respiratory infections	911	874	1,070	2,855
A 88	(*a*)	480	Influenza with pneumonia	107	51	60	218
	(*b*)	481	Influenza with other respiratory manifestations, and influenza unqualified	48,283	19,774	22,888	90,945
	(*c*)	482	Influenza with digestive manifestations, but without respiratory symptoms	1,345	629	730	2,704
	(*d*)	483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	1,491	482	797	2,770
A 89		490	Lobar pneumonia	141	114	108	363
A 90		491	Broncho-pneumonia	170	127	1,768	2,065
A 91		492-493	Primary atypical, other and unspecified pneumonia	179	80	303	562
A 92		500	Acute bronchitis	18,426	11,655	31,104	61,185
A 93	(*a*)	501	Bronchitis unqualified	68,239	40,949	76,030	185,218
	(*b*)	502	Chronic bronchitis	8,425	4,419	2,514	15,358
A 94		510	Hypertrophy of tonsils and adenoids	42	13	80	135
A 95	(*a*)	518	Empyema	2	1	..	3
	(*b*)	521	Abscess of lung	3	..	..	3
A 96		519	Pleurisy	209	76	7	292
A 97	(*a*)	517	Other diseases of upper respiratory tract	448	281	500	1,229
	(*b*)	520	Spontaneous pneumothorax	1	..	..	1
	(*c*)	522	Pulmonary congestion and hypostasis	1	..	..	1
	(*d*)	525	Other chronic interstitial pneumonia				
	(*e*)	523	Pneumoconiosis				
	(*f*)	526	Bronchiectasis	138	58	32	228
	(*g*)	511-516 524 527	All other respiratory diseases	1,981	1,999	2,568	6,548
			Carried forward ..	455,504	291,220	370,182	1,116,906

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	455,504	291,220	370,182	1,116,906
			IX.—DISEASES OF THE DIGESTIVE SYSTEM				
A 98	(*a*)	530	Dental caries	8,872	4,196	5,766	18,834
	(*b*)	531-535	(*a*) Gingivitis	452	245	131	828
			(*b*) Pyorrhoea	847	452	141	1,440
			(*c*) Other diseases of teeth and supporting structures	1,379	639	687	2,705
A 99		540	Ulcer of stomach	575	182	3	760
A 100		541	Ulcer of duodenum	76	17	..	93
A 101		543	Gastritis and duodenitis	17,652	11,334	4,506	33,492
A 102		550-553	Appendicitis	252	145	43	440
A 103	(*a*)	560	Hernia of abdominal cavity without mention of obstruction	264	6	65	335
	(*b*)	561	Hernia of abdominal cavity with obstruction	8	..	..	8
	(*c*)	570	(*a*) Intussusception	..	..	1	1
			(*b*) Volvulus				
			(*c*) Other intestinal obstruction ..	6	3	..	9
A 104	(*a*)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years	..	..	13,675	13,675
	(*b*)	571.1	Gastro-enteritis and colitis, ages 2 years and over	13,794	7,638	11,214	32,646
	(*c*)	572	Chronic enteritis and ulcerative colitis	133	27	39	199
A 105	(*a*)	581.0	Cirrhosis of liver without mention of alcoholism	87	31	1	119
	(*b*)	581.1	Cirrhosis of liver with alcoholism ..	31	10	..	41
A 106	(*a*)	584	Cholelithiasis	1	1	3	5
	(*b*)	585	Cholecystitis without mention of calculi	37	21	4	62
A 107	(*a*)	536	Stomatitis	2,491	2,282	5,759	10,532
	(*b*)	538	Other diseases of buccal cavity ..	111	70	143	324
	(*c*)	539	(*a*) Functional disorders of oesophagus				
			(*b*) Stricture or obstruction of oesophagus	..	2	..	2
	(*d*)	544	Disorders of function of stomach ..	7,785	5,538	4,808	18,131
	(*e*)	545	Other diseases of stomach and duodenum	3,055	2,981	1,510	7,546
	(*f*)	573	(*a*) Constipation	26,359	14,497	11,065	51,921
			(*b*) Other functional disorders of intestines	2,832	1,910	1,701	6,443
	(*g*)	574	Anal fissure and fistula	80	10	6	96
	(*h*)	575	Abscess of anal and rectal regions ..	71	4	5	80
	(*i*)	576	Peritonitis	2	..	..	2
	(*j*)	578	Other diseases of intestines and peritoneum	68	31	54	153
	(*k*)	580	(*a*) Acute yellow atrophy of liver ..	..	..	1	1
			(*b*) Degeneration of liver	1	..	..	1
			(*c*) Hepatitis	587	269	65	921
	(*l*)	583	Other diseases of liver	109	42	26	177
	(*m*)	586	Other diseases of gall-bladder and biliary ducts	82	34	12	128
	(*n*)	587	Diseases of pancreas	34	1	..	35
	(*o*)	537, 542 } 577, 582 }	Other diseases of digestive system ..	5,837	5,777	3,439	15,053
			X.—DISEASES OF THE GENITO-URINARY SYSTEM				
A 108		590	Acute nephritis	231	125	84	440
A 109	(*a*)	591	Nephritis with oedema, including nephrosis	82	45	9	136
	(*b*)	592	Chronic nephritis	215	103	32	350
	(*c*)	593	Nephritis not specified as acute or chronic	1,194	909	382	2,485
	(*d*)	594	Other renal sclerosis	3	1	..	4
			Carried forward ..	551,199	350,798	435,562	1,337,559

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	551,199	350,798	435,562	1,337,559
			X.—DISEASES OF THE GENITO-URINARY SYSTEM—(*cont.*)				
A 110		600	Infections of kidney	264	218	20	502
A 111	(*a*)	602	Calculi of kidney and ureter	24	1	..	25
	(*b*)	604	Calculi of other parts of urinary system	18	..	1	19
A 112		610	Hyperplasia of prostate	5	..	..	5
A 113		620-621	Diseases of breast	..	294	4	298
A 114	(*a*)	603	Other diseases of kidney and ureter ..	320	154	27	501
	(*b*)	605	Cystitis	1,027	832	139	1,998
	(*c*)	606	Other diseases of bladder	327	74	44	445
	(*d*)	608	Stricture of urethra	337	34	7	378
	(*e*)	609	Other diseases of urethra	1,375	398	101	1,874
	(*f*)	612	Other diseases of prostate	58	..	..	58
	(*g*)	613	Hydrocele	190	..	10	200
	(*h*)	614	Orchitis and epididymitis	631	..	33	664
	(*i*)	617	Other diseases of male genital organs	498	..	84	582
	(*j*)	622	Acute salpingitis and oophoritis ..	..	114	..	114
	(*k*)	625	Other diseases of ovary and fallopian tube	..	44	..	44
	(*l*)	626	Diseases of parametrium and pelviperitoneum (female)	..	6	..	6
	(*m*)	630	Infective disease of uterus, vagina and vulva	..	537	9	546
	(*n*)	633	Other diseases of uterus	..	1,474	..	1,474
	(*o*)	634	Disorders of menstruation	..	8,000	..	8,000
	(*p*)	637	Other diseases of female genital organs	..	1,434	4	1,438
	(*q*)	601 607, 611 615-616 623-624 631-632 635-636	All other diseases of the genito-urinary system..	1,161	780	217	2,158
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM				
A 115	(*a*)	640	Pyelitis and pyelonephritis of pregnancy	..	180	..	180
	(*b*)	641	Other infections of genito-urinary tract during pregnancy	..	73	..	73
	(*c*)	681	Sepsis of childbirth and the puerperium	..	32	..	32
	(*d*)	682	Puerperal phlebitis and thrombosis ..				
	(*e*)	684	Puerperal pulmonary embolism ..				
A 116	(*a*)	642	(*a*) Albuminuria of pregnancy ..	..	579	..	579
			(*b*) Eclampsia of pregnancy	..	22	..	22
			(*c*) Hyperemesis gravidarum	..	467	..	467
			(*d*) Acute yellow atrophy of liver ..	..	2	..	2
			(*e*) Other toxaemias of pregnancy ..	..	114	..	114
	(*b*)	652	Abortion with toxaemia, without mention of sepsis	..	20	..	20
	(*c*)	685	Puerperal eclampsia				
	(*d*)	686	Other forms of puerperal toxaemia ..	..	3	..	3
A 117	(*a*)	643	Placenta praevia	..	2	..	2
	(*b*)	644	Other haemorrhage of pregnancy ..	..	79	..	79
	(*c*)	670	Delivery complicated by placenta praevia or antepartum haemorrhage				
	(*d*)	671	Delivery complicated by retained placenta	..	4	..	4
	(*e*)	672	Delivery complicated by other postpartum haemorrhage	..	2	..	2
A 118		650	Abortion without mention of sepsis or toxaemia	..	1,038	..	1,038
A 119		651	Abortion with sepsis	..	62	..	62
			Carried forward ..	557,434	367,871	436,262	1,361,567

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	557,434	367,871	436,262	1,361,567
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM —(*cont.*)				
A 120	(*a*)	645	Ectopic pregnancy	..	17	..	17
	(*b*)	646	Anaemia of pregnancy	..	7,697	..	7,697
	(*c*)	683	Pyrexia of unknown origin during the puerperium	..	12	..	12
	(*d*)	688.1	Puerperal psychoses				
	(*e*)	689	Mastitis and other disorders of lactation	..	155	..	155
	(*f*)	647-649 673-680 687 688.0 688.2-688.3	Other complications of pregnancy, childbirth and the puerperium ..	..	4,315	..	4,315
	(*g*)	660	Delivery without complications ..	..	4,385	..	4,385
			XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE AND XIII.—DISEASES OF THE BONES AND ORGANS OF MOVEMENT				
A 121	(*a*)	690	Boil and carbuncle	14,321	5,588	10,472	30,381
	(*b*)	691-693	Cellulitis and abscess	15,735	6,349	9,477	31,561
	(*c*)	694-698	Other infections of skin and subcutaneous tissue	24,280	10,561	13,242	48,083
A 122	(*a*)	720	Acute arthritis due to pyogenic organisms	20	21	7	48
	(*b*)	721	Acute nonpyogenic arthritis	111	77	49	237
	(*c*)	722	Rheumatoid arthritis and allied conditions	270	150	12	432
	(*d*)	723-725	Arthritis specified and unspecified ..	4,850	2,537	187	7,574
A 123	(*a*)	726	Muscular rheumatism	6,912	2,810	69	9,791
	(*b*)	727	Rheumatism unspecified	7,952	5,127	186	13,265
A 124		730	Osteomyelitis and periostitis	109	27	26	162
A 125	(*a*)	737	Ankylosis of joint	26	6	3	35
	(*b*)	745-749	Other acquired musculoskeletal deformities	5	9	1	15
A 126	(*a*)	715	Chronic ulcer of skin (including tropical ulcer)	23 642	9,043	14,322	47,007
	(*b*)	700-714 716	All other diseases of skin	37,535	18,021	23,079	78,635
	(*c*)	731-736 738-744	All other diseases of musculoskeletal system..	2,789	1,453	521	4,763
			XIV.—CONGENITAL MALFORMATIONS				
A 127		751	Spina bifida and meningocele	..	..	1	1
A 128		754	Congenital malformations of circulatory system..	..	1	6	7
A 129	(*a*)	750	Monstrosity	..	..	1	1
	(*b*)	752	Congenital hydrocephalus	..	..	1	1
	(*c*)	753	Other congenital malformations of nervous system and sense organs ..				
	(*d*)	755	Cleft palate and harelip	4	5	40	49
	(*e*)	756	(*a*) Congenital hypertrophic pyloric stenosis				
			(*b*) Imperforate anus	..	..	8	8
			Carried forward ..	695,995	446,237	507,972	1,650,204

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	695,995	446,237	507,972	1,650,204
			XIV.—CONGENITAL MALFORMATIONS—(*cont.*)				
			(*c*) Other congenital malformations of digestive system	..	..	2	2
	(*f*)	757	Congenital malformations of genito-urinary system	..	..	2	2
	(*g*)	758	Congenital malformations of bone and joint	..	..	3	3
	(*h*)	759	Other and unspecified congenital malformations, not elsewhere classified	..	..	20	20
			XV.—CERTAIN DISEASES OF EARLY INFANCY				
A 130	(*a*)	760	Intracranial and spinal injury at birth				
	(*b*)	761	Other birth injury	..	..	1	1
A 131		762	Postnatal asphyxia and atelectasis ..				
A 132	(*a*)	764	Diarrhoea of newborn	..	..	160	160
	(*b*)	765	Ophthalmia neonatorum	..	..	13	13
	(*c*)	763	Pneumonia of newborn	..	..	3	3
	(*d*)	766	Pemphigus neonatorum	..	..	8	8
	(*e*)	767	Umbilical sepsis..	..	..	129	129
	(*f*)	768	Other sepsis of newborn	..	..	11	11
A 133		770	Haemolytic disease of newborn ..				
A 134		769 771-772	All other defined diseases of early infancy	..	..	90	90
A 135	(*a*)	773	Congenital debility	..	..	12	12
	(*b*)	774	Premature birth				
	(*c*)	775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified	..	..	93	93
			XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS				
A 136		794	Senility without mention of psychoses	2,939	2,535	..	5,474
A 137	(*a*)	780	Infantile convulsions	..	..	188	188
	(*b*)	788.8	Pyrexia of unknown origin	14,528	8,051	11,898	34,477
	(*c*)	793	Observation, without need for further medical care	3,643	880	300	4,823
	(*d*)	781-787 789-792 795 788.1-788.7 788.9	(*a*) Malingering	227	8	30	265
			(*b*) Sudden death (cause unkown) ..				
			(*c*) Found dead (cause unknown) ..				
			(*d*) Other ill-defined and unknown causes of morbidity and mortality	1,488	358	464	2,310
			XVII.—ACCIDENTS, POISONINGS AND VIOLENCE				
			"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)				
AE 138		E 810-E 835	Motor vehicles accidents	3,492	698	649	4,839
AE 139	(*a*)	E 800-E 802	Railway accidents	130	11	4	145
	(*b*)	E 850-E 858	Water transport accidents	18	..	1	19
	(*c*)	E 860-E 866	Aircraft accidents				
			Carried forward ..	722,460	458,778	522,053	1,703,291

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
			Adult Males	Adult Females	Children under 10 years	Total
		Brought forward ..	722,460	458,778	522,053	1,703,291
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)				
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(*cont.*)				
(*d*)	E 840-E 845	Other transport accidents	1,723	532	711	2,966
AE 140 (*a*)	E 870	Accidental poisoning by morphia and other opium derivatives	1	..	1	2
(*b*)	E 874	Accidental poisoning by other analgesic and soporific drugs				
(*c*)	E 878	Accidental poisoning by other and unspecified drugs	1	1	..	2
(*d*)	E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalies ..	3	6	5	14
(*e*)	E 884	Accidental poisoning by mercury and its compounds				
(*f*)	E 885	Accidental poisoning by lead and its compounds	1	..	..	1
(*g*)	E 886	Accidental poisoning by arsenic and antimony and their compounds ..	2	..	..	2
(*h*)	E 888	Accidental poisoning by other and unspecified soild or liquid substances	3	..	3	6
(*i*)	E 890-E 895	Accidental poisoning by gases and vapours				
(*j*)	E871-E873 E875-E877 E879-E882 E 887	Other accidental poisoning	9	5	5	19
AE 141	E 900-E 904	Accidental falls	27,600	7,721	13,213	48,534
AE 142	E 912	Accident caused by machinery ..	403	47	69	519
AE 143	E 916	Accident caused by fire and explosion of combustible material	453	180	273	906
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation	854	461	780	2,095
AE 145	E 919	Accident caused by firearm	52	5	2	59
AE 146	E 929	Accidental drowning and submersion..	2	1	1	4
AE 147 (*a*)	E 913	Accidents caused by cutting or piercing instruments	16,979	5,080	7,342	29,401
(*b*)	E 914	Accidents caused by electric current ..	7	1	..	8
(*c*)	E 920	Foreign body entering eye and adnexa	637	166	211	1,014
(*d*)	E 923	Foreign body entering other orifice ..	657	311	511	1,479
(*e*)	E 925	Accidental mechanical suffocation ..				
(*f*)	E 926	Lack of care of infants under 1 year of age	..	..	5	5
(*g*)	E 927	Accidents caused by bites and stings of venomous animals and insects ..	2,796	1,005	1,044	4,845
(*h*)	E 928	Other accidents caused by animals ..	3,150	1,124	1,673	5,947
(*i*)	E 931	Excessive heat	..	2	..	2
(*j*)	E 932	Excessive cold				
(*k*)	E 933	Hunger, thirst and exposure				
(*l*)	E 934	Cataclysm				
(*m*)	E 935	Lightning	1	..	..	1
(*n*)	E 936	(*a*) Accidents in mines and quarries ..	250	62	34	346
		(*b*) Agricultural and forestry accidents	69	14	4	87
		(*c*) Accidental injury by crushing or landslide	681	123	123	927
		(*d*) Other and unspecified accidents ..	3,748	967	1,543	6,258
(*o*)	E 940	Generalized vaccinia following vaccination	159	43	202	404
(*p*)	E 941-E 942	Other complications of smallpox vaccination				
(*q*)	E950-E953 E955-E959	Accidents due to medical or surgical intervention				
(*r*)	E 954	Anaesthetic accidents				
		Carried forward ..	782,701	476,635	549,808	1,809,144

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
			Adult Males	Adult Females	Children under 10 years	Total
		Brought forward ..	782,701	476,635	549,808	1,809,144
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)				
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES) —(*cont.*)				
(*s*)	E910-E911, E 915, E921-E922, E924-E930, E943-E946, E960-E965	All other accidental causes	3,368	816	1,228	5,412
AE 148 (*a*)	E 970	Suicide and self-inflicted injury by analgesic and soporific substances ..				
(*b*)	E 971	Suicide and self-inflicted injury by other solid and liquid substances ..	2	1	..	3
(*c*)	E 972	Suicide and self-inflicted injury by gases in domestic use				
(*d*)	E 973	Suicide and self-inflicted injury by other gases				
(*e*)	E 974	Suicide and self-inflicted injury by hanging or strangulation	3	1	..	4
(*f*)	E 975	Suicide and self-inflicted injury by submersion (drowning)	..	1	..	1
(*g*)	E 976	Suicide and self-inflicted injury by firearms and explosives				
(*h*)	E 977	Suicide and self-inflicted injury by cutting or piercing instruments ..	..	1	..	1
(*i*)	E 978	Suicide and self-inflicted injury by jumping from high place				
(*j*)	E 979	Suicide and self-inflicted injury by other and unspecified means ..	8	..	3	11
AE 149 (*a*)	E 980	Nonaccidental poisoning by another person	3	..	..	3
(*b*)	E 981	Assault by firearms and explosive ..	22	9	3	34
(*c*)	E 982	Assault by cutting or piercing instruments	850	263	53	1,166
(*d*)	E 983	Assault by other means	5,156	1,808	318	7,282
(*e*)	E 984	Injury by intervention of police ..	1	..	..	1
(*f*)	E 985	Execution (legal)	2	..	..	2
AE 150	E 990-E 999	Injury resulting from operations of war				
		"N" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING, AND VIOLENCE (NATURE OF INJURY)				
AN 138	N 800-N 804	Fracture of skull	3	1	..	4
AN 139	N 805-N 809	Fracture of spine and trunk	12	..	1	13
AN 140	N 810-N 829	Fracture of limbs	528	95	177	800
AN 141	N 830-N 839	Dislocation without fracture	100	18	87	205
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles	4,382	783	713	5,878
AN 143	N 850-N 856	Head injury excluding fracture ..	376	157	216	749
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis	371	58	131	560
AN 145	N 870-N 908	Laceration and open wounds	5,953	1,631	2,389	9,973
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface ..	4,767	1,296	1,824	7,887
AN 147	N 930-N 936	Effects of foreign body entering through orifice	77	20	63	160
AN 148	N 940-N 949	Burns	1,189	593	1,365	3,147
AN 149	N 960-N 979	Effects of poisons	1	1	1	3
AN 150	N950-N959, N980-N999	All other and unspecified effects of external causes	4,304	2,236	1,683	8,223
		TOTAL ..	814,179	486,424	560,074	1,860,677

TABLE 6—(*cont.*)

OUT-PATIENTS (FIXED DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Nationalities	New Cases All Nationalities (including Europeans)			
	Adult Males	Adult Females	Children under 10 years	Total
Europeans	4,842	2,632	1,757	9,231
Eurasians	4,458	3,131	2,706	10,295
Chinese	291,389	213,523	262,384	767,296
Indians	185,091	98,631	108,494	392,216
Malays	312,844	161,745	176,296	650,885
Javanese	9,453	3,360	5,255	18,068
Japanese	..	20	..	20
Others	6,102	3,382	3,182	12,666
TOTAL ..	814,179	486,424	560,074	1,860,677

TABLE 7

OUT-PATIENTS (TRAVELLING DISPENSARIES)

RETURN OF DISEASES FOR THE YEAR 1953

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			I.—INFECTIVE AND PARASITIC DISEASES				
A 1		001-008	Tuberculosis of respiratory system ..	115	41	..	156
A 2		010	Tuberculosis of meninges and central nervous system	1	..	..	1
A 3		011	Tuberculosis of intestines, peritoneum and mesenteric glands				
A 4		012-013	Tuberculosis of bones and joints ..	2	..	..	2
A 5	(*a*)	014	Tuberculosis of skin and subcutaneous cellular tissue	..	1	..	1
	(*b*)	015	Tuberculosis of lymphatic system ..				
	(*c*)	016	Tuberculosis of genito-urinary system				
	(*d*)	017	Tuberculosis of adrenal glands ..				
	(*e*)	018	Tuberculosis of other organs	1	1	..	2
	(*f*)	019	Disseminated tuberculosis				
A 6		020	Congenital syphilis				
A 7	(*a*)	021.0-021.1	Primary syphilis	7	..	..	7
	(*b*)	021.2	Secondary syphilis	8	..	..	8
	(*c*)	021.3	Early syphilis, relapse following treatment				
	(*d*)	021.4	Early syphilis (unspecified stage) ..				
A 8		024	Tabes dorsalis				
A 9		025	General paralysis of insane				
A 10	(*a*)	022	Aneurysm of aorta				
	(*b*)	023	Other cardiovascular syphilis				
	(*c*)	026	Other syphilis of central nervous system				
	(*d*)	027	Tertiary syphilis	35	9	..	44
	(*e*)	028	Latent syphilis				
	(*f*)	029	Syphilis unqualified	12	2	..	14
A 11	(*a*)	030	Acute or unspecified gonorrhoea ..	90	35	..	125
	(*b*)	031	Chronic gonococcal infection of genito-urinary system	11	9	..	20
	(*c*)	032	Gonococcal infection of joint	37	21	..	58
	(*d*)	033	Gonococcal infection of eye				
	(*e*)	034-035	Gonococcal infection of other sites ..	3	..	..	3
A 12		040	Typhoid fever				
A 13	(*a*)	041	Paratyphoid fever, A, B or C				
	(*b*)	042	Other salmonella infections				
A 14		043	Cholera				
A 15		044	Brucellosis (undulant fever)				
A 16	(*a*)	045	Bacillary dysentery	32	19	9	60
	(*b*)	046	Amoebiasis				
	(*c*)	047-048	Other protozoal and unspecified forms of dysentery	1,127	669	609	2,405
A 17		050	Scarlet fever				
A 18		051	Streptococcal sore throat	1	..	1	2
A 19		052	Erysipelas	1	..	1	2
A 20		053	Septicaemia and pyaemia				
A 21		055	Diphtheria				
A 22		056	Whooping Cough	5	5	296	306
A 23		057	Meningococcal infections				
A 24		058	Plague				
A 25		060	Leprosy	2	..	1	3
A 26	(*a*)	061	Tetanus of the new-born				
	(*b*)	—	Tetanus, other forms				
A 27		062	Anthrax				
A 28		080	Acute Poliomyelitis				
A 29		082	Acute infectious encephalitis				
A 30		081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis ..				
A 31		084	Smallpox				
A 32		085	Measles	10	8	110	128
A 33		091	Yellow fever				
A 34		092	Infectious hepatitis	..	..	1	1
A 35		094	Rabies				
A 36	(*a*)	100	Louse-borne epidemic typhus ..				
	(*b*)	101	Flea-borne endemic typhus (murine) ..				
			Carried forward ..	1,500	820	1,028	3,348

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	1,500	820	1,028	3,348
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
	(*c*)	104	Tick-borne epidemic typhus				
	(*d*)	105	Mite-borne typhus				
	(*e*)	102-103 106-108	Other and unspecified typhus ..				
A 37	(*a*)	110	Vivax malaria (benign tertian) ..	15	11	33	59
	(*b*)	111	Malariae malaria (quartan)	..	1	1	2
	(*c*)	112	Falciparum malaria (malignant tertian)	57	40	43	140
	(*d*)	114	Mixed malaria infections	31	26	23	80
	(*e*)	115	Blackwater fever				
	(*f*)	113 116-117	Other and unspecified forms of malaria	31,479	17,174	17,047	65,700
A 38	(*a*)	123.0	Schistosomiasis vesical (S. haematobium)				
	(*b*)	123.1	Schistosomiasis intestinal (S. Mansoni)				
	(*c*)	123.2	Schistosomiasis Pulmonary (S. japonicum)				
	(*d*)	123.3	Other and unspecified Schistosomiasis				
A 39		125	Hydatid disease				
A 40	(*a*)	127	Onchocerciasis	3	..	..	3
	(*b*)	—	Loiasis				
	(*c*)	—	Filariasis (bancrofti)	8	5	..	13
	(*d*)	—	Other filariasis	47	17	7	71
A 41		129	Ankylostomiasis	1,121	829	2,036	3,986
A 42	(*a*)	126	Tape worm (infestation) and other cestode infestation	7	4	..	11
	(*b*)	130.0	Ascariasis	7,148	5,204	33,322	45,674
	(*c*)	130.3	Guinea worm (dracunculosis)				
	(*d*)	124	Other trematode infestation	227	184	965	1,376
	(*e*)	128	Trichiniasis	..	4	..	4
	(*f*)	130.1-130.2	Other diseases due to helminths ..	1,547	1,256	5,905	8,708
A 43	(*a*)	036	Chancroid	12	4	..	16
	(*b*)	037	Lymphogranuloma venereum ..	..	..	7	7
	(*c*)	038	Granuloma inguinale, venereal ..				
	(*d*)	039	Other and unspecified venereal diseases	2	..	..	2
	(*e*)	049	Food poisoning infection and intoxication				
	(*f*)	059	Tularaemia				
	(*g*)	063	Gas gangrene				
	(*h*)	064	(*a*) Glanders				
			(*b*) Melioidosis				
			(*c*) Other bacterial diseases				
	(*i*)	070	Vincent's infection				
	(*j*)	071	Relapsing fever				
	(*k*)	072	Leptospirosis icterohaemorrhagica (Weil's disease)				
	(*l*)	073	Yaws	8,137	6,268	11,582	25,987
	(*m*)	086	Rubella				
	(*n*)	087	Chickenpox	47	29	188	264
	(*o*)	088	Herpes Zoster	90	40	39	169
	(*p*)	089	Mumps	161	60	326	547
	(*q*)	090	Dengue	..	..	1	1
	(*r*)	093	Glandular fever				
	(*s*)	095	Trachoma	5	5	..	10
	(*t*)	096.7	Sandfly fever				
	(*u*)	120	Leishmaniasis				
	(*v*)	121	(*a*) Trypanosomiasis gambiensis ..				
			(*b*) Trypanosomiasis rhodesiensis ..				
			(*c*) Other and unspecified trypanosomiasis				
	(*w*)	131	Dermatophytosis	317	187	346	850
	(*x*)	135	Scabies	18,455	9,999	37,508	65,962
			Carried forward ..	70,416	42,167	110,407	222,990

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	70,416	42,167	110,407	222,990
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
	(*y*)	054, 074 096.1-096.6 096.8, 096.9 122 132-134 136-138	All other diseases classified as infective and parasitic	2,166	1,534	6,053	9,753
			II.—NEOPLASMS				
A 44		140-148	Malignant neoplasm of buccal cavity and pharynx				
A 45		150	Malignant neoplasm of oesophagus ..				
A 46		151	Malignant neoplasm of stomach ..				
A 47	(*a*)	152	Malignant neoplasm of small intestine, including duodenum				
	(*b*)	153	Malignant neoplasm of large intestine, except rectum				
A 48		154	Malignant neoplasm of rectum ..				
A 49		161	Malignant neoplasm of larynx ..				
A 50		162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary				
A 51		170	Malignant neoplasm of breast				
A 52		171	Malignant neoplasm of cervix uteri ..				
A 53		172-174	Malignant neoplasm of other and unspecified parts of uterus				
A 54		177	Malignant neoplasm of prostate ..				
A 55		190-191	Malignant neoplasm of skin				
A 56		196-197	Malignant neoplasm of bone and connective tissue				
A 57	(*a*)	155-156	Malignant neoplasm of liver				
	(*b*)	157	Malignant neoplasm of pancreas ..				
	(*c*)	158	Malignant neoplasm of peritoneum ..				
	(*d*)	159	Malignant neoplasm of unspecified digestive organs				
	(*e*)	175-176	Malignant neoplasm of other and unspecified female genital organs ..				
	(*f*)	178-179	Malignant neoplasm of other and unspecified male genital organs ..				
	(*g*)	180-181	Malignant neoplasm of kidney, bladder and other urinary organs				
	(*h*)	160 164-165 192-195 198-199	Malignant neoplasm of all other and unspecified sites				
A 58		204	Leukaemia and Aleukaemia				
A 59	(*a*)	200	Lymphosarcoma and reticulosarcoma				
	(*b*)	201	Hodgkin's disease				
	(*c*)	202-203	Other neoplasm of lymphatic and haematopoietic system				
	(*d*)	205	Mycosis fungoides	447	229	389	1,065
A 60	(*a*)	210-211	Benign neoplasm of buccal cavity, pharynx and digestive system ..	5	4	..	9
	(*b*)	217	Benign neoplasm of other female genital organs	2	5	..	7
	(*c*)	218	Benign neoplasm of other male genital organs				
	(*d*)	212-216 219-229	Benign neoplasm of other and unspecified organs and tissue				
	(*e*)	230	Neoplasm of unspecified nature of digestive organs				
	(*f*)	233-235	Neoplasm of unspecified nature of other female genital organs				
	(*g*)	231-232 236-239	Neoplasm of unspecified nature of other unspecified organs	1	1	1	3
			Carried forward ..	73,037	43,940	116,850	233,827

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	73,037	43,940	116,850	233,827
			III.—ALLERGIC, ENDOCRINE SYSTEM METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS				
A 61		250-251	Nontoxic goitre	1	7	..	8
A 62		252	Thyrotoxicosis with or without goitre				
A 63		260	Diabetes mellitus	11	6	..	17
A 64	(*a*)	280	Beri Beri	339	357	40	736
	(*b*)	281	Pellagra	1	1	..	2
	(*c*)	282	Scurvy	2	4	26	32
	(*d*)	283-284	Rickets	..	..	80	80
	(*e*)	285	Osteomalacia				
	(*f*)	286.0	(*a*) Sprue	7	4	2	13
		286.5	(*b*) Malnutrition	468	516	1,366	2,350
		286.1-286.4, 286.6	(*c*) Other deficiency states	1,482	1,430	1,604	4,516
A 65	(*a*)	290	Pernicious and other hyperchromic anaemias	58	86	25	169
	(*b*)	291	Iron deficiency anaemias (hypochromic)	2,576	4,862	2,591	10,029
	(*c*)	292-293	Other specified and unspecified anaemias	8,976	13,959	8,350	31,285
A 66	(*a*)	241	Asthma	3,344	2,052	1,726	7,122
	(*b*)	240, 242-245	Angioneurotic oedema, urticaria and other allergic disorders	230	235	135	600
	(*c*)	253	Myxoedema and cretinism				
	(*d*)	254	Other diseases of thyroid gland ..	4	3	2	9
	(*e*)	270	Disorders of pancreatic internal secretion other than diabetes mellitus ..				
	(*f*)	271	Diseases of parathyroid gland				
	(*g*)	272	Diseases of pituitary gland				
	(*h*)	273	Diseases of thymus gland				
	(*i*)	274	Diseases of adrenal gland				
	(*j*)	275-277	Other diseases of endocrine glands ..				
	(*k*)	288	Gout	3	2	..	5
	(*l*)	287, 289	Other metabolic diseases	46	35	9	90
	(*m*)	294	Polycythemia				
	(*n*)	295	Haemophilia				
	(*o*)	296	Purpura and other haemorrhagic conditions	1	..	..	1
	(*p*)	297	Agranulocytosis				
	(*q*)	298	Diseases of spleen	7	5	3	15
	(*r*)	299	Other diseases of blood and blood-forming organs	18	15	1	34
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS				
A 67	(*a*)	300	Schizophrenic disorders (dementia praecox)				
	(*b*)	301	Maniac-depressive reaction				
	(*c*)	302	Involutional melancholia				
	(*d*)	303	Paranoia and paranoid states				
	(*e*)	304	Senile psychoses	1	..	..	1
	(*f*)	305-309	Other and unspecified psychoses ..				
A 68	(*a*)	311	Hysterical reaction				
	(*b*)	314	Neurotic-depressive reaction				
	(*c*)	322	Alcoholism				
	(*d*)	323	Other drug addiction				
	(*e*)	310, 312-313, 315-321, 324, 326	Other psychoneuroses and disorders of personality				
A 69		325	Mental deficiency	3	1	2	6
			Carried forward ..	90,615	67,520	132,812	290,947

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	90,615	67,520	132,812	290,947
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS				
A 70	(*a*)	331	Cerebral haemorrhage				
	(*b*)	332	Cerebral embolism and thrombosis ..				
	(*c*)	330	Other vascular lesions affecting central				
		333-334	nervous system				
A 71		340	Non-meningococcal meningitis ..				
A 72		345	Multiple sclerosis				
A 73		353	Epilepsy	60	10	5	75
A 74	(*a*)	370	Conjunctivitis and ophthalmia ..	7,049	5,958	10,368	23,375
	(*b*)	371-379	Other inflammatory diseases of eye ..	781	745	1,164	2,690
A 75		385	Cataract	32	54	4	90
A 76		387	Glaucoma				
A 77	(*a*)	390	Otitis externa	884	617	3,223	4,724
	(*b*)	391-393	Otitis media and mastolditis	501	343	2,068	2,912
	(*c*)	394	Other inflammatory diseases of ear ..	626	504	2,644	3,774
A 78	(*a*)	380-384					
		386-388	All other diseases and conditions of eye	1,945	1,843	2,940	6,728
		389					
	(*b*)	342	Intracranial and intraspinal abscess ..				
	(*c*)	343	Encephalitis, myelitis and encephalo-myelitis				
	(*d*)	350	Paralysis agitans				
	(*e*)	352	Other cerebral paralysis				
	(*f*)	356	Motor neurone disease and muscular atrophy				
	(*g*)	357	Other diseases of spinal cord				
	(*h*)	366	Other and unspecified forms of neuralgia and neuritis	14,495	10,732	2,305	27,532
	(*i*)	367	Other diseases of cranial nerves ..	65	47	7	119
	(*j*)	369	Diseases of peripheral autonomic nervous system	7	7	..	14
	(*k*)	341, 344					
		351, 354					
		355	All other diseases of the nervous system				
		360-365	and sense organs	2,944	2,199	528	5,671
		368					
		395-398					
			VII.—DISEASES OF THE CIRCULATORY SYSTEM				
A 79	(*a*)	400	Rheumatic fever without mention of heart involvement	961	406	3	1,370
	(*b*)	401	Rheumatic fever with heart involvement	1	..	..	1
	(*c*)	402	Chorea				
A 80	(*a*)	410-413	Diseases of valves specified as rheumatic				
	(*b*)	414	Other endocarditis specified as rheumatic				
	(*c*)	415	Other myocarditis specified as rheumatic				
	(*d*)	416	Other heart disease specified as rheumatic				
A 81	(*a*)	420	Arteriosclerotic heart disease, including coronary disease				
	(*b*)	421	Chronic endocarditis not specified as rheumatic				
	(*c*)	422	Other myocardial degeneration ..				
A 82	(*a*)	430	Acute and subacute endocarditis ..				
	(*b*)	431	Acute myocarditis				
	(*c*)	432	Acute pericarditis				
	(*d*)	433	Functional disease of heart	1	5	..	6
			Carried forward ..	120,967	90,990	158,071	370,028

TABLE 7—(*cont.*)

OUT-PATIENTS. (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	120,967	90,990	158,071	370,028
			VII.—DISEASES OF THE CIRCULATORY SYSTEM—(*cont.*)				
	(*e*)	434	Other and unspecified diseases of heart	14	5	2	21
A 83		440-443	Hypertension with heart disease ..				
A 84		444-447	Hypertension without mention of heart	9	6	..	15
A 85	(*a*)	450	General arteriosclerosis	3	1	..	4
	(*b*)	451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm ..				
	(*c*)	452	Other aneurysm, except of heart and aorta				
	(*d*)	453	Peripheral vascular disease				
	(*e*)	454	Arterial embolism and thrombosis ..				
	(*f*)	455	Gangrene of unspecified cause ..				
	(*g*)	456	Other diseases of arteries				
A 86	(*a*)	460, 462	Varicose veins	26	7	..	33
	(*b*)	461	Haemorrhoids	150	53	2	205
	(*c*)	463-464	Phlebitis and thrombophlebitis ..	1	..	..	1
	(*d*)	465	Pulmonary embolism and infarction ..				
	(*e*)	466	Other venous embolism and thrombosis	1	..	..	1
	(*f*)	467	Other diseases of circulatory system ..	7	5	2	14
	(*g*)	468	(*a*) Adenitis	188	105	80	373
			(*b*) Lymphadenitis	20	2	11	33
			(*c*) Other diseases of lymph nodes and lymph channels	25	5	2	32
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM				
A 87	(*a*)	470	Acute nasopharyngitis (common cold)	3,751	2,468	4,109	10,328
	(*b*)	471	Acute sinusitis	2	4	2	8
	(*c*)	472	Acute pharyngitis	209	113	91	413
	(*d*)	473	Acute tonsillitis	248	197	486	931
	(*e*)	474	Acute laryngitis and tracheitis ..	124	135	121	380
	(*f*)	475	Other acute upper respiratory infections	47	16	35	98
A 88	(*a*)	480	Influenza with pneumonia	4	5	23	32
	(*b*)	481	Influenza with other respiratory manifestations, and influenza unqualified	8,017	5,397	9,800	23,214
	(*c*)	482	Influenza with digestive manifestations, but without respiratory symptoms	112	95	250	457
	(*d*)	483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	199	162	258	619
A 89		490	Lobar pneumonia	..	2	3	5
A 90		491	Broncho-pneumonia	49	38	99	186
A 91		492-493	Primary atypical, other and unspecified pneumonia	7	5	8	20
A 92		500	Acute bronchitis	5,168	3,657	8,682	17,507
A 93	(*a*)	501	Bronchitis unqualified	19,319	13,205	24,831	57,355
	(*b*)	502	Chronic bronchitis	4,089	2,545	3,465	10,099
A 94		510	Hypertrophy of tonsils and adenoids	38	27	144	209
A 95		518	Empyema	1	..	..	1
	(*b*)	521	Abscess of lung				
A 96		519	Pleurisy	..	1	3	4
A 97	(*a*)	517	Other diseases of upper respiratory tract	109	66	111	286
	(*b*)	520	Spontaneous pneumothorax				
	(*c*)	522	Pulmonary congestion and hypostasis				
	(*d*)	525	Other chronic interstitial pneumonia ..				
	(*e*)	523	Pneumoconiosis				
	(*f*)	526	Bronchiectasis	21	14	2	37
	(*g*)	511-516, 524, 527	All other respiratory diseases	895	550	1,117	2,562
			Carried forward ..	163,820	119,881	211,810	495,511

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	163,820	119,881	211,810	495,511
			IX.—DISEASES OF THE DIGESTIVE SYSTEM				
A 98	(*a*)	530	Dental caries	2,746	2,085	4,044	8,875
	(*b*)	531-535	(*a*) Gingivitis	99	84	84	267
			(*b*) Pyorrhoea	306	271	78	655
			(*c*) Other diseases of teeth and supporting structures	157	105	58	320
A 99		540	Ulcer of stomach	2	..	..	2
A 100		541	Ulcer of duodenum				
A 101		543	Gastritis and duodenitis	3,885	3,805	1,579	9,269
A 102		550-553	Appendicitis	6	6	..	12
A 103	(*a*)	560	Hernia of abdominal cavity without mention of obstruction	2	..	1	3
	(*b*)	561	Hernia of abdominal cavity with obstruction				
	(*c*)	570	(*a*) Intussusception				
			(*b*) Volvulus				
			(*c*) Other intestinal obstruction ..	..	..	6	6
A 104	(*a*)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years	..	..	2,618	2,618
	(*b*)	571.1	Gastro-enteritis and colitis, ages 2 years and over	2,296	1,611	2,828	6,735
	(*c*)	572	Chronic enteritis and ulcerative colitis	26	13	16	55
A 105	(*a*)	581.0	Cirrhosis of liver without mention of alcoholism	1	..	..	1
	(*b*)	581.1	Cirrhosis of liver with alcoholism ..				
A 106	(*a*)	584	Cholelithiasis				
	(*b*)	585	Cholecystitis without mention of calculi	..	..	3	3
A 107	(*a*)	536	Stomatitis	734	773	1,945	3,452
	(*b*)	538	Other diseases of buccal cavity ..	31	37	83	151
	(*c*)	539	(*a*) Functional disorders of oesophagus	2	..	..	2
			(*b*) Stricture or obstruction of oesophagus				
	(*d*)	544	Disorders of function of stomach ..	1,356	1,236	1,764	4,356
	(*e*)	545	Other diseases of stomach and duodenum	224	160	95	479
	(*f*)	573	(*a*) Constipation	14,141	8,408	7,702	30,251
			(*b*) Other functional disorders of intestines	696	524	617	1,837
	(*g*)	574	Anal fissure and fistula	1	..	..	1
	(*h*)	575	Abscess of anal and rectal regions ..	6	..	1	7
	(*i*)	576	Peritonitis				
	(*j*)	578	Other diseases of intestines and peritoneum	8	1	..	9
	(*k*)	580	(*a*) Acute yellow atrophy of liver ..				
			(*b*) Degeneration of liver				
			(*c*) Hepatitis	48	27	2	77
	(*l*)	583	Other diseases of liver	4	4	3	11
	(*m*)	586	Other diseases of gall-bladder and biliary ducts	2	..	1	3
	(*n*)	587	Diseases of pancreas				
	(*o*)	537, 542 577, 582	Other diseases of digestive system ..	2,083	2,098	1,899	6,080
			X.—DISEASES OF THE GENITO-URINARY SYSTEM				
A 108		590	Acute nephritis	27	12	3	42
A 109	(*a*)	591	Nephritis with oedema, including nephrosis	9	8	3	20
	(*b*)	592	Chronic nephritis	85	36	1	122
	(*c*)	593	Nephritis not specified as acute or chronic	137	91	41	269
	(*d*)	594	Other renal sclerosis	2	1	..	3
			Carried forward ..	192,942	141,277	237,285	571,504

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
			Adult Males	Adult Females	Children under 10 years	Total
		Brought forward ..	192,942	141,277	237,285	571,504
		X.—DISEASES OF THE GENITO-URINARY SYSTEM—(*cont.*)				
A 110	600	Infections of kidney	6	4	1	11
A 111 (*a*)	602	Calculi of kidney and ureter				
(*b*)	604	Calculi of other parts of urinary system	1	..	..	1
A 112	610	Hyperplasia of prostate				
A 113	620-621	Diseases of breast	..	6	..	6
A 114 (*a*)	603	Other diseases of kidney and ureter ..	74	65	6	145
(*b*)	605	Cystitis	107	33	12	152
(*c*)	606	Other diseases of bladder	4	1	2	7
(*d*)	608	Stricture of urethra	11	2	2	15
(*e*)	609	Other diseases of urethra	87	38	7	132
(*f*)	612	Other diseases of prostate				
(*g*)	613	Hydrocele	1	..	1	2
(*h*)	614	Orchitis and epididymitis	33	..	5	38
(*i*)	617	Other diseases of male genital organs	8	..	..	8
(*j*)	622	Acute salpingitis and oophoritis ..	..	1	..	1
(*k*)	625	Other diseases of ovary and fallopian tube				
(*l*)	626	Diseases of parametrium and pelviperitoneum (female)				
(*m*)	630	Infective disease of uterus, vagina and vulva				
(*n*)	633	Other diseases of uterus	..	1	..	1
(*o*)	634	Disorders of menstruation	..	480	..	480
(*p*)	637	Other diseases of female genital organs	..	35	..	35
(*q*)	601, 607, 611, 615-616, 623-624, 631-632, 635-636	All other diseases of the genito-urinary system..	82	28	3	113
		XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY CHILDBIRTH AND THE PUERPERIUM				
A 115 (*a*)	640	Pyelitis and pyelonephritis of pregnancy				
(*b*)	641	Other infections of genito-urinary tract during pregnancy				
(*c*)	681	Sepsis of childbirth and the puerperium	..	1	..	1
(*d*)	682	Puerperal phlebitis and thrombosis ..				
(*e*)	684	Puerperal pulmonary embolism ..				
A 116 (*a*)	642	(*a*) Albuminuria of pregnancy ..	..	10	..	10
		(*b*) Eclampsia of pregnancy				
		(*c*) Hyperemesis gravidarum	..	1	..	1
		(*d*) Acute yellow atrophy of liver ..				
		(*e*) Other toxaemias of pregnancy ..				
(*b*)	652	Abortion with toxaemia, without mention of sepsis				
(*c*)	685	Puerperal eclampsia	..	1	..	1
(*d*)	686	Other forms of puerperal toxaemia ..				
A 117 (*a*)	643	Placenta praevia				
(*b*)	644	Other haemorrhage of pregnancy ..				
(*c*)	670	Delivery complicated by placenta praevia or antepartum haemorrhage ..				
(*d*)	671	Delivery complicated by retained placenta				
(*e*)	672	Delivery complicated by other postpartum haemorrhage				
A 118	650	Abortion without mention of sepsis or toxaemia	..	8	..	8
A 119	651	Abortion with sepsis				
		Carried forward ..	193,356	141,992	237,324	572,672

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	193,356	141,992	237,324	572,672
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY CHILDBIRTH AND THE PUERPERIUM —(*cont.*)				
A 120	(*a*)	645	Ectopic pregnancy	..	8	..	8
	(*b*)	646	Anæmia of pregnancy	..	1,181	..	1,181
	(*c*)	683	Pyrexia of unknown origin during the puerperium	..	9	..	9
	(*d*)	688.1	Puerperal psychoses				
	(*e*)	689	Mastitis and other disorders of lactation	..	6	..	6
	(*f*)	647-649, 673-680, 687, 688.0, 688.2-688.3	Other complications of pregnancy, childbirth and the puerperium ..	..	19	..	19
	(*g*)	660	Delivery without complications ..	..	304	..	304
			XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE AND XIII.—DISEASES OF THE BONES AND ORGANS OF MOVEMENT				
A 121	(*a*)	690	Boil and carbuncle	2,033	1,128	2,529	5,690
	(*b*)	691-693	Cellulitis and abscess	1,790	890	1,301	3,981
	(*c*)	694-698	Other infections of skin and subcutaneous tissue	10,613	6,011	13,352	29,976
A 122	(*a*)	720	Acute arthritis due to pyogenic organisms	9	8	..	17
	(*b*)	721	Acute nonpyogenic arthritis	6	11	1	18
	(*c*)	722	Rheumatoid arthritis and allied conditions	17	7	..	24
	(*d*)	723-725	Arthritis specified and unspecified ..	1,004	789	48	1,841
A 123	(*a*)	726	Muscular rheumatism	3,199	1,967	84	5,250
	(*b*)	727	Rheumatism unspecified	4,136	2,912	29	7,077
A 124		730	Osteomyelitis and periostitis				
A 125	(*a*)	737	Ankylosis of joint	61	42	4	107
	(*b*)	745-749	Other acquired musculoskeletal deformities	13	9	9	31
A 126	(*a*)	715	Chronic ulcer of skin (including tropical ulcer)	9,833	4,693	10,193	24,719
	(*b*)	700-714, 716	All other diseases of skin	19,488	10,274	22,722	52,484
	(*c*)	731-736, 738-744	All other diseases of musculoskeletal system..	773	643	345	1,761
			XIV.—CONGENITAL MALFORMATIONS				
A 127		751	Spina bifida and meningocele ..				
A 128		754	Congenital malformations of circulatory system				
A 129	(*a*)	750	Monstrosity				
	(*b*)	752	Congenital hydrocephalus				
	(*c*)	753	Other congenital malformations of nervous system and sense organs ..				
	(*d*)	755	Cleft palate and harelip	..	..	1	1
	(*e*)	756	(*a*) Congenital hypertrophic pyloric stenosis				
			(*b*) Imperforate anus				
			Carried forward ..	246,331	172,903	287,942	707,176

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
				Adult Males	Adult Females	Children under 10 years	Total
			Brought forward ..	246,331	172,903	287,942	707,176
			XIV.—CONGENITAL MALFORMATIONS—(*cont.*)				
			(*c*) Other congenital malformations of digestive system				
	(*f*)	757	Congenital malformations of genito-urinary system				
	(*g*)	758	Congenital malformations of bone and joint				
	(*h*)	759	Other and unspecified congenital malformations, not elsewhere classified ..				
			XV.—CERTAIN DISEASES OF EARLY INFANCY				
A 130	(*a*)	760	Intracranial and spinal injury at birth				
	(*b*)	761	Other birth injury				
A 131		762	Postnatal asphyxia and atelectasis ..				
A 132	(*a*)	764	Diarrhoea of newborn	..	..	13	13
	(*b*)	765	Ophthalmia neonatorum	..	..	2	2
	(*c*)	763	Pneumonia of newborn				
	(*d*)	766	Pemphigus neonatorum	..	..	7	7
	(*e*)	767	Umbilical sepsis	..	..	113	113
	(*f*)	768	Other sepsis of newborn				
A 133		770	Haemolytic disease of newborn ..				
A 134		769 771-772	All other defined diseases of early infancy	..	..	7	7
A 135	(*a*)	773	Congenital debility				
	(*b*)	774	Premature birth				
	(*c*)	775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified	..	..	50	50
			XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS				
A 136		794	Senility without mention of psychoses	2,640	2,012	..	4,652
A 137	(*a*)	780	Infantile convulsions			18	18
	(*b*)	788.8	Pyrexia of unknown origin	2,973	1,405	1,895	6,273
	(*c*)	793	Observation, without need for further medical care	116	129	88	333
	(*d*)	781-787 789-792 795 788.1-788.7 788.9	(*a*) Malingering	2	4	..	6
			(*b*) Sudden death (cause unknown) ..				
			(*c*) Found dead (cause unknown) ..				
			(*d*) Other ill-defined and unknown causes of morbidity and mortality	710	408	181	1,299
			XVII.—ACCIDENTS, POISONINGS AND VIOLENCE				
			"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)				
AE 138		E 810-E 835	Motor vehicle accidents	6	..	..	6
AE 139	(*a*)	E 800-E 802	Railway accidents	8	3	10	21
	(*b*)	E 850-E 858	Water transport accidents				
	(*c*)	E 860-E 866	Aircraft accidents				
			Carried forward ..	252,786	176,864	290,326	719,976

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
			Adult Males	Adult Females	Children under 10 years	Total
		Brought forward ..	252,786	176,864	290,326	719,976
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)				
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(*cont.*)				
(*d*)	E 840-E 845	Other transport accidents	235	129	374	738
AE 140 (*a*)	E 870	Accidental poisoning by morphia and other opium derivatives				
(*b*)	E 874	Accidental poisoning by other analgesic and soporific drugs				
(*c*)	E 878	Accidental poisoning by other and unspecified drugs				
(*d*)	E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalies ..				
(*e*)	E 884	Accidental poisoning by mercury and its compounds				
(*f*)	E 885	Accidental poisoning by lead and its compounds				
(*g*)	E 886	Accidental poisoning by arsenic and antimony and their compounds ..				
(*h*)	E 888	Accidental poisoning by other and unspecified solid or liquid substances..				
(*i*)	E 890-E 895	Accidental poisoning by gases and vapours				
(*j*)	E 871-E873 E 875-E877 E 879-E882 E 887	Other accidental poisoning	5	..	8	13
AE 141	E 900-E 904	Accidental falls	2,673	1,140	3,157	6,970
AE 142	E 912	Accident caused by machinery ..	76	29	41	146
AE 143	E 916	Accident caused by fire and explosion of combustible material	34	28	79	141
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation	102	119	221	442
AE 145	E 919	Accident caused by firearm	6	..	..	6
AE 146	E 929	Accidental drowning and submersion..				
AE 147 (*a*)	E 913	Accidents caused by cutting or piercing instruments	5,612	2,576	4,481	12,669
(*b*)	E 914	Accidents caused by electric current..	10	3	14	27
(*c*)	E 920	Foreign body entering eye and adnexa	3	5	4	12
(*d*)	E 923	Foreign body entering other orifice ..	..	2	9	11
(*e*)	E 925	Accidental mechanical suffocation ..				
(*f*)	E 926	Lack of care of infants under 1 year of age	..	..	3	3
(*g*)	E 927	Accidents caused by bites and stings of venomous animals and insects ..	190	154	207	551
(*h*)	E 928	Other accidents caused by animals ..	30	16	17	63
(*i*)	E 931	Excessive heat	1	3	3	7
(*j*)	E 932	Excessive cold				
(*k*)	E 933	Hunger, thirst and exposure				
(*l*)	E 934	Cataclysm				
(*m*)	E 935	Lightning				
(*n*)	E 936	(*a*) Accidents in mines and quarries ..	18	4	4	26
		(*b*) Agricultural and forestry accidents				
		(*c*) Accidental injury by crushing or landslide	205	103	154	462
		(*d*) Other and unspecified accidents ..	411	121	370	902
(*o*)	E 940	Generalized vaccinia following vaccination	..	1	97	98
(*p*)	E 941-E 942	Other complications of smallpox vaccination	..	..	35	35
(*q*)	E 950-E953 E 955-E959	Accidents due to medical or surgical intervention				
(*r*)	E 954	Anaesthetic accidents				
		Carried forward ..	262,397	181,297	299,604	743,298

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	New Cases All Nationalities (including Europeans)			
			Adult Males	Adult Females	Children under 10 years	Total
		Brought forward ..	262,397	181,297	299,604	743,298
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)				
		"E" CODE : ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES) —(*cont.*)				
(*s*)	E 910-E911 E 915 E 921-E922 E 924-E930 E 943-E946 E 960-E965	All other accidental causes	825	318	1,095	2,238
AE 148 (*a*)	E 970	Suicide and self-inflicted injury by analgesic and soporific substances..				
(*b*)	E 971	Suicide and self-inflicted injury by other solid and liquid substances ..				
(*c*)	E 972	Suicide and self-inflicted injury by gases in domestic use				
(*d*)	E 973	Suicide and self-inflicted injury by other gases				
(*e*)	E 974	Suicide and self-inflicted injury by hanging or strangulation				
(*f*)	E 975	Suicide and self-inflicted injury by submersion (drowning)				
(*g*)	E 976	Suicide and self-inflicted injury by firearms and explosives				
(*h*)	E 977	Suicide and self-inflicted injury by cutting or piercing instruments ..				
(*i*)	E 978	Suicide and self-inflicted injury by jumping from high place				
(*j*)	E 979	Suicide and self-inflicted injury by other and unspecified means ..				
AE 149 (*a*)	E 980	Nonaccidental poisoning by another person				
(*b*)	E 981	Assault by firearms and explosive ..				
(*c*)	E 982	Assault by cutting or piercing instruments	2	1	..	3
(*d*)	E 983	Assault by other means	17	8	1	26
(*e*)	E 984	Injury by intervention of police ..				
(*f*)	E 985	Execution (legal)				
AE 150	E 990-E 999	Injury resulting from operations of war				
		"N" CODE : ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING AND VIOLENCE (NATURE OF INJURY)				
AN 138	N 800-N 804	Fracture of skull				
AN 139	N 805-N 809	Fracture of spine and trunk				
AN 140	N 810-N 829	Fracture of limbs	3	1	2	6
AN 141	N 830-N 839	Dislocation without fracture	20	5	5	30
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles	1,396	701	809	2,906
AN 143	N 850-N 856	Head injury excluding fracture ..	3	..	1	4
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis	37	19	9	65
AN 145	N 870-N 908	Laceration and open wounds	1,372	494	1,027	2,893
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface ..	980	385	837	2,202
AN 147	N 930-N 936	Effects of foreign body entering through orifice	4	5	15	24
AN 148	N 940-N 949	Burns	225	218	504	947
AN 149	N 960-N 979	Effects of poisons	..	3	7	10
AN 150	N950-N959 N980-N999	All other and unspecified effects of external causes	293	137	281	711
		TOTAL ..	267,574	183,592	304,197	755,363

TABLE 7—(*cont.*)

OUT-PATIENTS (TRAVELLING DISPENSARIES)—(*cont.*)

RETURN OF DISEASES FOR THE YEAR 1953—(*cont.*)

Nationalities	New Cases All Nationalities (including Europeans)			
	Adult Males	Adult Females	Children under 10 years	Total
Europeans	13	1	..	14
Eurasians	40	34	37	111
Chinese	64,122	52,014	79,768	195,904
Indians	18,856	11,754	16,792	47,402
Malays	159,002	105,014	182,005	446,021
Javanese	13,329	7,114	16,660	37,103
Japanese				
Others	12,212	7,661	8,935	28,808
TOTAL ..	267,574	183,592	304,197	755,363

TABLE 8

DENTAL—SUMMARY OF WORK DONE FOR THE YEAR 1953

State/Settlement	Attendances	Extractions		Fillings				Scalings	Dentures
		Temporary teeth	Permanent teeth	Amalgam	Silicate	Inlay	Fillings		
Kedah	28,562	6,925	12,306	8,133	1,615	55	48	1,089	311
Perlis	2,322	1,373	578	864	331	34	—	1	—
Penang	25,459	6,147	14,163	1,745	948	272	20	704	665
Perak	23,599	7,875	12,866	6,280	1,476	43	19	726	225
Selangor	23,355	5,900	10,903	7,154	1,120	15	9	578	283
Negri Sembilan	18,446	4,461	8,257	7,112	897	31	4	1,128	180
Malacca	13,668	1,082	5,511	2,381	1,325	15	12	1,098	304
Johore	35,849	11,470	13,248	11,961	1,412	40	89	542	331
Kelantan	5,468	1,839	3,524	2,606	477	23	7	205	—
Trengganu	8,000	1,139	6,752	1,602	737	50	—	135	19
Pahang	14,187	4,710	5,013	4,831	1,626	7	26	720	44
Federal Institution, North	3,732	346	2,867	2,292	153	7	—	287	170
Federal Institution, South	5,849	182	3,263	1,340	387	16	3	350	242
Dental Nurses Training Schools, Penang	10,425	1,079	53	4,289	—	—	—	1,435	—
Dental Nurses in the Field	81,201	39,571	4,808	60,042	—	—	—	7,607	—
Total	300,122	94,099	104,112	122,632	12,504	608	237	16,605	2,774

TABLE 9

MICROSCOPICAL EXAMINATION OF BLOOD FILMS FOR THE YEAR 1953

State/Settlement	Number of patients examined	Number positive for Malarial Parasites				Total number of examinations of blood films
		S.T.	B.T.	Quartan	Mixed infection	
Kedah	26,759	1,291	683	9	6	27,915
Perlis	8,012	720	777	2	3	8,415
Penang	15,019	373	293	16	2	16,176
Perak	53,969	1,102	602	3	20	93,900
Selangor	42,367	678	373	10	21	72,068
Negri Sembilan ..	20,865	759	243	14	26	24,195
Malacca	12,066	509	149	2	6	13,207
Johore	22,747	395	249	8	99	27,784
Kelantan	11,670	1,115	524	12	11	12,982
Trengganu	3,433	149	96	18	11	4,137
Pahang	23,567	1,370	1,083	2	11	44,159
Total ..	240,474	8,461	5,072	96	216	344,938

TABLE 10

MICROSCOPICAL EXAMINATION OF FÆCES FOR WORM INFECTIONS FOR 1953

State/Settlement	Number of patients examined	Number positive for entamoeba histolytica	Number positive for Ova			Total number of examinations
			Ascaris lumbricoides	Ankylostoma duodenale	Mixed infection	
Kedah	16,384	171	6,648	3,498	1,763	17,400
Perlis	2,897	7	1,380	130	200	3,292
Penang	13,786	32	4,785	3,494	1,171	17,323
Perak	49,426	353	8,380	2,759	1,408	72,138
Selangor	32,018	147	7,323	2,815	1,843	39,949
Negri Sembilan ..	11,257	77	3,110	1,055	669	13,168
Malacca	12,302	55	1,432	1,528	3,655	14,533
Johore	18,100	96	5,302	2,053	3,594	19,909
Kelantan	5,922	116	1,228	554	1,298	6,441
Trengganu	2,641	77	560	66	1,187	2,724
Pahang	16,975	38	2,095	267	352	22,258
Total ..	181,708	1,169	42,243	18,219	17,140	229,135

Table 11

POST MORTEM EXAMINATIONS, 1953

State or Settlement	Medico-legal	Clinical
Kedah	187	3
Perlis	13	—
Penang	261	12
Perak	641	60
Selangor	574	42
Negri Sembilan	255	10
Malacca	143	12
Johore	507	133
Kelantan	76	—
Trengganu	3	4
Pahang	281	1
Total ..	2,941	277

TABLE 12

RETURN OF VENEREAL DISEASES FOR THE YEAR 1953

A.—NEW CASES

Nationalities		Syphilis				Gonorrhoea	Chancroid	Lymphogran	Comb. infec.	Non-venrl.	Total	
		Prim.	Sec.	Tert.	Congen.						M.	F.
Chinese	M.	99	970	191	47	1,700	343	50	55	738	4,193	—
	F.	21	397	78	83	253	2	—	11	937	—	1,782
Indians	M.	128	517	140	23	944	393	52	67	603	2,867	—
	F.	14	326	53	32	88	5	—	3	433	—	954
Malays	M.	100	955	160	13	1,688	113	44	24	417	3,514	—
	F.	20	358	96	26	342	1	2	32	522	—	1,399
Europeans	M.	4	2	—	—	62	3	—	—	46	117	—
	F.	—	—	1	—	—	—	—	—	55	—	56
Others	M.	2	24	7	1	44	8	3	1	29	119	—
	F.	—	36	5	1	14	—	—	—	43	—	99
Total	M.	333	2,468	498	84	4,438	860	149	147	1,833	10,810	—
	F.	55	1,117	233	142	697	8	2	46	1,990	—	4,290
											GRAND TOTAL ..	15,100

TABLE 12—(*cont.*)

RETURN OF VENEREAL DISEASES FOR THE YEAR 1953—(*cont.*)

B.—RE-ATTENDANCES

Nationalities		Syphilis				Gonorrhoea	Chancroid	Lymphogran	Comb. infec.	Non-venrl.	Total	
		Prim.	Sec.	Tert.	Congen.						M.	F.
Chinese	M.	593	7,446	2,843	260	2,856	1,450	242	203	1,129	17,022	—
	F.	97	6,686	1,230	894	689	19	2	94	2,299	—	12,010
Indians	M.	700	4,338	1,865	194	1,828	1,599	104	485	1,105	12,218	—
	F.	83	4,107	827	349	161	10	—	21	917	—	6,475
Malays	M.	321	15,895	1,819	63	2,142	286	47	148	1,902	22,623	—
	F.	65	3,720	795	272	427	5	5	44	1,349	—	6,682
Europeans	M.	3	4	—	4	70	23	—	—	112	216	—
	F.	—	—	1	—	—	—	—	—	12	—	13
Others	M.	4	144	16	7	42	10	7	8	18	256	—
	F.	—	262	23	14	50	—	—	5	68	—	422
Total	M.	1,621	27,827	6,543	528	6,938	3,368	400	844	4,266	52,335	—
	F.	245	14,775	2,876	1,529	1,327	34	7	164	4,645	—	25,602
											GRAND TOTAL ..	77,937

TABLE 12—(*cont.*)

RETURN OF VENEREAL DISEASES FOR THE YEAR 1953—(*cont.*)

C.—ANALYSIS OF COMBINED INFECTIONS—NEW CASES ONLY

	CHINESE		INDIANS		MALAYS		EUROPEANS		OTHERS		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
With Syphilis	49	11	58	3	22	31	—	—	1	—	130	45
With Gonorrhoea	51	11	63	3	21	32	—	—	1	—	136	46
With Chancroid	10	—	12	—	4	1	—	—	—	—	26	1
With Lymphogranuloma ..	—	—	1	—	1	—	—	—	—	—	2	—

TABLE 13

SUMMARY OF CHILD WELFARE CENTRES, 1953

State/Settlement	Permanent Centres	Subsidiary Centres	Medical Officers		Health		Dispensers or Hospital Assistants	Midwives	Others
			Men	Women	Sisters	Nurses			
Kedah	5	54	—	—	4	11	—	45	—
Perlis	2	—	—	1	—	1	4 (P.T.)	4 (K.B.)	—
Penang	34	—	—	5	3	15	4	29	1 (D.N.)
Perak	9	—	—	1	7	19	1	49 (K.B.)	—
Selangor	9	37	—	—	4	28	3	28	—
Negri Sembilan	9	34	—	1 (P.T.)	6	6	4 (P.T.)	7	—
Malacca	12	—	—	1	1	7	1	10	—
Johore	5	58	3 (P.T.)	2	8	9	3	24	—
Kelantan	7	—	—	—	3	1	—	11	—
Trengganu	5	—	—	1 (P.T.)	2	—	2	4 (K.B.) 2	—
Pahang	7	189	—	—	4	7	—	1 34 (K.B.)	—
Total ..	104	372	3 (P.T.)	12 (2 P.T.)	42	104	22 (8 P.T.)	248 (91 K.B.)	1 (D.N.)

P.T.—Part Time. K.B.—Kampong Bidans. D.N.—Dental Nurse.

TABLE 14

SUMMARY OF DISPENSARIES, 1953

State/Settlement	Total number	Fixed	Travelling		Medical Officers	Health		Dispensers or Hospital Assistants	Midwives	Others
			Road	River		Sisters	Nurses			
Kedah	20	16	4	—	—	—	—	20	—	—
Perlis	7	6	1	—	—	—	—	7	—	—
Penang	17	14	3	—	3	—	3	8	—	1 (D.N.)
Perak	42	26	16	2	—	—	—	37	—	—
Selangor	45	36	9	—	5	—	—	25	—	—
Negri Sembilan	16	10	6	—	—	—	—	15	—	—
Malacca	15	10	5	—	2	1	7	1	10	—
Johore	34	21	13	3	9 (8 P.T.)	7	9	48 (9 P.T.)	—	—
Kelantan	12	6	3	3	—	—	—	9	—	—
Trengganu	13	8	5	2	2 (1 P.T.)	2	—	9	2	—
Pahang	26	16	10	5	2	—	—	14	—	—
Total ..	247	169	75	15	23 (9 P.T.)	10	19	193 (9 P.T.)	12	1 (D.N.)

P.T.—Part Time. D.N.—Dental Nurse.

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