Annual report of the Medical Department / Federation of Malaya.

FEDERATION OF MALAYA

REPORT

OF THE

MEDICAL DEPARTMENT

FOR THE YEAR

1956

By

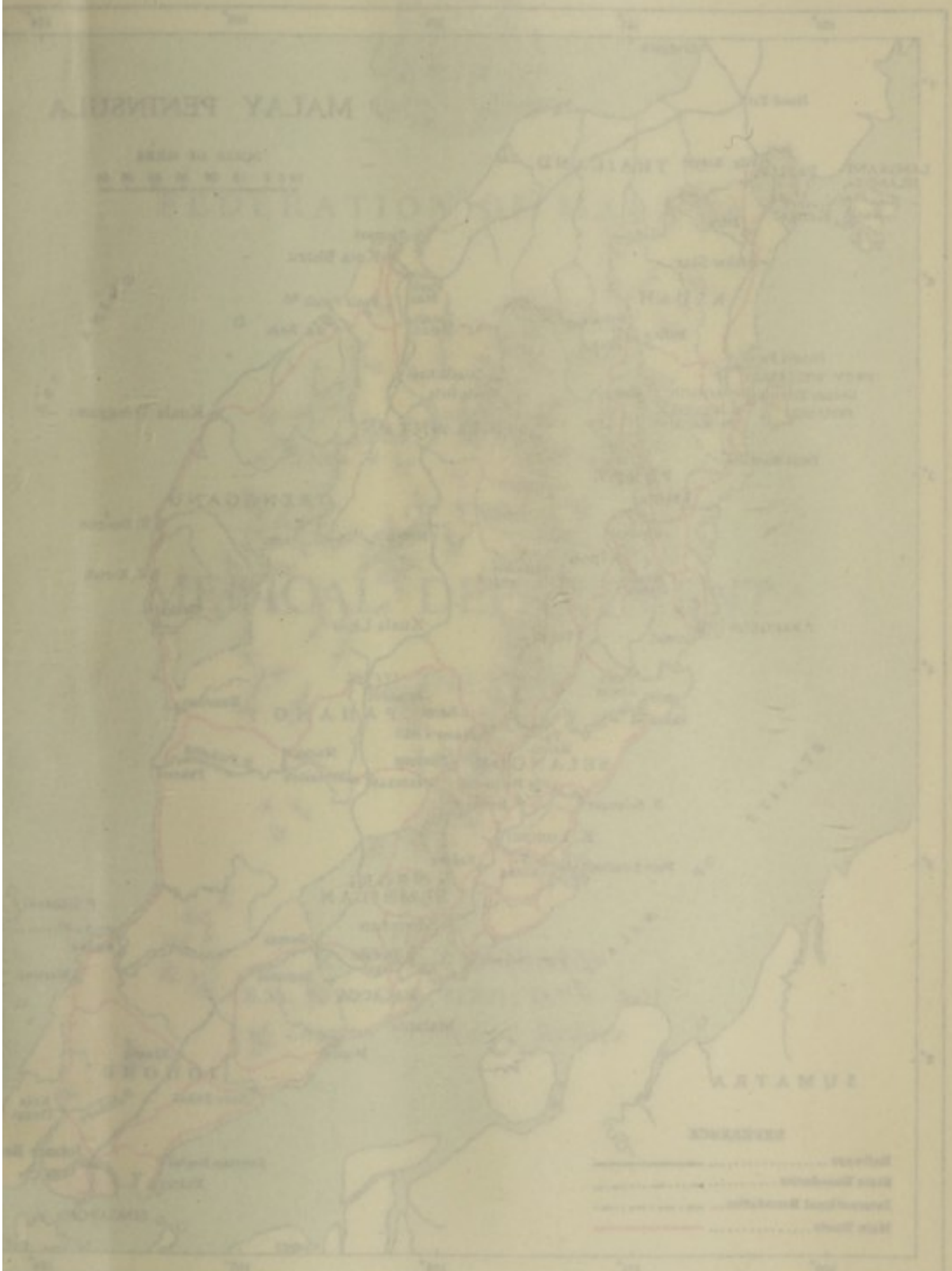
R. E. ANDERSON

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

Director of Medical Services

Price: $2.50

With the best compliments of
The Director of Medical Services,
Federation of Malaya,
Federal House,
KUALA LUMPUR



Survey Dept., Federation of Malaya No. 83 - 1953

FEDERATION OF MALAYA

REPORT

OF THE

MEDICAL DEPARTMENT

FOR THE YEAR

1956

By

R. E. ANDERSON

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

Director of Medical Services

KUALA LUMPUR

PRINTED AT THE GOVERNMENT PRESS BY B. T. FUDGE

ACTING GOVERNMENT PRINTER

1958

INTRODUCTION

To the Honourable Mr. V. T. Sambanthan,
Minister for Health,
Federation of Malaya.

SIR,

I have the honour to submit the Annual Report of the Medical Department, Federation of Malaya, for the year 1956.

It will be seen that in spite of acute staff shortages and deficiencies in accommodation, a reasonably satisfactory service has been maintained throughout the year, but increasing difficulties loom ahead in the form of inadequate trained medical staff at all levels, coupled with serious deficiencies in hospital accommodation and facilities to cope with the growing need for improved services and the extension of medical and health care into the rural areas of the Federation of Malaya.

I have the honour to be,
Sir,
Your obedient servant,
A. A. CAMERON,
Acting Director of Medical Services,
Federation of Malaya

CONTENTS

PART VI

PART VII

APPENDICES

STATISTICAL TABLES

FEDERATION OF MALAYA

REPORT OF THE MEDICAL DEPARTMENT FOR THE YEAR 1956

PART I

(1) CLIMATE, AREA AND POPULATION

1. CLIMATE.—The climate of Malaya is characterised by uniform temperature, high humidity and copious rainfall. The variation of temperature throughout the year is very small and the average temperature throughout the year ranges from 70° to 87°F. though at hill stations the temperature recorded is as far below as 36°F. The average rainfall is about 100 inches though there are great variations 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 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 developed area is the Western Coastal area, west of the high central chains of mountains rising over 7,000 feet. Here are the largest towns and the main tin-mining and rubber plantation areas. The area of the States and Settlements is shown below:

Kedah	3,648	sq. miles
Perlis	310	,,
Penang and P. Wellesley ...	400	,,
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 6,251,649 comprising Malaysians 3,048,899. Chinese 2,366,656, Indians and Pakistanis 740,436 and

others 95,658. The total shows an increase of 193,332 over the mid-year figure for 1955.

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

States/Settlements	Estimated Population mid-year 1954	Estimated Population mid-year 1955	Estimated Population mid-year 1956
Kedah	664,659	682,949	702,629
Perlis	82,976	85,213	87,533
Penang and Province Wellesley ...	527,770	542,299	558,691
Perak	1,152,342	1,185,969	1,224,320
Selangor	877,286	907,961	942,554
Negri Sembilan ...	333,875	345,665	358,862
Malacca	293,315	302,424	312,695
Johore	904,691	932,448	965,139
Kelantan	506,117	515,905	526,342
Trengganu	256,994	262,686	269,725
Pahang	288,553	294,798	303,159
Total Federation ...	5,888,578	6,058,317	6,251,649

(2) ADMINISTRATION

4. ORGANISATION.—During the year under review the Executive Council of the elected Government gave instructions that Ministries should be set up as far as possible, and in view of this the Ministry of Health began to function on the 1st of December, 1956. Previously the practice had been to follow the principle laid down under the Member Scheme. The result of this is that administrative work has now been handed over in respect of personnel, finance and policy to the Secretary of the Ministry, and the Director of Medical Services and his staff now have assumed the role of technical and professional advisers. While the Director of Medical Services still retains the position as head of the Medical Department, he has been relieved of much administrative work by this arrangement.

The Director of Medical Services, with his Deputy and 3 Assistant Directors (Hospitals, Health and Dental), hte Principal Matron and the Chief Pharmaceutical Chemist, is responsible to the Minister for Health and Social Welfare for advice on all matters of policy, and to the Chief Secretary, through the Federation Establishment Officer, for Staff and Personnel.

The Ministry has direct control of certain functions such as Research, Stores, Special Diseases (Mental Disease and Leprosy) Quarantine, Transfers, Promotions and Training of Staff and in addition is responsible for the functioning of the two large Federal Hospitals at Malacca and Penang.

The Director, Medical Services, is chairman of a number of statutory bodies, the Medical Council, the Dental Board, the Nursing Board, the Pharmacy Board, the Midwives Board and the Malaria Advisory Board, and is registrar of Medical Practitioners, Dentists, Pharmacists, Midwives and Nurses.

Each State and Settlement however is responsible for its own Medical and Health Services, but work is co-ordinated and planned with the assistance of the technical and professional staff of the Ministry in accordance with the policy of the Minister for Health and Social Welfare.

Urban Health is becoming increasingly associated with Local Government in the Federation. The Municipalities of George Town (Penang), Malacca and Kuala Lumpur, which are financially autonomous and a number of Town Boards, Town and Local Councils with increasing degrees of financial autonomy are mainly responsible for health in urban areas.

The Municipalities, being independent of the State/Settlement Government, have complete control over their finances, their staff and their programme of works, while Town Boards' staff are financed by the State/Settlement Governments. Health Officers in Municipalities and Town Boards have supervisory and advisory roles.

The work undertaken in both Municipalities and Town Boards include environmental sanitation, supervision of markets and street trading, rodent control and investigation of infectious diseases. Maternity and Child Health Work is a feature in the Municipalities.

Anti-malarial measures involve the latest methods of eradicating the various phases of the mosquito life cycle. Water is sampled and food inspections are carried out regularly.

The Town Councils and Local Councils are in the early stages of evolution. Their local committees are responsible for health and sanitary care and the results, so far observed, are variable.

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 re-grouped due to 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	22
Health Inspectors or Sanitary Inspectors ...	187
Public Health Sisters	28
Public Health Nurses	106

5. EXPENDITURE ON MEDICAL AND HEALTH SERVICES.—The estimated expenditure for the year 1956 under Medical and Health is as follows:

State/Settlement	P.E. O.C.A.R. & O.C.S.E.	Capital non-recurrent	Total	
			Amount	Per cent
	$	$	$	
Kedah	4,153,419	85,850	4,239,269	7.0
Perlis	541,198	11,350	552,548	0.9
Penang	2,323,923	—	2,303,923	3.8
Perak	7,588,090	745,904	8,333,994	13.7
Selangor	6,419,350	246,580	6,665,930	11.0
Negri Sembilan ...	3,822,870	—	3,822,870	6.3
Malacca	833,685	—	833,685	1.4
Johore	8,078,560	131,800	8,210,360	13.5
Kelantan	1,893,566	82,100	1,975,666	3.3
Trengganu	1,303,765	48,150	1,351,915	2.2
Pahang	3,842,204	37,600	3,879,804	6.4
Total ...	40,800,630	1,389,334	42,189,964	69.6
Federal ...	17,233,579	1,232,138	18,465,717	30.4
GRAND TOTAL ...	58,034,209	2,621,472	60,655,681	100.0

The total expenditure within the Federation for 1956 is estimated to be in the region of $60 million. Based on a population of 6,251,649 the expenditure per capita amounts to $9.70. This amount is slightly more than the amount approved for 1955 ($9.59).

The above amount does not take into account vast amounts expended by the Public Works Department, Town Boards and Municipal Health Departments on projects relating to anti-malarial drainage and water supplies which cover a wide area. In addition a large number of estates run their own hospitals, undertake anti-malarial schemes and maintain their own medical practitioner service.

6. STAFF.—In the forefront of the work carried out in 1956, the prospective Malayanisation of the service has taken an important place during the year. All expatriate officers in the service who were either on probation or on the permanent establishment were offered under Schedule X of the Federation of Malaya Agreement, the option to stay in the service for a limited period or to retire on or before 1st of July, 1957. The result of this is that out of 77 entitled officers 22 have decided to opt to retire and the remainder have opted to stay at present. These figures are subject to variation but the addition of a further 22 vacancies to an already depleted service will have an adverse effect on the future of the service unless urgent steps are taken to make good the deficiency. Among those who have opted to retire are the present Director of Medical Services and his Deputy and two senior expatriate administrative officers. The staff of the Institute for Medical Research have decided to stay at present, with one exception. This will mean that the majority of the administrative posts in the Establishment will in future

be held by local officers and specialists' posts will be filled by them wherever possible. The service has throughout the year experienced the greatest of difficulty in maintaining an adequate service on account of shortage of qualified personnel.

The Medical Department has an establishment for 393 Medical Officers but only 266 posts were filled in 1956, 209 being officers on the permanent establishment and 57 being on contract. Out of these, 169 were locally appointed. There were 127 vacancies and the position has been made worse by the fact that 36 officers were on leave on 31st December, 1956.

Recruitment of expatriate doctors and nursing sisters from overseas is at a standstill. During the year 25 medical officers were recruited and 30 house doctors were recruited as medical officers on completion of their 12 months statutory service.

Although the recruitment of local doctors has been given high priority, and has been given preference over the recruitment of others, doctors continue to enjoy lucrative private practice and are not unduly anxious to join Government services. Some who are already established in general practice have responded to an appeal to do part-time duty in the hospitals.

To overcome this shortage it was decided to recruit doctors and, possibly, nurses (qualified) from India and other adjoining countries, but at the end of the year the scheme had not yet been finalised.

In the meantime there are many hospitals without medical officers and there are many places which need hospitals, but these cannot be built as there are no doctors to run them. The need for doctors and hospitals is particularly acute in the remote areas of the Federation.

During the year Dr. R. E. Anderson, substantive Director, Medical Services, was on leave in the United Kingdom from 19th May to 6th July, 1956. Dr. M. L. Bynoe, the Deputy Director, Medical Services, acted as Director, Medical Services, during Dr. Anderson's leave.

Dr. M. L. Bynoe, the Deputy Director, Medical Services, was on leave in the United Kingdom from 4th August to 2nd October, 1956. Dr. A. A. Cameron, Assistant Director, Medical Services (Hospitals) officiated as Deputy Director.

Dr. W. H. Jeffrey, Assistant Director, Medical Services (Health) proceeded on leave to United Kingdom on 15th March, 1956, and retired on 15th September, 1956, due to ill health.

Dr. Mohamed Din bin Ahmad was transferred to the Medical Headquarters to act as Assistant Director, Medical Services (Health) on 15th February, 1956.

Dr. Lye Nyen Soon was transferred to the Medical Headquarters on 8th October, 1956, to act as Assistant Director, Medical Services (Hospitals).

Mr. A. H. Millard, Chief Pharmaceutical Chemist, proceeded on leave prior to retirement on 9th October, 1956, and Mr. C. R. P. Strachan has been acting as Chief Pharmaceutical Chemist.

Dr. J. W. Field, C.M.G., Director of the Institute for Medical Research, Kuala Lumpur, proceeded on leave prior to retirement on 16th March, 1956.

The Superintendent, Artificial Limb Centre, Kuala Lumpur, Mr. A. T. Mellowship proceeded on leave prior to retirement on 6th September, 1956.

7. HIGHER TRAINING.—The post-graduate training of doctors has been receiving great attention in recent years. 5 hospitals containing in all 20 specialist units have been recognised for experience leading up to full registration by the University of Malaya, but it has not as yet been possible to operate a full scheme for the employment of "registrars" in specialist units, the difficulty being that with acute shortage of medical staff, it has not been possible to provide reliefs for Malayan medical officers wishing to be attached to units as registrars, while their services were required in other non-training hospitals and in the rural areas. This has led to much dissatisfaction among the medical officers concerned, and it is hoped by the recruitment of doctors on contract from overseas in sufficient numbers that it will then be possible to post more Malayan medical officers as registrars to specialist units in order that they may proceed with post-graduate study overseas.

During the past year the following post-graduate diplomas were obtained by officers in the Federation Medical Services:

Dr. J. D. Llewellyn Jones	M.R.C.O.G., (Eng.) M.D., (Dublin)
Dr. B. V. Hassan	D.P.H., (London)
Dr. M. Zeville	D.P.H., (London) D.I.H., (London)
Dr. W. G. Thomson ...	F.R.C.S., (Edin.)
Dr. K. Slawinski	T.D.D., (Wales)
Dr. J. Dabrowski	T.D.D., (Cardiff)
Dr. K. K. Beri	D.P.H., (Malaya)

During the year scholarships were awarded to nine Malayan Medical Officers and one Dental Officer for the following Courses: D.P.H. (1), F.R.C.S. (2), M.R.C.P. (2), M.R.C.O.G. (1), D.M.R. (T). (1), D.P.M. (1), D.O. (1) and F.D.S., R.C.S. (1).

Two Medical Officers who were awarded Queen's Scholarships, one for M.R.C.O.G. and one for the M.R.C.P., and D.C.H. left for the United Kingdom. In addition six Medical Officers, one Dental Surgeon, four Hospital Assistants, four X'ray Assistants and three Staff Nurses left for the United Kingdom and six Medical Officers, two Male Nurses, and five Staff Nurses and Sisters returned from overseas after completion of their courses.

One Health Officer (locally appointed) who attended the D.P.H. Course in the University of Malaya was successful and another local Health Officer has been admitted into the University of Malaya for the same course.

During the year thirty-three girls left for training as nurses in Australia under the Colombo Plan. This makes a total of 48 girls now under training there of which eleven are due back early in 1957. It is hoped to extend this training so that ultimately a total of eighty student nurses per year will be trained in Australia.

8. LEGISLATION.—The following legislation affecting the Medical Department was passed during the year:

(*a*) The Medicines (Advertising and Sale) Ordinance, 1956.

(*b*) The Poisons (Amendment) Ordinance, 1956.

(*c*) The Mental Disorders (Amendment) Ordinance, 1956.

(*d*) The Nurses Registration Regulations, 1956.

(*e*) The Dangerous Drugs (Amendment) Regulations, 1956.

(*f*) The Dangerous Drug Order, 1956.

PART II

PUBLIC HEALTH—(1) VITAL STATISTICS

A review of vital statistics for the year indicates a gradual improvement in the health of the population in general. The birth rate remains high, 45.5 per 1,000 population and the death rate is lower than ever before. The infantile mortality has reached a low level of 74 per 1,000 live births.

9. POPULATION.—The estimated population of the Federation at mid-year 1956 was 6,251,649. Of this total 3,242,578 were males and 3,009,071 were females. This is equivalent to 928 females to 1,000 males.

Details by race since 1911 are as follows:

Year	Chinese	Malays	Indians and Pakistanis	Others	Total
1911 ...	—	—	—	—	2,339,051
1921 ...	855,863	1,568,588	439,172	43,068	2,906,691
1931 ...	1,284,888	1,863,872	570,987	68,011	3,787,758
1947 ...	1,884,534	2,427,834	530,638	65,080	4,908,086
1948 ...	1,928,965	2,457,014	536,646	64,802	4,987,427
1949 ...	1,952,682	2,511,520	550,684	66,962	5,081,848
1950 ...	2,011,072	2,579,914	564,454	71,109	5,226,549
1951 ...	2,043,971	2,631,154	586,371	75,726	5,337,222
1952 ...	2,092,218	2,716,899	617,257	80,073	5,506,447
1953 ...	2,152,906	2,803,863	665,503	83,680	5,705,952
1954 ...	2,216,105	2,893,650	691,431	87,392	5,888,578
1955 ...	2,286,883	2,967,233	713,810	90,391	6,058,317
1956 ...	2,366,656	3,048,899	740,436	95,658	6,251,649

10. BIRTHS.—There were 284,673 live births in 1956 compared with 260,766 in the previous year.

The birth rate for all races for 1956 was 45.5 per 1,000 population as at mid-year 1956 which is higher than the rate of 43.0 for 1955. It is interesting to note that there is an all round increase in the birth rate of all the races.

By races the birth rates were:

		1955 rates
Malaysians	49.3	45.1
Chinese	40.9	40.6
Indians and Pakistanis ...	46.0	43.9
Others	36.7	31.0
All races	45.5	43.0

11. DEATHS.—Deaths registered in 1956 were 70,445 which is 968 more than recorded for 1955 (69,477). The death rate for all races was 11.3 per 1,000 population as at mid-year 1956. This is slightly lower than the rate 11.5 for 1955. The death rates for 1947 to 1954 were 19.4, 16.2, 14.2, 15.8, 15.3, 13.6, 12.4 and 11.5 respectively.

The death rates by races were:

		1955 rates
Malaysians	14.2	14.0
Chinese	8.3	9.0
Indians and Pakistanis ...	9.4	9.5
Others	7.0	7.4
All races	11.3	11.5

There is a marked decline in the death rates of all other races except that of the Malaysians.

12. NATURAL INCREASE.—The births registered exceeded the deaths by 214,228 and therefore the natural increase amounted to about 3.4 per cent of the estimated population. The alarming increase in population is embarrassing because it is happening at a time when the coffers of the Government is being drained by the Emergency and it is doubtful whether the essential services would keep pace with the growth.

13. INFANT MORTALITY.—The deaths of infants under one year numbered 21,419 out of 70,445 deaths of all ages. There were 284,673 live births and the infant mortality rate was 74 per 1,000 live births. The corresponding figures for 1955 were 20,445 out of 69,447 with an infantile mortality rate of 78.

From the table shown below it will be noted that the infant mortality among Malay infants is still much higher than in other races. It is decreasing yearly but faster in the towns than in the rural areas because the child health services are better established in the urban areas.

The racial distribution of infant mortality is as follows (the corresponding figures for 1955 are shown in brackets):

Races	Infant deaths	Births	Infant mortality rate
Malaysians	14,289 (12,920)	... 150,225 (133,863)	... 95 (97)
Chinese	4,565 (4,962)	... 96,902 (92,784)	... 47 (53)
Indians and Pakistanis	2,463 (2,432)	... 34,035 (31,318)	... 72 (78)
Others	102 (131)	... 3,511 (2,801)	... 29 (47)

Although the infant mortality rate appears to be on the decline yet the number of infant deaths recorded shows an increase of 968 deaths over that of the previous year. These infant deaths are associated with overcrowding, ignorance, infection, lack of care during and after child birth, failure to feed and nourish correctly both infants and mothers, indifference to hygiene in the care of infants and the perpetuation of superstitious beliefs.

14. MATERNAL MORTALITY.—The number of maternal deaths registered was 1,128 for 284,673 live births as compared with 1,090 for 260,766 live births in 1955. This gave a maternal death rate of 4.0 per 1,000 births and the figure for 1955 was 4.2 per 1,000 births.

15. PRINCIPAL CAUSES OF DEATH.—There were 70,445 deaths recorded in the Federation of Malaya of which 13,614 only were certified by medical practitioners and 5,396 were inspected after death by medical men. Therefore figures shown under "Principal Causes of Death" are expected to be far from accurate.

Principal causes of death are given below:

Fever of unknown origin	22,307	(18,665)
Infantile convulsions	8,362	(8,765)
Pulmonary Tuberculosis	1,297	(1,526)
Pneumonias	1,838	(1,893)
Diarrhoea and enteritis	1,765	(2,157)
Diseases peculiar to infancy and immaturity	3,364	(3,269)
Violence	2,106	(2,483)

(Figures in brackets are for the year 1955)

Of these principal causes of death infants are affected in a high proportion. Gastro-enteritis, infantile convulsions, prematurity and possibly pneumonias are taking a heavy toll of infants. These infant deaths are also concealed under the many uncertified deaths said to be due to "pyrexia of unknown origin" or "other ill-defined diseases".

This gross waste of lives by diseases which are preventable will be continued unless means are forthcoming to bring about improvements in housing, slum clearance, food handling, maternal and child care and in educating the public in health and hygiene.

PUBLIC HEALTH—(2) SPECIAL DISEASES

16. 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.

17. MALARIA.—According to hospital statistics cases of malaria decreased appreciably during the year. The total number of cases admitted into Government and Estate Hospitals was 6,499 with 76 deaths as compared with 8,577 cases with 74 deaths in 1955.

Comparative figures are given below:

Year	Admission 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
1954 ...	9,695 ...	111 ...	1.1
1955 ...	8,577 ...	74 ...	0.86
1956 ...	6,499 ...	76 ...	1.17

Residual spraying of houses with D.D.T. or other insecticides has been extensively carried out around rural areas and especially in the new villages. Approximately 600,000 people are being protected from malaria residing in 110,000 houses.

In the urban areas the well known anti-larval measures such as sub-soil drainage, permanent surface drainage, ditching and brush spraying of breeding places are still being successfully employed.

Chemoprophylaxis of the members of the Police Force, whose frequent exposure to risk of malaria infection was great, was responsible for the low incidence of malaria among them.

At present malaria is only being controlled but not eradicated. About three quarters of the Federation's total population of six million persons live in rural areas, many of which are still highly malarious. The little that is being done in these rural areas is done piecemeal, and not in accordance with any co-ordinated plan. Outbreaks of malaria in kampong areas may go unnoticed for months, causing much preventable illness and many deaths.

Existing staff suffers from lack of training even in traditional methods of malaria control, and cannot be trained properly in the technique of spraying houses with residual insecticides. The extension of control to rural areas demands special training, a co-ordinated plan of campaign and a separate anti-malaria service.

A five man committee was appointed by the Government to consider the need for country-wide malaria control and to make recommendations thereon. The Committee has submitted its recommendations: the first essential step being the establishment of a malaria training centre, and the next step to carry out a

large scale trial of malaria eradication by selected staff. The trial would take several years before the results could be made known.

The number of malaria cases, positive as well as unspecified forms, treated in the Government Hospitals was 7,267. This shows a decrease of 1,844 cases when compared with the 1955 figure of 9,111. The distribution of types of malaria diagnosed microscopically was:

Subtertian	63.64	per cent
Benign tertian	33.73	,,
Mixed	2.31	,,
Quartan	0.32	,,

18. PLAGUE AND CHOLERA.—There were no cases of plague and cholera recorded in 1956.

19. SMALLPOX.—There was no case of smallpox in the Federation.

VACCINATION.—A new type of return of vaccination was introduced as from January, 1956. In the new return primary vaccinations were sub-divided into "infants" and "others" and re-vaccinations into "pre-school age children" and "others". The figures for the above items were as follows:

Primary Vaccinations—

	Number performed
Infants	158,049
Others	27,187
Total ...	185,236

Re-Vaccinations—

Pre-School Age Children	12,613
Others	70,116
Total ...	82,729

Compared with 1955 the total number of persons primarily vaccinated in the Federation was greater by 363 and the total number re-vaccinated lesser by 6,828.

When related to the 256,152 births during the 12 months ending 30th June, 1956, the 158,049 records of primary vaccinations done under the age of one year during 1956 represent an infant vaccination "acceptance rate" of 61.7 per cent for the whole Federation. It is well known that due to the emergency and other factors the "acceptance rates" for infant vaccination vary widely in different parts of the country.

20. TROPICAL TYPHUS.—The incidence of tropical typhus appears to be sporadic and the annual figures suggest that it is on the decrease.

During the year 351 cases were reported and out of these 266 were scrub typhus and 85 urban typhus.

The table below shows the summary of cases and deaths recorded in 1956:

State/Settlement	Number of cases	Number of deaths
Kedah	1 ...	—
Perlis	1 ...	—
Penang	5 ...	—
Perak	51 ...	1
Selangor	62 ...	—
Negri Sembilan	50 ...	2
Malacca	16 ...	—
Johore	24 ...	1
Kelantan	4 ...	—
Trengganu	14 ...	—
Pahang	44 ...	—
Military Headquarters ...	79 ...	—
Total ...	351 ...	4

21. ENTERIC FEVER.—This disease is endemic in Malaya. Its prevention lies not in protective inoculations but in the particular control of food and food hawkers and in the prevention of such habits as the use of nightsoil in vegetable growing.

The total number of enteric fever cases reported was 931 with 54 deaths as compared with 1,088 cases with 56 deaths in 1955.

During the middle of September a minor epidemic of typhoid fever occurred in Bukit Mertajam and lasted till November. In all 139 cases were reported with two deaths. Preventive measures were immediately instituted. More than 18,000 persons were inoculated with T.A.B. vaccine. In spite of every effort it was not possible to trace the source of the outbreak although it was not unreasonable to assume that it was spread by the many insanitary hawkers in the Town.

The table below shows the summary of cases and deaths recorded throughout the Federation:

State/Settlement	Number of cases	Number of deaths
Kedah	60 ...	6
Perlis	13 ...	1
Penang	133 ...	8
Perak	278 ...	12
Selangor	178 ...	11
Negri Sembilan	71 ...	11
Malacca	29 ...	—
Johore	76 ...	3
Kelantan	18 ...	1
Trengganu	35 ...	—
Pahang	36 ...	1
Military Headquarters ...	4 ...	—
Total ...	931 ...	54

22. DYSENTERY AND DIARRHOEA.—Dysentery and diarrhoea are not notifiable diseases. Hospital statistics show admissions as 8,673 with 1,052 deaths. Corresponding figures for 1955 were 8,183 with 1,080 deaths. The case mortality rate for 1956 was 12.1 per cent as against 13.2 per cent in 1955.

Out of 1,052 deaths recorded in the hospitals 803 (76 per cent) occurred especially in children under 2 years. These deaths are preventable as the occurrence of gastro-enteritis lie plainly in the hands of the public. The main causes contributing to the high mortality are bad feeding, lack of care of infants, ignorance and failure to recognise the simple rules of hygiene.

An outbreak of gastro-enteritis occurred in Kelantan during the third week of June, 1956. Sporadic cases were reported in Pasir Puteh, Bachok and Kota Bharu Districts and lasted till September. This has been an annual occurrence and as usual the disease responded to sulphaguanidine treatment. Insanitary conditions of the rural areas especially of the water supplies, difficulties of communication and shortage of staff, etc., are but a few of the facts that contribute to the spread of the infection.

23. DIPHTHERIA.—The incidence of diphtheria showed a slight decrease when compared with last year's figures. One thousand four hundred and seventy-two cases with 247 deaths were reported during the year as compared with 1,632 cases with 293 deaths in 1955. The mortality rate was 16.8 per cent as against 17.9 per cent during the previous year.

The high mortality emphasises the importance of immunisation against diphtheria. At present diphtheria immunisation is carried out mainly in the maternity and child health clinics, hospitals, static dispensaries and in schools, but has never been popular.

There are still far too many admissions to hospitals of diphtheria cases with a fairly high percentage of deaths. To remedy this state of affairs the anti-diphtheria campaign has been intensified in the State/Settlements, as far as possible with the existing staff in order to protect as many pre-school and school children as possible.

During the year 141,188 immunisations were recorded in the States/Settlements. The present state of affairs allows only for voluntary inoculation. It might be felt that in this country there is a case for compulsory inoculation as for smallpox vaccination.

During the year there was a minor outbreak in Bukit Mertajam. Cases started to occur in August and dragged on till November, 1956. Ninety-nine cases were reported during the epidemic and these chiefly occurred within the town proper where the density of the population is greatest. All reported cases were investigated and the usual preventive measures were adopted. Nearly 10,000 children under 12 years were inoculated. The town of Bukit Mertajam was thus unfortunate in having two epidemics (typhoid and diphtheria) almost at the same time.

The table below shows the summary of cases and deaths recorded throughout the Federation during 1956:

State/Settlement	Number of cases	Number of deaths
Kedah	109	19
Perlis	26	5
Penang	250	20
Perak	278	58
Selangor	323	55
Negri Sembilan	89	25
Malacca	99	21
Johore	211	29
Kelantan	5	1
Trengganu	23	3
Pahang	47	21
Military Headquarters ...	12	—
Total ...	1,472	257

24. CEREBRO-SPINAL MENINGITIS.—The incidence of meningococcal meningitis was again insignificant during the year.

25. POLIOMYELITIS.—During the year the incidence of poliomyelitis showed a slight increase. Forty-five cases were reported with 7 deaths. The corresponding figures for 1955 were 37 cases with 4 deaths.

In the year's statistics paralytic cases represented 91.1 per cent of total cases which ratio compares with 91.9 per cent in 1955. As to age distribution of cases 66.0 per cent were in the age group of 0 to 4 years; 13.6 per cent in the age group of 5-12 years; whilst 20.4 per cent were over 13 years.

During the year the incidence was highest in Selangor as usual, however, there were no outbreaks of any size in any particular area.

The following table shows the total number of cases and deaths of poliomyelitis in 1956:

State/Settlement	Number of cases	Number of deaths
Kedah	1	1
Perlis	—	—
Penang	7	—
Perak	8	2
Selangor	12	2
Negri Sembilan	3	—
Malacca	5	1
Johore	5	1
Kelantan	—	—
Trengganu	1	—
Pahang	—	—
Military Headquarters ...	3	—
Total ...	45	7

26. YAWS.—The yaws campaign which started in April, 1954, is still being continued in Kelantan and Trengganu. Survey as well as re-survey work is being carried out in both the States. During the year two teams have been continuously working and the greater portion of the areas have been covered. The following is a summary of work done up to the end of December, 1956:

	Survey	Re-survey	Total
Total estimated population covered	339,653	195,113	534,766
Total population examined ...	297,133	181,233	478,366
Total number of yaws cases diagnosed	50,701	11,414	62,115
Total number of cases treated ...	49,280	11,207	60,487
Number of contacts treated ...	5,739	1,415	7,154

During survey 297,133 cases were examined of which 50,701 (17.1 per cent) cases were diagnosed as yaws and out of these 49,280 (97.2 per cent) were treated; whilst on re-survey 181,233 cases were examined of which 11,414 (6.3 per cent) were diagnosed as active yaws and out of these 11,207 (98.2 per cent) were re-treated.

27. PULMONARY TUBERCULOSIS.—Tuberculosis is still an important medico-social disease in the Federation.

The total number of beds available for the treatment of tuberculosis is about 3,000 and most of these are in acute General hospitals. 7,155 cases were admitted to Government hospitals for pulmonary tuberculosis with 842 deaths as compared with 6,578 cases with 862 deaths in 1955.

The number of deaths from pulmonary tuberculosis registered with the Registrar-General, Births and Deaths, was 1,297 as compared with 1,526 during the previous year. This represents a death rate of 20.7 per 100,000 population. These figures may be subject to criticism as the majority of deaths are not certified by medical practitioners. It is, however, probable that deaths from other causes may have been wrongly registered as due to pulmonary tuberculosis.

During the year there have been no great changes in the social factors responsible for the spread of tuberculosis. However, an appreciation of the dangers of tuberculosis is gradually taking place and with the urge for education a new generation is growing up which is becoming more health minded.

A realistic programme of slum clearance and cheap housing to support segregation in proper tuberculosis homes and intensification of health education is needed to help in solving this problem.

The Malayan Association for the Prevention of Tuberculosis (M.A.P.T.B.) has given a great deal of assistance to schemes designed to prevent the spread of tuberculosis. Its funds, derived mainly from the Lotteries Board and from public subscriptions,

have been used to provide assistance to the dependants of cases to enable such cases to enter hospital. The importance of looking after the dependants while the bread-winner is in hospital or as an out-patient unfit for work cannot be overstressed.

Until such time as equipment, technicians and radiologists are available for mass radiography and medical staff are available to treat the cases discovered, there is no hope of forming a policy to combat this disease or to control the scourge. The private medical practitioners too are unable to diagnose pulmonary tuberculosis satisfactorily without trained personnel and equipment, as very few of them can afford to invest in such an expensive project.

A thoracic surgeon from the United Kingdom was appointed to the Lady Templer Tuberculosis Hospital during the year. Chest surgery which has been undertaken since June, 1956, forms a major part of the treatment of tuberculosis and has proved to be most successful for certain types of cases. The success of the operations depends mainly on proper team work and this hospital was fortunate to have nursing personnel who have had specialised training in Australia for many years in the field. An anaesthetist has been loaned from the Army and on occasions from the Government Medical Service, but the appointment of a qualified anaesthetist to the hospital staff is shortly to be made.

Facilities are available, and are made use of, for the admission of those Government servants suffering from tuberculosis who it is considered will benefit specifically from the treatment available at the Lady Templer Hospital and which is not available in Government Institutions.

The tuberculosis wards in the General Hospital and the modern out-patient clinic at Malacca with its own X'ray Department and laboratory continue to play an important part in the treatment of tuberculosis. However, the good work that had been carried out previously has been hampered without the services of a Tuberculosis Specialist and a Radiologist.

During the year there was no evidence of any new drug on the market for the treatment of pulmonary tuberculosis. Injections with Streptomycin in combination with INAH and PAS have continued to give good results.

28. B.C.G. Campaign.—The B.C.G. Campaign is still being carried out in the Federation. Selected groups of the population, namely school children, newborn babies and certain members of the public institutions, are tuberculin tested and vaccinated. In 1956, 108,632 persons were tuberculin tested and of these 37,131 received B.C.G. Vaccination. In addition 14,427 newborn babies were also vaccinated.

29. Venereal Diseases.—Once again there has been a substantial fall in the incidence of venereal diseases in the Federation. This will be seen from the following comparative

figures for new cases attending at Government hospitals and Special Clinics:

New Cases	1955	1956
Syphilis	3,120 ...	2,340
Gonorrhoea	4,711 ...	4,531
Non-Specific Urethritis ...	1,005 ...	978
Other V.D.	805 ...	999
Total ...	9,681 ...	8,848

Since 1955 an extra item of non-specific urethritis, has been included in the returns and the severity of the infection can only be assessed in course of time.

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

PUBLIC HEALTH—(3) NUTRITION

30. The study of the nutritional anaemias, so prevalent in Malaya has continued at the Institute for Medical Research. The present state of nutrition can perhaps be summarised in the statement that while frank deficiency disease is not common, there is a vast amount of ill health due to malnutrition in many sections of the population. The varied diet is usually a good diet but variety is difficult to achieve, although poverty is often the reason for excessive dependence on some staple food which can supply requirements yet is deficient in essential nutrients, other factors, of special importance in a country like Malaya, are the numerous racial customs and habits concerning food, and lack of knowledge of dietetics.

One of the notable events in the history of Medicine in Malaya was the holding of a Nutritional Conference in Kuala Lumpur for Selangor Government servants. This is the first occasion where a conscious effort has been made to evoke an interest among the staff of Government Departments in general. The Nutrition Conference has been a conspicuous success, and the interest evolved in nutrition by the attendance of some thirty officers of the Selangor Government will eventually have a much wider effect. This is because those attended, in one way or another were in a position to pass on their knowledge to others. It is hoped that in their work they will utilise the methods learned and the matters discussed to awaken interest in the ways and means of preventing disease in the people of this country.

Dr. R. F. A. Dean, World Health Organisation Consultant on Protein Malnutrition visited the Federation in October, 1956, to carry out a survey on the incidence of protein malnutrition in this country particularly amongst pre-school age children. He did a preliminary survey on the East Coast, Negri Sembilan, Perak, Kedah and Selangor and the results of his report are anxiously awaited.

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

31. HEALTH ON ESTATES.—The general health of estate labourers in general has been quite satisfactory. There has been no outbreak of infectious diseases during the year and statistics show a very low death rate amongst estate population.

Liaison with the Labour Department is good and estates are inspected periodically by the Health Officers and Health Inspectors. Living conditions of labourers on estates are steadily being improved.

There is a tendency in Malaya at present to dispose of large rubber estates and these in turn have been fragmented into small holdings. One of the undesirable results has been that the medical and health services formerly maintained by the Estate management have now ceased to exist. The result is that an established Estate population which has been for very many years under medical care has now been left on its own. The Government Health Department has to maintain the anti-malarial work as well as to supply medical treatment to the fragmented estate population.

The fact remains however that, until the Rural Health Scheme is fully implemented Government is unable fully to replace the services formerly provided by the Estate management.

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

		All Diseases		Malaria	
	Population	Deaths	Death rate per mille	Deaths	Death rate per mille
Labourers and Dependants:					
All Nationalities ...	471,589	2,750	5.8	17	0.04
Labourers only:					
All Nationalities ...	275,583	722	2.6	7	0.03
Labourers and Dependants:					
Indians	276,928	2,031	7.3	13	0.05
Labourers only:					
Indians	148,567	506	3.4	6	0.04

32. 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

F.M.	Total number of Estate labourers	Deaths	Death rate per mille
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
1954 ...	266,444 ...	756 ...	2.84
1955 ...	262,307 ...	660 ...	2.52
1956 ...	275,583 ...	722 ...	2.6

33. ESTATE HOSPITALS.—The estate hospital position is not entirely satisfactory. Although estate hospitals continue to be maintained by the Estate Management these are inadequately staffed. Very few estates engage midwives although a number of cases are confined in the estate hospitals and estate lines.

Further due to a change in the policy of the Government recruitment of estate dressers has been indirectly affected. During the year there were several meetings between the Director of Medical Services and the rubber industry on the subject of the training of Estate Dressers. The industry were concerned over the cessation of the training of hospital assistants, and the introduction of training as Male Nurses. The emphasis on the latter form of training is on nursing, and the industry maintains that this training does not meet the needs of estates and of estate dressers, who in the absence of the Estate Visiting Medical Officer, diagnose and treat cases.

As a result of these discussions it was agreed to form a Board, the main function of which would be to lay down a syllabus and a scheme of training of estate dressers and to conduct examinations. The certificates issued by this board would confer eligibility upon the holder for employment as an estate dresser, but would not confer eligibility for employment in Government Service.

The first examination under the aegis of this Board took place in September, 1956. Thirty-six candidates sat for the examination, of whom ten were successful. The results show that the training of estate dressers is very unsatisfactory at present.

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

State/Settlements	Number of Estate Hospitals	Number of Beds	All Diseases		Malaria	
			Adms.	Deaths	Adms.	Deaths
Kedah	13 ...	1,205 ...	21,220	243 ...	824	6
Perlis	— ...	— ...	—	— ...	—	—
Penang	3 ...	193 ...	1,419	18 ...	1	—
Perak	28 ...	1,318 ...	20,040	349 ...	474	—
Selangor	27 ...	1,221 ...	21,173	314 ...	572	2
Negri Sembilan ...	16 ...	682 ...	8,375	117 ...	113	3
Malacca	6 ...	111 ...	2,142	77 ...	44	—
Johore	13 ...	373 ...	5,620	66 ...	157	1
Kelantan	5 ...	94 ...	1,777	30 ...	80	—
Trengganu ...	1 ...	50 ...	1,400	6 ...	65	—
Pahang*	4 ...	170 ...	1,944	58 ...	54	—
Total ...	116 ...	5,417 ...	85,110	1,278 ...	2,384	12

* Includes one Mine's Hospital.

34. 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 and their state of health was considered to be satisfactory.

The Pahang Consolidated Mines and the Bukit Besi Mines in Trengganu have their own hospitals fully equipped with adequate medical facilities.

A pilot scheme is in operation at the former Japanese iron mine at Temangan. When the mine opens measures will have to be taken to deal with the considerable amount of malaria in the area.

35. RAILWAY SANITATION.—The Railway Health Department is in the charge of a Health Officer, seconded from the Government Medical Service. It provides out-patient medical facilities for Railway staff and their dependents 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 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 and prophylactic treatment of staff and their dependents, particularly permanent way staff in outlying and isolated areas. The efficacy of these measures was controlled by frequent larval surveys held in conjunction with Anti-Malarial Departments of Town Councils and Municipalities.

Local Town Councils and Municipalities provide anti-malarial oiling in nine localities.

The number of attendances for treatment of fresh and relapse cases of malaria among Railway Staff in 1956 decreased by 36 per cent compared with the previous year.

Primary malaria infections among the staff treated at State/ Settlement Medical Department Institutions amounted to 17 cases; three cases were treated at Railway Dispensaries compared with one case in 1955. The origin of each fresh infection was investigated by the Department and steps were taken to eliminate the source of infection.

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 half-yearly. In addition to this, Local Health Committee under the Chairmanship of the District Traffic Inspector visited all the main stations and thickly populated railway centres at shorter intervals.

The Health Officer made frequent independent inspections of the Railway accommodation during the year. It has been possible to effect a slight improvement in the standard of hygiene and sanitation in some housing areas and gang lines during the year but much remains to be done.

Improved patterns of Railway quarters have been designed and are now being put into production.

Liaison was effective between the Chief Civil Engineer and the Health Officer in all matters appertaining to the planning, construction of new accommodation and improvements to existing accommodation throughout the Railway.

Dispensaries, some working on a wholetime 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 and Kuala Lipis.

During the year the dispensary buildings at Alor Star, Gemas and Krai were enlarged and improved.

New premises to replace the existing wooden building of the Kuala Lumpur Dispensary and the building of a Medical Store at Travers Road for issue of medical supplies to Railway Dispensaries were under construction at the end of the year.

At Tapah Road work was in progress for the extension and renovation of a building which will function as a Railway Dispensary.

It is anticipated that work on these buildings will be completed in early 1957 when the Dispensaries will be brought into use.

The percentage of cases sent to hospitals from Railway Dispensaries in 1956 showed an increase of 3.73 per cent compared with 1955. The number of attendances at the dispensaries in 1956 showed an increase of 2.14 per cent over the figures in 1955.

At Sentul Works Dispensary 517 cases of injury due to workshop accidents were treated compared with 505 in 1955.

There were no cases of major infectious diseases during the year.

A total of 35 passengers crossing the Thai frontier at Padang Besar was vaccinated.

First Aid Equipment on passenger trains, stations and workshops were inspected periodically and replenished as necessary.

It was possible to post a Medical Officer at Sentul Works Dispensary for about two months on the return of Dr. A. J. Leslie-Spinks the Health Officer from overseas leave. During this short period it was manifestly evident that the employment of a full-time doctor at this unit is required. One of the results was that during the period referred to there was an appreciable decrease in the percentage of man-days lost owing to absenteeism of workshop employees on grounds of sickness.

PORT HEALTH WORK

36. Port Health work and quarantine are Federal functions. These are particularly important because of the number of immigrant ships which arrive from the neighbouring infected and suspected ports.

As a routine all ships from ports gazetted and infected were boarded at the Quarantine Anchorage and all passengers and crews examined and certificates of vaccination and inoculation scrutinised for the validity. Since 1st January, 1956, all passengers holding valid vaccination and inoculation certificates were permitted to land. This meant that the only persons quarantined were those from China ports whose certificates are not recognised. The system recognising International Certificates has worked well and there is no reason to believe that it will not continue to do so.

During the year a total of 304 ships were examined of which 186 from India, 68 from China, 46 from other infected ports and four were Pilgrim ships. These ships carried 71,831 Saloon and Deck passengers.

37. INFECTIOUS DISEASES ON SHIPS.—No case of dangerous infectious disease arrived into the Federation of Malaya. Four cases of chicken pox, 2 cases of measles and one of mumps were found on routine inspection.

38. PILGRIM SHIPS.—Four pilgrim ships carrying a total of 1,769 pilgrims left Penang. The pilgrims were inspected before embarkation; all were in possession of certificates of vaccination against smallpox and cholera, and the general state of health was good.

Conditions on board the two ships (Angking and Anshun) were satisfactory, the space allotted to each passenger had been increased and new accommodation for luggage was available.

Four pilgrim ships carrying a total of 1,751 pilgrims returned from Jeddah. A total of fourteen deaths, one still birth and one birth occurred on these ships during the voyages.

39. 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 ...	304	13,910	57,921	27,560	71,831	6	3,207	33,504
Port Swettenham	112	3,942	14,920	8,964	18,862	—	—	18,766
Total ...	416	17,852	72,841	36,524	90,693	6	3,207	52,270

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

40. VACCINATIONS AND INOCULATIONS.—During the year 14,046 vaccinations and 11,156 inoculations were performed, 63 were primary vaccinations and 10,780 were re-vaccinations for purposes of International Certificates and admission to schools.

41. INSPECTION TO SHIPS.—Seventy-seven ships were inspected during the year for rats for the purposes of issuing Deratisation Exemption Certificates.

42. CARBON DIOXIDE POISONING FROM ONIONS.—It is of interest to report that two fatalities occurred in the hold of S.S. Rajula on 5th March, 1956. This was found to be due to a dangerous accumulation of carbon dioxide gas given off by the respiration of the onions. Experiments were carried out by the Senior Chemist, Penang, on the respiration of onions and tests carried out on the air in the holds of ships carrying onions to ascertain that there was no dangerous accumulation of carbon dioxide. No record could be found of any previous incident such as this but it is clear that holds should be adequately ventilated when carrying the cargo.

43. INSPECTION OF AIRCRAFT.—A total of 321 aircraft were inspected in Penang and Province Wellesley during the year. Altogether a total of 1,341 crew and 2,625 passengers were examined, but no case of dangerous infectious disease was detected among them.

The Penang Airport at Bayan Lepas was closed from the 1st October, 1956, for repairs and aircraft on international flights were permitted to land at the R.A.F. Airport at Permatang Kuching, Butterworth. The runway of the Penang Airport is being strengthened and lengthened to take heavier aircraft on international flights. A mosquito-proof direct transit area block is being built also. When the runway and the new direct transit block are completed the Penang Airport could then be designated as an International Sanitary Airport.

44. INTERNATIONAL AIRPORT, KUALA LUMPUR.—The Airport at Kuala Lumpur was designated as an International Airport and was officially opened for International Traffic on August, 1956.

The increased volume of air traffic necessitates comprehensive measures to protect Kuala Lumpur Airport from the risk of introduction of disease from distant countries. It is especially necessary to take measures against the risk of yellow fever from endemic areas elsewhere.

The Malayan species of aedes mosquitoes has been found to be capable of carrying this serious disease. Should an infected person or an infected mosquito break through the "Sanitary Cordon" around the ports or airports of Malaya a vicious epidemic might well ensue.

PUBLIC HEALTH—(5) RURAL HEALTH SERVICES

45. The emphasis on the expansion and development of Rural Health Services continues. The State/Settlement Medical Departments provide medical facilities through static dispensaries, maternity and child health clinics and by travelling dispensaries.

Voluntary teams comprising of the British Red Cross, St. John Ambulance Brigade and the Missionary bodies also to a great extent render health services especially in the rural areas.

Health Services in the rural areas continued to improve and expand and a very high priority is given to the Rural Health Scheme which will affect beneficially the lives and welfare of much more than half the population of the country.

As the training schools for nurses, health nurses, dental nurses, assistant nurses, midwives, health inspectors, anti-malarial staff and for sanitary overseers are set up, increasing emphasis in the training will be put on health education, and the methods of approach to the people. The rural health services will be largely personal services, and it is hoped that the rural health staff will be able to teach a person how to avoid disease, rather than treat him when he gets the disease. The service will pay great attention to home visits, particularly that of the mid-wife who will enter the home because of the impending birth of a child in that home. Her training will be such that whenever she visits a home she will assess the health position of the family and help to correct where things are wrong. These health educators of the future will have to teach the value of positive health to the people and undo the harm done by superstition and racial custom.

The scheme is already under way and the programme which was originally phased over 25 years has been accelerated so as to complete the scheme within 15 years.

To achieve this aim a pilot scheme to build 8 Rural District Health Centres in 8 different States was launched with financial assistance from the Colonial Development and Welfare Funds. During the period under review the following District Health Centres were completed and opened:

Rembau in Negri Sembilan on 18th August, 1956;
Parit in Perak on 4th September, 1956;
Renggit in Johore on 18th September, 1956.

Kuala Kubu Bharu in Selangor has been completed and will be opened soon. The remaining four will be completed in 1957.

Standard type plans for the erection of sub-centres and quarters for the staff as well as other essential details for the sub-centres are being drawn up.

Since the inception of the Rural Health Centre scheme several adjustments have been found to be necessary. There is no basic change in the plan of the scheme which still envisages a midwife for every 2,000 persons, a sub-centre for every 10,000 persons and district centre for 50,000 persons. There is however, some doubt as to the extent of its application. The scheme was meant to be applied to the rural areas, and this virtually meant the areas where there was no health service. But when a rural area comes under the jurisdiction of a local authority what part of the rural health service does the local authority take over, if any. On this decision will depend the layout of the future rural health service, and it will therefore be necessary to decide what the functions of the various local authorities are in relation to health.

There is also another important problem which will have to be considered; i.e., the expansion of the rural health scheme depends on the availability of supervisory staff whose head is the medical and health officer. Unless and until the present shortage of doctors is remedied the rural health scheme cannot be developed as planned. This also applies to Health Sisters and Health Nurses.

The Rural Health Training School at Jitra was completed and officially opened on 15th February, 1956, by His Highness the Sultan of Kedah. Two courses were held during the year and forty-eight students attended the courses. The teams comprised of midwives, assistant nurses, sanitary overseers, dispensers and male nurses and the personnel trained at this Training School will ultimately man the rural health centres.

Part III

MATERNITY AND CHILD WELFARE

46. Maternity and child health services have expanded in some areas but they are still non-existent in large parts of the States/Settlements. There are about 72 main maternity and child health centres and 518 sub-centres functioning throughout the Federation. Normally these centres are under the charge of Public Health Sisters with a staff of Public Health Nurses and midwives. The working of these centres comes under the supervision of the Public Health Matron who is under the control of the Health Officer.

The attendances at all maternal and child health centres have increased rapidly. Through the medium of clinics and home visiting the kampong people are becoming more "Health" conscious, but by no means all the advice given by the Health Nurse is followed, especially when it conflicts with local custom. The establishment of domiciliary midwifery service is well under way and should render valuable service.

Expansion of maternity and child health work into rural areas and new villages is still limited owing to shortage of trained staff and housing. However, this has been offset by the voluntary teams comprising the Red Cross Society, St. John Ambulance Brigade and the Missionary Bodies rendering treatment to more than 800,000 people during the year.

The total number of deliveries carried out in the Government hospitals in 1956 was 53,866 and the total number of deaths was 394.

The attendances of mothers and children at the welfare centres amounted to 1,433,538 and 529,156 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

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

There are 71 Government Hospitals in the Federation with 12,669 beds. The special institutions are provided with 7,600 beds. On the whole the Federation Government maintains about 20,000 beds of which nearly 3,200 are specifically for the treatment of tuberculosis cases.

48. A summary of the distribution of Government Hospitals and beds is given below:

State/Settlement	Number and Category of Beds					Total
	General	Obstetrics	Tuberculosis	Infectious	Mental	
Kedah	735	76	206	16	18	1,051
Perlis	58	11	42	4	5	120
Penang	808	203	897	125	31	2,064
Perak	1,508	248	474	54	34	2,318
Selangor	1,127	170	246	44	24	1,611
Negri Sembilan ...	707	134	326	32	18	1,217
Malacca	441	54	271	6	10	782
Johore	1,186	282	378	26	37	1,909
Kelantan	298	35	120	—	35	488
Trengganu	211	19	78	3	6	317
Pahang	543	72	141	26	10	792
Total ...	7,622	1,304	3,179	336	228	12,669

Total excluding Special Institutions		12,669
SPECIAL INSTITUTIONS—		
Leper Settlement, Sungei Buloh, Selangor ...	2,532	
,, Pulau Jerejak, Penang ...	470	
,, Johore Bahru, Johore ...	350	
Leper Camp, Kota Bharu, Kelantan ...	45	
Leper Hospital, Kuala Trengganu, Trengganu	22	
		3,419
Mental Hospital, Tanjong Rambutan, Perak	3,000	
,, Tampoi, Johore	1,200	
		4,200
Total—All Beds ...		20,288

No new hospitals were built during the year. A scheme for the improvement and reconditioning of the existing hospitals (Taiping, Ipoh, Kuala Lumpur, Penang and Malacca) has been drawn up. It has also been proposed to build new hospitals at Petaling Jaya, Seremban and Kuantan and these proposals have all been included in the Development Plan 1955-1960.

Adequate medical staffing of hospitals is an acute problem at present. There are many hospitals without doctors and there are many places which need hospitals. It is not practicable to lay down any hard and fast rules about the number of doctors needed to run the hospitals. On an average there is only one

doctor to 9,200 persons in the Federation and even this gives a false picture of the actual needs. Most of the private practitioners are concentrated in the towns and Government doctors are reluctant to go to the less developed areas where they are needed most, as by so doing they fear they may lose any opportunity for specialisation and post graduate study.

For example Penang has a ratio of one doctor to 4,900 persons and Selangor one to 6,200. On the other hand Kelantan has one doctor to 38,000 persons and Trengganu one to 27,000. Unless there are doctors prepared to go to the rural areas, these States will have to continue with inadequate medical facilities, and yet these are the areas where there should be a faster rate of expansion of medical services.

During the year 266,332 patients were treated. The daily average number of in-patients treated was 10,632. The figures for the previous year were 243,176 admissions and a daily average of 10,536 in-patients. These figures, however, do not include any patients treated in the special institutions.

The rate of admission has been on the same high scale as in previous years and therefore a rapid turn-over of patients has to be maintained.

In spite of the introduction of Domiciliary Midwifery Schemes, the maternity wards in hospitals are congested, and accommodation is inadequate; hence it is necessary to discharge patients within a couple of days after delivery. Although this state of affairs is open to criticism, yet there is no other way of solving the problem, but reluctantly to adopt this measure, in the face of staff shortages.

The care of the chronic sick poses a big problem. The adequate care and after care of this group of patients are bound up with socioeconomic problems. Unless some arrangements are made to look after the welfare of the aged and chronic sick, the present practice of having to keep them too long in the wards will in future interfere with the admission rate of new cases.

A tabular statement of hospitals with daily average, admissions and deaths is given in the Appendix (Table 1A).

NOTES ON CONDITIONS TREATED IN GOVERNMENT HOSPITALS

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

Diseases	Admissions	Deaths	Mortality per cent
Pulmonary Tuberculosis ...	7,155	852	11.77
Dysentery	1,678	66	3.93
Malaria*	7,267	88	1.21
Anaemia (all forms)	3,210	157	4.89
Pneumonias	4,396	992	22.57
Bronchitis	7,720	73	0.95
Diarrhoea and enteritis ...	6,995	986	14.1
Premature Birth	2,307	983	42.61
Pyrexia of unknown origin	6,298	125	1.98

* Includes other and unspecified forms of Malaria.

50. RACIAL DISTRIBUTION OF HOSPITAL ADMISSIONS AND OF COMMON DISEASES:

Races	Malaysians		Chinese		Indians and Pakistanis		Others	
Population ...	3,048,899		2,366,656		740,436		95,658	
Total Admission to Hospital ...	55,427		117,744		80,277		6,390	
Diseases	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
Malaria* ...	3,069	23	1,796	40	2,306	23	96	2
Dysentery and Enteritis ...	1,931	145	3,479	582	3,052	301	211	24
Pulmonary Tuberculosis ...	1,892	115	3,905	545	1,255	164	103	18
Beri-beri ...	233	7	144	13	121	6	7	—
Appendicitis ...	375	3	1,305	17	561	4	103	—

51. OUT-PATIENTS.—All the hospitals have out-patient clinics. These are supplemented by static dispensaries situated in many of the towns. The out-patient departments in almost all the hospitals are besieged by crowds of patients. The same state of affairs exists in the static dispensaries also. Motor dispensaries carry supplies to the rural population and a certain amount of river travelling is also carried out in Perak, Johore, Kelantan, Trengganu and Pahang. Hospital Assistants in charge of static dispensaries travel by bicycle throughout the rural areas which the travelling motor dispensaries cannot reach.

A new out-patient department was built at the General Hospital, Kuala Lumpur, which owing to shortage of staff has not yet been possible to open.

In Seremban a new out-patient clinic is also under construction and this should be ready for occupation in 1957.

The total number of new cases treated at all dispensaries during the year was 3,293,759. Out of these 871,407 cases were travelling dispensaries. This figure does not include attendances at the maternity and child health clinics and venereal disease clinics.

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

52. SURGICAL WORK.—Major surgery continues to increase and fairly satisfactory service was maintained throughout the year despite shortage of staff. Specialist surgeons attend to surgical cases in the following States/Settlements: Kedah, Penang, Perak, Selangor, Negri Sembilan, Malacca, Johore and Kelantan. There is an acute shortage of anaesthetists. At present this work has been carried out by junior doctors or by housemen and there is a pressing need for qualified anaesthetists.

During the year 71,860 surgical operations, major and minor were performed: details according to States/Settlements are given in the Appendix (Table No. 3).

* Includes other and unspecified forms of malaria.

53. OPHTHALMIC WORK.—Specialist ophthalmic surgeons exist in the following towns: Penang, Alor Star, Ipoh, Kuala Lumpur, Seremban and Johore Bahru. This branch of work is also increasing year by year. 69,799 cases were treated for diseases and injuries of the eye and 3,407 operations were performed. Details are given in Table 4 of the Appendix.

54. RADIOLOGICAL WORK.—Full time Radiologists are stationed at Kuala Lumpur, Penang, Johore Bahru, Alor Star, Seremban, Ipoh and Malacca. The volume of work has increased with each succeeding year.

Total number of patients X-rayed was 202,616 and the number of examinations was 227,407. Corresponding figures for 1955 were 124,672 and 196,661 respectively.

55. PHYSIOTHERAPY.—Qualified physiotherapists are employed in the following places: Alor Star, Penang, Ipoh, Kuala Lumpur, Sungei Buloh, Seremban, Malacca and Johore Bahru and during the year 5,257 patients were treated.

PART V

TRAINING OF NURSES

56. The recruitment of suitable candidates for student nurse training has improved greatly during 1956. This is due partly to the greater number of girls who are now remaining at school long enough to enable them to reach school certificate standard and to take this examination and partly to the attraction of training abroad under the Colombo Plan. In addition, there is now less demand for teachers. So more girls with the school certificate become available for employment outside the Education Department.

Approximately 250 girls of the educational standard required have been interviewed during December for training under the Colombo Plan and in Penang Nurses Training School. The results of these interviews are awaited from the Public Service Appointments and Promotions Board.

Many applications are being received daily from suitable applicants for nurse training and it is hoped to deal with these as soon as the results of the above Board are released. A large number of candidates are lost as there is no machinery for interviewing and appointing candidates within a reasonable period of application for the post of student nurses.

During the year 33 girls left for training in Australia under the Colombo Plan. This makes a total of 48 girls now under training there: eleven are due back early in 1957.

The modern six-storey Nurses' Hostel in Penang was completed and officially opened by His Excellency the High Commissioner on 16th June, 1956. The accommodation provided in this hostel is of a very high order indeed, and its opening has given added impetus to the recruitment of nurses. This hostel was built from funds provided by the Colonial Development and Welfare Funds.

With the opening of this hostel all student nurse training was transferred to Penang and the training centres at Johore Bahru and at Kuala Lumpur were closed down. There is provision in Penang for the training of 250 nurses of which 25 are males.

Plans for a new training school at Penang are now completed, and it is hoped to start its construction in 1957 and to complete in 1958. The school is sited so that it adjoins the new hostel.

Training facilities for student nurse training will not be completely satisfactory until two further hostels and training schools of similar size to the one at Penang are built at Kuala Lumpur and perhaps Johore Bahru or Malacca.

As a result of the cessation of the recruitment of expatriate nursing sisters the promotion of local Staff Nurses to Nursing Sisters has gone on an ever increasing scale. This has resulted in a further depletion of the already existing shortage of staff nurses. This depletion cannot be made good by the local training facilities at our disposal, and proposals have been made to Government for the recruitment of staff nurses from overseas (possibly from India) on contract.

During the year the following post graduate diplomas have been obtained by officers in the Federation Nursing Services:

Mr. Sammanthamurthy ...	Sister Tutor's Certificate
Inche Mohamed Meah bin Baba Ahmad	Sister Tutor's Certificate
Miss Ding Ling Sing ...	Sister Tutor's Certificate
Miss Maria Lee	Mental Nursing Certificate
Miss Joan Yoong ...	Midwifery Tutor's Certificate
Miss Leong Mau Yong ...	C.M.B.
Miss W. J. Leverett ...	Nursing Administration (Hospital) Certificate

The following nurses who were trained at the Health Visitors School, Penang, obtained the Health Visitors Certificate of the Royal Society of Health:

Miss Boey Swee Chee
Miss Hiew Swee Yin
Miss Rosa Lee
Miss Ho Yuzin
Mrs. Chin Nyit Aun
Mrs. Lee Ah Choon.

Training of Health Visitors and of nurses and sisters in Ward Administration has continued at Penang during the year.

57. Assistant Nurses.—The training of Assistant Nurses is progressing well in all States and Settlements. There is no shortage of suitable applicants, but recruitment has been restricted in some areas owing to shortage of accommodation for Assistant Nurses in training. There is also a shortage of Staff Nurses to train them, and to supervise their work.

Fifteen hospitals have now been approved by the Nursing Board as Assistant Nurse Training schools.

Trained Assistant Nurses can now be enrolled as State/Settlement Enrolled Assistant Nurses under the Nurses Registration Regulations, 1956.

Four hundred and twenty-four assistant nurses were recruited in 1956 and it is expected to recruit 576 during 1957.

The Assistant Nurse is playing an increasingly important part in the care and basic nursing of the sick, and is proving herself a valuable, and indeed indispensable person in the organisation of our nursing services.

SCHOOL OF NURSING, NORTHERN REGION, PENANG

58. The total number of nurses attending the School of Nursing Northern Region, Malaya, during 1956 was 262 a decrease of 9 over last year.

The courses given comprised of 3 Preliminary Courses with 43 pupils, 3 Block I Courses with 120 pupils, 3 Block II Courses with 81 pupils and one Ward Administration Course with 18 pupils. The pupils consisted of 206 female nurses and 56 male nurses. The total number of students who had passed in the terminal examinations were 144 female nurses and 46 male nurses.

In addition one refresher course for 10 hospital assistants was also given in preparation for the Grade I examination.

Teaching.—Lectures were given according to the syllabus prescribed by the General Nursing Council of the United Kingdom with slight modification.

Films and film strips of educational value were used as an aid to teaching.

Practical cookery classes were conducted by the dietition.

Classes on elementary physics and chemistry were conducted to students attending the Preliminary Training School Course.

Laboratory and Dispensing.—The Dispensing Classes were conducted by the Superintending Pharmaceutical Chemist and the Laboratory courses were under the direction of the Senior Pathologist, Institute for Medical Research, Penang. Thirteen hospital assistants successfully completed the course and were awarded certificates.

Ward Administration Course.—The second course in Ward Administration was held with 16 students and it was of three months duration. The students thoroughly enjoyed the course: all were successful in passing the examination.

Health Visitors Course.—The Second Health Visitors Course which was conducted by the WHO Public Health Tutor ended in June, 1956. Classroom teaching was co-related with clinical instruction and field visits. At the end of the term six candidates obtained the Health Visitors Certificate of the Royal Society of Health.

The Third Health Visitors Course commenced with 12 students representing nine States/Settlements. The policy of selection has changed and the result is a very varied group in education and comprehension. The course will last one academic year.

Part VI

DENTAL

59. Dental policy has remained the same as in previous years with emphasis on school dental treatment, ante-natal cases, hospital cases and emergency treatment for the poor. There is now danger of the school dental treatment being curtailed as the demand for emergency treatment is rising extremely sharply.

New Dental Centres were mostly incorporated in the New District Health Centres in Perak, Negri Sembilan and Johore. No new separate Dental clinics were constructed in 1956.

Most of the clinics are adequately equipped but a few are below standard. The State Governments concerned were informed of these and detailed recommendations for their improvement were submitted to them by the Chief Dental Officer. Some States, e.g., Kedah, were able to carry out the recommendations, but others could not do so through lack of funds.

There are now two maxillo-facial sections functioning, one in Penang and the other in Kuala Lumpur, and they deal with all the serious oral pathological conditions. The Penang one is managed by a full time specialist, whilst the Kuala Lumpur one is in charge of the Chief Dental Officer, with the Senior Dental Officer, Selangor, as a "Senior Registrar".

Two Police Dental Clinics, one in Ipoh and one in Kuala Lumpur, look after the Dental Health of Police Forces and their families.

Patients in the Mental Hospitals in Tampoi and Tanjong Rambutan and the Leper Hospitals in Sungei Buloh and Tampoi receive dental treatment including dentures.

One Dental Officer was away on post graduate study in United Kingdom and another was selected but has not yet left for his course. They will both attempt F.D.S., R.C.S.

Several distinguished Dental Surgeons from Ceylon and Indonesia visited the Dental Nurses Training School in Penang and were very impressed with the system and the results of training obtained in the field.

His Royal Highness The Duke of Edinburgh visited the School and spent more than half an hour in it.

60. Dental Nurses Training School.—This school is still occupying a floor of the General Hospital, Penang, and the accommodation in school and the hostels is only sufficient to turn out 10 to 12 nurses a year.

The school is now training dental nurses not only for the Federation, but for Burma, Hongkong and Brunei. The training of the 3 students from Burma is being paid for by the World Health Organisation.

Some new equipment was installed and most of the old temporary chairs have now been replaced by new ones.

A batch of 14 girls qualified during the year and were evenly distributed throughout the Federation including the East Coast.

61. SCHOOL DENTAL NURSES.—Detailed examination of the School Dental Nurses' field work has proved that they are doing excellent work in keeping school children's teeth healthy.

62. DENTAL TECHNICIANS SCHOOL.—The Dental Technicians School which is also housed in the General Hospital, Penang, functioned smoothly and at full capacity during the year; students not only from the Federation but also from Brunei and Sarawak received training there.

Arrangements were made between the Instructors of the Dental Technicians Training School and the Junior Trade School, Penang, for trainee Dental Technicians to attend courses at the Trade School on certain subjects having a bearing on the Dental Technician's work. Such subjects included the maintenance of electrical motors, plumbing and elementary metal work. The courses proved extremely successful and were of great benefit to the students.

The shortage of floor space in the Penang General Hospital will not permit the installation of the modern equipment which the school urgently requires to keep abreast of modern trends. A proposal has however been made for the establishment of the Dental Nurses Training School and Dental Technicians School in a new centre in Kuala Lumpur and it is hoped that some advance will be made in this matter in 1957.

PART VII

SPECIAL INSTITUTIONS

63. INSTITUTE FOR MEDICAL RESEARCH.—The Institute for Medical Research is a Federal Institution, administered as a branch of the Medical Department. The Laboratories are maintained by the Federal Government, but financial support for the research work comes also from the Government of Singapore and the Colonial Research Council, while an American medical research team, working in the laboratories on the virus diseases of Malaya, is financed by the United States Treasury. 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 Kuantan. 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.

64. This report on the work of the Institute for Medical Research, Federation of Malaya, during 1956 would be sadly incomplete without reference to events which have occurred outside the Institute itself, but which are certain to have a permanent effect on its future. Early in the year, negotiations between the

Federation Government and the Government of the United Kingdom ended in a declaration that the Federation of Malaya would become an independent nation in August, 1957. In anticipation of this independence, the Government's plan to Malayanise the public services was announced later in the year. Under the terms offered, although expatriates in the Institute are assured of employment until July, 1965, many will have to leave by July, 1962, because of their age; and all can retire with pension and gratuity, at any time after July, 1957. Since over three-quarters of the Institute's senior officers are affected, the potential threat to the future of medical research in Malaya is obvious. During the last few years, local graduates have shown little inclination to join the Government medical service, and efforts to recruit them to the Institute have failed. If the Institute is to survive the next few years and maintain its research programme, the need for such recruitment is now urgent.

The general standard of medicine will deteriorate in any country where medical research is not vigorously prosecuted. But this deterioration may not become obvious for some time; in medicine, as in other branches of knowledge, there may be a time-lag between the discovery of a new fact and its general application. Failure to attract new recruits to the Institute in time to replace the present senior officers could, however, have an immediate impact on the standard of medical practice in the Federation, in that there would have to be a drastic curtailment of the present wide range of laboratory examinations. This could be disastrous; the physician or surgeon who cannot call on the assistance of an up-to-date laboratory is working in the dark. The remedy must be to place bacteriology, biochemistry and pathology on the same footing as other special branches of medicine or surgery, and devise training schemes for local officers in these specialities. Proposals to this effect have been made, and it is to be hoped they will be implemented without delay.

65. BACTERIOLOGY—*Antibiotics.*—A further series of Malayan moulds of the genus *Streptomyces*, have been sent to antibiotic research stations in England. One of the many antibiotics derived from Malayan streptomyces has shown considerable promise, and has been patented under the name "Actinonin".

A review of the past three years' work in testing the sensitivity to antibiotics of the common pathogenic bacteria of Malaya reveals that local strains have acquired some resistance to the six antibiotics in common use.

Salmonella Infections.—Salmonella infections continue to account for about a quarter of the enteric-like diseases reported in Malaya. In the last few years, 38 species of salmonella have been found in association with diseases such as gastro-enteritis, fevers of varying duration, meningitis in infants, and localised abscesses in adults; the types isolated in 1956 had all been found on previous occasions.

Phage Types of the Typhoid Bacillus.—One hundred and ten strains of *B. typhosum* isolated in this country have now been submitted for typing to Dr. M. Wilson of Melbourne University.

Only sixty have been found typable; and Malaya appears to have an unusually high proportion of untypable strains (36) or degraded strains (14). Seventeen strains from Kuantan and Pekan on the east Coast of Malaya have proved untypable, and this may be of value epidemiologically as they appear, so far, to be specific to that area.

The Occurrence of Haemoglobin "E" in Malaya.—Dr. Bhagwan Singh has collaborated with Dr. Lehman of St. Bartholomew's Hospital, London, in a study of the incidence of haemoglobin E. Malaysians show an incidence of about 7.5 per cent.

66. NUTRITION AND BIOCHEMISTRY—*Enriched Rice.*—This experiment, in which rice enriched with iron and thiamine was supplied to estate labourers for a year, was inconclusive. The amount of iron provided did not effect the haemoglobin levels of the persons eating it, compared with others who continued to eat highly milled rice. No observations could be made to assess the effect of the added thiamine.

Parboiled Rice.—Further progress on the development of a parboiled rice acceptable to Malays, Chinese, and Indians, has been halted owing to an inability to find enough money to erect a small experimental padi drier at one of the Government Rice Mills. Without adequate supplies of a palatable parboiled rice, any efforts to stimulate its consumption are rendered futile.

Protein Malnutrition.—A rapid survey of the Federation was carried out by Dr. R. F. A. Dean, a World Health Organisation Consultant, between September and November, during which he examined over 7,700 children of all races. His full report has not yet been received, but arrangements have been made to carry out more detailed investigation in the few areas where protein malnutrition appeared unusually prevalent.

Catering in Institutions.—As a result of a report made by the Senior Nutrition Officer late in 1955, the Minister of Health appointed a committee to examine and report on the present arrangements for the supply of food in residential institutions, and to make recommendations. The Senior Nutrition Officer acted as Secretary to this Committee, which after detailed enquiries has now submitted a report to the Minister.

Nutrition Education.—Traditional beliefs and customs die hard, and among the most persistent are those held by many people in Malaya concerning the types of food which may or may not be eaten by pregnant women and nursing mothers. Some of these are potent causes of ill-health yet efforts to change them are foredoomed to failure without a proper knowledge of the tradition from which they spring. Dr. J. B. Loudon, a social anthropologist, was invited to visit the Federation to study this problem, but had time for no more than a brief preliminary survey; information was then received that the expected funds for a long-term investigation would not be forthcoming. It is to be hoped that this project can be reviewed at a later date.

A training course in applied nutrition was held at the Institute in November-December, and was opened by the Chief Minister, Tengku Abdul Rahman. The course was intended to rouse an

interest in nutritional problems among officers of various Government departments, and to stimulate discussion on ways and means of improving nutritional standards. The 32 participants apparently found the course very interesting and considered that further courses should be held at regular intervals.

Food Technology.—The Senior Nutrition Officer continued to serve on a committee which is studying the problems associated with the bulk storage of various foodstuffs for prolonged periods. The difficulties connected with the storage of rice in silos have not yet been solved.

Examination of samples of rice from small power-driven rice mills emphasised the extremely unsatisfactory nutritional quality of the rice produced by such mills. The increase in numbers of these mills in rural areas, and the consequent tendency for rural communities to use highly-milled rice in place of home-pounded rice is thought to be associated with the observed increase in the incidence of beri-beri in several of the countries of South-East Asia. Technological studies on types of milling machinery for these small mills are long overdue.

Fish Flour.—Samples of locally prepared fish flour have been tested by feeding trials on rats. The rats thrived on the diets supplied and there was no evidence of toxicity either from samples of the fresh flour, or from samples which had been stored under different conditions.

67. PATHOLOGY—*Morbid Histology.*—Early in the year the morbid histology formerly done in Penang was transferred to Kuala Lumpur. Except for Johore and Malacca all the histology for the Federation is thus being done in the Division of Pathology, which also receives specimens regularly from North Borneo and Sarawak. The number of histological examinations made has risen from a prewar average of 250 a year to a total of 3,501 in 1956.

Cancer.—A Central Cancer Registry would be a normal development from this centralisation of morbid histology, and is the first essential step if an attack is to be made upon the problem of cancer. The prevention and cure of cancer in Malaya is becoming more important now that the great killing diseases are effectively controlled, and will become still more important as the expectation of life increases and the population ages. A preliminary, though sadly incomplete, review of cancer in the Federation has already been made. Cancer is equally prevalent among all the people of Malaya, but the frequency of each form of cancer varies with the race. Whereas in Malays and Chinese the most important cancers are those of the upper respiratory tract, oesophagus, liver, and lungs, in Indians the most prevalent cancers are those of the mouth. These latter are believed to be associated with betel chewing, and the betel quid and its ingredients are still being tested for carcinogenicity at the National Cancer Institute in the United States.

Other Diseases.—Many universal diseases, such as cardiovascular disease, diseases of the liver and of the kidney, show certain differences in the tropics and a study of these differences

may be valuable. The Division of Pathology has continued its studies on cirrhosis of the liver, myocarditis, and renal disease as opportunity offered; and a survey of peptic ulcer has also been made, the results of which will be submitted to the International Society of Geographical Pathology for comparison with those from other countries.

68. VIRUS RESEARCH AND MEDICAL ZOOLOGY—*The Yellow Fever Hazard.*—Yellow fever does not occur in South East Asia, but the danger of its introduction is very real, and is increased by the growing popularity of air travel and the greater speed of transit. The disease could be introduced by the arrival of a person incubating it, by the importation of an infected animal, or by the chance arrival of an infected mosquito in an aeroplane. Precautions are taken against all of these, but even the most efficient quarantine control may fail on occasion. Investigations at the Institute have been mainly concerned with the ability of local mosquitoes and animals to transmit and maintain the disease, the possible effect on such transmission of other viruses present in Malaya, and with methods of vaccination and mosquito control.

The evidence indicates that local *Aedes aegypti* are efficient vectors of yellow fever virus, and that the local human and animal populations are susceptible to infection. A vaccination experiment to study the antibody responses has however produced some puzzling results and this work is still in progress. Satisfactory methods of controlling *Aedes aegypti* have been devised, and are being applied in Port Swettenham and around the Kuala Lumpur airport. Surveys showing the distribution of this mosquito in the Federation have been completed, and the results have been sent for publication.

Arthropod-Borne Viruses.—Surveys for antibodies to a variety of viruses have been continued by collecting sera from selected human populations and from domestic and wild animals. This work is now nearing completion, and results are being analysed. Infection with dengue, or a closely-related virus, is widespread and tree dwelling forest animals are also involved.

Two viruses have been isolated from ticks. One (TP. 21), from *Ixodes granulatus* on a forest rat, very closely resemble that of Russian Spring-Summer Encephalitis, and an account of it has been published; the other is as yet unidentified.

Animals and Parasites.—Almost 3,000 animals were examined during the year; studies were made on their life history, habits, and parasites, as well as on the incidence of serum antibodies to various viruses described above. Mark-recapture experiments have provided information on the movements of rats, some of which helps to confirm conclusions about species and their habits arrived at earlier from study of the mites which infest these rats.

Noxious Animals.—A well-authenticated report of death from the bite of a Blue Malaysian Coral Snake (*Maticora bivirgata*) was received from Malacca. A two year old Malay girl was bitten on the hand between thumb and forefinger and died within

an hour. This appears to be the first record of such an occurrence involving this species of snake, probably because its gape is so small that biting any large object is physically impossible for it.

Symposium on the Hazards of Imported Disease.—A symposium on the hazards of imported disease was held in Singapore in April under the auspices of the Pan-Malayan Scientific Advisory Council, and papers were contributed by the Senior Virus Research Officer on ecological aspects of introduced pests and diseases, and by the Virus Research Officer on the international spread of virus diseases with special reference to Malaya.

69. ENTOMOLOGY—*Mosquito Systematics.*—A start has now been made in the long-overdue revision of the Malayan culicine mosquitoes. This will be a combined effort in which the Institute's Research Fellow in Entomology, the U.S. Army Medical Research Unit, Mr. D. H. Colless of the University of Malaya, and Mr. P. F. Mattingly of the British Museum (Natural History) will all play a part.

Catches of *Anopheles "leucosphyrus"* by the U.S. Unit in hill forest provided the opportunity to study the characteristics of the two forms, *A. l. leucosphyrus* and *A. l. balabacensis*, which are important vectors of malaria in Borneo and elsewhere. The material was later sent to Mr. Colless for further study.

The same catches produced an anopheline, *A. annandalei*, not previously recorded in Malaya.

Malayan Vectors of Malaria.—Study No. 27 from the Institute was published during the year, "The transmission of malaria in Malaya", by E. P. Hodgkin, Entomologist from 1931-1941. Our views on the status of the different vectors of malaria in Malaya are largely based on the 90,000 mosquito dissections recorded therein.

Mosquito Colonies.—Colonies of six different species of mosquitoes—*Aedes aegypti* and *albopictus*, *Culex gelidus* and *C. p. fatigans*, and *Anopheles barbirostris* and *sundaicus* are now being maintained in Kuala Lumpur, and a colony of *Mansonia uniformis* in Kuantan.

Phlebotomus in Malaya.—The true sandflies, *Phlebotomus* species, rarely been encountered in Malaya hitherto, and their frequent appearance in boxes set out as artificial daytime resting places for *Mansonia* mosquitoes therefore came as a surprise. Specimens have been sent to the Commonwealth Institute of Entomology, and Dr. D. J. Lewis has identified four different species, two present in Pahang, and three in Selangor. *P. argentipes* is regarded as the vector of kala-azar in India and Assam, but there is no indication that it is of public health importance in Malaya; precipitin tests on specimens containing blood showed that almost all had fed on buffaloes and cattle.

Insecticides.—There was little active research on insecticides during the year. Sufficient work has now been done to allow the framing of practical recommendations for the use of DDT, BHC, and dieldrin, against the mosquito vectors of malaria, filariasis

and dengue in Malaya. The Senior Entomologist attended the Seventh meeting of the W.H.O. Expert Committee on Insecticides at Geneva in July, which was devoted largely to the discussion of resistance to insecticides. Such resistance has not yet become a problem in Malaya.

70. MALARIA—*Treatment.*—Only a few observations were made on the treatment of patients with acute malaria. A suspension of amodiaquine (Camoquin) proved effective in light infections, and was popular with children. A new product (PAM-780) appeared to be less effective than amodiaquine or chloroquine when given as a single-dose treatment.

Observations on patients with proguanil-resistant strains of *Plasmodium falciparum* confirmed that the gametocytes of such strains may be resistant to the sterilising effect of the drug, and can develop normally in suitable mosquitoes to the sporozoite stage.

Suppression.—Early in the year an estate which had been using suppressive proguanil for more than nine years, with blood films from fever patients being sent to the Institute for checking, changed to residual spraying. There has been a subsequent increase in the amount of proved malaria, but part of this may be due to a more thorough search for persons with fever by a new hospital assistant on the estate.

Surveys of Malay school-children in the Negri Sembilan kampongs which had previously served as experimental areas showed that despite continued DDT spraying, malaria is still present, but at a low level. A similar result was noted in the coastal kampong in Selangor where drugs have been administered once a month by Health Department Staff.

Malayan Strains of Plasmodium Vivax.—Three strains of *P. vivax* from Malaya were taken to Chicago late in 1955 by Dr. A. S. Alving, and established there in volunteer patients. Dr. Alving has generously made available the results of his studies during the past year. In their behaviour and life history these strains resemble the Chesson strain of *P. vivax* from New Guinea, with a short incubation period and short intervals between attacks. It seems probable that radical cure can be achieved by treatment with chloroquine, 1.5 gramme of base in 3 days, combined with primaquine, .010-.015 gramme daily for 14 days.

Malaria in Krian.—The large rice growing area of Krian in North Perak has long been regarded as almost non-malarious. Investigations by the Health Officer, Perak North, indicated however that more notifications of malaria were coming in from the Krian area than from other parts of his district hitherto regarded as more malarious. The Institute was asked to assist in this investigation, and the Senior Entomologist arranged to identify and dissect mosquitoes trapped by Health Office staff in various parts of Krian in an effort to find the vector. This work continued for 5 months and will have to be repeated next year, but some interesting information has already been obtained.

Towards the coast, near Kuala Kurau, the dark-winged form of *Anopheles barbirostris* predominates, and is probably the vector; further inland, around Bagan Serai; *A. barbirostris* is scarce, but *A. nigerrimus* is common. *A. nigerrimus* is believed to be the mosquito responsible for an outbreak of malaria in Kuala Lumpur in 1931, and was also common in catches from Parit Buntar (in the Krian area) in 1947 when malaria was reportedly prevalent there.

A visit by Institute staff in November revealed that Malay school children in the Bagan Serai region had a malaria parasite rate of 14 per cent (10/70) at a time of year when notified malaria was said to be low. This investigation confirms the Health Officer's opinion that there is an appreciable amount of malaria in the Krian area.

The dissection of these mosquitoes from Krian had the interesting and unexpected side-effect of bringing to light a hitherto unreported focus of filariasis—*see* under that heading.

Recommendation to Establish a Malaria Training Centre.—The Director of the Institute was the Chairman, and the Senior Entomologist was a member, of a committee appointed by the Director of Medical Services to study a resolution of the Malaria Advisory Board on the need for country-wide malaria control, and to make recommendations thereon. They devoted much time to the preparation of a memorandum finally adopted by the committee, recommending the establishment of a malaria training centre as the first step towards a malaria eradication trial and eventual country-wide malaria control. These recommendations have been submitted to Government.

Parasitology.—Study No. 24 from the Institute was issued during the year, "The microscopic diagnosis of human malaria Part 2", by J. W. Field and P. G. Shute. This Study is in effect a text book on the morphology of malaria parasites as seen in thin blood films, with 24 plates in colour and 35 in monochrome; it has been reviewed in most favourable terms, and forms a valuable addition to the literature on malaria.

71. FILARIASIS—*Filarial Infections in Animals.*—Infections with *malayi*-type microfilariae have now been recorded from three species of monkeys, two species of cats, the Malayan Civet, the domestic dog, and a pangolin. Examination of the adult worms has shown that at least two species of *Wuchereria* are present, and descriptions of these have been published. One species resembles the previous descriptions of *W. malayi* from man, while the other is new, and has been named *W. pahangi.* Measurements of a series of formalin-fixed microfilariae show that on the average those of *W. pahangi* are significantly longer than those of *W. malayi,* but there is a good deal of individual variation, and no other definite points of difference have been made out. The microfilariae of the two species also vary in their readiness to develop in different species of mosquitoes but the larvae which do develop cannot be distinguished from each other.

Transmission of W. Malayi from Man to Animals.—Numerous efforts to transit *W. malayi* from man to animals have been carried out, and successful transmission has been accomplished in a number of domestic cats and in one young long-tailed macaque monkey, by the inoculation of infective stage larvae from laboratory-bred *Mansonia uniformis* mosquitoes. The pre-patent period, from inoculation to the first finding of microfilariae in the blood, was remarkably consistent at 80-96 days.

This success has immense possibilities in the study of the life history of filarial worms, reaction to drugs, etc., and has important implications in the epidemiology and control of the disease where *W. malayi* is the prevalent species.

The Kedah Strain of W. malayi.—The microfilariae of *W. malayi* in human carriers living in endemic areas in Kedah, Penang and Province Wellesley, behave differently to those found in carriers in East Pahang. The two strains differ in their degree of nocturnal periodicity, in the readiness with which they shed their sheaths, and in the species of mosquitoes that they infect. There is also a slight but significant difference in average length of the microfilariae. Transmission of the Kedah strain to two cats was successful, the pre-patent period being 94-99 days. Further investigations on this important subject are in progress.

Treatment of Hospital Patients.—Microfilaria carriers treated in 1954 and 1955 with various doses of diethylcarbamazine have now been followed up for more than twelve months. The microfilaria counts have been reduced by 96-99 per cent, the greatest reduction being found in those given 4 or 6 mg. per kg. body weight once a week or once a month for six doses.

Control Experiments in Rural Areas.—The populations of two small kampongs were given 5 mg. kg. diethylcarbamazine once a week for six weeks, and once a month for six months, respectively; houses in a third kampong have been sprayed with dieldrin at 100 mg./sq. ft. every six months since November, 1954. In the drug-treated populations, microfilaria rates and counts fell rapidly, and have remained low up to one year later in the only one resurveyed (weekly treatments); there has been no change in the sprayed kampong in two years since the first spraying.

The proportion of mosquitoes infected with filarial larvae has hitherto been unaffected by our control efforts, but this proportion in one of the drug-treated kampongs was markedly decreased by the extension of drug treatment to the populations of adjoining kampongs. This encouraging result is being followed up.

Field Surveys—Krian. A considerable number of mosquitoes (dark-winged *Anopheles barbirostris*) from the Krian area (*see* under Malaria) were found infected with filarial larvae which appeared to be *W. malayi*. This was reported to the Health Officer, and investigation revealed a hitherto unreported focus of endemic filariasis/elephantiasis around Kuala Kurau. Blood films collected by Institute staff in November showed that 27 per cent (19/70) contained microfilariae of *W. malayi*, and the Health Officer has seen 15 persons with elephantiasis. Thus areas of

endemic filariasis are now known to be present along the north-west coast of Malaya from Kedah peak to somewhere south of Kuala Kurau in Perak.

Pahang.—Surveys were made near the *W. bancrofti* area on the Pahang river reported last year, and one kampong population was found to have a *W. bancrofti* microfilaria rate of 10 per cent. Trapping and dissection of mosquitoes from this area has been started.

Kedah.—Assistance was given to the Health Officer, Central Kedah, in blood surveys there preliminary to the mass treatment of kampong populations.

72. U.S. Army Medical Research Unit—*Fevers of Unknown Origin.*—The study of undiagnosed fevers in children has now been in progress since August, 1955. The children are Malays, Chinese and Indians, up to 16 years of age, who are brought for treatment to the outpatient department of the General Hospital, Kuala Lumpur; most of them live in the town or in its neighbourhood. The criteria for admission to the special ward are that a child should be in the first week of illness, have fever when examined, have no obvious cause for the illness, and that the parents should consent to admission. Most children were seen on the first 3 or 4 days of illness, and some were only mildly ill and would ordinarily have been treated as outpatients. Attempts at virus isolation were made from all patients, and a blood specimen was obtained during the acute phase of the illness; repeat specimens were obtained on the 14-15th day after the onset, and again between 21st-40th day. Out of a total of 345 patients admitted between September, 1955 and 31st December, 1956, follow-up was possible in 313.

Serological tests on these 313 children are not yet completed, and one must remember that the method of selection automatically excludes all those with a readily recognised cause for their illness. Nevertheless it is somewhat surprising to find that the clinical and laboratory investigations already carried out have failed to establish a diagnosis in 78 per cent of the patients (245/313). As with civilian adults investigated in the same way in 1954/1955, the largest single cause of sickness was dengue and related illnesses, 12 per cent (39/313). Seven children (2 per cent) were diagnosed as having leptospirosis, and presented a far more varied clinical picture than did adults with leptospirosis. One child was severely ill, with an aseptic meningitis as a prominent feature of her leptospiral infection; none had jaundice.

Virus Isolation from a Patient.—A virus was isolated from a young child with an illness that started with fever, a convulsion on the second day, an erythamatous macular rash on the third day, and a hepatocellular type of jaundice lasting from the 5th-14th day. Neither complement-fixing nor neutralising antibodies were demonstrated in acute phase serum, but both were present in significant amounts in convalescent phase serum. The identity of this virus has not yet been determined, and investigations are in progress to assess its importance as a cause of disease in Malaya.

Fatal Encephalitis in the Federation.—Autopsy material was received from four servicemen who had died of encephalitis. Japanse encephalitis virus was recovered in two instances, but no virus was isolated in the other two.

Virus Isolation from Mosquitoes.—This work, first started in 1954, was greatly intensified in the first half of 1956. Mosquitoes were trapped from different types of terrain; open scrub near Kuala Lumpur, a rubber estate, the agricultural farms at Serdang, lowland forest, and the coastal nipah-palm and mangrove swamps near Klang. Mosquito trapping and observations have continued throughout the year, but by July the number of viral agents isolated and awaiting identification had grown so large that isolation attempts were stopped. Viral agents have been isolated on 34 different occasions since this work started; 18 of these have since been identified as Japanese encephalitis virus which appears to be widely distributed in at least the lowland non-forest areas of Selangor. The 16 other viral agents have yet to be properly identified, but already it is clear that at least 7 distinct viruses are present in this group.

Ecology of Mosquitoes.—The collection of these large numbers of mosquitoes for virus isolation also made possible a study of the distribution of various species in the different types of country, their life history and breeding habits, and their readiness to bite man. Thus of 30 types of mosquitoes caught in the Gombak forest, 27 were found in that habitat alone; only one species, *Aedes albopictus*, was found in all the collecting areas. Forty-two kinds of mosquitoes were observed to engorge on human blood.

Laboratory Colonisation of Mosquitoes.—*Culex* (*Culex*) *gelidus* is one of the most common mosquitoes in Malaya and has also provided more virus isolation than any other species. Studies on viruses are greatly facilitated by the maintenance of a laboratory colony of the suspected vector, but various laboratories had encountered great difficulty in colonising *gelidus*. Two specialists from the Walter Reed Army Institute of Research in Washington, Major H. C. Barnett and Dr. D. J. Gould, came to Kuala Lumpur for 4 months for this specific purpose, and were successful in establishing a colony of *Culex gelidus*, which is now in the 14th generation.

73. LIBRARY.—Lists of duplicate and missing copies of periodicals were sent to 12 national distributing centres and direct to 125 libraries throughout the world. Two thousand and thirty duplicates were distributed, and 300 single issues and 3 complete volumes, hitherto missing from the library, were received.

Eighty-three new text books were acquired during the year. 310 volumes of periodicals were prepared for binding, and 260 volumes were bound. The cost of binding has recently almost doubled, which puts a severe strain on the limited funds available for this purpose.

74. ROUTINE WORK.—From its headquarters laboratories in Kuala Lumpur and the branch laboratories in Ipoh and Penang,

the Institute provides a diagnostic and public health laboratory service for the Federation of Malaya. The demands for these services grow year by year; in Kuala Lumpur, clinical biochemical examinations have risen from 6,424 in 1954 to 12,902 in 1956 and in Penang biochemical examinations have almost doubled in the last two years. Bacteriological and other examinations have also increased, although not to the same extent, and unless an increase in staff can be obtained, the only alternative will be to restrict the number and variety of examinations performed.

The production of bacterial vaccines, which are issued free to Government Departments, is another important function to the Institute. Some 1,268,700 doses of smallpox vaccine lymph were issued, together with large volumes of typhoid, cholera and rabies vaccine. The Institute is the only approved centre for yellow fever vaccination in the Federation; the vaccine is obtained from South Africa, and periodic tests of its potency are carried out.

75. RETIREMENTS.—The Institute has suffered heavy losses of experienced staff during 1956 in the retirement of Dr. J. W. Field, C.M.G., who has been Director of the Institute since 1949, of Dr. R. T. B. Green, C.B.E., Senior Bacteriologist, who has worked in the Institute for 26 years and Dr. S. R. Savoor, Senior Pathologist, Penang, who has served in the Institute for 28 years.

The loss of these three officers has created a gap which it will be hard to fill.

LEPER SETTLEMENTS

76. There are five leper settlements in the Federation—Sungei Buloh in Selangor, Pulau Jerejak in Penang, Leper Settlement, Johore Bahru, Leper Camp, Kota Bharu, Kelantan and Leper Hospital, Kuala Trengganu. At the end of the year the number of inmates remaining at these institutions was 3,357.

The general health of the inmates has been good with no serious intercurrent infections and no outbreak of any infectious disease.

77. LEPER SETTLEMENT, SUNGEI BULOH.—Sungei Buloh Settlement is the main institution which has a specialist for the treatment of leprosy in the Federation. It is situated in a valley some 16 miles from Kuala Lumpur in attractive surroundings. It should be considered as a closed community similar to that of a new village, has a school run on boarding school lines, runs its own courts and a post office, has a small prison, manages a large agricultural area and looks after its own security.

Married couples who have been admitted to the settlement are allowed to live together and a number of marriages takes place each year amongst the settlement inmates. About 40 to 50 infants are born each year in the settlement and these are removed as soon as possible to a créche in the uninfected area where they are looked after till they are adopted or taken care of by the social welfare organisations.

A strike by the inmate staff took place in the early part of the year and this brought work to a complete standstill. Those

really inconvenienced were the patients themselves which became obvious after a few days. The strike was in support of a demand for an increase in wages, a matter which has already under consideration by the Government when the strike was held.

When the new rates of pay were published these were extremely generous involving rises between 60 per cent and 100 per cent in the lower ratings and proportionately less in the higher.

During the year 512 cases were admitted and 433 were officially discharged as free from infection. There were 37 deaths, 5 transfers and 31 absconded. The number of patients remaining at the end of the year was 2,435 and the distribution of population is as follows:

Nationalities	Men	Women	Boys	Girls	Healthy Infants	Total
Malaysians ...	196	46	31	14	2	289
Chinese ...	1,155	505	143	73	14	1,890
Indians ...	201	18	8	1	5	233
Others ...	19	2	2	—	—	23
Total ...	1,571	571	184	88	21	2,435

Hospital.—There were 1,545 admissions during the year to acute hospital for treatment and the number of deaths was 37. The predisposition of leprosy patients to develop tuberculosis keeps the tuberculosis ward full and there are many receiving treatment as out patients.

A new tuberculosis ward has been opened with a side room for minor operative procedures. It is large and airy and can take 50 patients, relieving the acute hospital where beds are always needed. A large number of ambulant patients from the Settlement also attend for pneumoperitoneum or pneumothorax.

Orthopaedic work has been advancing steadily but slowly: tibialis posterior transplant for dropped foot has now become routine and gives excellent results. Several reconstructions of claw hands have been performed and results are most encouraging. Physiotherapy is proving extremely valuable in these cases.

Treatment.—Diaminodiphenyl sulphone continues to be the drug of choice in the treatment of leprosy. A larger proportion of discharged cases are reporting to their State/Settlement hospitals and dispensaries for out-patient follow up treatment. The problem of successful treatment of leprosy is now focussing on the complications, paralysis, deformity and mutilation, the corrections of which enable the patient to return to normal life and to earn his living.

Research.—Research work on a large group of cases under treatment and with sulphone alone and in combination with thiosemicarbasone has now been completed and the results are being worked out.

School.—The enrolment in the Travers School has increased from 265 to 275 during the year. 18 children left school and are now apprenticed to various traders within the Settlement.

Two quarters near the school have been taken over as overflow accommodation for those who wish to carry on for a higher examination.

Eight boys sat for the London Chamber of Commerce Examination and obtained 20 certificates with two distinctions.

Fifteen boys sat for the Federation Lower Certificate of Education and 14 boys passed: a very gratifying result. Three sat for the School Certificate Examination and the results are not yet known.

Scouts and Guides continue to run with enthusiasm and the children's sports was a great success. During the strike the children looked after themselves and the older children did the cooking.

Trade School continued to make furniture and repairs of all sorts. A prototype of a new food trolley was produced which works well and will be issued as soon as they can replace the existing wrecks. Artificial legs and their repairs formed a valuable part of the work done.

Settlement Guards did a good job. They remained on duty during the strike. Their fire drill paid handsome dividends when the upper storey of the hostel caught fire where 18 babies were downstairs. All were removed in time and the inmate guards got the fire under control and prevented spread to nearby buildings before the Kuala Lumpur Municipal Fire Brigade arrived, a very good effort; in addition they have had to cope with numerous lallang (grass) fires.

Six of the patients have qualified as Assistant Nurses during the year—this is for the first time. It is hoped to use these trained patients in staffing leprosy institutions.

MENTAL INSTITUTIONS

78. The mentally diseased in the Federation are treated in two main hospitals; at Tanjong Rambutan in Perak which has 3,000 beds and at Tampoi in Johore which has 1,200 beds. Both these hospitals are already overcrowded, and the number of patients is still increasing; the present number in Tanjong Rambutan is 3,790 and Tampoi 1,235.

All fully socialised countries have found that they need about 3 to 4 mental beds per 1,000 population to give an adequate mental health service.

Singapore has already reached the proportion of 2 mental beds per 1,000 population. Therefore to equal the Singapore standard in the Federation it would require 12,000 beds, but the number that can be accommodated with severe overcrowding is 5,000. It would be clearly seen that there is an urgent need for more beds and more staff.

The staff at both these hospitals is inadequate and it is possible to provide little more than custodian care. As a result of the lack of facilities for the training and rehabilitation of patients in hospital, admissions continue to exceed discharges.

It is difficult to recruit doctors for service in the mental hospitals, as this work appears to be uncongenial to the local officer. During the year, however, one local officer accepted transfer from the general service to the mental hospital at Tanjong Rambutan, and it is proposed to send him to the United Kingdom in 1957 to study for the D.P.M. The only qualified alienist in the Federation is an expatriate officer.

A scheme for the improvement of conditions at these hospitals is being put forward, which involves the recruitment of additional alienists and additional medical officers, the training overseas of male and female nurses in mental diseases, the recruitment and training of assistant nurses locally in mental diseases, the local training of a hospital administrator for posting to Tanjong Rambutan to relieve the Medical Superintendent of routine administration duties and the recruitment of occupational therapists to assist in the rehabilitation of patients.

79. CENTRAL MENTAL HOSPITAL, TANJONG RAMBUTAN.—The number of patients remaining in hospital on 31.12.56 was 3,790 and on 31.12.55 was 3,607, thus an increase of 183. This is the highest ever reached and there is every indication that the numbers will go on increasing. The temporary safety valve of Tampoi Mental Hospital is no longer available as they will be dealing with their own problems of overcrowding in the not distant future.

The number of admission for the year under review was 1,805 as compared with 1,557 for the year 1955. Of these 62 were voluntary. The voluntary patients can of course discharge themselves any time they wish but none made use of the right and instead followed the medical advice steadfastly.

There were 1,567 discharges of whom 850 were graded as recovered, 598 as relieved and 119 as not improved.

The number of deaths was 111 as against 169 in 1955 and the death rate was 2.0 per cent as against 3.2 per cent during the previous year. This is the lowest on record over the last eleven years.

Deep Insulin and Electric Convulsive Therapy continued to be used with excellent result. Number of cases treated under

	1955	1956
Electric Convulsive Therapy ...	958	1,244
Deep Insulin Therapy	98	106

Any form of activity is preferable to inactive seclusion in a ward and genuinely deserves the name of Occupational Therapy. Due to inadequate staff only patients who are willing to work and who can be trusted with a fair amount of freedom are given work.

The recruitment of a temporary lady Occupational Therapist on the female side has improved the position.

The requirements to increase the number of patients doing Occupational Therapy are threefold: (*a*) staff, (*b*) space and (*c*) additional funds. None of these are available.

RETURN OF INMATES FOR THE YEAR 1956

SUMMARY OF NATIONALITIES

Nationalities	Remaining at the end of 31-12-55	Admissions	Deaths	Total cases treated	Remaining at end of 31-12-56
Europeans ...	—	7	—	7	—
Eurasians ...	15	10	—	25	15
Chinese ...	2,214	966	72	3,180	2,334
Malays ...	868	411	18	1,279	920
Indians ...	500	405	21	905	508
Others ...	10	6	—	16	13
Total ...	3,607	1,805	111	5,412	3,790

Daily number of inmates for 1956 ... 3,703
Number of beds 3,000

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

Personal Emoluments	$1,520,430
O.C.A.R.	1,458,419
O.C.S.E.	5,855
Total ...	2,984,704

Capital expenditure, pension and leave charges are not included. The net maintenance cost is $806.05 per patient treated.

Farms.—The number of patients working in the farms at the end of the year was 300 as compared with 332 in 1955. The farms progressed satisfactorily.

The patients with the help and supervision of two or three skilled attendants and with the material supplied by the Public Works Department at a cost of $7,000 built a new farm. The official estimate for such a building was $20,000. Further the farms produced $73,473.94 worth of vegetables, fruits, etc., estimated at contract prices.

80. MENTAL HOSPITAL, TAMPOI.—The number of admissions for the year under review was 730 as against 768 in 1955. There were 611 discharges as against 500 during the previous year. The total number of deaths in 1956 was 58 or 3.05 per cent in 1955. 1,235 patients remained at the end of the year and the daily average was 1,223.

The treatment of patients has consisted of Electric Convulsive Therapy and the new tranquillising drugs on which research has been done. Deep Insulin Therapy has not been carried out owing to the shortage of staff.

Six hundred and twenty cases were treated by E.C.T. and 61 cases by modified Insulin Therapy.

Occupational Therapy is carried out to a limited extent and is valuable in keeping the patients occupied. An average of 496 patients were engaged in occupational therapy in various forms during the year. More patients could probably be engaged beneficially if the services of an occupational therapist is available.

MEDICAL STORES AND PHARMACEUTICAL LABORATORY

81. 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 million.

The Federal Medical Stores organisation has existed on a very precarious basis, in that the majority of storage space is rented and dispersed, making economical running and supervision impossible. It is therefore proposed to build a new store organisation at Sungei Buloh and to provide quarters on the spot for the staff who will be employed there. Planning has already started on this proposed new Central Stores and Pharmaceutical Laboratory and the Public Works Department have allowed an Architect for the project and the site plan has been finalised.

During the year three hundred and eighty-six indents were forwarded to the Crown Agents from both the Stores and the total value of these indents was $5,714,000. Local purchases amounted to $934,000.

The total value of drugs issued to the laboratories attached to Kuala Lumpur and Penang Stores for manufacturing purposes was $197,396.78 and the manufactured products were valued at $286,922.05 making an overall profit of $89,525.27. The true saving to Government is much greater than the sum indicated above as the manufactured products could not be purchased on the open market at the valuation given them.

The Superintending Pharmaceutical Chemists continued to advise the various Medical Departments on matters arising out of the Dangerous Drugs Ordinance and the Poisons Ordinance. The Lady Templer Tuberculosis Hospital continued to draw upon the Stores organisation for medical supplies and the Pharmaceutical Chemists continued to give their advice.

In conjunction with the Department of Chemistry research work continued investigations into local plants regarding their medicinal properties.

Over 68 tons of galenicals were made as compared with 63.5 tons during the previous year. In addition 240,000 ampoules, and 17,639,000 tablets were produced in 1956. 54,665 ccs of B.C.G. Vaccine were distributed to the various States/Settlements.

Lallang (grass) fires in the vicinity of the Stores at Circular Road, Kuala Lumpur, gave cause for concern and additional fire fighting equipment was supplied by the Chief Fire Officer. A fire-break trench was also constructed around the perimeter of the Stores compound.

The Superintending Pharmaceutical Chemist, Penang, gave two courses of lectures and practical dispensing for 15 hospital assistants with nursing qualifications of which 13 were successful.

In addition a series of lectures was given and Practical lessons held for the 11 Hospital Assistants who attended a 3 months' refresher course between January and March, 1956.

Narcotics.—The Superintending Pharmaceutical Chemist, Penang, remained the sole importer and wholesale distributor of narcotics.

STATISTICS

	1956	1955
Consumption of medicinal opium ...	3 kg.	2 kg.
„ opium in tinctures, etc.	28 kg.	41 kg.
„ morphine ... ... under	3 kg.	2 kg.
„ diamorphine ... „	1 kg.	under 1 kg.
„ cocaine ... ... „	2 kg.	„ 2 kg.
„ pethidine ... ... „	13 kg.	10 kg.
„ heptalgin ... ... „	1 kg.	under 1 kg.
„ physeptone ...	481 G.	355 G.

During the year no Diamorphine or its preparations were supplied to any Government hospital. Its use will be discontinued in due course when present stocks are exhausted.

ORTHOPAEDIC APPLIANCE CENTRE

82. The production of artificial limbs and other appliances was carried out at the Orthopaedic Appliance Centre, Kuala Lumpur. There has been quite an appreciable increase in the production of artificial limbs, etc., during 1956.

During the year 50 artificial legs with foot, 36 peg legs, 5 artificial arms and various other appliances were manufactured.

The machinery is about nine years old and is in urgent need of replacement with more up-to-date types. The new machinery, if purchased will not only give greater scope for production but will also enable the Centre to produce all metal joints for limbs, etc., instead of purchasing these through the Crown Agents.

REPORT OF THE MEDICAL COUNCIL

The Medical Council consists of:

(*a*) the Director of Medical Services, Federation of Malaya;

(*b*) the Director of Medical Services, Colony of Singapore;

(*c*) one medical officer in the public service of the Federation to be appointed by the High Commissioner;

(*d*) one medical officer in the public service of the Colony to be nominated by the High Commissioner;

(*e*) three registered medical practitioners to be nominated by the Council of the University of Malaya and appointed by the High Commissioner;

(*f*) seven registered medical practitioners resident in the Federation to be elected by the registered medical practitioners resident in the Federation and five registered medical practitioners resident in the Colony to be elected by the registered medical practitioners resident in the Colony.

During the year two meetings of the Medical Council were held on 28th January, 1956 and 22nd September 1956.

2. An election was held in July to elect three members from registered medical practitioners resident in the Federation of Malaya and one from those resident in Singapore to fill vacancies caused by the retirement of members who had completed their three year term of office. The following were the successful candidates:

Federation of Malaya—

1. Dr. M. E. Tiruchelvam (re-elected)
2. Dr. R. K. Thirupad (re-elected)
3. Dr. S. G. Rajahram

Singapore—

4. Dr. C. E. Smith

3. Professor E. S. Monteiro and Dr. A. W. E. Moreira were appointed by the Council to take the place of Dr. D. W. G. Faris, C.B.E., and Dr. R. Shelly in the Penal Cases Committee.

4. Complaints of infamous conduct in a professional respect against three registered medical practitioners were considered by the Penal Cases Committee. The Committee was satisfied with the explanation put up by two of the practitioners concerned, and determined that no further action be taken. In the case of the third practitioner the Committee recommended that he should be given a warning.

5. A report was made to Council that two estate dressers had been using the title "Assistant Medical Officer" and "Assistant Surgeon" respectively. The offenders concerned had been warned that action would be taken against them if they continued to use titles which gave the impression that they were qualified medical practitioners.

6. An important ruling was made by Council with regard to enquiries from medical practitioners as to what constituted "infamous conduct in a professional respect". While Council had no objection to the Registrar or Secretary giving an opinion in the form of a reply which would not be binding on the Council as such, Council as a quasi judicial body was not prepared to give any decision unless it was an ethical case brought before the Council.

7. A Joint Committee of the Singapore and Federation of Malaya Medical Councils was appointed to consider amendments to the Medical Registration Ordinance. The Federation representatives on this Committee were Dr. R. E. Anderson, Dr. R. B. MacGregor, C.M.G., Dr. M. E. Tiruchelvam. The recommendations made by this Joint Committee were accepted by Council and had been submitted to the Minister for Health and Social Welfare for consideration.

8. An offer made by Medical Officers of the Royal Air Force to do roster duty at Fraser's Hill was referred to the Medical Council for an opinion. The view of Council was that it was not possible for a medical officer of the Royal Air Force to indulge in civilian practice unless he was registered under the Ordinance.

9. The attention of Council was brought to a case, which was still *sub judice*, in which a medical practitioner was charged with issuing false medical certificates to people who wished to withdraw their contributions to the Employees Provident Fund. Council agreed to discuss this case at an appropriate time whatever the decision of the court might be.

10. The nomination of a representative of the Medical Council to serve on the Poisons Board was considered by Council at its meeting held on 22nd September, 1956. After considerable discussion Council decided that it did not wish to be represented on the Poisons Board as at present consituted. At the request of the Secretary to the Ministry of Health and Social Welfare this matter would be brought up for reconsideration by Council at its next meeting to be held on 16th February, 1957.

11. At the beginning of the year there were 785 medical practitioners on the register. 63 were registered during the year, 3 were transferred from Singapore and 3 were restored to the register bringing the total to 854. But during the year 14 registered medical practitioners moved to Singapore, and 13 who had passed away or left the country had their names removed from

the register so that the number on the register with Federation addresses at the end of 1956 was 827. Of the 63 registered during the year were 2 medical practitioners registered under Section 9 (1) (*c*) of the Ordinance subject to certain conditions. In addition there were on the register at the end of the year 29 medical graduates provisionally registered. They were engaged in employment in a resident medical capacity in the five approved hospitals in Penang, Ipoh, Kuala Lumpur, Malacca and Johore Bahru, and had to complete one year's satisfactory service as house doctors, i.e., 6 months in Medicine and 6 months in Surgery (Midwifery may be counted as either) before they could be granted full registration.

12. The distribution of registered medical practitioners by race and by State/Settlement is shown on the following page.

REGISTERED MEDICAL PRACTITIONERS IN THE FEDERATION OF MALAYA

(As on 31st December, 1956)

State/Settlement	Government						Private						Total
	Europeans	Malays	Chinese	Indians and Ceylonese	Eurasians	Total	Europeans	Malays	Chinese	Indians and Ceylonese	Eurasians	Total	
Penang	14	5	13	12	1	45	23	2	54	10	4	93	138
Malacca	10	1	2	9	—	22	4	—	9	6	1	20	42
Perak	22	2	7	26	3	60	19	3	42	23	2	89	149
Selangor	53	5	13	22	4	97	40	2	44	38	6	130	227
Negri Sembilan	14	1	5	5	1	26	7	1	4	10	2	24	50
Pahang	4	1	1	11	—	17	4	—	2	3	—	9	26
Johore	16	1	7	27	1	2	8	3	30	11	1	53	105
Kelantan	11	—	—	2	1	14	3	2	3	1	—	9	23
Trengganu	5	2	—	2	—	9	2	—	—	2	—	4	13
Kedah	4	6	2	20	—	32	6	—	4	8	—	18	50
Perlis	—	—	—	2	—	2	—	1	—	1	—	2	4
	153	24	50	138	11	376	116	14	192	113	16	451	827

Appendix "B"

REPORT OF THE DENTAL BOARD

The constitution of the Dental Board is as follows:

(*a*) the Director of Medical Services, Federation of Malaya, ex-officio (*Chairman*);

(*b*) the Director of Medical Services, Singapore, ex-officio;

(*c*) a Registered Dentist or a Medical Practitioner nominated by the Vice-Chancellor of the University of Malaya, and appointed by the High Commissioner;

(*d*) the Professor of Dental Surgery, University of Malaya, Singapore;

(*e*) the Chief Dental Officer, Federation of Malaya, ex-officio;

(*f*) the Chief Dental Officer, Singapore, ex-officio;

(*g*) two Dental Surgeons practising in the Federation of Malaya, nominated by the Malayan Dental Association, to be appointed by the High Commissioner;

(*h*) a Dental Surgeon practising in the Colony of Singapore nominated by the Malayan Dental Association, to be appointed by the High Commissioner;

(*i*) a Registered Dentist in Division II nominated by the Central Malaya Chinese Dentists' Association, and appointed by the High Commissioner.

The Board functioned throughout 1956 with one change in membership. Professor E. S. Monteiro took over from Dr. W. G. Faris.

Board Meetings.—Two meetings were held as usual during the year, one in August and one in December when a variety of subjects ranging from cleanliness of dental premises to removal of names from the Register were dealt with. Detailed minutes of the meetings were issued to all concerned.

Legal Advisers.—They are Messrs. Presgrave and Matthews, Penang, and were consulted several times.

The Boards Sub-Committee on Ordinance Amendments.—This committee met four times in the year and has now finalised its task. The amendments are now with the Legal Advisers for their final draft and comments.

Inspection of Dental Premises and the Issue of Annual Practising Certificates for Division II.—This remains the Board's main task and to achieve it every single Government dental officer in a district is used.

Reports indicate that the standard of cleanliness in Division II Dentists' premises is getting higher.

Government Dental Officers were instructed to help and advise Division II Dentists on the maintenance of cleanliness in their premises.

SUMMARY OF DENTAL REGISTER, 1956

Division I

No. on register as at 1-1-56	91
No. registered during 1956	13
No. removed during 1956	4
Total on 31-12-56 ...	100
No. in Government Employment ...	64
No. in Private Practice	36

Division II

No. on register as at 1-1-56	503
No. registered during 1956	2
No. removed during 1956	17
Total on 31-12-56 ...	488

Number Registered by States/Settlements

State/Settlement	Division I	Division II
Perak	19 ...	85
Selangor	18 ...	91
Negri Sembilan ...	8 ...	26
Pahang	5 ...	21
Kedah	4 ...	35
Kelantan	6 ...	24
Trengganu	4 ...	11
Penang and Province Wellesley	17 ...	61
Malacca	5 ...	28
Johore	12 ...	98
Perlis	1 ...	8
*Singapore	1 ...	—
Total ...	100 ...	488

* Registered in the Federation of Malaya, but practising in Singapore.

DISTRIBUTION BY RACES

Division I

	In Govt. Employment	In Private Practice
Europeans	1 ...	3
Malays	9 ...	—
Chinese	36 ...	33
Indians	11 ...	—
Others	7 ...	—
Total (100) ...	64 ...	36

Division II

Malays	— ...	1
Chinese	1 ...	483
Indians	— ...	1
Others	— ...	2
Total (488) ...	1 ...	487

REPORT OF THE PHARMACY BOARD

The constitution of the Board is as follows:

(*a*) the Director of Medical Services, Federation of Malaya, ex-officio (*Chairman*);

(*b*) the Director of Medical Services, Singapore, ex-officio;

(*c*) one person nominated by the Vice-Chancellor of the University of Malaya, and appointed by the High Commissioner;

(*d*) one pharmacist in the public service of the Federation to be appointed by the High Commissioner;

(*e*) one pharmacist in the public service of the Colony to be appointed by the High Commissioner;

(*f*) one representative from the Department of Chemistry, nominated by the Director of Chemistry and appointed by the High Commissioner;

(*g*) two persons, not in the public service of the Federation or of the Colony of Singapore, nominated by the Association or Associations representing pharmacists in private practice and appointed by the High Commissioner.

Mr. A. H. Millard acted as Secretary until 1st April, 1956, when owing to pressure of work he was obliged to resign and Mr. K. Ponniah was appointed to take his place.

The term of office of Mr. C. R. P. Strachan having expired, he was replaced by Mr. Lee Sze Peng.

Mr. Ng Ek Khiam resigned his membership and Mr. Ng Ek Ho was appointed to take his place.

On the expiry of the term of office of Mr. C. R. P. Strachan who represented the Federation Pharmacy Board in the Singapore Pharmacy Board, his place was filled by Mr. Lee Sze Peng.

Only one meeting was held during the year under review.

At the commencement of the year there were 62 pharmacists on the register and three persons were registered as pharmacists while one pharmacist died during the year bringing the total to 64 as on 31st December, 1956.

There were 9 bodies corporate at the beginning of the year, one new body corporate was registered and one closed business during the year making the total to 9 at the end of the year.

Three applied to the High Commissioner in Council against the decision of the Board not to register them as pharmacists. One appeal was rejected while in the case of the other two, the Board was requested to interview them and put up further reports. The Board's report on these two appellants was submitted to the Minister for Health and Social Welfare and, as a result, the Executive Council rejected their appeals.

The sub-committee appointed to draw up regulations governing registration of persons who hold qualifications not hitherto recognised as registrable by the Board submitted its report which was accepted by the Board without any change.

On the request of the Minister for Health and Social Welfare, a sub-committee was appointed to consider amendments to the Registration of Pharmacists Ordinance, 1951. The sub-committee's report has not yet been received.

The distribution of registered pharmacists by race and State/Settlement is shown below:

Number of registered pharmacists on the register as on 1-1-56		62
Number registered during 1956		3
		65
Less number died		1
Number on the register as on 31-12-56		64
Number of registered pharmacists by race:		
Chinese	42	
Europeans	13	
Indians	5	
Ceylonese	4	
	64	
Number of registered pharmacists in Government Service		20
Number of registered pharmacists in private firms		44
Number admitted under Section 6 (2)		15
Number of registered pharmacists in each State/Settlement:		
Perak	11	
Selangor	20	
Negri Sembilan	1	
Penang	23	
Malacca	2	
Johore	5	
Kelantan	1	
Kedah	1	
	64	
Number registered as bodies corporate		9
Number registered as bodies corporate by race:		
Europeans	2	
Chinese	5	
Indians	2	
	9	

Appendix "D"

REPORT OF THE NURSING BOARD

The constitution of the Nursing Board is as follows:

(*a*) four ex-officio members who shall be—

(i) the Director of Medical Services, Federation of Malaya;

(ii) a medical officer in the Government Service, nominated by the Director of Medical Services;

(iii) the Principal Matron, Federation of Malaya;

(iv) a Sister Tutor nominated by the Principal Matron;

(*b*) three persons not connected with the nursing profession to be appointed by the High Commissioner; and

(*c*) eleven registered nurses to be appointed by the High Commissioner, one of whom shall be a registered male nurse.

The Director of Medical Services will be ex-officio Chairman of the Board and Registrar of the Board, except in the case of enrolment of Assistant Nurses where the State/Settlement Head of the Medical Department shall be the Registrar. The Principal Matron, Federation of Malaya, shall be ex-officio Secretary of the Board.

Legislation.—An Ordinance to amend the Nurses Registration Ordinance, 1950, came into force on the 1st January, 1956. The amendment made provision as under:

(*a*) For the inclusion of male nurses in the register and not in a supplementary part as previously.

(*b*) Provision for a supplementary part of the register containing the names of State or Settlement Enrolled Assistant Nurses to be kept by the Administrative Head of the Medical Department in each State/Settlement.

In exercise of the powers conferred by section 4 of the Nurses Registration Ordinance, 1950, the High Commissioner in Council brought into force the Nurses Registration Regulations, 1956, on the 1st day of May, 1956. With the coming into force of these Regulations the Nurses Registration Regulations, 1950, were revoked.

The main provisions under the new regulations include the setting up of Assistant Nurse Training Schools, regulations regarding training, syllabus to be followed and examinations to be taken; regulations regarding method of registration and the type of badge to be worn.

Meetings.—One meeting of the Nursing Board was held.

The following hospitals were named as Assistant Nurse Training Schools and approved by the Board.

ASSISTANT NURSE TRAINING SCHOOLS

PERAK	1. District Hospital, Ipoh. 2. General Hospital, Taiping. 3. General Hospital, Batu Gajah.
TRENGGANU	1. General Hospital, Kuala Trengganu.
MALACCA	1. General Hospital, Malacca.
JOHORE	1. General Hospital, Johore Bahru.
PENANG (Province Wellesley) ...	1. District Hospital, Bukit Mertajam.
NEGRI SEMBILAN	1. General Hospital, Seremban. 2. District Hospital, Kuala Pilah.
PAHANG	1. District Hospital, Kuantan. 2. District Hospital, Kuala Lipis.
KELANTAN	1. State Hospital, Kota Bharu.
KEDAH	1. General Hospital, Alor Star. 2. District Hospital, Sungei Patani.
PERLIS	1. State Hospital, Kangar.
SELANGOR	1. General Hospital, Kuala Lumpur. 2. Sungei Buloh Leper Settlement, General and Leprosy Training School.

Action is also being taken to enrol nurses trained in leprosy nursing, mental nursing and tuberculosis nursing under Section 2 (*b*) of the Ordinance.

The Nursing Board Entrance Test was held for candidates who had applied to take up Nursing but did not hold Senior Cambridge Certificate.

Entries		235
Passes	169	
Failures	66	
	——	235

Those who passed were invited to appear before the Public Service Appointments and Promotions Board for selection for training.

Nursing Board Examination were held three times during the year, the results were as shown:

	Preliminary Examination		Final Examination
Entries	130	...	95
Passes ...	123	71	
Failures ...	7	24	
	—— 130	——	95

Nurses in Training as at 31-12-56—

Females		Males		Total
224	...	81	...	305

Registration of Nurses—

Total shown on register as at 31-12-56 ...		1,337
In Government Service ...	1,139	
In Non-Government Practice	198	
		1,337

Distribution by Races—

Malays	96
Indians	183
Chinese	709
Eurasians	116
Europeans	231
Others	2
Total ...	1,337

Distribution by Sex—

Females	1,288
Males	49
Total ...	1,337

Number locally trained	1,052
Number trained outside Malaya ...	285
Total ...	1,337

State/Settlement Enrolled Assistant Nurses as at 31-12-56—

Penang and Province Wellesley	20
Johore	45
Malacca	27
Pahang	26
Trengganu	23
Perak	35
Selangor	46
Negri Sembilan	47
Kelantan	—
Kedah	63
Perlis	3
Total ...	335

APPENDIX "E"

REPORT OF THE MALARIA ADVISORY BOARD

The constitution of the Board is as follows:

Six permanent members (Medical)	The Director of Medical Services (*Chairman*);
	The Director of 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 THE MINISTER FOR HEALTH AND SOCIAL WELFARE

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 nominated member to represent labour interests.

Four other nominated members (one is an Administrative Officer and three are medical men).

1.—MEMBERS OF THE BOARD

The Malaria Advisory Board is a body appointed by the Government to give advice on malaria and its control. It will be seen from the above constitution that some members are ex-officio,

and some are nominated by the Minister for Health and Social Welfare. The nominated members, who form the majority, are about equally divided between officers in the Government Medical Service and Private Practitioners, having special experience of malaria control. Members of the Board receive no remuneration other than travelling expenses for attending meetings.

The Board was founded in 1911 when the rapid increase in malaria, and the failure of attempts to control it, was causing alarm. Sir Malcolm Watson was one of the first members. At that time the Board was executive as well as advisory, and its first success was the control of malaria in Kuala Lumpur by the then new technique of subsoil draining ravines. To-day the Board has no executive responsibility, and its functions are to keep Government, the Medical Profession and the Public informed of advances in the treatment and control of malaria, in so far as these are applicable to Malaya, and to record the incidence of malaria year by year. These functions it performs by means of pamphlets, circulars, meetings (of which the minutes are distributed widely within the medical profession), and a printed annual report in which are preserved the statistics of malaria incidence.

2.—MEETING

The Board held one meeting during the year on 18th February.

3.—REVIEW OF LOCAL MALARIA

Malaria admissions to hospital again showed a decline, being over 2,000 less than in 1955 (6,499 compared to 8,577). The case mortality rate rose slightly to 1.2 per cent mainly due to an increase in the north-west of the country where Kedah, Perlis, Penang and Province Wellesley recorded 33 deaths compared to 8 in 1955.

All these figures refer to microscopically diagnosed malaria admissions to Government and Estate hospitals, as these are the only reliable figures (*see* remarks in the section Recording of malaria Statistics). These figures, however, do not tell us much about malaria in the kampongs because their inhabitants seldom enter hospital. We cannot assume, therefore, that the marked reduction in malaria amongst the peri-urban and estate populations indicated by the hospital admissions, applies also to the kampongs, especially to the many areas in which it has not yet been possible to apply control measures.

4.—RURAL MALARIA CONTROL

The Board discussed the extension of malaria control to the rural areas, as an essential part of any long term plan to eradicate malaria from Malaya. Whereas before the war there were no control measures applicable to rural areas, house spraying with modern insecticides now provides a means of greatly reducing malaria in the kampongs. But so far, lack of money and staff have prevented the use of this method except on a small scale.

Out of a rural population, excluding estates, of some 4 million, only about 0.6 million are living in sprayed houses, whilst practically the whole of the urban population of about 1.6 million is protected from malaria.

To extend malaria control to the whole of the rural population there would have to be a large increase of staff and funds. The first essential would be the training of this staff, and the Board considered that a start should be made by the formation of a malaria training centre. The next step would be a trial of malaria eradication in a whole State, followed, if successful, by expansion to countrywide control. The Board summarised its views in the following recommendation to Government:

The Board is satisfied that malaria is still a serious problem in this country, especially in the rural areas where little has yet been done, and where more than half of the population resides.

The Board is concerned at the absence of any countrywide co-ordinated scheme aimed at the elimination of malaria from Malaya, and recommends that the Government create within the Medical Department a malaria control division to devise and direct a co-ordinated Malayan-wide scheme of malaria control.

Acting on this recommendation the Director of Medical Services appointed a committee to advise him, the members of which were:

Dr. T. Wilson, Acting Director, Institute for Medical Research (*Chairman*).

Dr. Mohd. Din bin Ahmad, Assistant Director of Medical Services (*Secretary*).

Dr. J. F. McGarity, State Medical and Health Officer, Selangor.

Dr. A. A. Byrne, Health Officer, Inland Districts, Selangor.

Dr. J. A. Reid, Senior Entomologist, Institute for Medical Research.

This committee, after two meetings and two drafts, submitted a detailed report in which it recommended:

that a Federal Malaria Training Centre should be established as soon as possible, with the training of existing staff as one of its functions,

that the Training Centre should organise and carry out a large scale trial of malaria control in rural areas with the object of discovering whether the eradication of malaria is a practical possibility in Malaya,

that the data from this trial should be used for the further extension of malaria control to other rural areas by staff who have been trained at the Centre,

that the ultimate aim must be countrywide malaria control and eradication of malaria from the Federation, through the agency of a specialist malaria control service.

The Committee made a tentative estimate of the staff (professional and subordinate) and the buildings and equipment required for a Malaria Training Centre, and concluded that the initial cost of building and equipping the Centre would be about half a million dollars, and the annual cost of running the Centre (salaries, maintenance, etc.) about $170,000.

The Committee also considered the probable cost of countrywide malaria control. Assuming an all-in figure of $2 per person per annum, and a population of 6 millions, countrywide control would evidently require an expenditure of the order of $12 million a year. The Government is at present spending about $4 million a year on malaria control so that an additional $8 million would be required, and it is easy to see from this that countrywide control is too expensive to continue indefinitely as annually recurrent expenditure. In other words, unless a trial shows that eradication of malaria is possible, so that the cost of countrywide control has only to be borne for a few years and can be regarded as capital expenditure, it is unlikely to be undertaken.

Although the experiments made by the Institute for Medical Research do not suggest that insecticides alone will eradicate malaria from rural Malaya (though they will greatly reduce it), the combined use of drugs and insecticides may be able to do so, and would probably be used in any trial of eradication.

5.—RECORDING OF MALARIA STATISTICS

In October, 1955, one of the leading newspapers drew attention to a large difference between the number of malaria deaths recorded by the Board in its annual report for 1954, namely 111, and the number recorded by the Registrar General for that year which was 941. In fact the Registrar General's figure must always be larger than the Board's, because the Board's figure is deliberately restricted to deaths in hospital from malaria positively diagnosed by microscope, and does not include deaths, whether in hospital or outside hospital, that are attributed to malaria although parasites have not been found (clinical malaria). The Registrar General's figure, on the other hand, takes in all deaths attributed to malaria, whether occurring in or out of hospital, and however diagnosed. Nevertheless the difference seemed too large to be fully accounted for in this way, and investigation showed that 609 out of the 941 deaths had occurred in Pahang, and 589 of these had not been reported by doctors, but by police or penghulus. These deaths should therefore have been recorded as deaths from unspecified fever (pyrexia of unknown origin), not as deaths from malaria, which is a diagnosis that should only be made by a doctor, and even then should be confirmed by microscope.

Subtracting the 589 "fever" deaths reduces the Registrar General's figure to 352. Probably a number of these ought also to have been recorded as due to fever instead of malaria, for it seems unlikely that this source of error will have been confined to Pahang. The error was discovered too late to correct the figures

for 1955, which show a similar large difference between the 74 malaria deaths recorded by the Board, and the 807 recorded by the Registrar General, of which 604 occurred in Pahang. The discrepancy was reduced in 1956 when the Registrar General recorded only 178 deaths from malaria, compared to 76 recorded by the Board.

It has always been recognised that the figures published by the Board, with their emphasis on microscopic diagnosis, represent only a part of the total amount of malaria occurring each year. Some of the fever deaths reported by police and penghulus must be due to malaria, but there is no means at present of telling how many, and to accept a diagnosis of malaria from layman as a cause of large numbers of deaths is merely to falsify the records and cause confusion. Since the true incidence of any disease can only be guessed at in a country where so many people live out of reach of a doctor, and only about 20 per cent of deaths are medically certified, it seems best to concentrate on the few figures known to be reliable. This means in practice malaria admissions to hospitals confirmed by microscope, and it is on these figures that the Board chiefly relies in assessing the changing incidence of malaria from year to year. It might be thought that clinical malaria should be included when this diagnosis is made in hospital, but the figures in the table below suggest that the grounds for this diagnosis vary considerably from one State to another.

TABLE.—Malaria admissions to Government hospitals, totals for the two years 1955 and 1956, to show the variable incidence of clinical malaria.

State or Settlement	Total malaria admissions	Microscopically diagnosed	Clinically diagnosed	Per cent clinically diagnosed
Perlis	671 ...	443 ...	228 ...	34
Kedah	1,705 ...	1,289 ...	416 ...	24
Penang and Province Wellesley	893 ...	628 ...	265 ...	30
Perak	3,958 ...	1,760 ...	2,198 ...	55
Selangor	1,022 ...	927 ...	95 ...	9
Negri Sembilan ...	1,479 ...	1,390 ...	89 ...	6
Malacca	601 ...	279 ...	322 ...	54
Johore	1,719 ...	914 ...	805 ...	47
Pahang	2,617 ...	1,127 ...	1,490 ...	57
Trengganu	873 ...	520 ...	353 ...	40
Kelantan	842 ...	444 ...	398 ...	47
Federation Total ...	16,380 ...	9,719 ...	6,661 ...	41

Whereas in Selangor and Negri Sembilan in the last two years clinical malaria has formed less than 10 per cent of the total malaria admissions; in Perak, Malacca and Pahang, over

half the "malaria" admissions were not confirmed by microscope. Probably these differences are partly due to differences in the standards of microscopy in the hospital laboratories and a malaria training centre may be expected to improve these. In this connection the following quotation is much to the point, "presupposing a reasonable standard of microscopy, and that no treatment has been given, we consider that 'clinical malaria' without detectable parasitaemia must be extremely rare in Malaya" (Wilson and Edeson). These authors go on to express the opinion that, even when treatment has been given, the persistence of symptoms with repeatedly negative blood films renders it very unlikely that the illness is malaria.

6.—HOUSE SPRAYING

The returns for the year show that about 605,000 persons in new villages and kampongs were living in houses sprayed by Government Medical Department (606,215 at mid year, and 604,585 at the end of the year). About 27 per cent of these persons were living in villages with populations of 2,000 or more. Most of these larger sprayed villages were in Johore and Perak. Dieldrin, as a 15 per cent emulsifiable concentrate, is beginning to replace the similar 25 per cent DDT concentrate most used hitherto. Dieldrin is generally applied twice a year at about 40 mg. per sq. ft. House spraying is also widely used on rubber estates but there are no exact figures.

TABLE 1

IN-PATIENTS

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956

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 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			I.—INFECTIVE AND PARASITIC DISEASES					
A 1		001-008	Tuberculosis of respiratory system	2,922	7,155	10,077	842	3,063
A 2		010	Tuberculosis of meninges and central nervous system	13	162	175	88	15
A 3		011	Tuberculosis of intestines, peritoneum and mesenteric glands	4	54	58	10	4
A 4		012-013	Tuberculosis of bones and joints	137	438	575	8	113
A 5	(*a*)	014	Tuberculosis of skin and subcutaneous cellular tissue	2	26	28	..	3
	(*b*)	015	Tuberculosis of lymphatic system	18	119	137	..	11
	(*c*)	016	Tuberculosis of genito-urinary system	4	34	38	2	1
	(*d*)	017	Tuberculosis of adrenal glands	2	8	10		
	(*e*)	018	Tuberculosis of other organs	2	12	14		
	(*f*)	019	Disseminated tuberculosis	..	7	7	1	
A 6		020	Congenital syphilis	1	45	46	7	1
A 7	(*a*)	021.0-021.1	Primary syphilis	..	29	29	..	1
	(*b*)	021.2	Secondary syphilis	8	54	62	..	9
	(*c*)	021.3	Early syphilis, relapse following treatment	..	5	5		
	(*d*)	021.4	Early syphilis (unspecified stage)					
A 8		024	Tabes dorsalis	1	23	24	1	2
A 9		025	General paralysis of insane	50	105	155	16	81
A 10	(*a*)	022	Aneurysm of aorta	..	21	21	5	
	(*b*)	023	Other cardiovascular syphilis	..	12	12	3	
	(*c*)	026	Other syphilis of central nervous system	2	18	20	4	1
	(*d*)	027	Tertiary syphilis	10	104	114	3	6
	(*e*)	028	Latent syphilis	..	31	31	..	1
	(*f*)	029	Syphilis unqualified	..	97	97	..	2
A 11	(*a*)	030	Acute or unspecified gonorrhoea	2	161	163	..	
	(*b*)	031	Chronic gonococcal infection of genito-urinary system	1	27	28	..	1
	(*c*)	032	Gonococcal infection of joint	5	31	36		
	(*d*)	033	Gonococcal infection of eye	1	31	32	..	1
	(*e*)	034-035	Gonococcal infection of other sites	..	21	21		
A 12		040	Typhoid fever	66	881	947	48	38
A 13	(*a*)	041	Paratyphoid fever A, B or C	2	32	34	2	2
	(*b*)	042	Other salmonella infections					
A 14		043	Cholera					
A 15		044	Brucellosis (undulant fever)					
A 16	(*a*)	045	Bacillary dysentery	5	148	153	9	7
	(*b*)	046	Amoebiasis	43	1,175	1,218	48	31
	(*c*)	047-048	Other protozoal and unspecified forms of dysentery	17	355	372	9	3
A 17		050	Scarlet fever	..	1	1		
A 18		051	Streptococcal sore throat	..	4	4		
A 19		052	Erysipelas	..	6	6		
A 20		053	Septicaemia and pyaemia	..	58	58	32	1
A 21		055	Diphtheria	43	1,445	1,488	257	31
A 22		056	Whooping Cough	3	72	75	3	4
			Carried forward ..	3,364	13,007	16,371	1,398	3,433

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.

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	3,364	13,007	16,371	1,398	3,433
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)					
A 23		057	Meningococcal infections ..	1	12	13	4	
A 24		058	Plague					
A 25		060	Leprosy	3,379	823	4,202	19	3,369
A 26	(*a*)	061	Tetanus of the new-born ..	4	175	179	128	2
	(*b*)	—	Tetanus, other forms	5	254	259	94	6
A 27		062	Anthrax					
A 28		080	Acute Poliomyelitis	..	46	46	7	4
A 29		082	Acute infectious encephalitis..	..	24	24	5	
A 30		081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis ..	13	80	93	2	9
A 31		084	Smallpox					
A 32		085	Measles	6	279	285	1	6
A 33		091	Yellow fever					
A 34		092	Infectious hepatitis	23	752	775	29	28
A 35		094	Rabies					
A 36	(*a*)	100	Louse-borne epidemic typhus ..					
	(*b*)	101	Flea-borne endemic typhus (murine)	3	39	42		
	(*c*)	104	Tick-borne epidemic typhus ..					
	(*d*)	105	Mite-borne typhus	3	170	173	4	4
	(*e*)	102-103, 106-108	Other and unspecified typhus ..	1	93	94	..	4
A 37	(*a*)	110	Vivax malaria (benign tertian)	23	1,388	1,411	6	23
	(*b*)	111	Malaria malaria (quartan) ..	1	13	14	..	3
	(*c*)	112	Falciparum malaria (malignant tertian)	62	2,619	2,681	55	30
	(*d*)	114	Mixed malaria infections ..	2	95	97	3	
	(*e*)	115	Blackwater fever	..	1	1	1	
	(*f*)	113, 116-117	Other and unspecified forms of malaria	42	3,152	3,194	24	48
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	20	21	1	1
A 40	(*a*)	127	Onchocerciasis	..	1	1		
	(*b*)	—	Loiasis					
	(*c*)	—	Filariasis (bancrofti)	2	28	30		
	(*d*)	—	Other filariasis	6	145	151	..	6
A 41		129	Ankylostomiasis	23	925	948	1	7
A 42	(*a*)	126	Tape worm (infestation) and other cestode infestation ..	..	39	39		
	(*b*)	130.0	Ascariasis	31	2,587	2,618	5	30
	(*c*)	130.3	Guinea worm (dracunculosis)	..	36	36		
	(*d*)	124	Other trematode infestation ..	..	2	2		
	(*e*)	128	Trichiniasis	..	6	6		
	(*f*)	130.1-130.2	Other diseases due to helminths	2	171	173	..	2
A 43	(*a*)	036	Chancroid	..	11	11		
	(*b*)	037	Lymphogranuloma venereum	1	15	16	1	
	(*c*)	038	Granuloma inguinale, venereal	..	4	4	..	1
	(*d*)	039	Other and unspecified venereal diseases	..	9	9		
	(*e*)	049	Food poisoning infection and intoxication	..	132	132	1	2
	(*f*)	059	Tularaemia					
	(*g*)	063	Gas gangrene	..	2	2		
	(*h*)	064	(*a*) Glanders					
			(*b*) Melioidosis					
			(*c*) Other bacterial diseases ..					
			Carried forward ..	6,998	27,155	34,153	1,789	7,018

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	6,998	27,155	34,153	1,789	7,018
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)					
	(*i*)	070	Vincent's infection	..	4	4		
	(*j*)	071	Relapsing fever					
	(*k*)	072	Leptospirosis icterohaemorrhagica (Weil's disease) ..	..	34	34	1	
	(*l*)	073	Yaws	13	170	183	..	6
	(*m*)	086	Rubella	..	2	2		
	(*n*)	087	Chickenpox	12	612	624	..	15
	(*o*)	088	Herpes Zoster	9	216	225	..	4
	(*p*)	089	Mumps	1	127	128	..	2
	(*q*)	090	Dengue	1	79	80		
	(*r*)	093	Glandular fever	..	20	20		
	(*s*)	095	Trachoma	2	45	47	..	2
	(*t*)	096.7	Sandfly fever					
	(*u*)	120	Leishmaniasis					
	(*v*)	121	(*a*) Trypanosomiasis gambiensis (*b*) Trypanosomiasis rhodesiensis (*c*) Other and unspecified trypanosomiasis					
	(*w*)	131	Dermatophytosis	12	290	302	..	14
	(*x*)	135	Scabies	..	131	131	..	2
	(*y*)	054-074 096.1-096.6 096.8,096.9 122 132-134 136-138	All other diseases classified as infective and parasitic ..	9	287	296	2	9
			II.—NEOPLASMS					
A 44		140-148	Malignant neoplasm of buccal cavity and pharynx	18	270	288	44	19
A 45		150	Malignant neoplasm of oesophagus	10	167	177	56	12
A 46		151	Malignant neoplasm of stomach	15	321	336	110	22
A 47	(*a*)	152	Malignant neoplasm of small intestine, including duodenum	..	12	12	4	
	(*b*)	153	Malignant neoplasm of large intestine, except rectum ..	3	55	58	14	4
A 48		154	Malignant neoplasm of rectum..	4	115	119	25	9
A 49		161	Malignant neoplasm of larynx ..	2	31	33	12	1
A 50		162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary ..	7	136	143	49	9
A 51		170	Malignant neoplasm of breast ..	4	149	153	13	12
A 52		171	Malignant neoplasm of cervix uteri	15	325	340	28	9
A 53		172-174	Malignant neoplasm of other and unspecified parts of uterus ..	7	52	59	11	3
A 54		177	Malignant neoplasm of prostate	..	22	22	5	
A 55		190-191	Malignant neoplasm of skin ..	19	215	234	19	7
A 56		196-197	Malignant neoplasm of bone and connective tissue	4	59	63	11	2
A 57	(*a*)	155-156	Malignant neoplasm of liver ..	12	254	266	104	7
	(*b*)	157	Malignant neoplasm of pancreas	..	9	9	5	
	(*c*)	158	Malignant neoplasm of peritoneum	..	7	7		
	(*d*)	159	Malignant neoplasm of unspecified digestive organs	1	9	10	3	1
	(*e*)	175-176	Malignant neoplasm of other and unspecified female genital organs	2	48	50	7	1
	(*f*)	178-179	Malignant neoplasm of other and unspecified male genital organs	5	52	57	8	2
			Carried forward ..	7,185	31,480	38,665	2,318	7,192

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	7,185	31,480	38,665	2,318	7,192
			II.—NEOPLASMS—(*cont.*)					
	(*g*)	180-181	Malignant neoplasm of kidney, bladder and other urinary organs	1	55	56	16	2
	(*h*)	160 164-165 192-195 198-199	Malignant neoplasm of all other and unspecified sites ..	12	220	232	46	12
A 58		204	Leukaemia and Aleukaemia ..	3	108	111	41	5
A 59	(*a*)	200	Lymphosarcoma and reticulosarcoma	1	19	20	9	1
	(*b*)	251	Hodgkin's disease	2	18	20	2	4
	(*c*)	202-203	Other neoplasm of lymphatic and haematopoietic system ..	1	9	10	2	
	(*d*)	205	Mycosis fungoides	1	4	5		
A 60	(*a*)	210-211	Benign neoplasm of buccal cavity, pharynx and digestive system..	3	51	54	6	
	(*b*)	217	Benign neoplasm of other female genital organs ..	2	68	70	3	1
	(*c*)	218	Benign neoplasm of other male genital organs	..	20	20		
	(*d*)	212-216 219-229	Benign neoplasm of other and unspecified organs and tissue	13	381	394	10	13
	(*e*)	230	Neoplasm of unspecified nature of digestive organs	2	10	12	1	
	(*f*)	233-235	Neoplasm of unspecified nature of other female genital organs	2	39	41	1	1
	(*g*)	231-232 236-239	Neoplasm of unspecified nature of other unspecified organs ..	6	217	223	7	6
			III.—ALLERGIC ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS					
A 61		250-251	Nontoxic goitre	5	101	106	..	4
A 62		252	Thyrotoxicosis with or without goitre	15	249	264	4	9
A 63		260	Diabetes mellitus	71	1,538	1,609	67	90
A 64	(*a*)	280	Beri Beri	21	505	526	26	26
	(*b*)	281	Pellagra	..	1	1		
	(*c*)	282	Scurvy	1	6	7	1	
	(*d*)	283-284	Rickets	2	13	15	..	1
	(*e*)	285	Osteomalacia					
	(*f*)	286.0	(*a*) Sprue	..	8	8		
		286.5	(*b*) Malnutrition	37	637	674	104	45
			Kwashiorkor	2	2	4		
		286.1-286.4 286.6	(*c*) Other deficiency states ..	11	353	364	15	13
A 65	(*a*)	290	Pernicious and other hyperchromic anaemias ..	5	58	63	15	
	(*b*)	291	Iron deficiency anaemias (hypochromic)	28	613	641	26	26
	(*c*)	292-293	Other specified and unspecified anaemias	171	2,539	2,710	116	204
A 66	(*a*)	241	Asthma	89	3,189	3,278	66	100
	(*b*)	240 242-245	Angioneurotic oedema, urtcaria and other allergic disorders ..	6	476	482	2	6
	(*c*)	253	Myxoedema and cretinism ..	2	7	9	..	2
			Carried forward ..	7,700	42,994	50,694	2,904	7,763

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	7,700	42,994	50,694	2,904	7,763
			III.—ALLERGIC ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS—(*cont.*)					
	(*d*)	254	Other diseases of thyroid gland	1	89	90	2	2
	(*e*)	270	Disorders of pancreatic internal secretion other than diabetes mellitus	..	13	13		
	(*f*)	271	Diseases of parathyroid gland ..	..	7	7		
	(*g*)	272	Diseases of pituitary gland ..	..	4	4	1	
	(*h*)	273	Diseases of thymus gland ..	..	3	3	3	
	(*i*)	274	Diseases of adrenal gland ..	..	1	1		
	(*j*)	275-277	Other diseases of endocrine glands	..	5	5		
	(*k*)	288	Gout	3	43	46	..	2
	(*l*)	287,289	Other metabolic diseases ..	..	16	16		
	(*m*)	294	Polycythemia	..	3	3		
	(*n*)	295	Haemophilia	..	7	7	1	1
	(*o*)	296	Purpura and other haemorrhagic conditions	1	55	56	9	3
	(*p*)	297	Agranulocytosis	..	5	5	3	
	(*q*)	298	Diseases of spleen	1	38	39	2	2
	(*r*)	299	Other diseases of blood and blood-forming organs ..	3	59	62	6	1
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS					
A 67	(*a*)	300	Schizophrenic disorders (dementia praecox)	2,396	1,628	4,024	56	2,662
	(*b*)	301	Maniac-depressive reaction ..	442	474	916	11	475
	(*c*)	302	Involutional melancholia ..	104	98	202	..	162
	(*d*)	303	Paranoia and paranoid states ..	7	3	10	..	8
	(*e*)	304	Senile psychoses	466	342	808	73	460
	(*f*)	305-309	Other and unspecified psychoses	774	596	1,370	11	752
A 68	(*a*)	311	Hysterical reaction	13	259	272	..	16
	(*b*)	314	Neurotic-depressive reaction ..	1	195	196	..	2
	(*c*)	322	Alcoholism	2	261	263	..	2
	(*d*)	323	Other drug addiction	7	350	357	..	18
	(*e*)	310 312-313 315-321 324 326	Other psychoneuroses and disorders of personality ..	500	366	866	5	373
A 69		325	Mental deficiency	115	947	1,062	7	136
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS					
A 70	(*a*)	331	Cerebral haemorrhage	7	371	378	247	8
	(*b*)	332	Cerebral embolism and thrombosis	36	307	343	105	26
	(*c*)	330 333-334	Other vascular lesions affecting central nervous system ..	23	118	141	31	11
A 71		340	Non-meningococcal meningitis	6	285	291	125	14
A 72		345	Multiple sclerosis	..	4	4		
A 73		353	Epilepsy	28	487	515	15	24
			Carried forward ..	12,636	50,433	63,069	3,617	12,923

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	12,636	50,433	63,069	3,617	12,923
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS—(*cont.*)					
A 74	(*a*)	370	Conjunctivitis and ophthalmia	33	1,582	1,615	..	29
	(*b*)	371-379	Other inflammatory diseases of eye	27	718	745	1	24
A 75		385	Cataract	61	956	1,017	..	77
A 76		387	Glaucoma	5	110	115	..	13
A 77	(*a*)	390	Otitis externa	2	190	192	..	5
	(*b*)	391-393	Otitis media and mastoiditis ..	7	423	430	4	21
	(*c*)	394	Other inflammatory diseases of ear	..	71	71	..	1
A 78	(*a*)	380-384, 386,388, 389	All other diseases and conditions of eye	101	1,328	1,429	1	94
	(*b*)	342	Intracranial and intraspinal abscess	1	31	32	24	1
	(*c*)	343	Encephalitis, myelitis and encephalomyelitis	6	153	159	66	4
	(*d*)	350	Paralysis agitans	16	50	66	4	10
	(*e*)	352	Other cerebral paralysis ..	90	416	506	25	92
	(*f*)	356	Motor neurone disease and muscular atrophy	2	35	37	1	2
	(*g*)	357	Other diseases of spinal cord ..	14	41	55	6	17
	(*h*)	366	Other and unspecified forms of neuralgia and neuritis ..	26	1,369	1,395	1	52
	(*i*)	367	Other diseases of cranial nerves	..	13	13	1	1
	(*j*)	369	Diseases of peripheral autonomic nervous system ..	6	110	116	..	7
	(*k*)	341,344, 351,354, 355, 360-365, 368, 395-398	All other diseases of the nervous system and sense organs ..	18	601	619	17	18
			VII.—DISEASES OF THE CIRCULATORY SYSTEM					
A 79	(*a*)	400	Rheumatic fever without mention of heart involvement	11	154	165	4	6
	(*b*)	401	Rheumatic fever with heart involvement	4	69	73	14	3
	(*c*)	402	Chorea	1	8	9		
A 80	(*a*)	410-413	Diseases of valves specified as rheumatic	21	196	217	28	13
	(*b*)	414	Other endocarditis specified as rheumatic	..	4	4	1	
	(*c*)	415	Other myocarditis specified as rheumatic	..	21	21	5	
	(*d*)	416	Other heart disease specified as rheumatic	..	39	39	4	4
A 81	(*a*)	420	Arteriosclerotic heart disease, including coronary disease ..	9	256	265	93	14
	(*b*)	421	Chronic endocarditis not specified as rheumatic ..	..	37	37	5	2
	(*c*)	422	Other myocardial degeneration	14	244	258	80	9
A 82	(*a*)	430	Acute and subacute endocarditis	2	35	37	8	2
	(*b*)	431	Acute myocarditis	5	109	114	36	4
	(*c*)	432	Acute pericarditis	3	31	34	14	1
	(*d*)	433	Functional disease of heart ..	38	1,178	1,216	325	85
	(*e*)	434	Other and unspecified diseases of heart	80	1,185	1,265	291	72
A 83		440-443	Hypertension with heart disease	37	626	663	149	33
A 84		444-447	Hypertension without mention of heart	45	1,406	1,451	89	73
A 85	(*a*)	450	General arteriosclerosis.. ..	1	22	23	5	1
			Carried forward ..	13,322	64,250	77,572	4,919	13,713

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	13,322	64,250	77,572	4,919	13,713
			VII.—DISEASES OF THE CIRCULATORY SYSTEM—(*cont.*)					
	(*b*)	451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm	1	38	39	6	3
	(*c*)	452	Other aneurysm, except of heart and aorta	..	12	12	2	
	(*d*)	453	Peripheral vascular disease ..	1	12	13		
	(*e*)	454	Arterial embolism and thrombosis	7	107	114	45	1
	(*f*)	455	Gangrene of unspecified cause ..	9	123	132	10	11
	(*g*)	456	Other diseases of arteries ..	7	81	88	2	4
A 86	(*a*)	460, 462	Varicose veins	8	131	139	..	4
	(*b*)	461	Haemorrhoids	35	1,220	1,255	2	40
	(*c*)	463-464	Phlebitis and thrombophlebitis	2	83	85	3	2
	(*d*)	465	Pulmonary embolism and infarction	3	54	57	15	2
	(*e*)	466	Other venous embolism and thrombosis	1	43	44	7	4
	(*f*)	467	Other diseases of circulatory system..	1	77	78	5	4
	(*g*)	468	(*a*) Adenitis	15	518	533	..	11
			(*b*) Lymphadenitis	2	183	185	..	5
			(*c*) Other diseases of lymph nodes and lymph channels..	3	60	63	..	1
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM					
A 87	(*a*)	470	Acute nasopharyngitis (common cold)	10	2,130	2,140	..	36
	(*b*)	471	Acute sinusitis	1	217	218	..	1
	(*c*)	472	Acute pharyngitis	11	882	893	2	17
	(*d*)	473	Acute tonsillitis	32	2,450	2,482	4	33
	(*e*)	474	Acute laryngitis and tracheitis..	2	256	258	7	11
	(*f*)	475	Other acute upper respiratory infections	3	245	248	12	2
A 88	(*a*)	480	Influenza with pneumonia ..	..	50	50	..	2
	(*b*)	481	Influenza with other respiratory manifestations, and influenza unqualified	24	1,596	1,620	..	32
	(*c*)	482	Influenza with digestive manifestations, but without respiratory symptoms ..	1	61	62		
	(*d*)	483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	2	38	40		
A 89		490	Lobar pneumonia	17	903	920	92	34
A 90		491	Broncho-pneumonia	34	2,674	2,708	786	65
A 91		492-493	Primary atypical, other and unspecified pneumonia ..	23	743	766	74	24
A 92		500	Acute bronchitis	37	2,439	2,476	26	51
A 93	(*a*)	501	Bronchitis unqualified	76	4,208	4,284	10	94
	(*b*)	502	Chronic bronchitis	64	1,073	1,137	37	48
A 94		510	Hypertrophy of tonsils and adenoids	5	182	187	..	4
A 95	(*a*)	518	Empyema	12	136	148	13	18
	(*b*)	521	Abscess of lung	17	129	146	25	6
A 96		519	Pleurisy	30	415	445	13	32
A 97	(*a*)	517	Other diseases of upper respiratory tract	9	536	545	13	22
	(*b*)	520	Spontaneous pneumothorax ..	..	27	27	6	1
	(*c*)	522	Pulmonary congestion and hypostasis	1	14	15	9	1
			Carried forward ..	13,828	88,396	102,224	6,145	14,339

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	13,828	88,396	102,224	6,145	14,339
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM—(*cont.*)					
	(*d*)	525	Other chronic interstitial pneumonia	..	5	5		
	(*e*)	523	Pneumoconiosis	..	5	5		
	(*f*)	526	Bronchiectasis	27	500	527	26	21
	(*g*)	511-516 524 527	All other respiratory diseases ..	17	515	532	22	21
			IX.—DISEASES OF THE DIGESTIVE SYSTEM					
A 98	(*a*)	530	Dental caries	5	198	203		
	(*b*)	531-535	(*a*) Gingivitis	..	133	133		
			(*b*) Pyorrhoea	1	72	73	1	
			(*c*) Other diseases of teeth and supporting structures ..	24	411	435	2	7
A 99		540	Ulcer of stomach	55	1,599	1,654	59	59
A 100		541	Ulcer of duodenum	32	407	439	21	16
A 101		543	Gastritis and duodenitis ..	52	2,129	2,181	5	51
A 102		550-553	Appendicitis	50	2,344	2,394	24	61
A 103	(*a*)	560	Hernia of abdominal cavity without mention of obstruction	37	1,376	1,413	5	39
	(*b*)	561	Hernia of abdominal cavity with obstruction	12	219	231	22	3
	(*c*)	570	(*a*) Intussusception	1	51	52	14	1
			(*b*) Volvulus	2	12	14	7	
			(*c*) Other intestinal obstruction	7	222	229	66	3
A 104	(*a*)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years	50	3,542	3,592	742	47
	(*b*)	571.1	Gastro-enteritis and colitis, ages 2 years and over ..	49	2,999	3,048	170	52
	(*c*)	572	Chronic enteritis and ulcerative colitis	5	292	297	13	4
A 105	(*a*)	581.0	Cirrhosis of liver without mention of alcoholism ..	33	760	793	138	42
	(*b*)	581.1	Cirrhosis of liver with alcoholism	..	37	37	6	2
A 106	(*a*)	584	Cholelithiasis	2	86	88	2	
	(*b*)	585	Cholecystitis without mention of calculi	10	382	392	5	11
A 107	(*a*)	536	Stomatitis	6	255	261	..	3
	(*b*)	538	Other diseases of buccal cavity	1	61	62	1	2
	(*c*)	539	(*a*) Functional disorders of oesophagus	1	28	29	1	
			(*b*) Stricture or obstruction of oesophagus	5	122	127	5	7
	(*d*)	544	Disorders of function of stomach	19	1,131	1,150	3	23
	(*e*)	545	Other diseases of stomach and duodenum	9	527	536	3	5
	(*f*)	573	(*a*) Constipation	1	516	517	..	5
			(*b*) Other functional disorders of intestines	11	1,016	1,027	4	12
	(*g*)	574	Anal fissure and fistula ..	12	313	325	..	11
	(*h*)	575	Abscess of anal and rectal regions	14	309	323	..	10
	(*i*)	576	Peritonitis	3	215	218	99	3
	(*j*)	578	Other diseases of intestines and peritoneum	2	109	111	15	1
	(*k*)	580	(*a*) Acute yellow atrophy of liver	..	8	8	5	
			(*b*) Degeneration of liver ..	..	1	1		
			(*c*) Hepatitis	23	778	801	30	19
	(*l*)	583	Other diseases of liver	9	227	236	42	8
			Carried forward ..	14,415	112,308	126,723	7,703	14,888

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	14,415	112,308	126,723	7,703	14,888
			IX.—DISEASES OF THE DIGESTIVE SYSTEM—(*cont.*)					
	(*m*)	586	Other diseases of gall-bladder and biliary ducts	5	178	183	21	9
	(*n*)	587	Diseases of pancreas	4	25	29	4	
	(*o*)	537, 542, 577, 582	Other diseases of digestive system..	11	834	845	7	16
			X.—DISEASES OF THE GENITO-URINARY SYSTEM					
A 108		590	Acute nephritis	20	467	487	38	26
A 109	(*a*)	591	Nephritis with oedema, including nephrosis	7	182	189	27	10
	(*b*)	592	Chronic nephritis	25	334	359	74	21
	(*c*)	593	Nephritis not specified as acute or chronic	35	488	523	51	36
	(*d*)	594	Other renal sclerosis	5	49	54	..	1
A 110		600	Infections of kidney	18	567	585	17	12
A 111	(*a*)	602	Calculi of kidney and ureter ..	11	460	471	4	14
	(*b*)	604	Calculi of other parts of urinary system..	10	305	315	2	15
A 112		610	Hyperplasia of prostate ..	4	82	86	3	4
A 113		620-621	Diseases of breast	3	159	162	..	5
A 114	(*a*)	603	Other diseases of kidney and ureter	4	592	596	43	13
	(*b*)	605	Cystitis	11	538	549	1	8
	(*c*)	606	Other diseases of bladder ..	8	213	221	1	6
	(*d*)	608	Stricture of urethra	16	281	297	3	10
	(*e*)	609	Other diseases of urethra ..	7	255	262	..	5
	(*f*)	612	Other diseases of prostate ..	18	265	283	12	22
	(*g*)	613	Hydrocele	5	238	243	..	4
	(*h*)	614	Orchitis and epididymitis ..	3	278	281	..	7
	(*i*)	617	Other diseases of male genital organs	9	465	474	1	11
	(*j*)	622	Acute salpingitis and oophoritis	5	314	319	1	8
	(*k*)	625	Other diseases of ovary and Fallopian tube	3	244	247	3	9
	(*l*)	626	Diseases of parametrium and pelviperitoneum (female) ..	7	161	168	3	5
	(*m*)	630	Infective disease of uterus, vagina and vulva	10	264	274	1	4
	(*n*)	633	Other diseases of uterus ..	11	576	587	13	16
	(*o*)	634	Disorders of menstruation ..	15	903	918	..	25
	(*p*)	637	Other diseases of female genital organs	8	487	495	3	18
	(*q*)	601, 607, 611, 615-616, 623-624, 631-632, 635-636	All other diseases of the genito-urinary system	23	573	596	21	20
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM					
A 115	(*a*)	640	Pyelitis and pyelonephritis of pregnancy	8	305	313	3	5
	(*b*)	641	Other infections of genito-urinary tract during pregnancy	..	19	19		
	(*c*)	681	Sepsis of childbirth and the puerperium	3	146	149	9	3
	(*d*)	682	Puerperal phlebitis and thrombosis	3	3	6		
			Carried forward ..	14,750	123,558	138,308	8,069	15,256

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	14,750	123,558	138,308	8,069	15,256
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM—(*cont.*)					
	(*e*)	684	Puerperal pulmonary embolism	..	4	4	2	
A 116	(*a*)	642	(*a*) Albuminuria of pregnancy	6	116	122	1	7
			(*b*) Eclampsia of pregnancy	10	329	339	49	10
			(*c*) Hyperemesis gravidarum	12	371	383	2	3
			(*d*) Acute yellow atrophy of liver	..	18	18	1	
			(*e*) Other toxaemias of pregnancy	22	813	835	26	36
	(*b*)	652	Abortion with toxaemia, without mention of sepsis	2	22	24	3	
	(*c*)	685	Puerperal eclampsia	..	81	81	16	5
	(*d*)	686	Other forms of puerperal toxaemia	4	49	53	4	3
A 117	(*a*)	643	Placenta praevia	..	109	109	5	1
	(*b*)	644	Other haemorrhage of pregnancy	11	509	520	19	6
	(*c*)	670	Delivery complicated by placenta praevia or atepartum haemorrhage	12	439	451	17	3
	(*d*)	671	Delivery complicated by retained placenta	6	596	602	37	11
	(*e*)	672	Delivery complicated by other postpartum haemorrhage	10	543	553	73	4
A 118		650	Abortion without mention of sepsis or toxaemia	81	5,550	5,631	13	78
A 119		651	Abortion with sepsis	12	325	337	8	5
A 120	(*a*)	645	Ectopic pregnancy	8	215	223	12	5
	(*b*)	646	Anaemia of pregnancy	27	1,493	1,520	10	57
	(*c*)	683	Pyrexia of unknown origin during the puerperium	3	61	64	3	
	(*d*)	688.1	Puerperal psychoses	..	33	33		
	(*e*)	689	Mastitis and other disorders of lactation	2	107	109	..	2
	(*f*)	647-649 673-680 687 688.0 688.2-688.3	Other complications of pregnancy childbirth and the puerperium	85	3,432	3,517	81	85
	(*g*)	660	Delivery without complications	702	56,719	57,421	..	724
			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	18	609	627	3	9
	(*b*)	691-693	Cellulitis and abscess	140	5,147	5,287	8	132
	(*c*)	694-698	Other infections of skin and subcutaneous tissue	36	743	779	1	23
A 122	(*a*)	720	Acute arthritis due to pyogenic organisms	2	65	67	2	5
	(*b*)	721	Acute nonpyogenic arthritis	..	48	48		
	(*c*)	722	Rheumatoid arthritis and allied conditions	25	395	420	1	16
	(*d*)	723-725	Arthritis specified and unspecified	55	1,204	1,259	2	44
A 123	(*a*)	726	Muscular rheumatism	12	509	521	..	4
	(*b*)	727	Rheumatism unspecified	7	229	236	..	6
A 124		730	Osteomyelitis and periostitis	40	499	539	5	38
			Carried forward ..	16,100	204,940	221,040	8,473	16,578

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	16,100	204,940	221,040	8,473	16,578
			XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE AND XIII.—DISEASES OF THE BONES AND ORGANS OF MOVEMENT—(*cont.*)					
A 125	(*a*)	737	Ankylosis of joint	4	38	42	..	2
	(*b*)	745-749	Other acquired musculoskeletal deformities	18	97	115	..	5
A 126	(*a*)	715	Chronic ulcer of skin (including tropical ulcer)	89	1,813	1,902	1	87
	(*b*)	700-714, 716	All other diseases of skin ..	85	2,993	3,078	2	95
	(*c*)	731-736, 738-744	All other diseases of musculoskeletal system	19	424	443	1	15
			XIV.—CONGENITAL MALFORMATIONS					
A 127		751	Spina bifida and meningocele ..	1	21	22	7	1
A 128		754	Congenital malformations of circulatory system	2	114	116	33	3
A 129	(*a*)	750	Monstrosity	..	8	8	7	
	(*b*)	752	Congenital hydrocephalus ..	1	29	30	11	1
	(*c*)	753	Other congenital malformations of nervous system and sense organs	..	7	7	2	1
	(*d*)	755	Cleft palate and harelip ..	11	267	278	4	9
	(*e*)	756	(*a*) Congenital hypertrophic pyloric stenosis	..	8	8	4	
			(*b*) Imperforate anus	..	86	86	21	3
			(*c*) Other congenital malformations of digestive system	1	14	15	8	
	(*f*)	757	Congenital malformations of genito-urinary system ..	..	9	9		
	(*g*)	758	Congenital malformations of bone and joint	1	42	43	1	3
	(*h*)	759	Other and unspecified congenital malformations, not elsewhere classified	..	38	38	6	1
			XV.—CERTAIN DISEASES OF EARLY INFANCY					
A 130	(*a*)	760	Intracranial and spinal injury at birth	..	40	40	34	1
	(*b*)	761	Other birth injury	..	38	38	18	
A 131		762	Postnatal asphyxia and atelectasis	4	343	347	279	1
A 132	(*a*)	764	Diarrhoea of newborn	2	162	164	61	4
	(*b*)	765	Ophthalmia neonatorum ..	2	24	26	..	1
	(*c*)	763	Pneumonia of newborn ..	4	76	80	40	2
	(*d*)	766	Pemphigus neonatorum ..	1	13	14	2	
	(*e*)	767	Umbilical sepsis	1	53	54	11	1
	(*f*)	768	Other sepsis of newborn ..	..	14	14	7	
A 133		770	Haemolytic disease of newborn	..	25	25	14	
A 134		769, 771-772	All other defined diseases of early infancy	..	148	148	65	2
A 135	(*a*)	773	Congenital debility	..	48	48	27	
	(*b*)	774	Premature birth	..	2,307	2,307	983	69
	(*c*)	775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified ..	62	123	185	61	3
			Carried forward ..	16,408	214,362	230,770	10,183	16,888

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number		Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
			Brought forward ..	16,408	214,362	230,770	10,183	16,888
			XVI.—SYMPTOMS SENILITY AND ILL-DEFINED CONDITIONS					
A 136		794	Senility without mention of psychoses	212	1,016	1,228	286	193
A 137	(*a*)	780	Infantile convulsions	5	265	270	45	5
	(*b*)	788.8	Pyrexia of unknown origin ..	127	6,298	6,425	125	194
	(*c*)	793	Observation, without need for further medical care	260	6,920	7,180	2	194
	(*d*)	781-787 789-792 795 788.1-788.7 788.9	(*a*) Malingering	1	90	91	..	6
			(*b*) Sudden death (cause unknown)					
			(*c*) Found dead (cause unknown)					
			(*d*) Other ill-defined and unknown causes of morbidity and mortality ..	51	3,982	4,033	70	292
			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 ..	73	2,410	2,483	227	73
AE 139	(*a*)	E 800-E 802	Railway accidents	..	20	20	2	
	(*b*)	E 850-E 858	Water transport accidents ..					
	(*c*)	E 860-E 866	Aircraft accidents	..	2	2		
	(*d*)	E 840-E 845	Other transport accidents ..	5	184	189	1	3
AE 140	(*a*)	E 870	Accidental poisoning by morphia and other opium derivatives	..	7	7	2	
	(*b*)	E 874	Accidental poisoning by other analgesic and soporific drugs	..	56	56	..	3
	(*c*)	E 878	Accidental poisoning by other and unspecified drugs ..	..	67	67	..	2
	(*d*)	E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalies	5	184	189	22	7
	(*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	..	38	38	7	
	(*h*)	E 888	Accidental poisoning by other and unspecified solid or liquid substances	..	64	64	5	
	(*i*)	E 890-E 895	Accidental poisoning by gases and vapours	..	2	2		
	(*j*)	E 871-E873 E 875-E877 E 879-E882 E 887	Other accidental poisoning ..	..	143	143	2	
AE 141		E 900-E 904	Accidental falls	129	4,293	4,422	80	170
AE 142		E 912	Accident caused by machinery	7	115	122	1	
AE 143		E 916	Accident caused by fire and explosion of combustible material	11	248	259	13	9
			Carried forward ..	17,294	240,766	258,060	11,073	18,039

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
		Brought forward ..	17,294	240,766	258,060	11,073	18,039
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)					
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—*cont.*)					
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation	17	472	489	14	20
AE 145	E 919	Accident caused by firearm ..	8	105	113	8	7
AE 146	E 929	Accidental drowning and submersion	1	38	39	10	3
AE 147 (*a*)	E 913	Accidents caused by cutting or piercing instruments ..	38	1,133	1,171	..	17
(*b*)	E 914	Accidents caused by electric current	..	54	54		
(*c*)	E 920	Foreign body entering eye and adnexa	..	75	75	..	1
(*d*)	E 923	Foreign body entering other orifice	6	209	215	1	1
(*e*)	E 925	Accidental mechanical suffocation	..	3	3		
(*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	19	1,580	1,599	17	21
(*h*)	E 928	Other accidents caused by animals	6	307	313	2	3
(*i*)	E 931	Excessive heat	..	5	5	..	1
(*j*)	E 932	Excessive cold	..	2	2		
(*k*)	E 933	Hunger, thirst and exposure ..	..	2	2		
(*l*)	E 934	Cataclysm					
(*m*)	E 935	Lightning	..	16	16		
(*n*)	E 936	(*a*) Accidents in mines and quarries	2	91	93	1	3
		(*b*) Agricultural and forestry accidents	2	81	83	2	2
		(*c*) Accidental injury by crushing or landslide	3	63	66	3	1
		(*d*) Other and unspecified accidents	12	428	440	6	10
(*o*)	E 940	Generalized vaccinia following vaccination	..	4	4		
(*p*)	E 941-E 942	Other complications of smallpox vaccination	..	1	1		
(*q*)	E 950-E953, E 955-E959	Accidents due to medical or surgical intervention ..	..	8	8	2	
(*r*)	E 954	Anaesthetic accidents	..	1	1	1	
(*s*)	E 910-E911, E 915, E 921-E922, E 924-E930, E 943-E946, E 960-E965	All other accidental causes ..	14	507	521	5	10
AE 148 (*a*)	E 970	Suicide and self-inflicted injury by analgesic and soporific substances	..	18	18	3	
(*b*)	E 971	Suicide and self-inflicted injury by other solid and liquid substances	5	141	146	37	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					
		Carried forward ..	17,427	246,113	263,540	11,185	18,142

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Intermediate list Number	Detailed list Number	Cause Groups—(Diseases)	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
		Brought forward ..	17,427	246,113	263,540	11,185	18,142
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)					
		"E" CODE, ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(*cont.*)					
	(*e*) E 974	Suicide and self-inflicted injury by hanging or strangulation	..	20	20	5	
	(*f*) E 975	Suicide and self-inflicted injury by submersion (drowning) ..	2	7	9	2	
	(*g*) E 976	Suicide and self-inflicted injury by firearms and explosives ..	..	3	3	1	
	(*h*) E 977	Suicide and self-inflicted injury by cutting or piercing instruments	..	35	35	3	3
	(*i*) E 978	Suicide and self-inflicted injury by jumping from high place ..	..	5	5	4	
	(*j*) E 979	Suicide and self-inflicted injury by other and unspecified means	..	14	14	1	
AE 149	(*a*) E 980	Non-accidental poisoning by another person	..	1	1		
	(*b*) E 981	Assault by firearm and explosive	7	98	105	9	9
	(*c*) E 982	Assault by cutting or piercing instruments	10	470	480	13	10
	(*d*) E 983	Assault by other means ..	21	1,133	1,154	9	11
	(*e*) E 984	Injury by intervention of police	2	7	9		
	(*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	12	269	281	73	7
AN 139	N 805-N 809	Fracture of spine and trunk..	25	318	343	18	16
AN 140	N 810-N 829	Fracture of limbs	130	2,252	2,382	16	121
AN 141	N 830-N 839	Dislocation without fracture ..	9	203	212	..	2
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles	8	496	504	..	13
AN 143	N 850-N 856	Head injury excluding fracture	26	1,079	1,105	25	27
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis	5	65	70	6	3
AN 145	N 870-N 908	Laceration and open wounds ..	109	3,989	4,098	5	127
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface	28	1,765	1,793	1	28
AN 147	N 930-N 936	Effects of foreign body entering through orifice	2	72	74		
AN 148	N 940-N 949	Burns	46	977	1,023	43	38
AN 149	N 960-N 979	Effects of poisons	2	98	100	6	1
AN 150	N950-N959 } N980-N999 }	All other and unspecified effects of external causes ..	3	349	352	8	10
		TOTAL ..	17,874	259,838	277,712	11,433	18,568

TABLE 1—(*cont.*)

IN-PATIENTS—(*cont.*)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1956—(*cont.*)

Nationalities	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
Europeans	57	2,396	2,453	31	53
Eurasians	46	981	1,027	29	43
Chinese	10,644	117,744	128,388	6,792	10,942
Indians	3,298	80,277	83,575	2,792	3,375
Malays	3,654	55,427	59,081	1,650	3,967
Javanese	96	1,273	1,369	79	99
Japanese	1	7	8	1	1
Others	78	1,733	1,811	59	88
Total	17,874	259,838	277,712	11,433	18,568
Healthy persons admitted to hospitals to accompany children or friends	75	12,814	12,889	..	100

SUMMARY ACCORDING TO MEN, WOMEN AND CHILDREN

	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56
Men	11,472	107,008	118,480	4,608	11,868
Women	5,415	116,742	112,157	2,122	5,706
Children: (1 to 10 years)	684	20,631	21,315	1,412	664
Infants: (under 1 year)	303	15,457	15,760	3,291	330
Total	17,874	259,838	277,712	11,433	18,568

SUMMARY ACCORDING TO HOSPITALS AND AVERAGE DAILY NUMBER OF PATIENTS

	Remaining at end of 31-12-55	Admissions	Total cases treated	Deaths	Remaining at end of 31-12-56	Average daily number of patients	Number of beds
1. Kedah	849	26,164	27,013	903	853	942	1,051
2. Perlis	105	3,748	3,853	111	124	113	120
3. Penang	1,331	27,133	28,464	1,224	1,365	1,419	2,064
4. Perak	1,719	52,867	54,586	2,578	1,742	1,882	2,318
5. Selangor	1,438	41,446	42,884	1,956	1,520	1,520	1,611
6. Negri Sembilan	942	27,004	27,946	1,027	963	994	1,217
7. Malacca	638	11,441	12,079	677	666	690	782
8. Johore	1,562	38,846	40,408	1,750	1,684	1,784	1,909
9. Kelantan	346	7,280	7,626	205	426	404	488
10. Trengganu	212	5,004	5,216	142	254	243	317
11. Pahang	585	15,672	16,257	638	589	641	792
12. C. M. H., Tanjong Rambutan	3,607	1,805	5,412	111	3,790	3,703	3,000
13. M. H., Tampoi, Johore	1,174	730	1,904	58	1,235	1,223	1,200
14. L. S., Sungei Buloh	2,429	512	2,941	37	2,435	2,402	2,532
15. L. S., Pulau Jerejak	453	84	537	8	455	460	470
16. L. S., Johore Bahru	423	66	489	7	406	416	350
17. Leper Camp., K. Bharu, Kel.	44	26	70	1	44	43	45
18. Leper Hospital, K. Trengganu	17	10	27	..	17	16	22
Total	17,874	259,838	277,712	11,433	18,568	18,895	20,288

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	452	396	11,725	428	3.5
District Hospital, Sungei Patani	244	222	7,307	266	3.5
District Hospital, Kulim	164	154	5,084	171	3.3
District Hospital, Langkawi	60	69	1,221	28	2.2
District Hospital, Baling	22	8	827	10	1.2
PERLIS					
District Hospital, Kangar	113	105	3,748	111	2.9
PENANG					
General Hospital, Penang	585	550	10,166	663	6.2
Maternity Hospital, Penang	76	69	4,637	132	2.8
Perak Road Hospital, Penang	60	61	31	10	10.9
Prison Hospital, Penang	6	2	194	—	—
District Hospital, Balik Pulau	22	26	567	10	1.7
Quarantine Station Hospital, Pulau Jerejak	—	—	—	—	—
Tuberculosis Hospital, Pulau Jerejak	400	394	327	51	7.1
District Hospital, Butterworth	76	56	2,908	117	3.9
District Hospital, Bukit Mertajam	118	99	5,594	160	2.8
District Hospital, Sungei Bakap	76	74	2,690	81	2.9
PERAK					
District Hospital, Parit Buntar	79	62	2,833	85	2.9
General Hospital, Taiping	339	329	8,253	520	6.1
Men's Hospital, Kuala Kangsar	111	103	2,808	91	3.1
Women's Hospital, Kuala Kangsar	101	105	3,992	131	3.2
District Hospital, Ipoh	490	433	12,963	802	5.9
General Hospital, Batu Gajah	269	267	5,212	237	4.3
District Hospital, Kampar	61	47	2,625	102	3.8
District Hospital, Tapah	110	99	3,495	133	3.7
District Hospital, Tanjong Malim	44	34	2,558	67	2.6
District Hospital, Telok Anson	170	149	5,201	294	5.5
District Hospital, Lumut	96	76	2,345	108	4.5
District Hospital, Grik	12	15	582	8	1.3
SELANGOR					
Bungsar Hospital, Kuala Lumpur	38	26	1,454	18	1.2
General Hospital, Kuala Lumpur	602	602	23,281	1,270	5.3
Tuberculosis (Clinic) Hospital, Kuala Lumpur	109	102	401	21	4.2
Tai Wah (Decrepit) Hospital, Kuala Lumpur	287	305	8	33	10.5
Police Ward Hospital, Kuala Lumpur	5	6	253	—	—
Prison Hospital, Kuala Lumpur	13	10	203	—	—
District Hospital, Klang	247	220	7,582	405	5.2
District Hospital, Kajang	137	115	5,138	129	2.5
District Hospital, Kuala Kubu Bharu	82	52	3,126	80	2.5
NEGRI SEMBILAN					
General Hospital, Seremban	491	405	13,704	656	4.6
District Hospital, Kuala Pilah	252	284	4,959	166	3.2
District Hospital, Port Dickson	113	101	3,459	66	1.9
District Hospital, Tampin	86	93	3,053	115	3.7
District Hospital, Jelebu	50	57	1,714	24	1.4
Prison Hospital, Seremban	2	2	115	—	—
Carried forward	6,870	6,384	178,362	7,799	—

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 ..	6,870	6,384	178,362	7,799	—
MALACCA					
General Hospital, Malacca	594	540	11,156	656	5.6
District Hospital, Alor Gajah	95	98	87	21	11.4
Federal S.C. Depot Hospital, Malacca	—	—	136	—	—
Henry Gurney School Hospital, Malacca	1	—	62	—	—
Prison Hospital, Malacca	—	—	—	—	—
JOHORE					
General Hospital, Johore Bahru ..	601	537	10,614	544	4.9
District Hospital, Kota Tinggi ..	113	116	1,927	67	3.3
District Hospital, Pontian	76	73	2,659	66	2.4
District Hospital, Batu Pahat.. ..	173	129	4,436	226	4.9
District Hospital, Kluang	245	209	5,814	234	3.9
District Hospital, Mersing	40	46	1,338	29	2.1
District Hospital, Muar	270	235	6,059	341	5.4
District Hospital, Tangkak	86	100	1,447	51	3.3
District Hospital, Segamat	180	117	4,552	192	4.1
KELANTAN					
State Hospital, Kota Bharu	328	291	5,480	168	2.9
District Hospital, Kuala Krai	67	49	1,468	37	2.4
Prison Hospital, PengkalanChepa ..	9	6	253	—	—
Teachers Training College Hospital, Pengkalan Chepa	—	—	79	—	—
TRENGGANU					
General Hospital, Kuala Trengganu ..	139	122	2,536	87	3.3
District Hospital, Kemaman	50	48	818	26	3.0
District Hospital, Dungun	22	18	924	16	1.7
District Hospital, Besut	32	24	726	13	1.7
PAHANG					
General Hospital, Kuala Lipis ..	100	107	2,735	131	4.6
District Hospital, Pekan	40	45	735	19	2.4
District Hospital, Kuantan	191	138	3,109	142	4.4
District Hospital, Raub	102	98	2,887	93	3.1
District Hospital, Bentong	109	102	2,581	132	4.9
District Hospital, Mentekab	99	95	3,625	121	3.3
(FEDERAL) SPECIAL INSTITUTIONS					
Leper Settlement, Sungei Buloh ..	2,402	2,429	512	37	1.3
Leper Settlement, Pulau Jerejak ..	460	453	84	8	1.5
Leper Settlement, Johore Bahru ..	416	423	66	7	1.4
Leper Hospital, Kota Bharu, Kelantan	43	44	26	1	1.4
Leper Hospital, Kuala Trengganu, Trengganu	16	17	10	—	—
Central Mental Hospital, Tanjong Rambutan	3,703	3,607	1,805	111	2.1
Mental Hospital, Tampoi, Johore Bahru	1,223	1,174	730	58	3.0
Total ..	18,895	17,874	259,838	11,433	—

TABLE 2

MALARIA ADMISSIONS (INCLUDING CLINICAL MALARIA) IN GOVERNMENT HOSPITALS BY STATES/SETTLEMENTS AND MONTHS FOR 1956

State/Settlement	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Kedah	109	58	35	54	57	87	64	68	57	62	60	64	775
Perlis	43	26	19	14	18	8	28	15	18	17	56	64	326
Penang	37	19	26	20	52	47	73	52	44	48	37	40	495
Perak	162	129	133	175	150	146	162	176	174	142	134	142	1,825
Selangor	42	26	19	17	40	31	18	25	38	22	31	20	329
Negri Sembilan	29	18	31	39	62	53	45	56	71	64	72	32	572
Malacca	33	12	20	22	44	25	33	13	11	17	11	9	250
Johore	80	39	46	71	103	82	62	54	40	76	51	66	770
Kelantan	23	33	35	25	42	35	33	25	15	15	19	16	316
Trengganu	39	44	42	48	23	29	42	30	30	45	39	25	436
Pahang	80	77	79	65	125	121	101	99	108	116	102	100	1,173
Total ..	677	481	485	550	716	664	661	613	606	624	612	578	7,267

TABLE 2A

MALARIA (POSITIVE ADMISSIONS) IN GOVERNMENT HOSPITALS BY STATES/SETTLEMENTS AND MONTHS FOR 1956

State/Settlement	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Kedah	86	40	29	42	38	56	55	62	55	55	53	61	632
Perlis	26	10	13	12	9	6	25	13	15	17	47	50	243
Penang	27	15	16	16	33	31	49	33	24	26	31	32	333
Perak	67	61	66	81	64	71	84	84	72	52	49	52	803
Selangor	37	20	12	13	34	21	16	23	35	21	30	20	282
Negri Sembilan	29	16	29	38	60	53	45	56	63	60	59	27	535
Malacca	12	5	11	8	17	10	9	5	8	10	6	5	106
Johore	43	24	25	40	64	46	28	23	23	31	17	26	390
Kelantan	14	28	30	14	23	13	11	10	6	5	8	10	172
Trengganu	24	29	21	27	14	18	29	19	19	30	28	17	275
Pahang	27	29	22	17	43	48	31	34	27	27	23	16	344
Total ..	392	277	274	308	399	373	382	362	347	334	351	316	4,115

Table 3

SURGICAL OPERATIONS FOR 1956

State/Settlement	Operations	Deaths
Kedah	4,484 ..	50
Perlis	982 ..	—
Penang	3,905 ..	35
Perak	19,140 ..	104
Selangor	20,196 ..	153
Negri Sembilan	2,737 ..	17
Malacca	3,654 ..	32
Johore	9,166 ..	57
Kelantan	1,259 ..	6
Trengganu	1,807 ..	5
Pahang	4,530 ..	5
Total ..	71,860 ..	464

Table 4

OPHTHALMIC PATIENTS FOR 1956

State/ Settlement	Eye diseases proper	Eye injuries	Refraction	General diseases affecting eyes	Disorganised eyes	Total	Operations
Kedah	8,187	497	459	135	20	9,298	183
Perlis	—	1	—	34	—	35	—
Penang ..	3,982	541	743	814	60	6,140	645
Perak	4,640	739	3,571	403	82	9,435	789
Selangor ..	7,966	594	1,484	—	26	10,070	787
Negri Sembilan	5,124	411	802	1,552	16	10,904*	460
Malacca ..	1,276	70	2,168	148	16	3,678	132
Johore	3,260	272	2,236	390	14	6,172	359
Kelantan ..	12,443	36	—	2	—	12,481	36
Trengganu ..	—	—	—	—	—	—	—
Pahang ..	1,231	7	94	254	—	1,586	16
Total ..	48,109	3,168	11,557	3,732	234	69,799	3,407

* Includes vision testing of new recruits.

TABLE 5

SUMMARY OF OUT-PATIENTS TREATED IN EACH STATE/SETTLEMENT

(Excluding those who were treated at Child Health Centres, School Inspections and Special Clinics)

Hospitals and Dispensaries	Adult Males	Adult Females	Children under 10 years	Total
KEDAH				
At Hospitals	62,503	49,058	50,435	161,996
At Static Dispensaries ..	53,906	38,096	54,779	146,781
By Travelling Dispensaries	32,471	19,911	33,671	86,053
Total ..	148,880	107,065	138,885	394,830
PERLIS				
At Hospitals	10,232	9,837	10,887	30,956
At Static Dispensaries ..	9,609	6,867	8,274	24,750
By Travelling Dispensaries	1,071	773	2,222	4,066
Total ..	20,912	17,477	21,383	59,772
PENANG				
At Hospitals	54,400	43,601	43,082	141,083
At Static Dispensaries ..	19,926	34,764	52,393	107,083
By Travelling Dispensaries	19,383	18,807	22,784	60,974
Total ..	93,709	97,172	118,259	309,140
PERAK				
At Hospitals	141,769	109,789	95,984	347,542
At Static Dispensaries ..	56,511	28,440	38,863	123,814
By Travelling Dispensaries:				
(i) By Road ..	54,382	38,886	44,254	137,522
(ii) By River ..	5,620	2,850	3,338	11,808
Total ..	258,282	179,965	182,439	620,686

TABLE 5—(*cont.*)

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

Hospitals and Dispensaries	Adult Males	Adult Females	Children under 10 years	Total
SELANGOR				
At Hospitals	84,768	57,896	71,105	213,769
At Static Dispensaries ..	72,118	47,626	74,569	194,313
By Travelling Dispensaries	12,544	11,170	25,903	49,617
Total ..	169,430	116,692	171,577	457,699
NEGRI SEMBILAN				
At Hospitals	37,034	31,343	39,245	107,622
At Static Dispensaries ..	27,703	26,173	38,045	91,921
By Travelling Dispensaries	16,053	15,788	20,964	52,805
Total ..	80,790	73,304	98,254	252,348
MALACCA				
At Hospitals	17,191	13,768	13,514	44,473
At Static Dispensaries ..	21,590	19,030	24,459	65,079
By Travelling Dispensaries	17,130	18,262	30,786	66,178
Total ..	55,911	51,060	68,759	175,730
JOHORE				
At Hospitals	60,638	34,660	45,773	141,071
At Static Dispensaries ..	48,542	29,831	52,414	130,787
By Travelling Dispensaries:				
(i) By Road ..	45,658	27,206	63,407	136,271
(ii) By River ..	3,342	1,793	4,449	9,584
Total ..	158,180	93,490	166,043	417,713

TABLE 5—(*cont.*)

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

Hospitals and Dispensaries	Adult Males	Adult Females	Children under 10 years	Total
KELANTAN				
At Hospitals	34,491	18,591	15,824	68,906
At Static Dispensaries ..	20,439	12,320	15,921	48,680
By Travelling Dispensaries:				
(i) By Road ..	20,144	15,425	31,516	67,085
(ii) By River ..	4,326	3,690	5,734	13,750
Total ..	79,400	50,026	68,995	198,421
TRENGGANU				
At Hospitals	19,497	12,845	18,805	51,147
At Static Dispensaries ..	10,971	7,575	12,007	30,553
By Travelling Dispensaries:				
(i) By Road ..	27,532	20,607	32,005	80,144
(ii) By River ..	3,602	2,621	5,073	11,296
Total ..	61,602	43,648	67,890	173,140
PAHANG				
At Hospitals	43,007	25,055	38,249	106,311
At Static Dispensaries ..	15,807	11,359	16,559	43,725
By Travelling Dispensaries:				
(i) By Road ..	12,501	8,903	12,989	34,393
(ii) By River ..	18,721	13,407	17,733	49,861
Total ..	90,036	58,724	85,530	234,290
FEDERATION OF MALAYA				
At Hospitals	565,530	406,443	442,903	1,414,876
At Static Dispensaries ..	357,122	262,081	388,283	1,007,486
By Travelling Dispensaries:				
(i) By Road ..	258,869	195,738	320,501	775,108
(ii) By River ..	35,611	24,361	36,327	96,299
Total ..	1,217,132	888,623	1,188,014	3,293,769

TABLE 6

OUT-PATIENTS (FIXED DISPENSARIES)

RETURN OF DISEASES FOR THE YEAR 1956

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

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 ..	4,021	1,675	180	5,876
A 2		010	Tuberculosis of meninges and central nervous system	7	3	8	18
A 3		011	Tuberculosis of intestines, peritoneum and mesenteric glands	9	3	2	14
A 4		012-013	Tuberculosis of bones and joints ..	27	7	30	64
A 5	(*a*)	014	Tuberculosis of skin and subcutaneous cellular tissue	1	1	2	4
	(*b*)	015	Tuberculosis of lymphatic system ..	33	14	53	100
	(*c*)	016	Tuberculosis of genito-urinary system ..				
	(*d*)	017	Tuberculosis of adrenal glands	..	2	..	2
	(*e*)	018	Tuberculosis of other organs	18	16	16	50
	(*f*)	019	Disseminated tuberculosis				
A 6		020	Congenital syphilis	..	1	17	18
A 7	(*a*)	021.0-021.1	Primary syphilis	63	6	..	69
	(*b*)	021.2	Secondary syphilis	252	146	2	400
	(*c*)	021.3	Early syphilis, relapse following treatment	3	..	..	3
	(*d*)	021.4	Early syphilis (unspecified stage) ..	32	3	..	35
A 8		024	Tabes dorsalis	6	2	..	8
A 9		025	General paralysis of insane	3	..	..	3
A 10	(*a*)	022	Aneurysm of aorta				
	(*b*)	023	Other cardiovascular syphilis	1	1	..	2
	(*c*)	026	Other syphilis of central nervous system				
	(*d*)	027	Tertiary syphilis	56	47	..	103
	(*e*)	028	Latent syphilis	5	1	..	6
	(*f*)	029	Syphilis unqualified	132	60	5	197
A 11	(*a*)	030	Acute or unspecified gonorrhoea ..	1,844	224	2	2,070
	(*b*)	031	Chronic gonococcal infection of genito-urinary system	113	29	..	142
	(*c*)	032	Gonococcal infection of joint	23	3	..	26
	(*d*)	033	Gonococcal infection of eye	3	1	9	13
	(*e*)	034-035	Gonococcal infection of other sites ..	9	3	..	12
A 12		040	Typhoid fever	4	..	7	11
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	228	177	92	497
	(*b*)	046	Amoebiasis	218	98	121	437
	(*c*)	047-048	Other protozoal and unspecified forms of dysentery	1,492	850	976	3,318
A 17		050	Scarlet fever				
A 18		051	Streptococcal sore throat	41	68	135	244
A 19		052	Erysipelas	12	4	15	31
A 20		053	Septicaemia and pyaemia	1	..	2	3
A 21		055	Diphtheria	22	26	245	293
A 22		056	Whooping Cough	2	1	1,002	1,005
A 23		057	Meningococcal infections				
A 24		058	Plague				
A 25		060	Leprosy	297	89	14	400
A 26	(*a*)	061	Tetanus of the new-born	..	..	5	5
	(*b*)	—	Tetanus, other forms	1	..	7	8
A 27		062	Anthrax				
A 28		080	Acute Poliomyelitis				
A 29		082	Acute infectious encephalitis	1	..	..	1
			Carried forward ..	8,980	3,561	2,947	15,488

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.

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	8,980	3,561	2,947	15,488
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
A 30		081 083	Late effects of acute poliomyelitis and acute infectious encephalitis	1	1	2	4
A 31		084	Smallpox				
A 32		085	Measles	105	50	683	838
A 33		091	Yellow fever				
A 34		092	Infectious hepatitis	53	20	11	84
A 35		094	Rabies				
A 36	(*a*)	100	Louse-borne epidemic typhus				
	(*b*)	101	Flea-borne endemic typhus (murine) ..	1	..	..	1
	(*c*)	104	Tick-borne epidemic typhus				
	(*d*)	105	Mite-borne typhus				
	(*e*)	102-103 106-108	Other and unspecified typhus	2	1	3	6
A 37	(*a*)	110	Vivax malaria (benign tertian)	1,824	837	1,102	3,763
	(*b*)	111	Malariae malaria (quartan)	81	72	61	214
	(*c*)	112	Falciparum malaria (malignant tertian)	1,998	869	1,093	3,960
	(*d*)	114	Mixed malaria infections	38	12	13	63
	(*e*)	115	Blackwater fever				
	(*f*)	113 116-117	Other and unspecified forms of malaria	27,485	15,230	17,419	60,134
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)	11	18	1	30
	(*d*)	—	Other filariasis	77	51	1	129
A 41		129	Ankylostomiasis	4,169	3,281	5,111	12,561
A 42	(*a*)	126	Tape worm (infestation) and other cestode infestation	11	8	13	32
	(*b*)	130.0	Ascariasis	15,910	14,882	56,066	86,858
	(*c*)	130.3	Guinea worm (dracunculosis)	24	21	96	141
	(*d*)	124	Other trematode infestation	4	8	3	15
	(*e*)	128	Trichiniasis	3	..	1	4
	(*f*)	130.1-130.2	Other diseases due to helminths ..	2,232	2,088	7,676	11,996
A 43	(*a*)	036	Chancroid	45	..	..	45
	(*b*)	037	Lymphogranuloma venereum	15	..	..	15
	(*c*)	038	Granuloma inguinale, venereal	6	..	..	6
	(*d*)	039	Other and unspecified venereal diseases	14	4	1	19
	(*e*)	049	Food poisoning infection and intoxication	32	13	3	48
	(*f*)	059	Tularaemia				
	(*g*)	063	Gas gangrene				
	(*h*)	064	(*a*) Glanders				
			(*b*) Melioidosis				
			(*c*) Other bacterial diseases				
	(*i*)	070	Vincent's infection	2	1	..	3
	(*j*)	071	Relapsing fever				
	(*k*)	072	Leptospirosis icterohaemorrhagica (Weil's disease)	1	..	..	1
	(*l*)	073	Yaws	5,549	4,582	4,855	14,986
	(*m*)	086	Rubella	2	..	..	2
	(*n*)	087	Chickenpox	547	178	693	1,418
	(*o*)	088	Herpes Zoster	606	304	205	1,115
	(*p*)	089	Mumps	429	196	614	1,239
	(*q*)	090	Dengue	5	1	1	7
	(*r*)	093	Glandular fever	1	..	7	8
	(*s*)	095	Trachoma	109	244	9	362
	(*t*)	096.7	Sandfly fever				
	(*u*)	120	Leishmaniasis				
			Carried forward ..	70,372	46,533	98,690	215,595

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	70,372	46,533	98,690	215,595
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
	(*v*)	121	(*a*) Trypanosomiasis gambiensis ..				
			(*b*) Trypanosomiasis rhodesiensis ..				
			(*c*) Other and unspecified trypanosomiasis				
	(*w*)	131	Dermatophytosis	997	600	542	2,139
	(*x*)	135	Scabies	14,839	9,823	26,169	50,831
	(*y*)	054.074 096.1-096.6 096.8, 096.9 122 132-134 136-138	All other diseases classified as infective and parasitic	6,172	3,678	4,650	14,500
			II.—NEOPLASMS				
A 44		140-148	Malignant neoplasm of buccal cavity and pharynx	33	29	1	63
A 45		150	Malignant neoplasm of oesophagus ..	15	4	..	19
A 46		151	Malignant neoplasm of stomach ..	14	4	..	18
A 47	(*a*)	152	Malignant neoplasm of small intestine, including duodenum	1	..	..	1
	(*b*)	153	Malignant neoplasm of large intestine, except rectum	1	1	..	2
A 48		154	Malignant neoplasm of rectum ..	12	8	..	20
A 49		161	Malignant neoplasm of larynx	..	2	..	2
A 50		162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	6	..	..	6
A 51		170	Malignant neoplasm of breast	..	40	..	40
A 52		171	Malignant neoplasm of cervix uteri ..	..	62	..	62
A 53		172-174	Malignant neoplasm of other and unspecified parts of uterus	..	11	..	11
A 54		177	Malignant neoplasm of prostate ..	2	..	..	2
A 55		190-191	Malignant neoplasm of skin	31	11	1	43
A 56		196-197	Malignant neoplasm of bone and connective tissue	6	4	..	10
A 57	(*a*)	155-156	Malignant neoplasm of liver	14	7	..	21
	(*b*)	157	Malignant neoplasm of pancreas ..				
	(*c*)	158	Malignant neoplasm of peritoneum ..				
	(*d*)	159	Malignant neoplasm of unspecified digestive organs	1	3	..	4
	(*e*)	175-176	Malignant neoplasm of other and unspecified female genital organs ..	..	2	..	2
	(*f*)	178-179	Malignant neoplasm of other and unspecified male genital organs ..	9	..	..	9
	(*g*)	180-181	Malignant neoplasm of kidney, bladder and other urinary organs	..	1	..	1
	(*h*)	160 164-165 192-195 198-199	Malignant neoplasm of all other and unspecified sites	80	32	1	113
A 58		204	Leukaemia and Aleukaemia	1	..	..	1
A 59	(*a*)	200	Lymphosarcoma and reticulosarcoma ..				
	(*b*)	201	Hodgkin's disease	1	..	..	1
	(*c*)	202-203	Other neoplasm of lymphatic and haematopoietic system				
	(*d*)	205	Mycosis fungoides	399	38	48	485
A 60	(*a*)	210-211	Benign neoplasm of buccal cavity, pharynx and digestive system ..	32	17	9	58
	(*b*)	217	Benign neoplasm of other female genital organs	..	4	..	4
	(*c*)	218	Benign neoplasm of other male genital organs	7	..	2	9
	(*d*)	212-216 219-229	Benign neoplasm of other and unspecified organs and tissue ..	207	130	33	370
			Carried forward ..	93,252	61,044	130,146	284,442

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	93,252	61,044	130,146	284,442
			II.—NEOPLASMS—(*cont.*)				
	(*e*)	230	Neoplasm of unspecified nature of digestive organs	2	..	..	2
	(*f*)	233-235	Neoplasm of unspecified nature of other female genital organs	..	17	..	17
	(*g*)	231-232 236-239	Neoplasm of unspecified nature of other unspecified organs	152	90	34	276
			III.—ALLERGIC, ENDOCRINE SYSTEM METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS				
A 61		250-251	Nontoxic goitre	47	344	1	392
A 62		252	Thyrotoxicosis with or without goitre ..	41	203	..	244
A 63		260	Diabetes mellitus	1,700	1,127	45	2,872
A 64	(*a*)	280	Beri Beri	1,670	1,905	357	3,932
	(*b*)	281	Pellagra	8	2	5	15
	(*c*)	282	Scurvy	64	92	46	202
	(*d*)	283-284	Rickets	..	..	28	28
	(*e*)	285	Osteomalacia				
	(*f*)	286.0	(*a*) Sprue	14	20	2	36
		286.5	(*b*) Malnutrition	2,962	4,519	4,333	11,814
		286.1-286.4 286.6	(*c*) Other deficiency states	5,408	8,577	3,610	17,595
A 65	(*a*)	290	Pernicious and other hyperchromic anaemias	50	121	9	180
	(*b*)	291	Iron deficiency anaemias (hypochromic)	4,256	9,893	2,257	16,406
	(*c*)	292-293	Other specified and unspecified anaemias	17,294	36,052	11,383	64,729
A 66	(*a*)	241	Asthma	12,480	8,240	7,910	28,630
	(*b*)	240 242-245	Angioneurotic oedema, urticaria and other allergic disorders	3,979	3,038	2,394	9,411
	(*c*)	253	Myxoedema and cretinism	..	1	2	3
	(*d*)	254	Other diseases of thyroid gland ..	19	202	4	225
	(*e*)	270	Disorders of pancreatic internal secretion other than diabetes mellitus				
	(*f*)	271	Diseases of parathyroid gland	2	1	..	3
	(*g*)	272	Diseases of pituitary gland				
	(*h*)	273	Diseases of thymus gland				
	(*i*)	274	Diseases of adrenal gland	2	..	2	4
	(*j*)	275-277	Other diseases of endocrine glands ..	15	13	9	37
	(*k*)	288	Gout	11	3	..	14
	(*l*)	287, 289	Other metabolic diseases	129	178	64	371
	(*m*)	294	Polycythemia	..	1	..	1
	(*n*)	295	Haemophilia				
	(*o*)	296	Purpura and other haemorrhagic conditions	4	..	10	14
	(*p*)	297	Agranulocytosis				
	(*q*)	298	Diseases of spleen	5	9	1	15
	(*r*)	299	Other diseases of blood and blood-forming organs	122	134	26	282
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS				
A 67	(*a*)	300	Schizophrenic disorders (dementia praecox)	7	3	..	10
	(*b*)	301	Maniac-depressive reaction				
	(*c*)	302	Involutional melancholia				
	(*d*)	303	Paranoia and paranoid states				
	(*e*)	304	Senile psychoses	2	1	..	3
			Carried forward ..	143,697	135,830	162,678	442,205

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	143,697	135,830	162,678	442,205
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS —(*cont.*)				
	(*f*)	305-309	Other and unspecified psychoses ..	2	1	..	3
A 68	(*a*)	311	Hysterical reaction	20	78	5	103
	(*b*)	314	Neurotic-depressive reaction	73	45	..	118
	(*c*)	322	Alcoholism	828	21	..	849
	(*d*)	323	Other drug addiction	276	18	..	294
	(*e*)	310 312-313 315-321 324 326	Other psychoneuroses and disorders of personality	91	252	3	346
A 69		325	Mental deficiency	71	25	13	109
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS				
A 70	(*a*)	331	Cerebral haemorrhage	3	..	..	3
	(*b*)	332	Cerebral embolism and thrombosis ..	6	4	..	10
	(*c*)	330 333-334	Other vascular lesions affecting central nervous system	5	2	1	8
A 71		340	Non-meningococcal meningitis	..	..	2	2
A 72		345	Multiple sclerosis				
A 73		353	Epilepsy	518	207	129	854
A 74	(*a*)	370	Conjunctivitis and ophthalmia ..	24,469	15,000	20,724	60,193
	(*b*)	371-379	Other inflammatory diseases of eye ..	3,846	2,530	2,643	9,019
A 75		385	Cataract	861	690	24	1,575
A 76		387	Glaucoma	56	75	1	132
A 77	(*a*)	390	Otitis externa	7,180	4,584	11,387	23,151
	(*b*)	391-393	Otitis media and mastoiditis	5,005	3,314	10,650	18,969
	(*c*)	394	Other inflammatory diseases of ear ..	3,682	2,500	7,185	13,367
A 78	(*a*)	380-384 386,388 389	All other diseases and conditions of eye	12,357	6,891	5,027	24,275
	(*b*)	342	Intracranial and intraspinal abscess ..	1	1	2	4
	(*c*)	343	Encephalitis, myelitis and encephalomyelitis	1	..	2	3
	(*d*)	350	Paralysis agitans	17	7	..	24
	(*e*)	352	Other cerebral paralysis	87	31	4	122
	(*f*)	356	Motor neurone disease and muscular atrophy	74	21	..	95
	(*g*)	357	Other diseases of spinal cord				
	(*h*)	366	Other and unspecified forms of neuralgia and neuritis	42,399	35,923	3,492	81,814
	(*i*)	367	Other diseases of cranial nerves ..	12	9	..	21
	(*j*)	369	Diseases of peripheral autonomic nervous system	145	185	3	333
	(*k*)	341, 344 351, 354 355 360-365 368 395-398	All other diseases of the nervous system and sense organs	2,735	2,320	129	5,184
			VII.—DISEASES OF THE CIRCULATORY SYSTEM				
A 79	(*a*)	400	Rheumatic fever without mention of heart involvement	247	157	17	421
	(*b*)	401	Rheumatic fever with heart involvement	5	77	5	87
	(*c*)	402	Chorea	..	..	2	2
A 80	(*a*)	410-413	Diseases of valves specified as rheumatic	17	10	3	30
	(*b*)	414	Other endocarditis specified as rheumatic	3	20	..	23
			Carried forward ..	248,789	210,828	224,131	683,748

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	248,789	210,828	224,131	683,748
			VII.—DISEASES OF THE CIRCULATORY SYSTEM—(*cont.*)				
	(*c*)	415	Other myocarditis specified as rheumatic	4	6	1	11
	(*d*)	416	Other heart disease specified as rheumatic	6	6	5	17
A 81	(*a*)	420	Arteriosclerotic heart disease, including coronary disease	10	1	..	11
	(*b*)	421	Chronic endocarditis not specified as rheumatic	2	52	..	54
	(*c*)	422	Other myocardial degeneration ..	102	48	2	152
A 82	(*a*)	430	Acute and subacute endocarditis ..	1	16	..	17
	(*b*)	431	Acute myocarditis	62	84	3	149
	(*c*)	432	Acute pericarditis	4	10	1	15
	(*d*)	433	Functional disease of heart	258	225	29	512
	(*e*)	434	Other and unspecified diseases of heart ..	960	639	46	1,645
A 83		440-443	Hypertension with heart disease ..	141	151	..	292
A 84		444-447	Hypertension without mention of heart	2,003	1,493	5	3,501
A 85	(*a*)	450	General arteriosclerosis	4	21	..	25
	(*b*)	451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm ..	1	1	1	3
	(*c*)	452	Other aneurysm, except of heart and aorta	..	1	..	1
	(*d*)	453	Peripheral vascular disease				
	(*e*)	454	Arterial embolism and thrombosis ..	2	1	..	3
	(*f*)	455	Gangrene of unspecified cause	5	3	1	9
	(*g*)	456	Other diseases of arteries	7	2	..	9
A 86	(*a*)	460, 462	Varicose veins	290	380	..	670
	(*b*)	461	Haemorrhoids	3,044	1,215	46	4,305
	(*c*)	463-464	Phlebitis and thrombophlebitis	34	43	16	93
	(*d*)	465	Pulmonary embolism and infarction ..				
	(*e*)	466	Other venous embolism and thrombosis	2	..	..	2
	(*f*)	467	Other diseases of circulatory system ..	41	63	17	121
	(*g*)	468	(*a*) Adenitis	2,909	1,501	2,970	7,380
			(*b*) Lymphadenitis	239	113	156	508
			(*c*) Other diseases of lymph nodes and lymph channels	102	54	33	189
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM				
A 87	(*a*)	470	Acute nasopharyngitis (common cold)	66,422	40,675	69,337	176,434
	(*b*)	471	Acute sinusitis	965	998	321	2,284
	(*c*)	472	Acute pharyngitis	8,550	6,886	7,592	23,028
	(*d*)	473	Acute tonsillitis	11,411	9,685	17,562	38,658
	(*e*)	474	Acute laryngitis and tracheitis ..	2,290	1,337	2,040	5,667
	(*f*)	475	Other acute upper respiratory infections	1,337	1,257	4,043	6,637
A 88	(*a*)	480	Influenza with pneumonia	31	188	100	319
	(*b*)	481	Influenza with other respiratory manifestations, and influenza unqualified ..	37,629	19,780	31,333	88,742
	(*c*)	482	Influenza with digestive manifestations, but without respiratory symptoms ..	2,777	2,295	3,964	9,036
	(*d*)	483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	813	232	233	1,278
A 89		490	Lobar pneumonia	237	155	143	535
A 90		491	Broncho-pneumonia	292	360	2,988	3,640
A 91		492-493	Primary atypical, other and unspecified pneumonia	167	81	404	652
A 92		500	Acute bronchitis	23,939	15,752	42,137	81,828
A 93	(*a*)	501	Bronchitis unqualified	73,490	51,922	98,410	223,822
	(*b*)	502	Chronic bronchitis	8,430	5,214	2,912	16,556
A 94		510	Hypertrophy of tonsils and adenoids ..	72	42	261	375
A 95	(*a*)	518	Empyema	5	4	3	12
	(*b*)	521	Abscess of lung	8	4	1	13
A 96		519	Pleurisy	109	52	5	166
			Carried forward ..	497,996	373,876	511,252	1,383,124

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	497,996	373,876	511,252	1,383,124
			VIII—DISEASES OF THE RESPIRATORY SYSTEM—(*cont.*)				
A 97	(*a*)	517	Other diseases of upper respiratory tract	366	412	749	1,527
	(*b*)	520	Spontaneous pneumothorax				
	(*c*)	522	Pulmonary congestion and hypostasis ..				
	(*d*)	525	Other chronic interstitial pneumonia ..	2	1	..	3
	(*e*)	523	Pneumoconiosis				
	(*f*)	526	Bronchiectasis	118	63	6	187
	(*g*)	511-516, 524, 527	All other respiratory diseases	2,562	1,977	3,006	7,545
			IX.—DISEASES OF THE DIGESTIVE SYSTEM				
A 98	(*a*)	530	Dental caries	8,013	5,009	6,723	19,745
	(*b*)	531-535	(*a*) Gingivitis	535	625	433	1,593
			(*b*) Pyorrhoea	712	669	215	1,596
			(*c*) Other diseases of teeth and supporting structures	1,337	771	737	2,845
A 99		540	Ulcer of stomach	806	562	5	1,373
A 100		541	Ulcer of duodenum	85	78	..	163
A 101		543	Gastritis and duodenitis	23,199	17,109	5,554	45,862
A 102		550-553	Appendicitis	274	143	45	462
A 103	(*a*)	560	Hernia of abdominal cavity without mention of obstruction	712	24	148	884
	(*b*)	561	Hernia of abdominal cavity with obstruction	9	..	2	11
	(*c*)	570	(*a*) Intussusception				
			(*b*) Volvulus	..	..	241	241
			(*c*) Other intestinal obstruction ..	4	1	2	7
A 104	(*a*)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years	..	..	22,616	22,616
	(*b*)	571.1	Gastro-enteritis and colitis, ages 2 years and over	17,567	11,645	19,549	48,761
	(*c*)	572	Chronic enteritis and ulcerative colitis ..	86	84	118	288
A 105	(*a*)	581.0	Cirrhosis of liver without mention of alcoholism	155	35	3	193
	(*b*)	581.1	Cirrhosis of liver with alcoholism ..	2	1	..	3
A 106	(*a*)	584	Cholelithiasis	4	7	1	12
	(*b*)	585	Cholecystitis without mention of calculi	78	92	42	212
A 107	(*a*)	536	Stomatitis	4,053	4,272	7,869	16,194
	(*b*)	538	Other diseases of buccal cavity ..	136	90	133	359
	(*c*)	539	(*a*) Functional disorders of oesophagus (*b*) Stricture or obstruction of oesophagus	10	5	..	15
	(*d*)	544	Disorders of function of stomach ..	12,493	10,311	8,674	31,478
	(*e*)	545	Other diseases of stomach and duodenum	3,049	2,914	1,491	7,454
	(*f*)	573	(*a*) Constipation	26,268	17,039	17,688	60,995
			(*b*) Other functional disorders of intestines	3,321	2,129	2,631	8,081
	(*g*)	574	Anal fissure and fistula	143	28	40	211
	(*h*)	575	Abscess of anal and rectal regions ..	100	18	5	123
	(*i*)	576	Peritonitis	9	5	9	23
	(*j*)	578	Other diseases of intestines and peritoneum	31	7	11	49
	(*k*)	580	(*a*) Acute yellow atrophy of liver ..	3	3	..	6
			(*b*) Degeneration of liver	6	3	..	9
			(*c*) Hepatitis	465	356	95	916
	(*l*)	583	Other diseases of liver	44	19	19	82
	(*m*)	586	Other diseases of gall-bladder and biliary ducts	91	56	29	176
	(*n*)	587	Diseases of pancreas	11	..	..	11
	(*o*)	537, 542, 577, 582	Other diseases of digestive system ..	8,052	7,306	4,710	20,068
			Carried forward ..	612,907	457,745	614,851	1,685,503

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	612,907	457,745	614,851	1,685,503
		X.—DISEASES OF THE GENITO-URINARY SYSTEM				
A 108	590	Acute nephritis	276	239	83	598
A 109 (*a*)	591	Nephritis with oedema, including nephrosis	35	42	14	91
(*b*)	592	Chronic nephritis	168	89	15	272
(*c*)	593	Nephritis not specified as acute or chronic	1,147	620	376	2,143
(*d*)	594	Other renal sclerosis	5	..	..	5
A 110	600	Infections of kidney	322	329	50	701
A 111 (*a*)	602	Calculi of kidney and ureter	109	31	6	146
(*b*)	604	Calculi of other parts of urinary system	30	5	1	36
A 112	610	Hyperplasia of prostate	12	..	..	12
A 113	620-621	Diseases of breast	..	557	..	557
A 114 (*a*)	603	Other diseases of kidney and ureter ..	439	249	55	743
(*b*)	605	Cystitis	1,963	1,557	397	3,917
(*c*)	606	Other diseases of bladder	194	112	51	357
(*d*)	608	Stricture of urethra	324	32	9	365
(*e*)	609	Other diseases of urethra	1,808	516	157	2,481
(*f*)	612	Other diseases of prostate	109	..	..	109
(*g*)	613	Hydrocele	262	..	29	291
(*h*)	614	Orchitis and epididymitis	660	..	28	688
(*i*)	617	Other diseases of male genital organs ..	618	..	163	781
(*j*)	622	Acute salpingitis and oophoritis ..	..	213	..	213
(*k*)	625	Other diseases of ovary and fallopian tube	..	82	..	82
(*l*)	626	Diseases of parametrium and pelvi-peritoneum (female)	..	1	..	1
(*m*)	630	Infective disease of uterus, vagina and vulva	..	1,298	17	1,315
(*n*)	633	Other diseases of uterus	..	1,188	..	1,188
(*o*)	634	Disorders of menstruation	..	12,852	..	12,852
(*p*)	637	Other diseases of female genital organs	..	1,861	10	1,871
(*q*)	601 607, 611 615-616 623-624 631-632 635-636	All other diseases of the genito-urinary system	1,325	1,286	403	3,014
		XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM				
A 115 (*a*)	640	Pyelitis and pyelonephritis of pregnancy	..	187	..	187
(*b*)	641	Other infections of genito-urinary tract during pregnancy	..	12	..	12
(*c*)	681	Sepsis of childbirth and the puerperium	..	35	..	35
(*d*)	682	Puerperal phlebitis and thrombosis ..				
(*e*)	684	Puerperal pulmonary embolism ..				
A 116 (*a*)	642	(*a*) Albuminuria of pregnancy	..	995	..	995
		(*b*) Eclampsia of pregnancy	..	22	..	22
(*c*)		(*c*) Hyperemesis gravidarum	..	983	..	983
		(*d*) Acute yellow atrophy of liver ..				
		(*e*) Other toxaemias of pregnancy ..	..	273	..	273
(*b*)	652	Abortion with toxaemia, without mention of sepsis	..	55	..	55
(*c*)	685	Puerperal eclampsia	..	2	..	2
(*d*)	686	Other forms of puerperal toxaemia ..				
A 117 (*a*)	643	Placenta praevia		85	..	85
(*b*)	644	Other haemorrhage of pregnancy ..	..			
(*c*)	670	Delivery complicated by placenta praevia or anteparum haemorrhage	..	1	..	1
(*d*)	671	Delivery complicated by retained placenta	..	3	..	3
		Carried forward ..	622,713	483,557	616,715	1,722,985

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	622,713	483,557	616,715	1,722,985
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM —(*cont.*)				
	(*e*)	672	Delivery complicated by other postpartum haemorrhage	..	8	..	8
A 118		650	Abortion without mention of sepsis or toxaemia	..	1,178	..	1,178
A 119		651	Abortion with sepsis	..	55	..	55
A 120	(*a*)	645	Ectopic pregnancy	..	72	..	72
	(*b*)	646	Anaemia of pregnancy	..	7,390	..	7,390
	(*c*)	683	Pyrexia of unknown origin during the puerperium	..	79	..	79
	(*d*)	688.1	Puerperal psychoses	..	1	..	1
	(*e*)	689	Mastitis and other disorders of lactation	..	430	..	430
	(*f*)	647-649 673-680 687 688.0 688.2-688.3	Other complications of pregnancy, childbirth and the puerperium ..	..	511	..	511
	(*g*)	660	Delivery without complications ..	..	14,159	..	14,159
			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	18,964	9,946	21,576	50,486
	(*b*)	691-693	Cellulitis and abscess	23,599	13,351	20,240	57,190
	(*c*)	694-698	Other infections of skin and subcutaneous tissue	24,094	13,557	21,730	59,381
A 122	(*a*)	720	Acute arthritis due to pyogenic organisms	22	42	2	66
	(*b*)	721	Acute nonpyogenic arthritis	150	109	7	266
	(*c*)	722	Rheumatoid arthritis and allied conditions	306	310	4	620
	(*d*)	723-725	Arthritis specified and unspecified ..	5,177	3,705	135	9,017
A 123	(*a*)	726	Muscular rheumatism	10,588	5,952	57	16,597
	(*b*)	727	Rheumatism unspecified	8,996	7,041	381	16,418
A 124		730	Osteomyelitis and periostitis	180	104	26	310
A 125	(*a*)	737	Ankylosis of joint	25	19	..	44
	(*b*)	745-749	Other acquired musculoskeletal deformities	4	3	2	9
A 126	(*a*)	715	Chronic ulcer of skin (including tropical ulcer)	19,986	10,034	18,236	48,256
	(*b*)	700-714 716	All other diseases of skin	41,695	26,026	34,866	102,587
	(*c*)	731-736 738-744	All other diseases of musculoskeletal system	3,637	2,362	622	6,621
			XIV.—CONGENITAL MALFORMATIONS				
A 127		751	Spina bifida and meningocele	..	..	6	6
A 128		754	Congenital malformations of circulatory system	1	..	8	9
A 129	(*a*)	750	Monstrosity				
	(*b*)	752	Congenital hydrocephalus	..	..	3	3
	(*c*)	753	Other congenital malformations of nervous system and sense organs ..	..	..	5	5
	(*d*)	755	Cleft palate and harelip	12	10	115	137
			Carried forward ..	780,149	600,011	734,736	2,114,896

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	780,149	600,011	734,736	2,114,896
			XIV.—CONGENITAL MALFORMATIONS—(*cont.*)				
	(*e*)	756	(*a*) Congenital hypertrophic pyloric stenosis	..	..	1	1
			(*b*) Imperforate anus	..	..	7	7
			(*c*) Other congenital malformations of digestive system	..	..	8	8
	(*f*)	757	Congenital malformations of genito-urinary system				
	(*g*)	758	Congenital malformations of bone and joint	3	1	23	27
	(*h*)	759	Other and unspecified congenital malformations, not elsewhere classified ..	1	..	12	13
			XV.—CERTAIN DISEASES OF EARLY INFANCY				
A 130	(*a*)	760	Intracranial and spinal injury at birth ..	..	..	1	1
	(*b*)	761	Other birth injury	..	..	1	1
A 131		762	Postnatal asphyxia and atelectasis ..	..	..	1	1
A 132	(*a*)	764	Diarrhoea of newborn	..	..	639	639
	(*b*)	765	Ophthalmia neonatorum	..	..	15	15
	(*c*)	763	Pneumonia of newborn	..	..	10	10
	(*d*)	766	Pemphigus neonatorum	..	..	1	1
	(*e*)	767	Umbilical sepsis	..	..	152	152
	(*f*)	768	Other sepsis of newborn	..	..	4	4
A 133		770	Haemolytic disease of newborn ..	..	..	4	4
A 134		769 771-772	All other defined diseases of early infancy	..	..	130	130
A 135	(*a*)	773	Congenital debility	..	..	5	5
	(*b*)	774	Premature birth	..	..	72	72
	(*c*)	775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified	..	..	359	359
			XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS				
A 136		794	Senility without mention of psychoses ..	2,901	2,685	..	5,586
A 137	(*a*)	780	Infantile convulsions	..	..	240	240
	(*b*)	788.8	Pyrexia of unknown origin	22,018	15,087	25,741	62,846
	(*c*)	793	Observation, without need for further medical care	4,371	5,926	3,868	14,165
	(*d*)	781-787 789-729 795 788.1-788.7 788.9	(*a*) Malingering	165	652	619	1,436
			(*b*) Sudden death (cause unknown) ..				
			(*c*) Found dead (cause unknown) ..				
			(*d*) Other ill-defined and unknown causes of morbidity and mortality ..	2,927	1,870	1,126	5,923
			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	2,752	869	627	4,248
AE 139	(*a*)	E 800-E 802	Railway accidents	39	7	4	50
	(*b*)	E 850-E 858	Water transport accidents	14	6	2	22
			Carried forward ..	815,340	627,114	768,408	2,210,862

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	815,340	627,114	768,408	2,210,862
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)				
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(*cont.*)				
(*c*)	E 860-E 866	Aircraft accidents	1	..	..	1
(*d*)	E 840-E 845	Other transport accidents	1,071	467	886	2,424
AE 140 (*a*)	E 870	Accidental poisoning by morphia and other opium derivatives				
(*b*)	E 874	Accidental poisoning by other analgesic and soporific drugs	2	..	..	2
(*c*)	E 878	Accidental poisoning by other and unspecified drugs	2	..	1	3
(*d*)	E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalies..	16	17	10	43
(*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 ..	13	5	..	18
(*h*)	E 888	Accidental poisoning by other and unspecified solid or liquid substances ..	2	5	9	16
(*i*)	E 890-E 895	Accidental poisoning by gases and vapours	1	..	..	1
(*j*)	E 871-E873 E 875-E877 E 879-E882 E 887	Other accidental poisoning	55	26	26	107
AE 141	E 900-E 904	Accidental falls	25,143	9,569	18,247	52,959
AE 142	E 912	Accident caused by machinery ..	420	57	49	526
AE 143	E 916	Accident caused by fire and explosion of combustible material	302	139	295	736
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation	1,172	772	1,545	3,489
AE 145	E 919	Accident caused by firearm	23	4	..	27
AE 146	E 929	Accidental drowning and submersion ..	2	..	1	3
AE 147 (*a*)	E 913	Accidents caused by cutting or piercing instruments	20,159	7,718	11,971	39,848
(*b*)	E 914	Accidents caused by electric current ..	12	3	3	18
(*c*)	E 920	Foreign body entering eye and adnexa..	794	260	416	1,470
(*d*)	E 923	Foreign body entering other orifice ..	752	384	936	2,072
(*e*)	E 925	Accidental mechanical suffocation ..				
(*f*)	E 926	Lack of care of infants under 1 year of age	..	..	10	10
(*g*)	E 927	Accidents caused by bites and stings of venomous animals and insects ..	5,230	2,386	2,825	10,441
(*h*)	E 928	Other accidents caused by animals ..	2,252	1,190	1,984	5,426
(*i*)	E 931	Excessive heat	6	3	8	17
(*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 ..	245	59	9	313
		(*b*) Agricultural and forestry accidents	183	96	44	323
		(*c*) Accidental injury by crushing or landslide	200	45	105	350
		(*d*) Other and unspecified accidents ..	2,677	753	1,243	4,673
(*o*)	E 940	Generalized vaccinia following vaccination	263	81	358	702
(*p*)	E 941-E 942	Other complications of smallpox vaccination	2	1	20	23
(*q*)	E 950-E953 E 955-E959	Accidents due to medical or surgical intervention				
(*r*)	E 954	Anaesthetic accidents	117	55	58	230
		Carried forward ..	876,458	651,209	809,467	2,337,134

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	876,458	651,209	809,467	2,337,134
		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	4,499	1,423	1,926	7,848
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	2	..	4
(*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	1	..	..	1
(*h*)	E 977	Suicide and self-inflicted injury by cutting or piercing instruments ..	7	1	..	8
(*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 ..	32	5	12	49
(*c*)	E 982	Assault by cutting or piercing instruments	1,005	361	132	1,498
(*d*)	E 983	Assault by other means	4,570	1,994	594	7,158
(*e*)	E 984	Injury by intervention of police ..	9	1	..	10
(*f*)	E 985	Execution (legal)	13	..	..	13
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	2	1	2	5
AN 139	N 805-N 809	Fracture of spine and trunk	7	1	4	12
AN 140	N 810-N 829	Fracture of limbs	605	125	256	986
AN 141	N 830-N 839	Dislocation without fracture	125	49	94	268
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles	5,831	1,410	1,220	8,461
AN 143	N 850-N 856	Head injury excluding fracture ..	554	263	414	1,231
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis	1	..	..	1
AN 145	N 870-N 908	Laceration and open wounds	16,462	6,057	9,013	31,532
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface ..	7,103	2,890	4,244	14,237
AN 147	N 930-N 936	Effects of foreign body entering through orifice	94	59	104	257
AN 148	N 940-N 949	Burns	1,306	950	2,212	4,468
AN 149	N 960-N 979	Effects of poisons	3	5	4	12
AN 150	N950-N959 N980-N999	All other and unspecified effects of external causes	3,860	1,756	1,553	7,169
		TOTAL ..	922,549	668,562	831,251	2,422,362

TABLE 6—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*cont.*)

Nationalities	New Cases All Nationalities (including Europeans)			
	Adult Males	Adult Females	Children under 10 years	Total
Europeans	4,320	2,864	2,514	9,698
Eurasians	5,012	3,415	3,310	11,737
Chinese	346,368	307,839	417,781	1,071,988
Indians	192,755	119,436	142,284	454,475
Malays	317,175	224,622	253,641	835,438
Javanese	10,484	5,858	7,266	23,608
Japanese	7	4	3	14
Others	6,428	4,524	4,452	15,404
TOTAL ..	922,549	668,562	831,251	2,422,362

TABLE 7

OUT-PATIENTS (TRAVELLING DISPENSARIES)

RETURN OF DISEASES FOR THE YEAR 1956

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

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 ..	78	47	..	125
A 2		010	Tuberculosis of meninges and central nervous system				
A 3		011	Tuberculosis of intestines, peritoneum and mesenteric glands				
A 4		012-013	Tuberculosis of bones and joints ..	1	1	1	3
A 5	(*a*)	014	Tuberculosis of skin and subcutaneous cellular tissue				
	(*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				
	(*f*)	019	Disseminated tuberculosis				
A 6		020	Congenital syphilis				
A 7	(*a*)	021.0-021.1	Primary syphilis	5	..	..	5
	(*b*)	021.2	Secondary syphilis				
	(*c*)	021.3	Early syphilis, relapse following treatment				
	(*d*)	021.4	Early syphilis (unspecified stage) ..	2	1	..	3
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	2	..	..	2
	(*e*)	028	Latent syphilis				
	(*f*)	029	Syphilis unqualified	10	5	..	15
A 11	(*a*)	030	Acute or unspecified gonorrhoea ..	173	33	..	206
	(*b*)	031	Chronic gonococcal infection of genito-urinary system..	5	..	..	5
	(*c*)	032	Gonococcal infection of joint	6	..	..	6
	(*d*)	033	Gonococcal infection of eye				
	(*e*)	034-035	Gonococcal infection of other sites ..	1	..	..	1
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	7	3	1	11
	(*b*)	046	Amoebiasis	2	1	..	3
	(*c*)	047-048	Other protozoal and unspecified forms of dysentery	1,009	509	538	2,056
A 17		050	Scarlet fever				
A 18		051	Streptococcal sore throat	..	1	..	1
A 19		052	Erysipelas	..	..	1	1
A 20		053	Septicaemia and pyaemia				
A 21		055	Diphtheria				
A 22		056	Whooping Cough	..	..	116	116
A 23		057	Meningococcal infections				
A 24		058	Plague				
A 25		060	Leprosy	99	23	..	122
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				
			Carried forward ..	1,400	624	657	2,681

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.

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	1,400	624	657	2,681
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
A 30		081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis				
A 31		084	Smallpox				
A 32		085	Measles	18	15	318	351
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) ..				
	(*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)	60	13	73	146
	(*b*)	111	Malariae malaria (quartan)	4	2	..	6
	(*c*)	112	Falciparum malaria (malignant tertian)	28	7	30	65
	(*d*)	114	Mixed malaria infections	1	..	1	2
	(*e*)	115	Blackwater fever				
	(*f*)	113, 116-117	Other and unspecified forms of malaria	22,480	12,432	16,435	51,347
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)				
	(*d*)	—	Other filariasis	39	2	10	51
A 41		129	Ankylostomiasis	1,148	957	1,509	3,614
A 42	(*a*)	129	Tape worm (infestation) and other cestode infestation	4	3	35	42
	(*b*)	130.0	Ascariasis	5,148	5,115	29,910	40,173
	(*c*)	130.3	Guinea worm (dracunculosis)				
	(*d*)	124	Other trematode infestation	2	1	..	3
	(*e*)	128	Trichiniasis	4	6	..	10
	(*f*)	130.1-130.2	Other diseases due to helminths ..	2,880	2,208	14,809	19,897
A 43	(*a*)	036	Chancroid				
	(*b*)	037	Lymphogranuloma venereum				
	(*c*)	038	Granuloma inguinale, venereal				
	(*d*)	039	Other and unspecified venereal diseases	12	4	..	16
	(*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	3,203	2,437	4,061	9,701
	(*m*)	086	Rubella				
	(*n*)	087	Chickenpox	29	20	121	170
	(*o*)	088	Herpes Zoster	31	19	20	70
	(*p*)	089	Mumps	50	43	174	267
	(*q*)	090	Dengue				
	(*r*)	093	Glandular fever				
	(*s*)	095	Trachoma	3	3	..	6
	(*t*)	096.7	Sandfly fever				
			Carried forward ..	36,545	23,911	68,163	128,619

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	36,545	23,911	68,163	128,619
			I.—INFECTIVE AND PARASITIC DISEASES—(*cont.*)				
	(*u*)	120	Leishmaniasis				
	(*v*)	121	(*a*) Trypanosomiasis gambiensis ..				
			(*b*) Trypanosomiasis rhodesiensis ..				
			(*c*) Other and unspecified trypanosomiasis				
	(*w*)	131	Dermatophytosis	558	342	1,023	1,923
	(*x*)	135	Scabies	11,459	7,502	28,066	47,027
	(*y*)	054, 074 096.1-096.6 096.8, 096.9 122 132-134 136-138	All other diseases classified as infective and parasitic	3,093	5,809	9,125	18,027
			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	..	3	..	3
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	25	14	5	44
A 60	(*a*)	210-211	Benign neoplasm of buccal cavity, pharynx and digestive system ..				
	(*b*)	217	Benign neoplasm of other female genital organs				
	(*c*)	218	Benign neoplasm of other male genital organs				
			Carried forward ..	51,680	37,581	106,382	195,643

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	51,680	37,581	106,382	195,643
			II.—NEOPLASMS—(*cont.*)				
	(*d*)	212-216 219-229	Benign neoplasm of other and unspecified organs and tissue.. ..	1	1	1	3
	(*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	4	5	..	9
			III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS				
A 61		250-251	Nontoxic goitre	..	4	..	4
A 62		252	Thyrotoxicosis with or without goitre ..	..	2	..	2
A 63		260	Diabetes mellitus..	28	10	..	38
A 64	(*a*)	280	Beri Beri	366	362	91	819
	(*b*)	281	Pellagra	9	2	..	11
	(*c*)	282	Scurvy	4	2	6	12
	(*d*)	283-284	Rickets	..	..	20	20
	(*e*)	285	Osteomalacia				
	(*f*)	286.0	(*a*) Sprue	..	2	..	2
		286.5	(*b*) Malnutrition	1,348	1,117	1,927	4,392
		286.1-286.4 286.6	(*c*) Other deficiency states	2,543	2,085	2,480	7,108
A 65	(*a*)	290	Pernicious and other hyperchromic anaemias	..	..	2	2
	(*b*)	291	Iron deficiency anaemias (hypochromic)	1,943	3,149	1,284	6,376
	(*c*)	292-293	Other specified and unspecified anaemias	11,493	20,133	9,905	41,531
A 66	(*a*)	241	Asthma	2,746	1,870	1,680	6,296
	(*b*)	240 242-245	Angioneurotic oedema, urticaria and other allergic disorders	287	221	138	646
	(*c*)	253	Myxoedema and cretinism				
	(*d*)	254	Other diseases of thyroid gland ..	1	3	..	4
	(*e*)	270	Disorders of pancreatic internal secretion other than diabetes mellitus				
	(*f*)	271	Diseases of parathyroid gland	17	11	..	28
	(*g*)	272	Diseases of pituitary gland	2	1	..	3
	(*h*)	273	Diseases of thymus gland	1	1	..	2
	(*i*)	274	Diseases of adrenal gland				
	(*j*)	275-277	Other diseases of endocrine glands ..	2	1	..	3
	(*k*)	288	Gout	35	23	..	58
	(*l*)	287, 289	Other metabolic diseases				
	(*m*)	294	Polycythemia				
	(*n*)	295	Haemophilia				
	(*o*)	296	Purpura and other haemorrhagic conditions				
	(*p*)	297	Agranulocytosis				
	(*q*)	298	Diseases of spleen	44	44	29	117
	(*r*)	299	Other diseases of blood and blood-forming organs	81	40	..	121
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS				
A 67	(*a*)	300	Schizophrenic disorders (dementia praecox)				
	(*b*)	301	Maniac-depressive reaction				
	(*c*)	302	Involutional melancholia				
			Carried forward ..	72,635	66,670	123,945	263,250

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	72,635	66,670	123,945	263,250
			V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS —(*cont.*)				
	(*d*)	303	Paranoia and paranoid states				
	(*e*)	304	Senile psychoses				
	(*f*)	305-309	Other and unspecified psychoses ..				
A 68	(*a*)	311	Hysterical reaction				
	(*b*)	314	Neurotic-depressive reaction				
	(*c*)	322	Alcoholism	5	..	..	5
	(*d*)	323	Other drug addiction				
	(*e*)	310 312-313 315-321 324 326	Other psychoneuroses and disorders of personality	10	9	..	19
A 69		325	Mental deficiency	..	2	2	4
			VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS				
A 70	(*a*)	331	Cerebral haemorrhage				
	(*b*)	332	Cerebral embolism and thrombosis ..				
	(*c*)	330 333-334	Other vascular lesions affecting central nervous system				
A 71		340	Non-meningococcal meningitis				
A 72		345	Multiple sclerosis				
A 73		353	Epilepsy	26	18	14	58
A 74	(*a*)	370	Conjunctivitis and ophthalmia	5,662	5,103	8,803	19,568
	(*b*)	371-379	Other inflammatory diseases of eye ..	459	525	968	1,952
A 75		385	Cataract	24	17	..	41
A 76		387	Glaucoma				
A 77	(*a*)	390	Otitis externa	878	746	3,664	5,288
	(*b*)	391-393	Otitis media and mastoiditis	728	582	3,387	4,697
	(*c*)	394	Other inflammatory diseases of ear ..	1,180	1,138	3,813	6,131
A 78	(*a*)	380-384 386, 388 389	All other diseases and conditions of eye..	3,478	3,149	4,230	10,857
	(*b*)	342	Intracranial and intraspinal abscess ..				
	(*c*)	343	Encephalitis, myelitis and encephalomyelitis				
	(*d*)	350	Paralysis agitans	2	1	..	3
	(*e*)	352	Other cerebral paralysis	3	4	..	7
	(*f*)	356	Motor neurone disease and muscular atrophy	8	2	1	11
	(*g*)	357	Other diseases of spinal cord	..	1	..	1
	(*h*)	366	Other and unspecified forms of neuralgia and neuritis	14,976	12,461	1,903	29,340
	(*i*)	367	Other diseases of cranial nerves ..	1	..	..	1
	(*j*)	369	Diseases of peripheral autonomic nervous system	28	33	..	61
	(*k*)	341, 344 351, 354 355 360-365 368 395-398	All other diseases of the nervous system and sense organs	1,025	750	154	1 929
			VII.—DISEASES OF THE CIRCULATORY SYSTEM				
A 79	(*a*)	400	Rheumatic fever without mention of heart involvement	46	33	..	79
	(*b*)	401	Rheumatic fever with heart involvement	..	7	2	9
	(*c*)	402	Chorea				
A 80	(*a*)	410-413	Diseases of valves specified as rheumatic				
			Carried forward ..	101,174	91,251	150,886	343,311

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	101,174	91,251	150,886	343,311
			VII.—DISEASES OF THE CIRCULATORY SYSTEM—(*cont.*)				
	(*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 ..	7	6	..	13
A 82	(*a*)	430	Acute and subacute endocarditis ..				
	(*b*)	431	Acute myocarditis				
	(*c*)	432	Acute pericarditis				
	(*d*)	433	Functional disease of heart	21	2	..	23
	(*e*)	434	Other and unspecified diseases of heart	47	21	5	73
A 83		440-443	Hypertension with heart disease ..	6	5	1	12
A 84		444-447	Hypertension without mention of heart	37	27	..	64
A 85	(*a*)	450	General arteriosclerosis	1	2	..	3
	(*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	..	1	..	1
	(*g*)	456	Other diseases of arteries	3	1	..	4
A 86	(*a*)	460, 462	Vericose veins	7	11	..	18
	(*b*)	461	Haemorrhoids	164	67	..	231
	(*c*)	463-464	Phlebitis and thrombophlebitis ..	1	..	..	1
	(*d*)	465	Pulmonary embolism and infarction ..				
	(*e*)	466	Other venous embolism and thrombosis				
	(*f*)	467	Other diseases of circulatory system ..				
	(*g*)	468	(*a*) Adenitis	91	40	113	244
			(*b*) Lymphadenitis	18	16	14	48
			(*c*) Other diseases of lymph nodes and lymph channels	2	1	..	3
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM				
A 87	(*a*)	470	Acute nasopharyngitis (common cold) ..	13,190	8,616	17,511	39,317
	(*b*)	471	Acute sinusitis	28	37	4	69
	(*c*)	472	Acute pharyngitis	400	357	325	1,082
	(*d*)	473	Acute tonsillitis	338	363	633	1,334
	(*e*)	474	Acute laryngitis and tracheitis ..	1,641	1,277	1,635	4,553
	(*f*)	475	Other acute upper respiratory infections	268	192	246	706
A 88	(*a*)	480	Influenza with pneumonia	6	39	13	58
	(*b*)	481	Influenza with other respiratory manifestations, and influenza unqualified ..	6,951	5,105	7,358	19,414
	(*c*)	482	Influenza with digestive manifestations, but without respiratory symptoms ..	59	47	85	191
	(*d*)	483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	298	246	626	1,170
A 89		490	Lobar pneumonia	18	10	6	34
A 90		491	Broncho-pneumonia	4	3	63	70
A 91		492-493	Primary atypical, other and unspecified pneumonia	2	1	9	12
A 92		500	Acute bronchitis	7,373	5,871	11,523	24,767
A 93	(*a*)	501	Bronchitis unqualified	27,498	17,483	38,165	83,146
	(*b*)	502	Chronic bronchitis	1,678	1,347	1,621	4,646
A 94		510	Hypertrophy of tonsils and adenoids ..	7	3	..	10
A 95	(*a*)	518	Empyema				
	(*b*)	521	Abscess of lung				
			Carried forward ..	161,338	132,448	230,842	524,628

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	161,338	132,448	230,842	524,628
			VIII.—DISEASES OF THE RESPIRATORY SYSTEM—(*cont.*)				
A 96		519	Pleurisy	6	..	..	6
A 97	(*a*)	517	Other diseases of upper respiratory tract	126	76	46	248
	(*b*)	520	Spontaneous pneumothorax				
	(*c*)	522	Pulmonary congestion and hypostasis ..				
	(*d*)	525	Other chronic interstitial pneumonia ..				
	(*e*)	523	Pneumoconiosis				
	(*f*)	526	Bronchiectasis	..	1	..	1
	(*g*)	511-516 524 527	All other respiratory diseases	666	444	474	1,584
			IX.—DISEASES OF THE DIGESTIVE SYSTEM				
A 98	(*a*)	530	Dental caries	3,208	2,472	6,126	11,806
	(*b*)	531-535	(*a*) Gingivitis	114	89	116	319
			(*b*) Pyorrhoea	80	83	56	219
			(*c*) Other diseases of teeth and supporting structures	43	82	49	174
A 99		540	Ulcer of stomach	15	10	..	25
A 100		541	Ulcer of duodenum	7	3	1	11
A 101		543	Gastritis and duodenitis	10,212	5,266	3,778	19,256
A 102		550-553	Appendicitis	9	4	..	13
A 103	(*a*)	560	Hernia of abdominal cavity without mention of obstruction	5	..	1	6
	(*b*)	561	Hernia of abdominal cavity with obstruction	3	..	..	3
	(*c*)	570	(*a*) Intussusception				
			(*b*) Volvulus	..	..	22	22
			(*c*) Other intestinal obstruction	3	3	25	31
A 104	(*a*)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years	..	..	4,212	4,212
	(*b*)	571.1	Gastro-enteritis and colitis, ages 2 years and over	3,482	2,679	4,732	10,893
	(*c*)	572	Chronic enteritis and ulcerative colitis ..				
A 105	(*a*)	581.0	Cirrhosis of liver without mention of alcoholism				
	(*b*)	581.1	Cirrhosis of liver with alcoholism ..				
A 106	(*a*)	584	Cholelithiasis				
	(*b*)	585	Cholecystitis without mention of calculi	..	3	5	8
A 107	(*a*)	536	Stomatitis	933	1,226	2,863	5,022
	(*b*)	538	Other diseases of buccal cavity ..	1	1	77	79
	(*c*)	539	(*a*) Functional disorders of oesophagus (*b*) Stricture or obstruction of oesophagus				
	(*d*)	544	Disorders of function of stomach ..	2,931	2,472	2,379	7,782
	(*e*)	545	Other diseases of stomach and duodenum	514	500	420	1,434
	(*f*)	573	(*a*) Constipation	13,290	7,851	7,206	28,347
			(*b*) Other functional disorders of intestines	902	718	858	2,478
	(*g*)	574	Anal fissure and fistula	2	..	..	2
	(*h*)	575	Abscess of anal and rectal regions ..	13	4	5	22
	(*i*)	576	Peritonitis				
	(*j*)	578	Other diseases of intestines and peritoneum	..	..	1	1
	(*k*)	580	(*a*) Acute yellow atrophy of liver ..				
			(*b*) Degeneration of liver				
			(*c*) Hepatitis	42	40	3	85
	(*l*)	583	Other diseases of liver	10	17	1	28
	(*m*)	586	Other diseases of gall-bladder and biliary ducts	5	1	1	7
	(*n*)	587	Diseases of pancreas				
	(*o*)	537, 542 577, 582	Other diseases of digestive system ..	2,594	2,768	932	6,294
			Carried forward ..	200,554	159,261	265,231	625,046

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	200,554	159,261	265,231	625,046
			X.—DISEASES OF THE GENITO-URINARY SYSTEM				
A 108		590	Acute nephritis	29	10	10	49
A 109	(*a*)	591	Nephritis with oedema, including nephrosis	21	12	3	36
	(*b*)	592	Chronic nephritis	48	23	13	84
	(*c*)	593	Nephritis not specified as acute or chronic	187	110	76	373
	(*d*)	594	Other renal sclerosis				
A 110		600	Infections of kidney	..	4	1	5
A 111	(*a*)	602	Calculi of kidney and ureter	1	..	..	1
	(*b*)	604	Calculi of other parts of urinary system	2	..	..	2
A 112		610	Hyperplasia of prostate				
A 113		620-621	Diseases of breast	..	33	..	33
A 114	(*a*)	603	Other diseases of kidney and ureter ..	132	79	20	231
	(*b*)	605	Cystitis	213	115	25	353
	(*c*)	606	Other diseases of bladder	12	11	4	27
	(*d*)	608	Stricture of urethra	14	2	..	16
	(*e*)	609	Other diseases of urethra	79	17	15	111
	(*f*)	612	Other diseases of prostate	11	..	..	11
	(*g*)	613	Hydrocele..	12	..	..	12
	(*h*)	614	Orchitis and epididymitis	11	..	3	14
	(*i*)	617	Other diseases of male genital organs ..	6	..	..	6
	(*j*)	622	Acute salpingitis and oophoritis ..	..	3	..	3
	(*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	..	10	..	10
	(*n*)	633	Other diseases of uterus..	..	17	..	17
	(*o*)	634	Disorders of menstruation	..	596	..	596
	(*p*)	637	Other diseases of female genital organs	..	26	1	27
	(*q*)	601 607, 611 615-616 623-624 631-632 635-636	All other diseases of the genito-urinary system	377	310	65	752
			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 prégnancy	..	2	..	2
	(*c*)	681	Sepsis of childbirth and the puerperium				
	(*d*)	682	Puerperal phlebitis and thrombosis ..				
	(*e*)	684	Puerperal pulmonary embolism ..				
A 116	(*a*)	642	(*a*) Albuminuria of pregnancy	..	4	..	4
			(*b*) Eclampsia of pregnancy				
			(*c*) Hyperemesis gravidarum	..	4	..	4
			(*d*) Acute yellow atrophy of liver ..	..			
			(*e*) Other toxaemias of pregnancy ..	..	12	..	12
	(*b*)	652	Abortion with toxaemia, without mention of sepsis				
	(*c*)	685	Puerperal eclampsia				
	(*d*)	686	Other forms of puerperal toxaemia ..				
A 117	(*a*)	643	Placenta praevia				
	(*b*)	644	Other haemorrhage of pregnancy ..	..	3	..	3
	(*c*)	670	Delivery complicated by placenta praevia or antepartum haemorrhage				
	(*d*)	671	Delivery complicated by retained placenta..	..	1	..	1
			Carried forward ..	201,709	160,665	265,467	627,841

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	201,709	160,665	265,467	627,841
			XI.—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM —(*cont.*)				
	(*e*)	672	Delivery complicated by other post-partum haemorrhage	..	3	..	3
A 118		650	Abortion without mention of sepsis or toxaemia	..	9	..	9
A 119		651	Abortion with sepsis				
A 120	(*a*)	645	Ectopic pregnancy				
	(*b*)	646	Anaemia of pregnancy	..	1,432	..	1,432
	(*c*)	683	Pyrexia of unknown origin during the puerperium	..	2	..	2
	(*d*)	688.1	Puerperal psychoses				
	(*e*)	689	Mastitis and other disorders of lactation	..	4	..	4
	(*f*)	647-649 673-680 687 688.0 688.2-688.3	Other complications of pregnancy, childbirth and the puerperium	..	15	..	15
	(*g*)	660	Delivery without complications ..	..	170	..	170
			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	2,759	1,623	4,460	8,842
	(*b*)	691-693	Cellulitis and abscess	3,245	2,230	3,524	8,999
	(*c*)	694-698	Other infections of skin and subcutaneous tissue	10,076	6,004	16,780	32,860
A 122	(*a*)	720	Acute arthritis due to pyogenic organisms				
	(*b*)	721	Acute nonpyogenic arthritis	50	23	..	73
	(*c*)	722	Rheumatoid arthritis and allied conditions	13	8	..	21
	(*d*)	723-725	Arthritis specified and unspecified ..	1,601	994	67	2,662
A 123	(*a*)	726	Muscular rheumatism	3,644	2,521	95	6,260
	(*b*)	727	Rheumatism unspecified	8,681	6,050	32	14,763
A 124		730	Osteomyelitis and periostitis	5	2	..	7
A 125	(*a*)	737	Ankylosis of joint	51	32	3	86
	(*b*)	745-749	Other acquired musculoskeletal deformities	32	33	125	190
A 126	(*a*)	715	Chronic ulcer of skin (including tropical ulcer)	9,244	5,523	12,779	27,546
	(*b*)	700-714 716	All other diseases of skin	21,659	13,113	29,762	64,534
	(*c*)	731-736 738-744	All other diseases of musculoskeletal system	2,212	1,293	513	4,018
			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				
			Carried forward ..	264,981	201,749	333,607	800,337

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	264,981	201,749	333,607	800,337
			XIV.—CONGENITAL MALFORMATIONS—(*cont.*)				
	(*e*)	756	(*a*) Congenital hypertrophic pyloric stenosis				
			(*b*) Imperforateanus				
			(*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..	..	..	3	3
			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	..	..	260	260
	(*b*)	765	Ophthalmia neonatorum	..	..	2	2
	(*c*)	763	Pneumonia of newborn	..	..	8	8
	(*d*)	766	Pemphigus neonatorum				
	(*e*)	767	Umbilical sepsis	..	..	142	142
	(*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	..	..	6	6
A 135	(*a*)	773	Congenital debility	..	..	2	2
	(*b*)	774	Premature birth	..	..	1	1
	(*c*)	775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified	..	..	6	6
			XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS				
A 136		794	Senility without mention of psychoses	2,242	2,130	..	4,372
A 137	(*a*)	780	Infantile convulsions	..	..	28	28
	(*b*)	788.8	Pyrexia of unknown origin	6,371	4,345	5,052	15,768
	(*c*)	793	Observation, without need for further medical care	161	250	69	480
	(*d*)	781-787 789-792 795 788.1-788.7 788.9	(*a*) Malingering	17	9	..	26
			(*b*) Sudden death (cause unknown) ..				
			(*c*) Found dead (cause unknown) ..				
			(*d*) Other ill-defined and unknown causes of morbidity and mortality	5,393	4,465	3,907	13,765
			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	50	8	20	78
AE 139	(*a*)	E 800-E 802	Railway accidents				
	(*b*)	E 850-E 858	Water transport accidents				
			Carried forward ..	279,215	212,956	343,113	835,284

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	279,215	212,956	343,113	835,284
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(*cont.*)				
		"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(*cont.*)				
(*c*)	E 860-E 866	Aircraft accidents				
(*d*)	E 840-E 845	Other transport accidents	164	85	255	504
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 ..	1	..	..	1
(*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	2	1	..	3
(*i*)	E 890-E 895	Accidental poisoning by gases and vapours				
(*j*)	E871-E873, E875-E877, E879-E882, E 887	Other accidental poisoning				
AE 141	E 900-E 904	Accidental falls	2,788	1,085	2,907	6,780
AE 142	E 912	Accident caused by machinery	12	5	4	21
AE 143	E 916	Accident caused by fire and explosion of combustible material	30	38	66	134
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation	108	93	184	385
AE 145	E 919	Accident caused by firearm				
AE 146	E 929	Accidental drowning and submersion ..				
AE 147 (*a*)	E 913	Accidents caused by cutting or piercing instruments	2,820	1,409	2,271	6,500
(*b*)	E 914	Accidents caused by electric current ..	1	..	..	1
(*c*)	E 920	Foreign body entering eye and adnexa	19	4	9	32
(*d*)	E 923	Foreign body entering other orifice ..	16	6	32	54
(*e*)	E 925	Accidental mechanical suffocation ..				
(*f*)	E 926	Lack of care of infants under 1 year of age	..	..	32	32
(*g*)	E 927	Accidents caused by bites and stings of venomous animals and insects ..	315	224	368	907
(*h*)	E 928	Other accidents caused by animals ..	67	48	80	195
(*i*)	E 931	Excessive heat				
(*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 ..	12	..	..	12
		(*b*) Agricultural and forestry accidents	21	5	5	31
		(*c*) Accidental injury by crushing or landslide	29	8	20	57
		(*d*) Other and unspecified accidents ..	183	104	220	507
(*o*)	E 940	Generalized vaccinia following vaccination	..	..	123	123
(*p*)	E 941-E 942	Other complications of smallpox vaccination	..	..	78	78
(*q*)	E 950-E953, E 955-E959	Accidents due to medical or surgical intervention				
(*r*)	E 954	Anaesthetic accidents				
		Carried forward ..	285,803	216,071	349,767	851,641

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*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 ..	285,803	216,071	349,767	851,641
		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	153	76	148	377
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 fire-arms 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	4	2	1	7
(*d*)	E 983	Assault by other means	22	17	6	45
(*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	8	5	1	14
AN 141	N 830-N 839	Dislocation without fracture	4	..	7	11
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles	1,910	718	929	3,557
AN 143	N 850-N 856	Head injury excluding fracture ..	14	3	31	48
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis				
AN 145	N 870-N 908	Laceration and open wounds	4,356	2,054	3,554	9,964
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface ..	1,412	508	1,312	3,232
AN 147	N 930-N 936	Effects of foreign body entering through orifice				
AN 148	N 940-N 949	Burns	208	244	587	1,039
AN 149	N 960-N 979	Effects of poisons				
AN 150	N950-N959 N980-N999	All other and unspecified effects of external causes	594	400	478	1,472
		TOTAL ..	294,488	220,098	356,821	871,407

TABLE 7—(*cont.*)

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

RETURN OF DISEASES FOR THE YEAR 1956—(*cont.*)

Nationalities	New Cases All Nationalities (including Europeans)			
	Adult Males	Adult Females	Children under 10 years	Total
Europeans	5	..	..	5
Eurasians	190	219	233	642
Chinese	59,239	48,569	85,126	192,934
Indians	19,708	15,316	23,930	58,954
Malays	191,175	139,392	219,349	549,916
Javanese	16,862	11,157	21,946	49,965
Japanese	..	..	..	..
Others	7,309	5,445	6,237	18,991
TOTAL ..	294,488	220,098	356,821	871,407

TABLE 8

DENTAL—SUMMARY OF WORK DONE DURING THE YEAR 1956

State/Settlement	Attendances	Extractions		Fillings				Scalings	Dentures
		Temporary Teeth	Permanent Teeth	Amalgam	Silicate	Inlay	Fillings		
Kedah	37,970	15,733	22,178	20,553	1,482	47	67	991	280
Perlis	5,289	965	2,343	1,560	170	—	6	54	—
Penang	22,519	5,312	6,790	4,069	862	31	—	336	202
Perak	46,601	11,821	29,462	24,177	2,061	53	39	1,010	816
Selangor	32,035	6,407	17,105	7,170	1,471	6	15	809	333
Negri Sembilan	30,869	6,413	15,178	18,045	1,057	37	6	1,176	605
Malacca	15,117	1,927	5,124	6,099	475	13	—	411	79
Johore	60,309	19,184	30,071	15,323	1,766	68	97	2,122	938
Kelantan	16,255	3,438	13,650	6,140	1,313	27	17	608	111
Trengganu	21,371	5,909	14,079	4,306	1,148	10	3	676	—
Pahang	24,709	8,213	11,254	5,488	2,009	2	5	712	147
Federal Institution, North ..	6,409	714	2,701	1,709	299	107	4	774	412
Federal Institution, South ..	7,196	628	2,542	1,460	371	25	—	301	149
Dental Nurses Training School ..	12,044	2,260	820	10,984	—	—	41	—	—
Dental Nurses in the Field ..	121,605	65,560	3,744	84,224	—	—	—	7,236	—
Total ..	460,298	154,484	177,041	211,307	14,484	426	300	17,216	4,072

TABLE 9

MICROSCOPICAL EXAMINATION OF BLOOD FILMS FOR THE YEAR 1956

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	23,678	451	459	1	11	24,757
Perlis	4,450	88	151	—	4	1,807
Penang	17,429	389	174	1	6	21,531
Perak	60,166	821	681	3	26	91,119
Selangor	48,649	396	523	11	5	73,082
Negri Sembilan ..	17,172	551	161	8	13	19,117
Malacca	11,061	201	58	3	3	12,107
Johore	19,545	165	187	4	34	20,921
Kelantan	13,735	1,241	1,564	18	40	15,005
Trengganu	7,092	552	259	47	138	7,238
Pahang	25,784	534	161	2	10	34,286
Total ..	248,761	5,389	4,378	98	290	328,970

TABLE 10

MICROSCOPICAL EXAMINATION OF FAECES FOR WORM INFECTIONS, 1956

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	19,771	169	5,902	2,754	1,120	20,678
Perlis	1,995	1	610	169	112	1,995
Penang	17,248	193	5,653	4,275	1,535	21,834
Perak	46,129	289	5,586	1,706	895	54,374
Selangor	43,588	203	9,374	2,683	1,767	55,738
Negri Sembilan ..	13,949	92	3,403	1,671	2,587	14,770
Malacca	9,070	31	1,450	1,213	4,036	10,723
Johore	12,151	909	2,671	1,284	739	13,338
Kelantan	3,838	75	877	203	751	4,111
Trengganu	3,244	81	1,226	536	563	3,417
Pahang	13,138	46	2,573	387	461	16,283
Total ..	184,121	2,089	39,325	16,881	14,566	217,261

Table 11

POST MORTEM EXAMINATIONS, 1956

State/Settlement	Medico-legal	Clinical
Kedah	164	1
Perlis	14	18
Penang	208	54
Perak	609	25
Selangor	467	29
Negri Sembilan	395	36
Malacca	119	18
Johore	418	96
Kelantan	69	—
Trengganu	51	—
Pahang	135	10
Total	2,649	277

TABLE 12

RETURN OF VENEREAL DISEASES FOR THE YEAR 1956

A.—NEW CASES

Nationalities		Syphilis				Gonorrhoea	Non-Specific Unrethritis	Chancroid	Lymphogran.	Comb. infec.	Non-Venerl.	Total	
		Prim.	Sec.	Tert.	Congen.							M.	F.
Chinese	M.	91	519	123	21	1,789	220	353	25	14	706	3,861	—
	F.	18	171	61	13	125	156	1	1	13	229	—	788
Indians	M.	77	307	77	7	1,072	193	424	33	27	723	2,940	—
	F.	12	165	38	14	81	104	2	—	7	136	—	559
Malays	M.	29	261	77	17	1,189	179	44	10	17	400	2,223	—
	F.	7	148	54	14	162	96	1	—	10	158	—	650
Europeans	M.	1	3	—	1	46	21	4	—	—	15	91	—
	F.	—	—	—	—	—	1	—	—	—	4	—	5
Others	M.	2	4	3	1	65	6	10	—	1	27	119	—
	F.	—	4	—	—	2	2	—	—	2	2	—	12
Total	M.	200	1,094	280	47	4,161	619	835	68	59	1,871	9,234	—
	F.	37	488	153	41	370	359	4	1	32	529	—	2,014

GRAND TOTAL .. 11,248

TABLE 12—(*cont.*)

B.—RE-ATTENDANCES

Nationalities		Syphilis				Gonorrhoea	Non-Specific Unrethritis	Chancroid	Lymphogran.	Comb. infec.	Non-Venerl.	Total	
		Prim.	Sec.	Tert.	Congen.							M.	F.
Chinese	M.	328	3,493	1,502	194	3,001	373	2,054	80	63	1,085	12,173	—
	F.	34	2,941	641	517	335	648	2	—	64	778	—	5,960
Indians	M.	317	2,259	1,301	62	2,367	460	1,879	103	205	1,086	10,039	—
	F.	65	2,186	438	245	160	507	1	—	24	599	—	4,225
Malays	M.	45	3,020	642	149	2,181	220	156	36	63	776	7,288	—
	F.	23	1,980	376	252	297	431	—	—	32	527	—	3,918
Europeans	M.	1	—	8	7	77	48	1	—	3	4	149	—
	F.	—	—	—	—	4	—	—	—	—	—	—	4
Others	M.	8	37	23	—	98	17	30	—	1	64	278	—
	F.	—	122	6	—	—	20	—	—	28	24	—	200
Total	M.	699	8,809	3,476	412	7,724	1,118	4,120	219	335	3,015	29,927	—
	F.	122	7,229	1,461	1,014	796	1,606	3	—	148	1,928	—	14,307
												GRAND TOTAL ..	44,234

TABLE 12—(*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	10	13	23	7	13	10	—	—	1	2	47	32
With Gonorrhoea	12	13	25	7	17	10	—	—	1	2	55	32
With Chancroid	6	—	6	—	4	—	—	—	—	—	16	—
With Lymphogranuloma ..	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 13

SUMMARY OF CHILD HEALTH CENTRES, 1956

State/Settlement	Centres		Medical Officers		Health		Dispensers or Hospital Assistants	Midwives	Others
	Permanent	Subsidiary	Men	Women	Sisters	Nurses			
Kedah	7	70	—	—	4	14	—	52	—
Perlis	1	4	—	—	—	1	5	13 (K.B.)	—
Penang	12	27	—	2	4	18	7	30	6 (D.N.)
Perak	7	2	—	—	6	23	—	66 (K.B.)	—
Selangor	6	73	—	—	6	33	2	21	—
Negri Sembilan	12	50	—	1	5	6	6 (P.T.)	16	—
Malacca	7	6	—	1	1	8	1	12	—
Johore	5	106	2	—	3	6	2 (1 P.T.)	56	—
Kelantan	3	8	1 (P.T.)	—	2	1	1	20	2 (A.N.)
Trengganu	4	22	—	1	3	—	4	4	—
Pahang	8	150	—	—	3	6	—	42 (41 K.B.)	—
Total ..	72	518	3 (1 P.T.)	5	37	116	28 (7 P.T.)	332 (120 K.B.)	6 (D.N.) 2 (A.N.)

D.N. = Dental Nurse. A.N. = Assistant Nurse. P.T. = Part-time. K.B. = Kampong Bidans.

TABLE 14

SUMMARY OF DISPENSARIES, 1956

State/Settlement	Total Number	Fixed	Travelling	Medical Officers	Health		Dispensers or Hospital Assistants	Midwives	Others
			Road and River		Sisters	Nurses			
Kedah	22	17	5	—	—	—	21	—	—
Perlis	7	6	1	—	—	—	6	4	—
Penang	14	11	3	3	—	3	9	—	1 (D.N.)
Perak	41	24	17	—	1	—	38	—	—
Selangor	33	23	10	2	—	—	29	—	—
Negri Sembilan	18	13	5	—	—	—	16	—	—
Malacca	16	10	6	3	1	8	18	12	—
Johore	28	16	12	12	5	13	35	—	—
Kelantan	19	10	9	—	—	—	12	—	—
Trengganu	11	5	6	1	3	—	9	2	—
Pahang	27	16	11	1 (P.T.)	—	1	16	—	—
Total ..	236	151	85	22 (1 P.T.)	10	25	209	18	1 (D.N.)

D.N. = Dental Nurse. P.T. = Part-time.

24903—752—30-4-58.

GOVERNMENT PRESS, KUALA LUMPUR