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## CHAPTER XVII.

## PUBLIC HEALTH.

## A. STATE GOVERNMENT ACTIVITIES

(including activities of the Commonwealth Government in the Northern Territory and the Australian Capital Territory).

## § 1. Public Health Legislation and Administration.

1. **New South Wales.**—The Department of Public Health comes under the jurisdiction of the Minister for Health, with an Under-Secretary as Permanent Head of the Department for administrative purposes.

There is also a Director-General of Public Health and Chief Medical Adviser to the Government, who is *ex officio* President of the Board of Health and Chairman of the Nurses' Registration Board.

The Director of State Psychiatric Services is responsible for the administration of that part of the Mental Health Act relating to the care and treatment of mental patients.

The Department's activities embrace all matters relating to public health and the greater part of the general medical work of the Government. These include:—*(a)* Supervision of the work of local authorities (municipal and shire councils) in relation to public health matters connected with the following Acts—Public Health Act, Noxious Trades Act and Pure Food Act; *(b)* Scientific divisions (Government Analyst, Microbiological Laboratory, and Division of Occupational Health); *(c)* Tuberculosis and Social Hygiene Divisions; *(d)* Medical Officers of Health at Sydney, Broken Hill, Newcastle, Wollongong, Bathurst and Lismore; *(e)* State hospitals and homes and State sanatoria; *(f)* Mental hospitals; *(g)* Public hospitals (Hospitals Commission); *(h)* Maternal and baby welfare (Baby health centres); *(i)* School medical and dental services; and *(j)* Publicity, nutrition and library services.

2. **Victoria.**—The Department of Health, which is constituted under the Health Act 1958, contains, in addition to the central administration, four branches, the General Health Branch, the Maternal and Child Hygiene Branch, the Tuberculosis Branch and the Mental Hygiene Branch. The work of these branches is described below.

*(a) The General Health Branch.* The branch, *inter alia*, is the administrative branch for the Commission of Public Health, protects or promotes the health of the community in the following ways:—

The Engineering Division scrutinizes from a public health point of view the plans of all public buildings and provincial sewerage installations and makes periodical inspections. Other activities include prevention of stream pollution and supervision of abattoirs and cattle sale yards.

The Poliomyelitis Division provides a comprehensive orthopaedic, physiotherapy and respirator service for all eligible patients and carries out rehabilitation in conjunction with the Commonwealth Government. Facilities developed for poliomyelitis are now being used for other neurological disorders. The Division is also concerned with the Salk immunization campaign being undertaken in Victoria. Through the municipalities, immunization against poliomyelitis, diphtheria, smallpox, whooping cough, and tetanus is encouraged and supervised.

Prevention and control of infectious diseases are functions of this Branch, which also sponsors original research into virus diseases and epidemiological investigations throughout Victoria.

The Venereal Diseases Division provides a centrally situated headquarters where the use of modern remedies is effecting a general improvement in the standard of treatment.

Standards of quality and purity of foods and drugs are fixed by the Food Standards Committee and are administered and enforced by both departmental and municipal health inspectors.

Investigations into occupational hazards to the health of workers, the treatment and incidence of occupational diseases and research into the effects of toxic substances used in industry are conducted by the Industrial Health Division.

Subsidies are granted to municipalities to provide meals for pensioners, to clubs for elderly citizens, and to emergency housekeeper services.

Other services operated by the Branch are: registering plumbers and gasfitters; providing free travel to hospital for people with limited incomes; analysing food, drink, water and sewerage effluents; registering cinematograph operators; administering the Cemeteries Acts and the Clean Air Act; and advising industry on health hazards associated with handling radioactive substances.

(b) *The Maternal and Child Hygiene Branch.* This branch is concerned with pre-natal hygiene, the development of pre-school services, and the school medical and dental services.

(c) *The Tuberculosis Branch.* The Tuberculosis Branch is concerned with the prevention of tuberculosis and the treatment and rehabilitation of tubercular patients.

(d) *The Mental Hygiene Branch.*—This Branch is controlled by the Mental Hygiene Authority and consists of institutions for in-patient care and out-patient's clinics and other services necessary for a comprehensive community mental health programme. Since the appointment of the Authority in 1951, existing buildings have been remodelled and new ones provided. Services have been re-organized to conform with modern requirements.

(e) *The Cancer Institute.*—This Institute, which was incorporated in 1948, provides, *inter alia*, facilities for research and investigation related to the causes, prevention, diagnosis and treatment of cancer and allied conditions. The policy of the Cancer Institute Board has been to ensure the provision of maximum clinical service to patients and to carry out related research. Clinics have been opened in a number of country centres in co-operation with the local hospital committees.

Under an agreement with the Government of Tasmania, clinics are also conducted at Launceston and Hobart.

A 4 mega-volt linear accelerator was installed in Melbourne in 1956 and a Cobalt 60 unit in Launceston in 1957. Another 4 mega-volt linear accelerator is to be installed in Melbourne in late 1960. Out-patient attendances during the twelve months ended 30th June, 1959, were 32,297, and X-ray therapy treatments administered totalled 83,142. One hundred in-patient beds are now available.

3. **Queensland.**—(i) *General.* The Health Acts 1937 to 1955 are administered by the Director-General of Health and Medical Services subject to the Minister for Health and Home Affairs. A central staff controls the following divisions:—

(a) *Division of Public Health Supervision.* This Division is controlled by the Deputy Director-General of Health and Medical Services and comprises separate sections of communicable disease control, environmental sanitation, food and drug control, enthetic (venereal) diseases, hookworm control and Hansen's disease (leprosy) control. Free treatment of venereal diseases is offered at the Department's clinics in Brisbane, and at any public hospital. Free immunization against poliomyelitis, diphtheria, whooping cough and tetanus is offered by most of the local authorities. About 94 per cent. of school children in the Greater Brisbane area and 90 per cent. in the rest of the State have been immunized against diphtheria, while 86 per cent. of the population aged under 15 years have been immunized against poliomyelitis.

(b) *Division of Tuberculosis.* A central chest clinic in Brisbane offers Mantoux tests, X-ray examinations, and inoculations of Mantoux negative reactors free of charge and this service is extensively used. Mobile X-ray units visit country districts. Children in the final grade of primary schools are now being Mantoux-tested and given B.C.G. vaccine. The compulsory X-ray examination of all persons over the age of 14 years has commenced in Northern Queensland and will be applied progressively to other areas of the State.

(c) *Division of Industrial Medicine.* The services of this division are available both to industry and the trade union movement for the prevention of industrial hazards. This division is particularly interested in occupational diseases, such as silicosis and lead and other poisoning and advises on industrial problems such as lighting, ventilation, fatigue, air pollution and the use of radio-active isotopes.

(d) *Division of Maternal and Child Welfare.* This Division offers supervision and advice on the rearing and health of infants and pre-school children at 242 baby health centres throughout the State. Outlying centres are visited by air or by special rail car. Homes for in-patient treatment of infants with feeding problems have been established at Brisbane, Toowoomba, Ipswich and Rockhampton.

(e) *Division of School Health Services.* This Division comprises the Chief Medical Officer, School Health Services, and a staff of doctors, dentists and visiting school nurses. Every child has a medical examination at least once in three years.

(f) *Division of Mental Hygiene.* The Director is responsible for the care and treatment of mentally sick patients in the State's four mental hospitals at Brisbane, Toowoomba, Ipswich and Charters Towers.

(g) *Division of Laboratory Services.* Two laboratories—the Laboratory of Microbiology and Pathology and the Government Chemical Laboratory—are maintained to ensure the purity of a wide range of foodstuffs and materials. The former also offers a service in clinical pathology to institutions, country hospitals and private doctors.

(ii) *Hospitals.* All public hospitals operate under the district system, which provides for the constitution of hospitals regions and hospitals districts and a hospitals board for each district. The State is divided into 11 hospitals regions with a base hospital for each region. Each region comprises a number of hospital districts, the purpose of the regional scheme being to co-ordinate the public hospitals in the region with the base hospital. The administration of the hospital services, including public dental services, in each hospitals district is vested in the hospitals board, which comprises not less than four members nor more than eight members appointed by the Governor-in-Council and one member elected by the component local authorities. There are 57 hospitals boards controlling 132 public hospitals. In addition five other hospitals provide public accommodation and receive aid from the Government.

An institution for the treatment of Hansen's disease in aboriginals is maintained at Fantome Island near Townsville. Modern therapy has rendered the Peel Island institution unnecessary and white patients are now treated at the South Brisbane Hospital.

Private hospitals in Queensland are controlled under the provisions of the Health Acts, 1937 to 1955 and the Private Hospitals Regulations, 1937. There are 58 private hospitals licensed in the State, containing 1,739 beds and cots, of which 20 containing 778 beds and cots, are in Brisbane.

4. *South Australia.*—The Department of Public Health embraces the activities of the Central Board of Health, the Food Drugs Advisory Committee, the Radiological Advisory Committee, the School Health Services (comprising School Medical and Dental Services and Deafness Guidance Clinic), Poliomyelitis Services and the public health aspect of the control of tuberculosis, including the State X-ray Health Survey, under the control of the Director of Tuberculosis.

The Central Board of Health consists of five members, three of whom (including the chairman) are appointed by the Governor, while one is elected by metropolitan local boards and one by all other local boards. The Central Board of Health administers the Health, Food and Drugs, Dangerous Drugs, Noxious Trades, Bakehouses Registrations and Early Notification of Birth Acts. The Board is also concerned to some degree with Acts relating to local government, abattoirs and cremation. Other legislation administered by the Department of Public Health relates to venereal diseases and vaccination.

The Health Act 1935–1956 constitutes every municipal council and every district council a local board of health for its municipality or district. There are 143 local boards under the general control and supervision of the Central Board. Under the Food and Drugs Act, each local board is constituted the local authority for its respective district except in the metropolitan area, for which the Metropolitan County Board is the local authority.

5. *Western Australia.*—Health services are provided under the Health Act 1911–1958. The central authority is the Department of Public Health, controlled by a Commissioner, who must be a qualified medical practitioner. The State is divided into 147 local government areas which are administered either by municipal councils or by road boards. Each type of authority has health administration powers.

In any emergency, the Commissioner may exercise all the powers of a health authority in any part of the State.

Features of recent legislation are as follows:—(a) Act No. 70 of 1948 gives power to control sufferers from tuberculosis and established a Tuberculosis Control Branch; (b) Act No. 11 of 1952 gives wide powers to regulate the sale and use of pesticides; (c) Act No. 34 of 1954 provides for the licensing of manufacturers of therapeutic substances; (d) Act No. 21 of 1957 gives power to require the notification of any prescribed condition of health in addition to infectious diseases; (e) Act No. 17 of 1956 gives local authorities power to provide or subsidize centres for the accommodation and care of the aged; (f) Act No. 30 of 1958 provides for the establishment of the Health Education Council with the object of promoting and improving the health of the people of Western Australia; and (g) Act No. 43 of 1958 provides for the establishment of the Cancer Council of Western Australia with the objects of co-ordinating, promoting and subsidizing cancer research.

6. *Tasmania*.—The Department of Health Services is under the jurisdiction of the Minister of Health. The Department consists of a Headquarters and three Divisions. The Director-General of Health Services is the permanent head of the Department and he administers the Department through Directors of each of the three divisions (Division of Public Health, Division of Mental Health, and Division of Tuberculosis) and through several other clinical directors and other senior officers attached to the Headquarters of the Department including the Directors of Orthopaedics, Pathology and Anaesthetics and the Government Analyst and Chemist.

In addition to his responsibility for the functioning of the Department as a whole, the Director-General of Health Services directly administers the various branches of the work performed by Headquarters. This is concerned particularly with the following:—

- (a) The Administration of the Hospital Services throughout the State.
- (b) The Government Medical Service.
- (c) The Hospital and Government Nursing Service, which includes the administration of 27 District Nursing Centres throughout the State.
- (d) Legislation concerned with Health and allied matters and the Nurses' Registration Board.
- (e) The Health Education Council and National Fitness Council.
- (f) Specialist Medical Services.
- (g) Statistical classification of Diseases and Injuries.
- (h) Liason with other States and the Commonwealth Health Department, and all matters dealing with the maintenance of Departmental property and the appointments and salaries of Departmental staff.

The Division of Public Health administers laws relating to sanitation, notification of infectious diseases, and food and drug legislation. The Division also controls the school medical and dental services and child health services.

The Division of Mental Health is responsible for the supervision of mental hospitals, the consultative diagnosis and treatment of psychiatric cases, the treatment and care of the mentally ill, the treatment and care of inebriates, the treatment and custody of sexual offenders, the treatment of psychopathic cases, and the care and treatment of retarded children. The Tuberculosis Division is concerned with the prevention (including B.C.G. vaccination), detection, notification, examination and treatment of all forms of tuberculosis occurring in the State. This Division also conducts the compulsory mass chest-X-ray examinations and maintains chest hospitals and diagnostic clinics.

7. *Northern Territory*.—The Commonwealth Department of Health provides hospital, health and medical services in the Northern Territory.

Four general hospitals have been established. The Darwin Hospital has accommodation for 235 in-patients, Alice Springs Hospital, 120, Katherine Hospital, 36, and Tennant Creek Hospital, 34. The treatment of Hansen's disease (leprosy) is carried out at East Arm Settlement. A full range of ancillary services is available at the Darwin hospital which serves as a base hospital for the Territory. Dental clinics have been set up at Darwin and Alice Springs.

Medical and dental services to outback areas are provided by road and air. Aircraft used in the Territory are two De Havilland Doves stationed at Darwin, and one Drovat at Alice Springs. They are staffed and serviced by Trans-Australia Airlines and are extensively

used in ambulance and survey medical work. At Alice Springs, doctors of the Northern Territory provide the medical services to the Royal Flying Doctor Service (South Australian) base.

A section of the Department of Health undertakes continuous investigation into native health.

School doctors and dentists travel throughout the Territory to carry out diagnosis and treatment. Public health services are provided and health inspectors periodically visit all settlements.

Darwin, as a first port of entry for oversea aircraft and shipping, has a quarantine station.

**8. Australian Capital Territory.**—The Public Health Ordinance 1928–1951 places under the control of the Minister for Health all matters relating to public health and hygiene in the Australian Capital Territory. A Medical Officer of Health and a number of Health Inspectors are appointed to administer and police this ordinance. The Canberra Community Hospital is administered subject to the Minister for Health by a board consisting of five elected members and three members appointed by the Minister. The hospital has accommodation for 253 in-patients. A district nursing service administered by the Commonwealth Department of Health was established in 1950 to provide a home-nursing service for the sick and aged. The service is available at the request of a registered doctor.

## § 2. Supervision and Care of Infant Life.

1. **General.**—The number of infant deaths and the rate of infant mortality for the five years 1954 to 1958 are given in the following table. Further information regarding infant mortality (including information for each State as a whole and for the Territories) will be found in Chapter X.—Vital Statistics (*see* p. 356).

### INFANT DEATHS AND DEATH RATES.

State.	Metropolitan.					Remainder of State.				
	1954.	1955.	1956.	1957.	1958.	1954.	1955.	1956.	1957.	1958.

#### NUMBER OF INFANT DEATHS.

New South Wales	787	814	784	795	792	1,063	1,036	993	1,009	912
Victoria ..	576	549	630	703	718	479	486	498	516	460
Queensland ..	206	210	224	224	209	489	446	513	508	448
South Australia ..	199	207	193	202	241	189	224	184	201	208
Western Australia ..	153	187	156	168	167	206	186	228	189	193
Tasmania ..	58	55	53	51	63	128	134	117	119	104
Total(a) ..	1,979	2,022	2,040	2,143	2,190	2,554	2,512	2,533	2,542	2,325

#### RATE OF INFANT MORTALITY.(b)

New South Wales	22.51	22.76	21.33	20.40	20.03	27.85	26.81	25.49	24.92	22.52
Victoria ..	18.26	16.68	18.13	19.39	19.41	20.72	20.75	21.07	21.32	18.95
Queensland ..	18.95	18.60	19.93	18.88	17.83	24.08	21.17	24.23	23.20	20.23
South Australia ..	19.82	20.13	18.47	18.85	21.62	23.08	27.27	21.61	22.79	23.37
Western Australia ..	19.59	22.50	17.89	19.63	18.44	25.37	22.37	27.82	22.59	24.75
Tasmania ..	25.45	23.10	22.18	19.97	24.51	23.31	23.48	20.48	20.23	17.34
Total(a) ..	20.30	20.03	19.56	19.68	19.81	24.70	23.84	23.85	23.18	21.14

(a) Excludes Territories.

(b) Number of deaths of children under one year of age per 1,000 live births registered.

Because the health of mothers and infants depends largely on pre-natal attention as well as after-care, government and private organizations provide instruction and treatment for mothers before and after confinement. The health and well-being of mother and child are looked after by baby health centres, baby clinics, crèches, etc.

In all States, Acts have been passed with the object of supervising the conditions of infant life and reducing the rate of mortality. Departments control the boarding-out of the wards of the State to suitable persons and wherever possible the child is boarded out

its mother or to a near female relative. Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons, while special attention is devoted to the welfare of ex-nuptial children.

Under the provisions of Part V. of the Social Services Act 1947-1959, a sum of £15 is payable to the mother in respect of each confinement at which a living or viable child is born if the mother has no other children under 16 years of age. Where there are one or two other children under 16 the amount payable is £16, and where there are three or more other children under 16 the amount payable is £17 10s. Where more than one child is born at a birth the amount of the allowance is increased by £5 in respect of each additional child born at that birth. More detailed information concerning maternity allowances is given in Chapter XVIII.—Welfare Services.

2. *Nursing Activities.*—(i) *General.* In several of the States, the Government maintains institutions which provide treatment for mothers and children, and, in addition, subsidies are granted to various associations engaged in welfare work.

(ii) *Details by States.* In earlier issues of the Official Year Book (see No. 22, pp. 515-16) information concerning the activities of institutions in each State is given.

(iii) *Summary.* The following table gives particulars of the activities of Baby Health Centres and Bush Nursing Associations for the year 1959.

**BABY HEALTH CENTRES AND BUSH NURSING ASSOCIATIONS, 1959.**

Heading.	N.S.W.	Vic.	Qld. (a)	S. Aust. (a)	W.Aust.	Tas.	N.T.	A.C.T. (a)	Aus- tralia.
Baby Health Centres—									
Metropolitan No.	111	173	68	93	31	18	..	9	503
Urban-Provincial and Rural No.	247 (b)	427	174	139	29	72	2	..	1,090
Total No.	358	600	242	232	60	90	2	9	1,593
Attendances at Centres No.	1,015,018	1,331,403	463,499	232,213	229,431	133,855	7,583	30,806	3,443,808
Visits paid by Nurses No.	(c)	151,174	29,921	25,629	22,216	75,742	1,850	3,843	(c)
Bush Nursing Associa- tions—Number of Centres .. ..	24	58	7	30	12	25	..	..	156

(a) Year ended 30th June.  
available.

(b) Includes 7 mobile units which served 21 centres.

(c) Not available.

In the last thirty years, the number of attendances at the Baby Health Centres has more than trebled. The numbers of attendances, at five-year intervals, since 1930 were as follows:—1930, 919,893; 1935, 1,355,306; 1940, 2,035,299; 1945, 2,927,764; 1950, 3,049,375; and 1955, 3,099,233. During the year 1959, the number of attendances was 3,443,808.

### § 3. Medical Inspection of School Children.

1. *General.*—Medical inspection of school children is carried out in all States, in the Northern Territory and in the Australian Capital Territory. In some States, travelling clinics have been established to deal with dental and ocular defects.

2. *New South Wales.*—(i) *School Medical Service.* Doctors of the School Medical Service examine children attending all schools administered by the Department of Education and the majority of other schools in the State. They make annual visits to schools in the metropolitan, Newcastle and Wollongong areas, and in Armidale, Tamworth, Bathurst, Orange and Wagga, and examine children in kindergarten or 1st grade in primary schools and 1st and 4th years in secondary schools. Children in other classes are examined or reviewed as necessary. The vision and hearing of pupils in 4th grade are re-tested. In country areas, doctors aim to visit schools every three years, and examine all children attending. Owing to insufficient staff, the country portion of the programme cannot be completed each year.

If treatment is necessary, the parent is informed in writing and, if possible, is called in for interview. In the metropolitan, Newcastle and Wollongong areas, school nurses follow up these cases with the object of persuading parents to seek medical advice for the children.

As well as examining school children, the medical officer examines the sanitary arrangements at each school. Bush nurses act as school nurses in schools at or near the bush nursing centres.

Medical officers of this service examined 152,620 children in 1958. Notifiable defects were found in 25.2 per cent. of the children examined.

Various surveys of school children are undertaken from time to time, e.g. hearing surveys, hookworm surveys, height-weight surveys, nutrition surveys, and investigations to determine the incidence of enlargement of the thyroid gland, defective vision, and postural defects.

Five child guidance clinics, all in the metropolitan area, operate under the administration of the School Medical Service. One clinic functions at the Yasmar Boys' Shelter and deals exclusively with cases which come before the Children's Courts. Each clinic is staffed by a psychiatrist, a psychologist and social workers.

(ii) *School Dental Service.* The aim of the School Dental Service is to provide dental treatment for children on the school premises, to train them in the care of their teeth, and to teach them the principles of dental health.

Of 35,007 children examined in 1958, 29,083 were included in a Dental Health Survey. Of these, 6.7 per cent. were found to have naturally healthy dentitions and 77 per cent. were in need of treatment.

In 1958, the clinics treated 16,055 children in 47,724 visits, 26,035 teeth were extracted, and 43,641 permanent fillings and 48,894 other treatments, including prophylaxis, were provided. As the number of clinics is not sufficient to provide more than a limited service, it is necessary to restrict treatment to the ages 6-8 years in the metropolitan area, and 6-9 years in large country centres. In small outlying rural schools, children of all ages are included.

3. *Victoria.*—School Medical Services are conducted in close association with the Education Department. All children between the ages of 5 and 14 years attending State and registered primary schools are examined regularly, and any disabilities found in the children are brought to the notice of their parents. School nurses, under medical direction, visit the homes and schools. Children suffering from physical and mental disabilities are recommended to attend appropriate schools or classes by the medical officers. Some special training for the handicapped is given.

The School Dental Service has a staff of 43 dental officers and provides dental attention for children in parts of the metropolitan area at one of three dental centres and for a number of country districts by means of 15 mobile units. It also provides dental service for children's institutions in and around Melbourne and certain provincial centres. This service is now providing dental attention for some 80,000 primary school children.

4. *Queensland.*—During 1958-59, medical officers and nurses examined 101,211 school children, referring children with defects to their own doctors. In western Queensland, local doctors act as part-time ophthalmic officers. In north Queensland, two school sisters assist in the control of hookworm. Advice is given on school sanitation, infectious diseases in schools, and health education.

During 1958-59, school dentists gave treatment to 9,511 school children whose parents could not afford private treatment. The treatment was carried out at four rail dental clinics and with portable equipment at schools. In addition, school children are treated at hospital dental clinics in the larger towns.

5. *South Australia.*—Children in State schools are examined while in Grades 1, 4 and 7 in the primary schools, and in their second and fourth years in secondary schools. Efforts are made to visit country schools every three years and all the children are examined. Students who wish to become teachers are examined on appointment as Leaving Teaching



Scholars while still attending secondary schools, again immediately prior to entering the Teachers' College and finally when they leave the College to take up teaching. Courses of lectures in hygiene and in first aid are given to all College students and, in addition, domestic arts students are lectured on home nursing.

During 1958, 58,808 children were examined by medical officers in 159 country and 101 metropolitan schools. Of these, 3,898 required treatment for defective vision, 1,234 for defective hearing, and 14,416 for dental disorders.

There were 996 children examined at the deafness guidance clinic during 1958. Of the 487 new patients, 370 were referred to doctors or hospitals for treatment.

Educational work was assisted by talks to mothers' clubs and interviews with parents by doctors and dentists, and by home visits and interviews by nurses.

The Psychology Branch of the Education Department examines difficult children of many types, including those with such problems as backwardness, truancy and delinquency, and assists the parents of the children interviewed in handling these problems. In addition to supervising opportunity and special classes for children who are hard-of-hearing or backward in school work, it advises on questions of placement and types of education for ordinary children. Its guidance officers organize vocational guidance work in schools, interview pupils and visit schools. They also lecture to students of the Teachers' College as well as to other interested organizations such as mothers' clubs. Expenditure on the Psychology Branch during 1958 was £22,985.

6. **Western Australia.**—The School Medical Service of the State Health Department employs five full-time medical officers for schools. During 1958, these officers examined 37,569 children (metropolitan 23,151, country 14,418) of whom 19,431 were boys and 18,138 girls. The 257 schools visited comprised—metropolitan, 126 (state schools 94, convents 32), and country, 131 (state schools 109, convents 22). The aim is to examine each school child three times in his school career.

During 1958, the 15 full-time dentists employed by the School Dental Service visited 15 metropolitan schools, 157 country schools, 11 orphanages and 13 native missions. The number of children examined was 13,502. With the consent of their parents, 7,744 of these were treated. The number of dental vans operating was 12. The cost of this service for 1957–58 was £47,902.

7. **Tasmania.**—During 1958, one full-time and five part-time medical officers examined school children in State and private schools, and 13 full-time and 2 part-time sisters visited homes and schools. Of the 22,989 children examined by medical officers, 8,776 were found to have defects.

There are 20 school dental clinics. Surgeries are located at Hobart, Launceston, Queenstown, Burnie and Devonport, and 15 mobile clinics are operated in other districts. A full-time dental surgeon is in charge of each surgery or clinic. During the year, there were 18,054 new visits to the school dentists and 28,998 repeat visits.

The cost of school medical and school dental services for the year ended 30th June, 1958, was £79,967.

8. **Northern Territory.**—(i) *School Medical Service.* The Schools Medical Officer makes routine physical examinations of all children attending both pre-school centres and the schools which come under the supervision of the Assistant Supervisor of Education in the Northern Territory. The only children not examined by him are those at the Native Welfare Settlement School, i.e. full-blood aboriginals, who are examined during native health surveys.

An immunization clinic and a paediatric clinic are held each week at the Darwin Hospital.

(ii) *School Dental Service.* A special service for school and pre-school children is available in Darwin.

9. **Australian Capital Territory.**—The Commonwealth Department of Health is responsible for health aspects of child welfare in the Australian Capital Territory. These include a school medical service, carried out by a medical officer and a trained nurse, who are full time officers of the Health Department.

Routine examinations are carried out at all schools, public and private, within the Territory. The programme is planned to provide for examinations at the ages of six, eight, 12, 15 and 17 years. During 1959, the total number of children examined in the above age groups was 3,931.

Examinations of children attending Pre-School Centres are made according to the time available, an attempt being made to cover children aged 4½ to five years. In 1959, lack of time prevented full coverage but 154 pre-school children were examined.

In addition, an immunization programme for the protection of children aged from six months to 12 years against diphtheria, whooping cough and tetanus is carried out by the school doctor and nurse. Injections given during 1959 numbered 5,433.

The officer-in-charge of the school service also acts as medical adviser to the Mothercraft Council.

The school dental service is staffed by eight dentists and nine dental nurses, and has operated since 1950. Free dental treatment is available to children at primary and infants' schools and pre-school centres. Approximately 90 per cent. of children accept treatment. During 1959, 7,065 children were examined, involving 21,220 visits by these children.

#### § 4. Inspection of Food and Drugs for Sale.

Public health legislation in force in all States provides for the inspection of foods and drugs with the object of ensuring that all goods sold shall be wholesome, clean, and free from contamination or adulteration, and that all receptacles, places and vehicles used for their manufacture, storage, or carriage shall be clean.

#### § 5. Supervision of Dairies, Milk Supply, etc.

Earlier issues of the Official Year Book (*see* No. 22, p. 498), refer to the legislation in force in the various States to ensure the purity of dairy produce.

#### § 6. Disposal of Dead by Cremation.

The first crematorium in Australia was opened in South Australia in 1903. At 31st December, 1959, there were seventeen crematoria in Australia, situated as follows:—

##### CREMATORIA, 31st DECEMBER, 1959.

New South Wales	..	..	..	..	..	..	7
Victoria	..	..	..	..	..	..	3
Queensland	..	..	..	..	..	..	2
South Australia	..	..	..	..	..	..	1
Western Australia	..	..	..	..	..	..	2
Tasmania	..	..	..	..	..	..	2
Australia	..	..	..	..	..	..	17

There is no crematorium in the Northern Territory or the Australian Capital Territory.

The following table shows the number of cremations in each State for each of the years 1955 to 1959:—

##### CREMATIONS.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955 .. ..	11,128	6,119	2,993	431	1,169	549	22,389
1956 .. ..	12,358	6,733	3,341	514	1,201	551	24,698
1957 .. ..	12,189	6,849	3,250	539	1,239	688	24,754
1958 .. ..	12,190	6,913	3,308	620	1,363	622	25,016
1959 .. ..	13,352	7,549	3,678	779	1,433	666	27,457

**B. COMMONWEALTH GOVERNMENT ACTIVITIES.****§ 1. General.**

At the time of federation, the only health function given to the Commonwealth Government under the Constitution was the power to make laws with respect to quarantine. All other health powers remained with the State Governments. Under this power, the systems of State quarantine formerly in operation were abolished with the passing of the Quarantine Act 1908 and a branch of the Department of Trade and Customs, under the control of a Director of Quarantine, was created on 1st July, 1909.

The Commonwealth Department of Health was formed in 1921 by the extension and development of the quarantine service, the Director of Quarantine becoming the Director-General of Health. It had certain other functions in the field of public health. An amendment to the Constitution in 1946 gave the Commonwealth power to make laws with respect to pharmaceutical, hospital and sickness benefits, and medical and dental services. In addition, the Commonwealth Government has used its powers under Section 96 of the Constitution to make grants to the States for health purposes.

**§ 2. National Health Benefits.**

**1. Pharmaceutical Benefits.**—Prior to 1st March, 1960, certain life-saving and disease-preventing drugs were provided free of charge to the general community provided they had been prescribed by a doctor registered in Australia. These benefits, together with the drugs listed in the British Pharmacopoeia, were provided free to pensioners.

Total expenditure on pharmaceutical benefits in the year 1958–59 was £20,972,797.

As from 1st March, 1960, benefits previously available only to pensioners, with certain additions and deletions, are also available to the general community but a fee of 5s. per prescription has been imposed for each prescription both for the life-saving and the wider range of drugs.

As in the past, pensioners who benefit under the Pensioner Medical Service (*see* para. 5, page 663), will receive all benefits without any charge being made.

**2. Hospital Benefits.**—The payment of hospital benefits to the States is authorized under Part V. of the National Health Act 1953–1959. This Act continues the agreements entered into with the various States under the Hospital Benefits Act 1951. Under these agreements, the Commonwealth pays the States certain sums of money which vary according to the number of occupied beds in public hospitals and the status of patients.

The agreements provide for the payment of 12s. a day for patients who are pensioners or their dependants, and for patients in certain South Australian hospitals. The rate of 8s. a day is paid for other patients.

The National Health Act also provides for the payment of 8s. a day for patients in approved private hospitals. This payment is made to the proprietor of the private hospital. A condition of the benefit is that an equivalent amount has been allowed against the patient's account.

Commonwealth additional benefit is paid in the case of patients who are members of a registered hospital benefit organization. The additional benefit is payable at the rate of 4s. a day if a person contributes for a fund benefit of at least 6s. a day but less than 16s. a day, and at the rate of 12s. a day if a person contributes for a fund benefit of at least 16s. a day. Payment of the additional benefit is made through the benefit organization and the patient normally receives it with the amount of fund benefit payable by the organization. Reimbursement of the Commonwealth additional benefit is subsequently made to the organization by the Commonwealth.

Until 1st January, 1959, organizations' rules generally provided for disallowance of claims for fund benefit in cases of chronic or pre-existing ailments, or after the contributor had received benefit for a certain maximum period each year. As from 1st January, 1959, provision was made for fund benefit to be paid in these cases. The fund benefit generally

payable in such cases is 16s. a day and is paid either from special accounts guaranteed by the Commonwealth, or from the ordinary accounts of the organizations. One of the original conditions of payment was that the treatment was given in a hospital recognized for the purpose of paying this benefit. While this condition still remains as a general rule, provision has been made as from 1st January, 1960, for fund benefit to be paid in certain circumstances to particular cases for treatment in hospitals which are not recognized.

Australian residents and their dependants who receive hospital treatment while temporarily living overseas are eligible to receive the benefit of 8s. a day and the additional benefit to which they are entitled.

Expenditure on hospital benefits in 1958-59 was £14,802,290. This does not include expenditure on mental hospitals (*see* para. 3, below).

The following tables show the amount of ordinary benefit paid for each of the years 1956-57 to 1958-59 together with the number of registered organizations, the membership thereof, and payments of Commonwealth additional benefit and hospital fund benefit on account of occupied beds in public and approved private hospitals for the year 1958-59. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by hospital benefit schemes is considerably higher than the number of members. Reliable figures for coverage are not available.

**HOSPITAL BENEFITS: SUMMARY 1956-57 to 1958-59.**

**1. Ordinary Benefits (a). Paid to Hospitals in respect of occupied beds.**  
(£.)

Year Ended 30th June.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Territories and Overseas.	Australia.
1957 .. ..	3,065,921	1,920,075	1,356,017	714,980	594,007	264,227	57,936	7,973,163
1958 .. ..	2,832,282	2,024,597	1,415,169	735,079	644,149	276,378	63,498	7,991,152
1959 .. ..	3,260,416	2,077,329	1,493,257	746,282	720,164	284,522	65,313	8,647,283

(a) Ordinary benefits are payable in respect of:—(i) Beds occupied by pensioners in public hospitals (12s. a day); (ii) Beds occupied in certain South Australian hospitals (12s. a day); and (iii) Other occupied beds in public hospitals and approved private hospitals (8s. a day).

**2. Additional Benefits (a). Paid through Benefit Organizations.**  
YEAR ENDED 30TH JUNE, 1959.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.(b)
Registered Organizations							
Members	No. 29	No. 48	No. 3	No. 14	No. 12	No. 10	No. 116
Commonwealth Benefit	£ 1,152,832	£ 712,788	£ 288,365	£ 257,289	£ 230,559	£ 107,475	£ 2,749,308
Fund Benefit	£ 3,091,444	£ 1,348,723	£ 478,711	£ 478,495	£ 565,493	£ 192,141	£ 6,155,007
	£ 5,354,146	£ 1,561,150	£ 897,984	£ 850,967	£ 665,533	£ 437,532	£ 9,767,312

(a) An additional benefit of 4s. a day is payable to registered hospital benefit organizations for persons who contribute for a fund benefit of at least 6s. a day but less than 16s. a day, or 12s. a day for those who contribute for a fund benefit of at least 16s. a day. (b) No hospital benefit organization is registered in the Northern Territory or the Australian Capital Territory. Persons who live in one of these territories, or who are overseas, receive their Commonwealth additional benefit and fund benefit through membership of an organization registered in one of the States.

**3. Mental Hospitals.**—In 1946, when Commonwealth hospital benefits were introduced for patients in public hospitals, no provision was made for patients in mental hospitals. To help meet the cost of maintaining patients in mental hospitals, the Commonwealth Parliament passed the Mental Institutions Benefits Act 1948. This Act ratified agreements with the States whereunder it was provided that:—

- (a) the Commonwealth would pay the States a benefit equal to the amount being collected by the States from the relatives of patients in mental hospitals by way of charges for maintenance; and
- (b) the States would cease making charges for the maintenance of mental patients.

These agreements operated for five years, and terminated in the latter half of 1954. The amount contributed by the Commonwealth during the operation of the agreements was approximately one shilling a day for each patient. When the agreements terminated, Dr. Alan Stoller, of the Victorian Mental Hygiene Authority, was commissioned to undertake a survey on mental health facilities and needs in Australia. His report was released in May, 1955. The report stated that serious overcrowding existed in the majority of mental hospitals in Australia. The provision of more beds was the most urgent need, but other accommodation and rehabilitation facilities were also required.

Following the report, the Commonwealth made an offer of £10 million to the States as part of a capital expenditure programme of £30 million on increasing and improving patient accommodation. All States accepted the Commonwealth offer.

The following table sets out the amounts which have been paid to the State Governments by the Commonwealth Government each year from 1954–55 to 1958–59.

#### EXPENDITURE ON MENTAL HOSPITALS BY THE COMMONWEALTH GOVERNMENT.

(£.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1954–55 ..	106,525	53,820	36,460	15,871	9,453	3,457	225,586
1955–56 ..	208,763	445,747	66,588	12,245	9,984	29,822	773,149
1956–57 ..	383,555	527,213	88,068	128,467	51,855	68,974	1,248,132
1957–58 ..	324,151	545,365	114,104	152,159	29,236	91,384	1,256,399
1958–59 ..	196,831	619,585	118,512	122,328	17,210	45,892	1,120,358

Amounts shown in the foregoing table in respect of the year 1954–55 represent payments made under the Mental Institutions Benefits Act 1948. Amounts shown in respect of 1955–56 to 1958–59 represent payments made during the year shown under the States Grants (Mental Institutions) Act 1955. The total amounts payable to each State under the last-mentioned Act are as follows:—

	£
New South Wales .. .. .	3,830,000
Victoria .. .. .	2,740,000
Queensland .. .. .	1,460,000
South Australia .. .. .	895,000
Western Australia .. .. .	720,000
Tasmania .. .. .	355,000
<b>Australia</b> .. .. .	<b>10,000,000</b>

There are no mental hospitals in the Northern Territory or the Australian Capital Territory.

4. **Medical Benefits.**—A medical benefits scheme has operated since July, 1953, being authorized firstly by the National Health (Medical Benefits) Regulations and then by the National Health Act 1953.

The basic principle of the scheme is Commonwealth support of voluntary insurance towards meeting the costs of medical attention. The benefits payable by the Commonwealth are paid either on a fee-for-service basis in respect of the items set out in the first and second schedules to the National Health Act, or in the form of a subsidy not exceeding half of the payments made to doctors by registered organizations under contract arrangements.

In order to qualify for the Commonwealth benefit, a person is required to be insured with a registered medical benefits organization. The organization pays the Commonwealth benefit to the contributor, usually at the time it pays its own benefit. Reimbursement of the Commonwealth benefit is subsequently made to the organization by the Commonwealth.

Provision was made from 1st January, 1959, for payments of fund benefit in cases of pre-existing ailments and long-term illnesses.

Substantially increased Commonwealth and fund benefits were introduced for a number of medical services from 1st January, 1960. The largest increases were for major operations where the combined benefits were doubled.

An organization wishing to be registered by the Commonwealth for the purposes of the medical benefits scheme is required to provide to its contributors, subject to its rules, all benefits specified in the first schedule to the National Health Act 1953-59, at rates not less than those provided by the Commonwealth. The organization must be non-profit-making.

In 1958-59, Commonwealth expenditure on medical benefits was £7,779,451.

The following table shows the number of registered medical benefit organizations, their membership, the number of medical services rendered to members and their dependants, and payments of Commonwealth benefits and medical fund benefits to members of registered organizations. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by medical benefit schemes is considerably higher than the number of contributors. Reliable figures for coverage are not available.

#### MEDICAL BENEFITS: SUMMARY, YEAR ENDED 30th JUNE, 1959.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (a)
Registered Organizations							
No.	26	22	6	9	9	10	82
Members	1,230,496	611,999	290,458	241,814	199,429	92,788	2,666,984
Medical Services	7,188,796	4,152,415	1,818,244	1,678,988	1,519,362	460,851	16,818,656
Commonwealth Benefit	£ 3,383,799	1,872,049	824,123	795,859	699,802	203,819	7,779,451
Fund Benefit	£ 4,437,512	1,859,049	1,032,243	898,712	906,888	276,213	9,410,617

(a) No medical benefit organization is registered in the Northern Territory or the Australian Capital Territory. Persons who live in one of those territories, or who are overseas, receive their Commonwealth Benefit and fund benefit through membership of an organization registered in one of the States.

**5. Pensioner Medical Service.**—The Pensioner Medical Service, which commenced on 21st February, 1951, was introduced under the authority of the National Health (Medical Services to Pensioners) Regulations made under the provisions of the National Health Services Act 1948-1949. The service has been continued under the provisions of the National Health Act 1953-1959.

The service provided to eligible pensioners consists of medicines provided free of cost and a medical service of a general practitioner nature such as that ordinarily rendered by a general medical practitioner in his surgery or at the patient's home. Specialist services are not provided. Patients may be charged a small fee by doctors for travelling and attendance outside normal surgery or visiting hours. Doctors participating in the scheme are paid on a fee-for-service basis by the Commonwealth Government.

Persons eligible to receive the benefits of the service are those who satisfy a means test and are receiving an age, invalid or widow's pension under the Social Services Act or a service pension under the Repatriation Act; persons receiving a tuberculosis allowance under the Tuberculosis Act; and dependants of persons eligible for the service.

Since 1st November, 1955, the means test which has applied to new enrolments in the service is the income test that had to be satisfied in order to qualify for a full rate pension as at 31st December, 1953.

The means test does not apply to persons who had applied for and were eligible to receive a pension prior to 1st November, 1955, or to persons receiving a tuberculosis allowance.

At 30th June, 1959, 5,531 doctors were enrolled in the scheme to attend to approximately 720,053 pensioners and their dependants.

During the year ended 30th June, 1959, doctors in the scheme performed 6,441,121 services—visits and surgery consultations—for persons enrolled in the scheme. For these services, they were paid £3,806,457. The average number of services rendered by doctors to each person was nine.

**6. Anti-Tuberculosis Campaign.**—The main provisions of the Tuberculosis Act 1948 are as follows:—(a) Section 5 authorizes the Commonwealth to enter into an arrangement with the States for a national campaign against tuberculosis; (b) Section 6 empowers the Commonwealth to take over or provide specified facilities for the diagnosis, treatment and control of tuberculosis; (c) Section 8 provides for the setting up of an advisory council to advise the Commonwealth Minister for Health on matters relating to the national campaign; and (d) Section 9 authorizes the Commonwealth to pay allowances to sufferers from tuberculosis and their dependants.

Under an arrangement with the Commonwealth Government, each State conducts a campaign against tuberculosis. The Commonwealth Government reimburses the State for all approved capital expenditure in relation to tuberculosis, and for net maintenance expenditure to the extent that it exceeds net maintenance expenditure for the year 1947–48. Thus the States carry out the physical or field work of the national campaign and the Commonwealth acts in an advisory, co-ordinating and financial capacity. For this reason, the Commonwealth has not found it necessary to make much use of its powers under Section 6.

An advisory council, known as the National Tuberculosis Advisory Council, has been set up. There are twelve members, the chairman being the Commonwealth Director-General of Health. Other members are the Commonwealth Director of Tuberculosis, the six State Directors of Tuberculosis, the Consultant (Chest Diseases) of the Department of Repatriation, two specialist private practitioners, and the Chief Administrative Officer of the Commonwealth Department of Health.

To help reduce the spread of infection, the Commonwealth Government pays living allowances to persons suffering from tuberculosis, so that they may give up work and undergo treatment. These allowances have been in operation since 13th July, 1950. Since 8th October, 1959, the rates payable have been:

Married sufferer with a dependent wife	£11 2s. 6d. a week.
Each dependent child under the age of sixteen years	10s. a week (additional to child endowment)
Sufferer without dependants .. .. .	£6 17s. 6d. a week (reducible to £4 15s. a week if a person is maintained free of charge in an institution).

There is a means test on income but not on property. The allowance is reduced by the amount by which a person's income from sources other than his allowance exceeds, in the case of a married person, £7 a week, and in the case of a person without a dependent wife, £3 10s. a week.

The following table gives particulars of the number of new cases of tuberculosis notified in Australia for the year 1958–59 :—

**TUBERCULOSIS: NEW CASES NOTIFIED, YEAR ENDED 30TH JUNE, 1959.**

State or Territory.	Age Group.					Total.
	0–14.	15–34.	35–54.	55 and over.	Not Stated.	
New South Wales ..	48	297	444	385	4	1,178
Victoria .. .. .	88	260	230	208	2	788
Queensland .. ..	87	151	258	279	17	792
South Australia ..	28	69	107	81	..	285
Western Australia ..	9	70	155	153	2	389
Tasmania .. .. .	12	64	52	36	..	164
Northern Territory ..	5	25	8	8	..	46
Australian Capital Territory .. .. .	1	1	5	3	..	10
<b>Australia .. .. .</b>	<b>278</b>	<b>937</b>	<b>1,259</b>	<b>1,153</b>	<b>25</b>	<b>3,652</b>

The following table sets out expenditure by the Commonwealth Government during 1958-59 on its anti-tuberculosis campaign:—

**ANTI-TUBERCULOSIS CAMPAIGN: EXPENDITURE BY THE COMMONWEALTH GOVERNMENT, 1958-59.**  
(£.)

State or Territory.	Allowances.	Maintenance.	Capital.	Total.
New South Wales .. ..	363,863	1,789,097	371,624	2,524,584
Victoria .. ..	224,085	1,072,637	44,444	1,341,166
Queensland .. ..	206,185	800,142	664,213	1,670,540
South Australia .. ..	132,126	440,340	69,754	642,220
Western Australia .. ..	78,084	565,890	256,530	900,504
Tasmania .. ..	58,266	176,000	4,497	238,763
Northern Territory .. ..	..	..	..	..
Australian Capital Territory .. ..	..	..	..	..
<b>Australia .. ..</b>	<b>1,062,609</b>	<b>4,844,106</b>	<b>1,411,062</b>	<b>7,317,777</b>

The following table sets out expenditure by the Commonwealth Government on its anti-tuberculosis campaign since the start of the campaign.

**ANTI-TUBERCULOSIS CAMPAIGN: EXPENDITURE BY THE COMMONWEALTH GOVERNMENT 1947-48 TO 1958-59.**  
(£.)

Year.	Allowances.	Maintenance.	Capital.	Total.
Total 1947-48 to 1953-54 ..	7,620,256	9,702,894	4,049,570	21,372,720
1954-55 .. ..	1,904,467	3,752,856	1,709,405	7,366,728
1955-56 .. ..	1,689,774	4,006,869	1,757,612	7,454,255
1956-57 .. ..	1,460,651	4,754,765	2,381,210	8,596,626
1957-58 .. ..	1,254,693	4,569,215	2,128,462	7,952,370
1958-59 .. ..	1,062,609	4,844,106	1,411,062	7,317,777

**7. Anti-Poliomyelitis Campaign.**—The success of the 1954 United States field trials of the poliomyelitis vaccine developed by Dr. Jonas Salk and his associates at the University of Pittsburg was announced in April, 1955. The Commonwealth Government immediately decided to produce the anti-polio vaccine in Australia.

With the advantage of the experience of the campaigns in the United States and Canada, Australia has adopted a vaccine which has proved to be safe and effective in building up immunity against poliomyelitis.

The vaccine was being produced in Australia by the end of 1955 under the most rigid safety conditions. Plans were made for comprehensive testing procedures to be carried out at many stages both during the production process and with the finished product. These tests ensured the maintenance of safety standards no less rigid than those laid down in other countries where vaccination campaigns were in progress. The Research Laboratory at the Fairfield Hospital, Melbourne, agreed to act as an independent testing authority under an arrangement with the Commonwealth Government, and the pathology department of the University of Melbourne also agreed to conduct tests. No vaccine was released for use unless the searching requirements of the Commonwealth Serum Laboratories, the Fairfield Hospital, and the University of Melbourne were met.

The vaccine was supplied to the States free of charge and the States accepted responsibility for the cost of their particular vaccination programmes. No child can be vaccinated without the consent of his parents or guardian.



Distribution of the Salk poliomyelitis vaccine to the States began in July, 1956. The States are responsible for the organization and running of their own campaigns and for the distribution of the vaccine in accordance with priority groups established by the National Health and Medical Research Council. The first priority group consists of children in the 0-14 age group, expectant mothers, and persons subjected to special risk. These persons have been found to be the most vulnerable.

Vaccination against poliomyelitis takes the form of three injections of the vaccine. The second injection is given approximately four weeks after the first, and the third injection is given not less than 32 weeks after the first.

Where the incidence of the disease in certain areas approaches epidemic proportions, special efforts have been made to vaccinate as soon as possible all persons in the area who give their consent.

By 30th June, 1959, approximately 2,375,000 children had completed the course of injections and, in addition, approximately 404,000 children had commenced the course.

Campaigns for the mass immunization of adults were not commenced until early in 1958 because available supplies of vaccine up to that time were required for the immunization of children and groups subject to special risk. By 30th June, 1959, 347,795 adults had completed the course of injections, and a further 838,810 had commenced the course.

#### POLIOMYELITIS: NEW CASES NOTIFIED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1954 .. ..	555	569	134	176	436	10	..	26	1,906
1955 .. ..	222	235	190	182	33	7	4	1	874
1956 .. ..	240	251	112	122	401	55	..	13	1,194
1957 .. ..	58	13	24	16	8	6	..	..	125
1958 .. ..	23	60	5	10	2	..	..	..	100

8. Free Milk for School Children Scheme.—In 1950, the States Grants (Milk for School Children) Act was passed. The object of this Act was to improve the diet of school children by the addition of a small quantity of milk each day. All children under the age of thirteen years attending public or private primary schools, including nursery schools, kindergartens, crèches and aboriginal missions, are eligible to receive free milk. The cost of the milk plus half the capital or incidental costs, including administrative expenses of the scheme, is reimbursed by the Commonwealth to the States. All States now participate in the scheme. At 30th June, 1959, approximately 1,485,000 children were entitled to receive free milk under this scheme.

Expenditure by the Commonwealth Government under the scheme since its inception has been as follows:—

#### COMMONWEALTH EXPENDITURE ON MILK FOR SCHOOL CHILDREN SCHEME.

(£.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1950-51 to 1953-54 ..	2,059,047	1,002,766	259,600	406,042	267,614	369,970	943	16,233	4,382,215
1954-55 ..	980,589	498,000	323,340	156,000	127,015	145,695	921	10,760	2,242,320
1955-56 ..	1,042,173	540,000	308,000	184,000	137,211	185,000	1,016	14,048	2,411,448
1956-57 ..	1,094,469	600,901	386,999	200,000	158,659	156,275	1,323	16,146	2,614,772
1957-58 ..	1,139,512	677,000	401,000	212,000	153,600	160,433	860	18,186	2,762,591
1958-59 ..	1,190,048	782,623	474,909	235,879	182,249	181,025	2,799	19,104	3,068,636

The figures in the foregoing table differ slightly from those in the table shown in Chapter XVIII., Welfare Services, page 686, as they include capital and administrative costs. Figures in the latter table represent only expenditure which is a charge on the National Welfare Fund (i.e., the cost of the milk).

### § 3. Commonwealth Laboratories and Research Institutions.

1. **National Health and Medical Research Council.**—In 1926, the Commonwealth Government established a Federal Health Council, in accordance with a recommendation of the Royal Commission on Health (1925), "for the purpose of securing closer co-operation between the Commonwealth and State Health Authorities". This council held sessions each year except in 1932. In 1936, the Commonwealth Government decided to create a body with wider functions and representation, and the National Health and Medical Research Council was established with the following functions:—

- To advise Commonwealth and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public and on medical research.
- To advise the Commonwealth Government on the expenditure of money specifically appropriated to be spent on the advice of this Council.
- To advise the Commonwealth Government on the expenditure of money on medical research and on projects of medical research generally.
- To advise Commonwealth and State Governments upon the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition.

The council consists of the Commonwealth Director-General of Health (as chairman), three officers of his department, the official head of the Health Department in each State, and the Director of Public Health for Papua and New Guinea, together with ten other members one each being nominated by the Federal Council of the British Medical Association, the Royal Australasian College of Surgeons, the Royal Australasian College of Physicians, the Australian Regional Council of the Royal College of Obstetricians and Gynaecologists, the Council of the Australian College of General Practitioners, the College of Pathologists of Australia, the Australian Dental Association, the Australian Paediatric Association, the College of Radiologists of Australasia and (jointly) the Australian universities having medical schools. An eminent layman and laywoman, appointed by the Commonwealth Minister of State for Health, also serve on the council.

The first session of the National Health and Medical Research Council was held at Hobart in February, 1937. The forty-eighth session was held at Sydney in November, 1959.

Under the Medical Research Endowment Act 1937, the Commonwealth Government has made an annual appropriation of funds to assist:—(a) departments of the Commonwealth or of a State engaged in medical research; (b) universities for the purpose of medical research; (c) institutions and persons engaged in medical research; and (d) in the training of persons in medical research.

Approved research institutions under this system now number 74. For 1960, grants for projects numbered 118 in the following fields:—bacteriology, biochemistry, biophysics, clinical research, dentistry, epidemiology, haematology, medical chemistry, neurology, neuro-physiology, obstetrics, pathology, physiology and pharmacology, tuberculosis and diseases due to viruses. In certain instances, equipment and apparatus have been made available by the council; this has greatly facilitated some specialized lines of research. The wide scope of work being carried out is greatly assisted by the formation of committees which meet regularly and advise the council on such subjects as industrial hygiene, public health, epidemiology, maternal and child welfare, radio-active isotopes, antibiotic distribution, nursing, tropical physiology and hygiene, tuberculosis, staphylococcus infections, dentistry and the latest developments in X-ray technology and application.

The research work being done under these grants is of a high standard, many of the individual investigators enjoying international reputations. Beyond this practical achievement, the original objectives of the council are being attained by encouraging young graduates to take up research work and by securing a continuity and permanence of medical research in Australia.

Four scholarships are available each year to allow study overseas for one year. In addition, assistance is often given to scholarship-holders to cover part of their travel expenses.

2. *The National Biological Standards Laboratory.* The Therapeutic Substances Act 1953 provides the Commonwealth with powers to ensure that therapeutic substances used for the prevention, diagnosis and treatment of disease in man and animals are safe, pure and potent.

The Director-General of Health is authorized under this Act to set up laboratories to test such substances. Since 1956, products have been analysed for the Commonwealth in the pharmacology laboratories of the Universities of Sydney and Melbourne, and in the Commonwealth Laboratory, Department of Customs and Excise, Melbourne. In 1958, the first steps were taken to establish an Australian National Biological Standards Laboratory in Canberra.

The Laboratory is divided into two main divisions, a Biological Division and a Pharmaceutical Division. The Biological Division consists of the Bacterial Products Laboratory, the Viral Products Laboratory and an Antibiotics Laboratory. The Pharmaceutical Division consists of an Analytical Chemistry Laboratory, an Endocrine Products Laboratory and a Pharmacology Laboratory.

The Antibiotics Laboratory tests samples of the most widely used antibiotics collected from pharmacies in all States and from the manufacturers. The Analytical Chemistry Laboratory commenced work in March, 1960, the Viral Products Laboratory and the Pharmacology Laboratory in April, 1960.

The National Biological Standards Laboratory will analyse therapeutic substances used in human and veterinary medicine to determine whether they conform to the standards in the British Pharmacopoeia. The laboratories receive International Reference Standards from stocks maintained in London and will issue Australian Reference Standards which have been assayed against the International Standards.

**3. Commonwealth Serum Laboratories.**—The Laboratories were established in 1916 under the administration of the Department of Trade and Customs and since 1921 have operated under the Department of Health.

Their basic function is to ensure the supply of essential biological products to the Commonwealth in line with its national health needs. This includes—

- (a) Production and supply of essential biological products.
- (b) Research and development relating to biological products and allied fields.
- (c) The maintenance of potential production capacity for use in emergencies.

Since their foundation, the Laboratories have greatly extended in size and scope. They now produce some 450 regular products and many special products for use in the diagnosis, prevention and treatment of human and animal diseases. Professional, technical and other staffs total over 1,100.

Products comprise a full range of human bacterial and virus vaccines, veterinary bacterial and virus vaccines, serum products such as blood fractions, a wide variety of antibacterial and antitoxic sera, antivenenes, penicillin, endocrines, including insulin, A.C.T.H., pituitary and thyroid extracts, allergy test materials and desensitizing preparations, culture media and diagnostic agents for clinical and laboratory work.

Continuous research is conducted into the relevant aspects of bacteriology and immunology, and related fields. As the growth of medical and scientific knowledge in Australia and overseas reveals new methods of diagnosis, prevention and treatment of diseases, this information is applied to the preparation of new biological products at the Laboratories, the most recent being the production of poliomyelitis (Salk) vaccine.

Facilities are maintained for investigation in relation to public health matters which it is inconvenient or impracticable to handle at the Commonwealth Health Laboratories or the School of Public Health and Tropical Medicine.

The Laboratories serve as a national centre for the maintenance in Australia of International Standards of the Permanent Commission on Biological Standards (World Health Organization). They act as a regional reference centre for W.H.O. in collating reports of the prevalence of certain infectious diseases, and provide facilities for the identification of diseases.

Veterinary biological products produced at the Laboratories have given the lead to other producers in Australia, resulting in the diminution of incidence of a number of serious infectious stock diseases.

**4. The Commonwealth Health Laboratories.**—Health Laboratories, of which there are fourteen, are situated in the following towns: Albury, Bendigo, Cairns, Canberra, Darwin, Hobart, Kalgoorlie, Launceston, Lismore, Port Pirie, Rockhampton, Tamworth, Toowoomba and Townsville. They were established as an essential part of the quarantine

system but were also to undertake research into local health problems and to provide doctors of each district with up-to-date facilities for laboratory investigation and diagnosis. It was realized that co-operation between the general practitioner with his clinical observations and knowledge of the environment of disease on the one hand, and the staff of a well-equipped laboratory on the other, is essential to the investigation and control of disease.

From this standpoint, the Laboratories have already proved their value in the determination of leptospirosis and endemic typhus in North Queensland, in the investigation of special local problems in Darwin, of undulant fever throughout Australia, of silicosis and tuberculosis at Kalgoorlie and of plumbism at Port Pirie. In these investigations, close co-operation has existed with State and local health and hospital services, especially in Queensland where collaboration has yielded exceptionally valuable results in differentiating the groups of fevers previously unclassified in that State. In this investigational work, as well as in more routine activities, the Laboratories have at their disposal the full resources and technical and specialist facilities available at the Commonwealth Serum Laboratories and the School of Public Health and Tropical Medicine, Sydney.

**5. Commonwealth Acoustic Laboratories.**—Sponsored by the National Health and Medical Research Council, the Acoustic Research Laboratory, Sydney, investigated inter-communication difficulties and noise problems in aircraft and tanks (1942–46). It then investigated the problem of congenital deafness in children resulting from maternal rubella. The Department of Health took over this laboratory in January, 1947, and subsequently established branch laboratories in all other State capitals.

The Acoustic Laboratories Act 1948 gave the Minister for Health the right to establish, maintain and operate, within the Commonwealth, acoustic laboratories for scientific investigations, including tests in respect of hearing aids and their application to the needs of individuals and in respect of problems associated with noise as it affects individuals. In 1949, the Government approved the provision and maintenance of hearing aids, without charge, to deaf school and pre-school children. The minister has extended the Laboratories' functions to include:—(1) provision and maintenance of hearing aids on behalf of Repatriation and other Commonwealth Departments; (2) assistance to the State Education Departments in measuring deafness by providing and maintaining portable audiometers; (3) the making of hearing tests of Civil Aviation aircrew as required by international agreement; and (4) the making of independent tests on behalf of State and other authorities.

The Sydney Laboratory is responsible for staff training, production of equipment, calibration of hearing-aids and audiometers, and the technical administration of branch laboratories.

**6. Commonwealth X-ray and Radium Laboratory.**—The Commonwealth Radium Laboratory was established in 1929 by the Commonwealth Department of Health to act as the custodian of radium and to ensure its equitable distribution and satisfactory use.

A total of 10 grams of radium, purchased in 1928 by the Commonwealth Government for use in treatment and research, has been distributed on loan to treatment centres throughout Australia. Under the terms of this loan, treatment at well-equipped clinics is available to all persons requiring it, irrespective of their ability to pay. This work is co-ordinated by the Department. From time to time, portions of the original radium holding have been remounted by the Department in forms more suitable for recently developed techniques.

In 1935, the Commonwealth Department of Health extended the work of the Commonwealth Radium Laboratory to include the investigation of the physical problems of radiation therapy generally. This laboratory, now known as the Commonwealth X-ray and Radium Laboratory, is maintained, controlled, and staffed by the Commonwealth Department of Health. It is specifically designed for work with X-rays and radium, and is amply provided with all necessary equipment for research work, including a 400,000 volt high-tension generator. The free-air chamber which acts as the Australian standard X-ray dosimeter is maintained in the Laboratory.

The Laboratory co-operates closely with the local physical services which have been developed in the other capital cities of Australia to provide local facilities for the production of radon, for the calibration of X-ray therapy equipment, and for the measurement of radiation exposure of X-ray and radium workers. It also undertakes investigations into physical problems arising in the use of X-rays and radium treatment. In recent years, the Laboratory has widened its functions to include investigations of the physical aspects of the diagnostic use of X-rays with particular emphasis on miniature radiography.

During the year 1958-59, 66,646 millicuries of radon were prepared and issued from the Laboratory in the form of implants, needles and tubes for use in Victoria, Tasmania, South Australia and Western Australia. A further 23,776 millicuries were issued by the associated centres in Sydney and Brisbane. The corresponding figures for 1957-58 were 77,572 and 23,994 millicuries respectively. The issue of radon from a few centres to serve hospitals all over the continent is an Australian development and enables very efficient use to be made of the radium available.

Supplies of artificial radio-isotopes have been made available through the development of atomic energy programmes overseas. The radio-isotopes can be used medically either as an alternative to natural radio-active materials such as radium and radon, or they may be administered orally or intravenously to patients, in which case the selective up-take by a particular organ or tissue may be used to determine its condition. In addition, radio-isotopes are used in industry, in production control, the investigation of the efficiency of processes and as research tools.

The importation of artificial radio-isotopes is restricted under the Customs (Prohibited Imports) Regulations, approval for importation being given through the Laboratory by the Director-General of Health after it has been established that the isotope will be used safely and usefully. Isotopes used in Australia are obtained from Great Britain, Canada and the United States of America, and are imported through the Laboratory.

During 1958-59, 50 different radio-isotopes were imported for all purposes. This represented 660 separate deliveries from oversea sources of supply. Of this number of shipments, 330 were for medical purposes, 284 for research purposes and 46 for industrial purposes. In 1957-58, the total deliveries were 656, of which 328 were for medical purposes, 280 for research purposes and 48 for industrial purposes. In addition to the 660 deliveries of radio-isotopes arranged by the Laboratory in the year 1958-59, 55 certificates of approval under the Customs (Prohibited Imports) Regulations were issued to permit the entry of radioactive materials imported directly by local firms from their oversea principals. These radioactive materials were for use in industry, medicine and research. In the year 1957-58, the corresponding figure was 43. In addition, in the year 1958-59, 39 certificates of approval were issued to the Australian Atomic Energy Commission to permit the entry of special radio-active materials, including calibrated reference sources, for use within that establishment. Six shipments of static isotopes were also procured.

Regular bulk supplies of radio-isotopes for medical purposes are obtained and these are distributed by the Laboratory as individual doses for use on patients throughout Australia according to a policy developed by the Committee on Radio-isotopes of the National Health and Medical Research Council. These radio-isotopes are issued free of charge.

Seven different radio-isotopes were imported in the year 1958-59 for medical purposes, labelled compounds of radio-iodine, radio-phosphorus and radio-colloidal gold being in greatest demand. However, the use of radio-colloidal gold for therapeutic purposes was reduced to approximately half that of the previous year; colloids of chromic and zirconium phosphate labelled with radio-phosphorus being used as the preferred alternative. During 1958-59, the demand for special compounds labelled with radio-iodine and for radio-chromium, radio-iron and radio-cobalt labelled vitamin B12 continued.

In all, approximately 6,400 individual doses of radio-isotopes were issued by the Laboratory during 1958-59 for use on patients. The corresponding figure for 1957-58 was approximately 6,100.

The use of radio-isotopes in research and industry is also steadily increasing.

Investigations of the degree of protection necessary in particular applications of X-rays and radio-active materials continue to be an important activity of the Laboratory. It prepares specifications of the protection facilities necessary in departments and laboratories employing ionizing radiation in medicine, research and industry and carries out measurements of radiation levels in existing departments and laboratories. An extensive film badge service to measure the radiation dose received by those exposed to ionizing radiation is maintained. In 1958-59, 18,049 film badges were processed and assessed. The corresponding figure for 1957-58 was 16,010 films.

The Laboratory has an extensive library of special radiological literature and issues regular library bulletins. Through its advisory service, the Laboratory is available for consultation to all users of ionizing radiation. Technical communications on topics related to its functions are issued from time to time to medical men engaged in the clinical investigation and treatment of cancer and to research workers and those in industry interested in applications of radiation.

Officers of the Laboratory serve on a number of committees, both national and international.

**7. The School of Public Health and Tropical Medicine.**—In March, 1930, the Commonwealth Government, under an agreement with the University of Sydney, established a School of Public Health and Tropical Medicine at the University of Sydney for the purpose of training medical graduates and students in the subjects of public health and tropical medicine. The organization of the Australian Institute of Tropical Medicine at Townsville was merged in the new school, and the staff, equipment and material were transferred to Sydney.

The School comprises sections of Preventive Medicine, Tropical Medicine, Occupational Health, Environmental Health, Biochemistry, Bacteriology and Pathology, Parasitology, Medical Entomology and Medical Statistics. The Child Welfare section of the Institute of Child Health is located at the School, with which it is closely associated. The library, which includes approximately 17,000 bound volumes and a large collection of official and institutional papers and reports, forms an important information centre in the subjects of public health and tropical medicine.

The work of the school comprises both teaching and investigation. Courses are held for the university post-graduate diploma in public health and the diploma in tropical medicine and hygiene. Lectures are given in public health and preventive medicine as prescribed for the fifth year of the medical curriculum. Courses are also provided in hygiene and social medicine for students of architecture and social studies, in tropical medicine for lay officers, nurses in tropical service, and missionaries, and in industrial health for engineering students. Training is also provided for certain personnel of the armed services, for laboratory workers from various services and institutions, and for post-graduate nursing diploma students.

Investigation covers a wide field of public health and medical subjects, both in the laboratory and in the field. Field work has been carried out in Australia and in Papua, New Guinea, Norfolk Island and Nauru in co-operation with the local administrations and the South Pacific Commission.

**8. Institute of Child Health.**—The institute, which was established early in 1950 in association with the School of Public Health and Tropical Medicine, Sydney, is located at the Royal Alexandra Hospital for Children, where a special teaching and research unit with the necessary ancillary services was made available by the Board of the Hospital.

The Director of the Institute is a senior honorary paediatrician on the staff of the Hospital, and thus has access to the 430 beds for teaching purposes. He is also the Professor of Child Health in the University of Sydney.

The Director is required to co-ordinate and control under-graduate and post-graduate teaching in paediatrics and child health, and thus the Institute and its staff are brought into close contact with each group of medical students who attend the Children's Hospital for 10 weeks tuition in paediatrics and child health.

In the 10 years since its foundation, the staff of the Institute has carried out a number of substantial research projects, including the natural history and prevention of rheumatic fever in childhood, accident prevention, endemic goitre, endocrine disorders and stress in children. All told some 90 scientific papers describing the research work have been published in Australian and overseas scientific journals.

The Institute and its staff have come to be recognized as an authoritative source for advice and information on many matters relating to paediatrics and child health. The Director and senior members have acted as consultants to Medical Schools of Universities and to Commonwealth and State Authorities and on missions for the World Health Organization to a number of foreign countries. At present, the staff consists of the Director, a Senior Medical Officer, two other medical officers (full time), four part-time medical officers, a social psychologist, a social worker, clerical and stenographic staff.

**9. Commonwealth Bureau of Dental Standards.**—This laboratory is concerned with research, standards, and testing, related to dental and allied materials and processes. It became part of the Department of Health in January, 1947, but for the preceding eight years it was sponsored by the National Health and Medical Research Council. During that time, the former Dental Materials Research Laboratory established itself as a recognized authority in its special field and proved to be of particular value to the defence services, government

departments, the dental profession and manufacturers of dental products. By maintaining the quality of dental materials and improving techniques for their use, the Bureau continues to assist the dentist in his service to the community—a service that calls for restorations and appliances of a high degree of precision and permanence under very exacting conditions.

The functions of the Bureau are: (1) original research into dental equipment, materials, techniques and processes; (2) regular reporting of the results of these investigations in recognized Australian scientific journals; (3) the development of specifications for dental materials and equipment, through the Standards Association of Australia, in consultation with a committee representing the Commonwealth Department of Health, the Australian Dental Association, and manufacturers and distributors, and (4) the provision of a consultative service and testing facilities for manufacturers and distributors of dental materials with a view to assisting them in the improvement of existing products and the development of new materials.

**10. The Australian Institute of Anatomy.**—The Australian Institute of Anatomy is situated in a building erected in Canberra by the Commonwealth Government under the Zoological Museum Agreement Act of 1924. Prior to the passing of this Act, the Commonwealth Government had expressed regret that the Australian nation possessed neither a collection of specimens of the unique and fast disappearing fauna of Australia, nor a museum in which such specimens could be preserved for future generations. Sir Colin MacKenzie, the first Director of the Institute of Anatomy, presented his entire private collection of Australian fauna to the Commonwealth Government. This gift was housed in the Institute. The Institute became part of the Commonwealth Department of Health in 1931.

The original collection has been greatly augmented. A list of gifts to the Australian nation may be found in Official Year Book No. 39, page 1277. In addition to these donations of material, there have been several endowments for orations and lectures, particulars of which are shown in previous issues of the Official Year Book.

The Institute consists of a museum section and a laboratory section. In the museum section, which is open to the public, a portion of the original collection of anatomical specimens assembled by Sir Colin MacKenzie is displayed, together with ethnological collections which have been added since the foundation of the Institute. The material has been arranged to present simple lessons in human hygiene, to display the anatomical features and peculiarities of Australian fauna, and to display aspects of the character of Australian aboriginals and natives of Papua and New Guinea.

A number of Health Department sections are now situated in the Institute. These include the Museum and Medical Artistry Section, the Nutrition Section, the Commonwealth Health Laboratory for the Australian Capital Territory and a Veterinary Laboratory.

The scientific research work of the Institute is now concentrated on problems of nutrition. It takes the form of field surveys of the dietary status of the Australian population and laboratory investigations into the biochemistry of nutrition and metabolism. For further information concerning the Institute, see Official Year Book No. 32, pages 919–21.

#### § 4. Control of Infectious and Contagious Diseases.

**1. General.**—The provisions of the various Acts with regard to the compulsory notification of infectious diseases and the precautions to be taken against the spread thereof may be conveniently dealt with under the heading of quarantine and notifiable diseases, including venereal diseases.

**2. Quarantine.**—The Quarantine Act is administered by the Commonwealth Department of Health, and has three sections of disease control, as follows:—(i) Human quarantine, which controls the movements of persons arriving from overseas until it is apparent that they are free of quarantinable disease; (ii) Animal quarantine, which controls the importation of animals and animal products from overseas and the security of other animals present on vessels in Australian ports; and (iii) Plant quarantine, which regulates the conditions of importation of all plants and plant products with the object of excluding plant diseases, insect pests and weeds.

In respect of interstate movements of animals and plants, the Act becomes operative only if the Governor-General considers that Commonwealth action is necessary for the protection of any State or States and, in general, the administration of interstate movements of animals and plants is left in the hands of the States.

(i) *Human Quarantine.* All passengers and crews arriving in Australia from overseas, whether by air or sea, are subjected to a medical inspection by quarantine officers for the purpose of preventing the introduction of disease into Australia. At the major ports, full-time quarantine officers carry out the work but in the minor ports local doctors act as part-time quarantine officers. In each State, quarantine activities are controlled by a medical officer of the Commonwealth Department of Health with the title of Commonwealth Director of Health.

The main concern of the examining officers is to detect cases of the quarantinable diseases smallpox, cholera, yellow fever, plague and typhus fever. These diseases are not endemic to Australia and it is of great importance to prevent their entry. Quarantine stations at the major ports and at Darwin, Thursday Island and Townsville are kept ready for occupation at all times. In addition, persons arriving in Australia and suffering from infectious diseases such as chicken pox, mumps, scarlet fever and measles are directed to appropriate care and placed in isolation where necessary.

The increasing use of air travel has created particular quarantine problems. Before the use of air transport, persons suffering from an infectious disease would show symptoms on arrival and before disembarkation. Passengers travelling by air, however, can arrive well within the incubation period, and they are, therefore, required to be vaccinated against smallpox before departure. Those from an area infected with cholera or yellow fever are required to be inoculated in addition against the particular disease prevalent in that area. They are also required to report any sickness which they might suffer within the fourteen days after arrival. Passengers arriving in Australia by sea are also required to be vaccinated against smallpox, but exemption is granted to those who hold religious convictions against vaccination or who are suffering from a medical condition which makes vaccination undesirable. All passengers, whether they arrive by sea or air, are required to give their intended place of residence so that they may be traced if a case of disease occurs among the passengers on the aircraft or ship by which they travelled to Australia.

The number of cases of infectious (non-quarantinable) diseases which were discovered among the passengers and crew of oversea vessels and aircraft calling at Australian ports during the year ended 30th June, 1959, and during the preceding four years, are shown in the following tables.

**HUMAN QUARANTINE: CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES ON OVERSEA VESSELS AND AIRCRAFT CALLING AT AUSTRALIAN PORTS, YEAR ENDED 30th JUNE, 1959.**

Disease.	Number of Oversea Vessels and Aircraft on which Cases were Found.	Number of Cases of Infectious Disease.	
		Passengers.	Crew.
Chicken Pox .. .. .	23	83	1
Gastro Enteritis .. .. .	1	65	..
Infective Hepatitis .. .. .	1	..	1
Influenza .. .. .	1	17	..
Measles .. .. .	29	144	5
Mumps .. .. .	11	22	..
Poliomyelitis .. .. .	1	1	..
Rubella .. .. .	3	3	..
Scarlet Fever .. .. .	1	1	..
Syphilis .. .. .	1	..	1
Varicella .. .. .	4	5	1
Whooping Cough .. .. .	2	3	..
<b>Total .. .. .</b>	<b>(a) 63</b>	<b>344</b>	<b>9</b>

(a) On some vessels there were cases of more than one disease.



**HUMAN QUARANTINE: OVERSEA VESSELS AND AIRCRAFT ARRIVING IN AUSTRALIA AND CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASE FOUND THEREON.**

Year ended 30th June.	Number of Oversea Vessels and Aircraft Cleared.		Number of Oversea Vessels and Aircraft on which Cases were Found.	Number of Cases of Infectious Disease.	
	Ships.	Aircraft.		Passengers.	Crew.
1955 .. ..	2,319	1,310	48	267	3
1956 .. ..	2,592	1,417	26	104	4
1957 .. ..	2,702	1,747	53	216	10
1958 .. ..	2,658	1,881	61	202	20
1959 .. ..	2,826	1,938	63	344	9

(ii) *Animal Quarantine.* Animal quarantine, authorized by the provisions of the Quarantine Act 1908-1950, aims at preventing the introduction or spread of animal diseases. It covers the importation of all animals, raw animal products and biological cultures associated with animal diseases, and goods associated with animals.

Domesticated animals, i.e., horses, cattle, pigs, sheep, goats, dogs, cats and poultry, are admitted from a limited number of countries depending on diseases present in the country of origin. All must be accompanied by health certificates which include prescribed tests. On arrival in Australia, they are subject to quarantine detention.

Zoological specimens are imported into registered zoos where they remain in permanent quarantine. Circuses are also registered if exotic species of animals are kept. In a somewhat similar manner, animals for scientific purposes are imported to approved laboratories. All these premises are kept under constant surveillance. Raw animal products such as hair, special types of wool, skins and hides, are specially treated under quarantine control, while such items as raw meat, sausage casings and eggs, which cannot be sterilized, are admitted from very few countries. Other items such as harness fittings, fodder, and ship's refuse, are treated to destroy any possible infection.

The Division of Veterinary Hygiene was created in 1926 to deal with the administration of animal quarantine. Formerly, the full responsibility for this administration fell on the Director of Quarantine. The organization of the Division provides an excellent example of Commonwealth and State co-operation. The central administration is situated within the Health Department at Canberra, with a Director, an Assistant Director and Veterinary Officers. The Principal Veterinary Officer of the Department of Agriculture in each State is appointed Chief Quarantine Officer (Animals) of the State, and members of his staff Quarantine Officers (Animals). These State officers carry out the quarantine policy formulated by the central administration. Quarantine accommodation is provided in permanent animal quarantine stations at each capital city.

The Division participates in world-wide international notification of the more serious contagious diseases of animals and maintains a census of such diseases throughout the world. Information regarding animal diseases and parasites in Australia is also collected and disseminated by means of service publications. Consultation on technical matters is maintained with various scientific institutions, notably the Commonwealth Scientific and Industrial Research Organization. In matters of policy and the quarantine control of imports, there is a close liaison with the Department of Customs and Excise.

The Division collaborates with the "General" and "Plant" divisions of the quarantine service. Many diseases of animals are communicable to man and for this reason "Animal" and "General" quarantine administration are in some respects inseparable. Similarly the interests of "Animal" and "Plant" divisions overlap, many items such as insects, fodder and straw being the subject of combined control.

In each alternate year, the Director of the Division convenes the Biennial Conference of Principal Commonwealth and State Veterinarians which meets under the auspices of the Australian Agricultural Council to discuss problems of animal health and disease control and animal quarantine.

In the Australian Capital Territory, veterinary officers of the division exercise control over animal disease, dairy and piggery hygiene, manage the Canberra abattoir and give advice to stockowners.

(iii) *Plant Quarantine.* Since 1st July, 1909, the importation into Australia of all plants or parts of plants, cuttings, seeds and fruits, whether living or dead, has been subject to an increasingly stringent quarantine with the object of preventing the introduction of insect pests, plant diseases and weeds not yet established in this country. Under the Quarantine Act 1908-1950, quarantine inspectors are required to examine all plant material at the first port of entry and to release only material free from diseases and pests. Everyone entering Australia is required to declare if he or she has any plant material in luggage or personal effects. Heavy penalties are laid down for those found evading the regulations. All plant material entering as cargo must also be declared.

When the Commonwealth became responsible for all plant quarantine, the State Governments agreed to co-operate by providing and maintaining inspection facilities and personnel, for which they are reimbursed by the Commonwealth. In 1921, the administration of the regulations came under the newly-formed Department of Health, and in 1927 the Division of Plant Quarantine was created, under a Director who is responsible for policy and legislation and for co-ordinating the work of the State officers, who carry out the detailed administration in their capacity as Commonwealth officers.

Any plant material found carrying diseases or pests, or suspected of doing so, may be ordered into quarantine for remedial treatment, or if the treatment be impracticable may be destroyed. The cost of treatment is met by the importer. Regulations governing the different types of plants are based on the following broad principles:—(a) The importation of plants likely to be infected with plant diseases, noxious fungi or poison plants is prohibited; (b) Agricultural seed must conform to standards of purity, insect pest and disease freedom; (c) Many commodities such as hops, cotton, peanuts in shell, potatoes, certain crop seeds, vines and specified plants may be imported only by approved importers under special conditions; (d) Certain plant products such as bulbs and timber (in logs or sawn) from specified areas may be imported only if accompanied by certificates showing that prescribed treatment has been given in the country of origin; (e) All nursery stock, including bulbs, must be grown in post-entry quarantine. It may only be imported by approved importers who are registered for this purpose. The numbers of plants which may be imported in any one year are limited.

3. *Notifiable Diseases.*—(i) *General.* (a) *Methods of Prevention and Control.* Provision exists in the Health Acts of all the States for the observance of precautions against the spread of, and the compulsory notification of, infectious disease. When any such disease occurs, the local authority must be notified at once, and in some States notification must be made also to the Health Department.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State on the health, cleanliness and general sanitary state of their several districts, and on the appearance of certain diseases. Regulations are prescribed for the disinfecting and cleansing of premises, and for the disinfection or destruction of bedding, clothing or other articles which have been exposed to infection. Bacteriological examinations for the detection of plague, diphtheria, tuberculosis, typhoid and other infectious diseases within the meaning of the Health Acts are continually being carried out. Regulations are provided in most of the States for the treatment and custody of persons suffering from certain dangerous infectious diseases, such as smallpox and leprosy.

(b) *Diseases Notifiable and Cases Notified in each State and Territory.* The following table, which has been compiled by the Commonwealth Department of Health, shows for each State and Territory the diseases notifiable in 1958 and the number of cases notified. Diseases not notifiable in a State or Territory are indicated by an asterisk.

**DISEASES NOTIFIABLE IN EACH STATE AND TERRITORY OF AUSTRALIA  
AND NUMBER OF CASES REPORTED DURING THE YEAR ENDED  
31st DECEMBER, 1958.**

Disease.	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Acute rheumatism .. .. .	105	140	276	8	21	*	6	..	556
Amoebiasis .. .. .	*	6	7	2	1	1	2	..	19
Ankylostomiasis .. .. .	20	..	82	..	1	..	259	..	362
Anthrax .. .. .	*	..	..	..	..	..	..	..	..
Bilharziasis .. .. .	*	..	..	..	..	..	..	..	..
Breast Abscess .. .. .	(a) 6	(b)161	122	*	*	*	*	3	292
Brucellosis .. .. .	23	17	..	1	..	5	..	..	46
Chorea .. .. .	6	20	..	1	1	..	1	..	29
Dengue .. .. .	..	..	*	..	..	*	..	..	..
Diarrhoea, infantile .. .. .	193	627	167	13	12	9	97	26	1,144
Diphtheria .. .. .	28	37	10	2	24	2	..	..	103
Dysentery, bacillary .. .. .	*	335	78	57	121	2	108	..	701
Encephalitis .. .. .	25	37	4	11	..	..	2	2	81
Erythema Nodosum .. .. .	..	15	..	1	2	..	3	..	21
Filariasis .. .. .	*	..	2	..	..	..	..	..	2
Homologous serum jaundice .. .. .	..	..	*	..	..	*	..	..	..
Hydatid .. .. .	..	19	..	4	..	18	..	..	41
Infective hepatitis .. .. .	3,262	1,053	469	307	396	51	45	16	5,599
Influenza .. .. .	*	*	*	4	*	*	*	*	4
Lead poisoning .. .. .	..	..	10	..	1	..	..	..	11
Leprosy .. .. .	..	2	8	..	38	..	36	..	84
Leptospirosis .. .. .	18	..	88	..	..	*	..	1	107
Malaria .. .. .	..	7	18	..	2	..	11	1	39
Meningococcal infection .. .. .	72	78	31	5	9	5	..	..	200
Ophthalmia .. .. .	..	*	*	..	30	..	..	..	30
Ornithosis .. .. .	..	2	*	6	..	*	..	..	8
Paratyphoid fever .. .. .	10	1	..	3	2	..	..	..	16
Poliomyelitis .. .. .	23	60	5	10	2	..	..	..	100
Puerperal fever .. .. .	46	5	34	3	1	..	..	..	89
Q-fever .. .. .	..	*	50	*	*	..	*	*	50
Rubella .. .. .	*	1,745	27	271	3,059	25	8	128	5,263
Salmonella infection .. .. .	*	..	*	59	45	*	3	..	107
Scarlet fever .. .. .	703	1,079	177	133	190	42	4	18	2,346
Tetanus .. .. .	*	13	32	6	11	..	..	..	62
Trachoma .. .. .	*	1	*	..	364	*	..	..	365
Trichinosis .. .. .	*	*	*	..	..	..	..	..	..
Tuberculosis .. .. .	1,399	639	764	302	374	168	55	7	3,708
Typhoid fever .. .. .	17	9	11	3	22	..	..	..	62
Typhus—flea, mite or tick borne .. .. .	5	..	19	..	5	..	..	..	29

\* Not notifiable.

(a) Notifiable from December, 1958. (b) Notifiable from August, 1958.

NOTE.—No cases of cholera, plague, smallpox, epidemic typhus or yellow fever were notified.

(ii) *Venereal Diseases.* The prevention and control of venereal diseases are undertaken by the States. Each State except South Australia has a Venereal Diseases Act, or provisions in its Health Act govern the control of these diseases. Under these Acts, treatment has been made compulsory. Consequent steps have been taken to ensure free treatment by medical practitioners or in subsidized hospitals and clinics. Registered pharmaceutical chemists are allowed to dispense prescriptions for venereal diseases only if they are signed by medical practitioners. Clinics have been established and, in some cases, beds in public hospitals have been set aside for patients suffering from these diseases.

Penalties may be imposed on a patient who fails to continue under treatment. Clauses are inserted in the Acts which aim at preventing the marriage of any infected person and the employment of an infected person in the manufacture or distribution of foodstuffs.

### § 5. Commonwealth Grants to Organizations Associated with Public Health.

1. **General.**—In addition to providing the services mentioned in sections 1–4 above, the Commonwealth Government gives financial assistance to certain organizations associated with public health. Examples of organizations included in this category are the National Fitness Organizations, the Royal Flying Doctor Service of Australia, the Red Cross Blood Transfusion Service, and the Lady Gowrie Child Centres.

2. **National Fitness.**—In 1938, arising from a recommendation of the National Health and Medical Research Council, the Commonwealth Government appointed a Commonwealth Council for National Fitness, under the Commonwealth Minister for Health, to effect collaboration of Commonwealth, State and Local Government authorities in the National

**Fitness Movement.** Following the recommendations of the first Commonwealth Council meeting in 1939, the Commonwealth Government agreed to make available an annual sum of £20,000 for five years and grants were allocated to each State for purposes of organization and to each of the six Australian universities to establish lectureships in physical education. In June, 1942, this grant was increased to £72,500 to include grants to State Education Departments and for the work in the Australian Capital Territory.

The functions of autonomous National Fitness Councils operating in each State are connected with voluntary leader training, camping and hostels, assisting the work of voluntary youth and amateur sports organizations, and providing advisory services to these organizations.

The six State Education Departments spend their Commonwealth grants to assist the promotion of physical education programmes in schools and teachers' colleges. This is done mainly through the organization of training courses for teachers and the development of school camping, which in most States is part of the regular school physical education programme. In New South Wales and Victoria, holiday play centres and camps have become a special feature of the programmes, while Queensland has led the way in the provision of school swimming pools financed in co-operation with parent organizations.

In the universities, departments of physical education provide either a diploma course in physical education or a major course in physical education as part of a degree course.

An annual grant of £2,000 is allocated in the Australian Capital Territory and is distributed on a £1 for £1 basis to youth and sports organizations for the purchase of equipment, the development of coaching schemes, and the extension of club and camp facilities.

**3. Royal Flying Doctor Service of Australia.**—The purpose of the Royal Flying Doctor Service of Australia is to provide medical and dental services to white and aboriginal persons in isolated areas. Most remote homesteads are equipped with two-way radio sets which they use for receiving ordinary radio programmes, participating in the School of the Air, and for contacting each other. In cases of minor illness or injury, they also use these sets to seek medical advice. If the illness or injury is serious, a doctor flies to the homestead and, if necessary, flies the patient to the nearest hospital. Standard medicine chests are supplied by the service. Each chest contains a first-aid book and instructions on the use of the various drugs and medical supplies in it. Further instructions are given by doctors over the air.

From time to time, special purpose work is undertaken in connexion with flood relief, searching for lost parties and co-ordinating cattle movements.

The service is not conducted with a view to profit. In some sections, small charges are made for particular services or a fixed annual charge is levied on graziers. Other sections rely on voluntary contributions from those who use their services. Donations and government contributions help to provide much of the overhead and capital expenditure incurred each year.

The Commonwealth has made an annual grant to this organization for operational expenses since 1936. Prior to that, from 1928 to 1931, the Commonwealth subsidized the Australian Inland Mission Aerial Medical Service. The Commonwealth annual grant to the Royal Flying Doctor Service of Australia towards maintenance was increased from £25,000 to £40,000 per annum for four years from 1st July, 1958. The Commonwealth grant towards capital expenditure was increased from £15,000 to £27,500 per annum for the same period. This capital expenditure grant is made on a £1 for £1 basis, in respect of approved projects.

The Royal Flying Doctor Service of Australia is conducted by a federal council comprising representatives of six sections, namely Queensland, New South Wales, Victoria, South Australia, Western Australia and the Eastern Goldfields of Western Australia. The Queensland, New South Wales and South Australian sections are centred in their own States but in Western Australia there are three centres, that in the far north being under the control of the Victorian section, and that in the south-east under the control of the Eastern Goldfields section. The third one, which has bases at Port Hedland and Meekatharra, is sponsored by the Western Australian section.

**4. Red Cross Blood Transfusion Service.**—The Australian Red Cross Society conducts a blood transfusion service in all States.

Before 1952-53, the cost of the Red Cross Blood Transfusion Service was borne by the Red Cross Society with assistance from the State Governments. In 1952, the Commonwealth made an amount of £50,000 available to the Red Cross Society through the State Governments. The States were to continue to assist the society at the same level as previously and make arrangements with the society to share any deficit still remaining.

The Commonwealth recognized that the proper maintenance of a blood transfusion service was of the utmost importance to the welfare of the community and that the service was one eminently suited for operation by the Australian Red Cross Society. In March, 1954, therefore, the Commonwealth offered each State Government a grant equal to 30 per cent. of the certifiable operating expenses incurred by the Society in the conduct of the blood transfusion service in that State. The grant was to be made subject to the conditions that the government of the State concerned agreed to meet 60 per cent. of the cost of operating the service in that State, leaving the society to meet the remaining 10 per cent. of the cost. All States accepted this proposal. The following table sets out the payments made by the Commonwealth government to the State governments in 1958-59:—

**RED CROSS BLOOD TRANSFUSION SERVICE: PAYMENTS TO STATES FOR 1958-59.**

					£
New South Wales	..	..	..	..	35,263
Victoria	..	..	..	..	40,858
Queensland	..	..	..	..	25,102
South Australia	..	..	..	..	13,468
Western Australia	..	..	..	..	12,008
Tasmania	..	..	..	..	4,830
<b>Total</b>	..	..	..	..	<b>131,529</b>

5. **Lady Gowrie Child Centres.**—In 1940, the Commonwealth Government established a pre-school demonstration centre in each of the six capital cities. These centres are known as the Lady Gowrie Child Centres and are administered by the Australian Pre-school Association for the Commonwealth Department of Health.

The specialized function of the centres is that of demonstration and research and the programmes are carried out under the supervision of the Federal Pre-school Officer. Each centre is concerned with a study of the factors promoting and retarding physical and mental health in young children, and in demonstrating an educational health programme based on the developing needs of children aged 3 to 6 years.

The centres are used for observation by university students of Medicine, Psychology, Education, Social Studies, Architecture, Physical Education, Teacher Training Colleges, Nursing Colleges and Domestic Science.

Fuller information concerning these centres was given in earlier issues of the Year Book (*see* No. 44, p. 536).

## C. INSTITUTIONS.

### § 1. General.

In Australia, institutions related to public health may be classified to three groups: (a) State, (b) public and (c) private. To the first group belong those institutions wholly provided for by the State, such as the principal mental hospitals in the various States and the Government and leased hospitals in Western Australia. To the second group belong public institutions of two kinds, namely:—(i) those partially subsidized by the State or by State endowments for maintenance, but receiving also private aid, and (ii) those wholly dependent upon private aid. To the first of these two kinds belong such institutions as the principal metropolitan hospitals; in the second are included institutions established and endowed by individuals for the benefit of the needy generally. All institutions of a private character are included in the third group. A more or less accurate statistical account is possible in classes (a) and (b), but in respect of (c) general tabulation is impossible. Owing to differences in the dates of collection and tabulation, it is impossible to bring statistics of some charitable institutions to a common year.

### § 2. Public Hospitals (other than Mental Hospitals).

1. **General.**—All the State capitals have several large and well-equipped hospitals and there is at least one in every important town. In large centres, there are special hospitals for infectious diseases, tubercular patients, women, children, and patients suffering from chronic diseases.

The particulars given herein refer to public hospitals at the latest available date and include all institutions affording hospital relief, whether general or special, with the exception of mental hospitals, repatriation hospitals, and private hospitals conducted commercially.

2. **Number, Staff and Accommodation.**—Details regarding the number of public hospitals, staff, and accommodation for the year 1957-58 are given in the following table:—

**PUBLIC HOSPITALS: NUMBER, STAFF AND ACCOMMODATION, 1957-58.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Number of Hospitals	270	138	139	64	93	28	4	1	737
Medical Staff—									
Honorary ..	4,029	1,420	26	463	330	106	..	36	6,410
Salaried ..	815	730	762	126	116	117	15	3	2,684
<i>Total</i> ..	<i>4,844</i>	<i>2,150</i>	<i>788</i>	<i>589</i>	<i>446</i>	<i>223</i>	<i>15</i>	<i>39</i>	<i>9,094</i>
Nursing Staff ..	12,218	8,673	4,915	2,237	2,808	1,242	130	213	32,436
Accommodation—									
Number of beds and cots ..	21,625	12,391	11,293	3,870	4,432	2,381	373	253	56,618

The figures for accommodation shown in the table above include particulars, where available, of a considerable number of beds and cots for certain classes of cases in outdoor or verandah sleeping places.

3. **In-Patients Treated.**—The following table furnishes particulars of in-patients treated. The figures shown refer to cases, that is to say, a person who is admitted to hospital twice during a year is counted twice. Newborn babies are excluded unless they remain in hospital after their mothers' discharge.

**PUBLIC HOSPITALS: IN-PATIENTS TREATED, 1957-58.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
In-patients at beginning of year—									
Males ..	6,190	3,368	3,718	1,117	1,336	824	137	68	16,758
Females ..	8,697	5,017	3,943	1,374	1,407	901	97	102	21,538
<i>Persons</i> ..	<i>14,887</i>	<i>8,385</i>	<i>7,661</i>	<i>2,491</i>	<i>2,743</i>	<i>1,725</i>	<i>234</i>	<i>170</i>	<i>38,296</i>
Admissions and re-admissions during year—									
Males ..	169,719	89,080	93,454	31,347	38,652	12,130	3,454	2,342	440,178
Females ..	265,424	149,671	115,458	41,444	45,200	20,317	3,816	3,995	645,325
<i>Persons</i> ..	<i>435,143</i>	<i>238,751</i>	<i>208,912</i>	<i>72,791</i>	<i>83,852</i>	<i>32,447</i>	<i>7,270</i>	<i>6,337</i>	<i>1,085,503</i>
Total in-patients (cases) treated—									
Males ..	175,909	92,448	97,172	32,464	39,988	12,954	3,591	2,410	456,936
Females ..	274,121	154,688	119,401	42,818	46,607	21,218	3,913	4,097	666,863
<i>Persons</i> ..	<i>450,030</i>	<i>247,136</i>	<i>216,573</i>	<i>75,282</i>	<i>86,595</i>	<i>34,172</i>	<i>7,504</i>	<i>6,507</i>	<i>1,123,799</i>
Discharges—									
Males ..	161,985	84,230	90,159	29,782	37,148	11,451	3,324	2,268	420,347
Females ..	259,291	145,954	112,916	40,228	44,207	19,830	3,730	3,918	630,074
<i>Persons</i> ..	<i>421,276</i>	<i>230,184</i>	<i>203,075</i>	<i>70,010</i>	<i>81,355</i>	<i>31,281</i>	<i>7,054</i>	<i>6,186</i>	<i>1,050,421</i>
Deaths—									
Males ..	7,384	4,619	3,395	1,566	1,396	676	101	78	19,215
Females ..	5,827	3,624	2,342	1,179	913	470	57	62	14,474
<i>Persons</i> ..	<i>13,211</i>	<i>8,243</i>	<i>5,737</i>	<i>2,745</i>	<i>2,309</i>	<i>1,146</i>	<i>158</i>	<i>140</i>	<i>33,689</i>
In-patients at end of year—									
Males ..	6,540	3,599	3,618	1,116	1,444	827	166	64	17,374
Females ..	9,003	5,110	4,143	1,411	1,487	918	126	117	22,315
<i>Persons</i> ..	<i>15,543</i>	<i>8,709</i>	<i>7,761</i>	<i>2,527</i>	<i>2,931</i>	<i>1,745</i>	<i>292</i>	<i>181</i>	<i>39,689</i>
Average daily number resident ..	16,629	8,474	7,490	2,527	2,748	1,740	266	182	40,056

In addition to those admitted to the hospitals, there are large numbers of out-patients treated. During 1957-58, there were 1,107,073 out-patients treated in New South Wales, 541,743 in Victoria, 588,878 in Queensland, 92,718 in South Australia, 127,000 (estimated)

in Western Australia, 83,398 in Tasmania, 86,238 in the Northern Territory and 13,960 in the Australian Capital Territory, making an estimated total for Australia of 2,641,000. The figures quoted refer to cases, as distinct from persons and attendances.

4. **Revenue and Expenditure.**—Details of the revenue and expenditure for the year 1957–58 are shown in the next table. The revenue includes the Commonwealth Hospital Benefits Scheme.

**PUBLIC HOSPITALS: REVENUE AND EXPENDITURE, 1957–58.**

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aus- tralia.
<b>Revenue—</b>									
Government aid ..	22,833	14,741	9,683	5,212	4,341	1,770	731	297	67,015
Commonwealth Hospital Benefits, etc.		2,066	2,932	738	1,578		39	54	
Municipal aid ..	(a)	21	..	153	..	..	..	..	174
Public subscriptions, legacies, etc. ..	145	1,677	2	100	77	..	..	..	2,001
Fees .. ..	8,234	4,337	941	951	1,359	561	37	63	16,483
Other .. ..	853	311	96	532	222	4	..	1	2,019
<b>Total .. ..</b>	<b>32,065</b>	<b>23,153</b>	<b>13,654</b>	<b>7,686</b>	<b>7,577</b>	<b>2,335</b>	<b>807</b>	<b>415</b>	<b>87,692</b>
<b>Expenditure—</b>									
Salaries and wages	17,100	10,034	6,143	2,963	3,376	1,482	350	251	41,699
Upkeep and repair of buildings and grounds ..	816	528	268	281	565	55	32	14	2,559
All other ordinary ..	8,378	7,318	5,489	1,625	1,946	776	228	128	25,888
Capital .. ..	5,148	4,641	1,673	2,840	1,640	510	197	22	16,671
<b>Total .. ..</b>	<b>31,442</b>	<b>22,521</b>	<b>13,573</b>	<b>7,709</b>	<b>7,527</b>	<b>2,823</b>	<b>807</b>	<b>415</b>	<b>86,817</b>

(a) Included in "Other".

5. **Summary.**—A summary, for the years 1953–54 to 1957–58, of the number of public hospitals in Australia, medical and nursing staffs, beds, admissions, in-patients treated, out-patients, deaths, average daily number resident, revenue and expenditure is given in the following table.

**PUBLIC HOSPITALS: AUSTRALIA.**

Particulars.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
Hospitals .. ..	699	709	721	731	737
Medical Staff .. ..	7,487	7,738	8,103	8,573	9,094
Nursing Staff .. ..	26,116	27,566	29,070	31,006	32,436
Beds and cots .. ..	50,812	52,979	53,550	55,801	56,618
Admissions during year ..	925,571	1,008,955	994,466	1,028,320	1,085,503
Total in-patients (cases) treated	961,288	1,046,171	1,032,668	1,065,045	1,123,799
Out-patients (cases) (a) ..	2,458,631	2,651,000	2,587,000	2,583,600	2,641,000
Deaths .. ..	29,403	32,489	31,417	33,267	33,689
Average daily number resident	34,587	38,179	38,341	39,092	40,056
Revenue (b) .. .. £'000	54,971	63,998	71,612	82,182	87,692
Expenditure (b) .. .. £'000	54,190	64,323	74,568	83,922	86,817

(a) Partly estimated.  
for New South Wales.

(b) Up to and including 1954–55, excludes loan receipts and expenditure

§ 3. Leper Hospitals.

Isolation hospitals for the care and treatment of persons suffering from Hansen's disease (leprosy) are located at Little Bay, New South Wales; Fantome Island, North Queensland; Derby, Western Australia; and East Arm Settlement, Northern Territory. Special wards for the isolation of leprosy patients have been provided at Fairfield (Victoria) and Wooroloo (Western Australia). Peel Island (Queensland) lazaret was closed down on 5th August, 1959, the patients being transferred to the chronic diseases section of South Brisbane Hospital. At the end of 1959, there were seven cases at Little Bay, 20 at Fantome Island, 126 at Derby, 164 at East Arm Settlement, seven at Fairfield, one at Wooroloo and 10 at South Brisbane Hospital, including three voluntary patients (arrested cases). Of the 335 cases, 263 were full-blood aboriginals, 43 were half-caste aboriginals (including one Japanese-aboriginal half-caste), two were South Sea Islanders, one was an Asian and 26 were Europeans.

§ 4. Mental Hospitals.

1. **General.**—The methods of compiling statistics of mental patients are fairly uniform throughout the States, but there is an element of uncertainty about possible differences in diagnosis in the early stages of the disease. Statistics of mental hospitals (except those relating to revenue and expenditure) include particulars of the two licenced houses in New South Wales. The figures exclude those of reception houses and observation wards in gaols. There are no mental hospitals in the Northern Territory or the Australian Capital Territory.

2. **Hospitals, Staff and Accommodation.**—Particulars regarding the number of hospitals, the medical and nursing staff, and accommodation are given in the following table for the year 1958. Figures for Victoria and Western Australia relate to 31st December, 1958. Figures for the other States relate to 30th June, 1958.

MENTAL HOSPITALS: NUMBER, STAFF, ACCOMMODATION, 1957-58.

Particulars.	N.S.W.	Vic. (a)	Q'land. (b)	S. Aust.	W.Aust. (a)	Tas.	Aust.
Number of Hospitals .. ..	14	15	5	2	4	1	41
Medical Staff—							
Males .. ..	55	} 103 {	12	12	8	3	} 206
Females .. ..	10		2	1	..	..	
Persons .. ..	(c) 65	103	14	13	8	3	206
Nursing Staff and Attendants—							
Males .. ..	1,038	1,155	640	217	190	98	3,338
Females .. ..	1,122	1,320	509	238	139	95	3,423
Persons .. ..	2,160	2,475	1,149	455	329	193	6,761
Accommodation—							
Number of beds and cots ..	12,700	8,897	4,804	2,708	1,681	797	31,587

(a) Year ended 31st December, 1958. (b) Includes the Epileptic Home. (c) In addition there are 52 visiting specialists who are paid for their services.

3. **Patients.**—Information regarding patients treated during 1957-58 is given in the following table:—



## MENTAL HOSPITALS: PATIENTS, DEATHS, ETC., 1957-58.

Particulars.	N.S.W.	Vic. (a)	Q'land. (b)	S.Aust.	W. Aust. (a)	Tas.	Aust.
Number of patients at beginning of year—							
Males .. .. .	6,694	4,635	2,518	1,325	1,022	371	16,565
Females .. .. .	7,047	4,810	2,139	1,267	823	382	16,468
<i>Persons</i> .. .. .	13,741	9,445	4,657	2,592	1,845	753	33,033
Admissions and re-admissions (excluding absconders retaken and transfers from other mental hospitals)—							
Males .. .. .	1,007	2,289	731	339	192	252	4,810
Females .. .. .	1,243	1,836	690	322	121	222	4,434
<i>Persons</i> .. .. .	2,250	4,125	1,421	661	313	474	9,244
Number of persons treated during year—							
Males .. .. .	7,701	6,924	3,249	1,664	1,214	623	21,375
Females .. .. .	8,290	6,646	2,829	1,589	944	604	20,902
<i>Persons</i> .. .. .	15,991	13,570	6,078	3,253	2,158	1,227	42,277
Discharges (including absconders not retaken)—							
Males .. .. .	549	1,839	519	167	62	209	3,345
Females .. .. .	735	1,195	589	193	37	194	2,943
<i>Persons</i> .. .. .	1,284	3,034	1,108	360	99	403	6,288
Deaths—							
Males .. .. .	430	333	200	110	65	32	1,170
Females .. .. .	516	403	160	116	68	35	1,298
<i>Persons</i> .. .. .	946	736	360	226	133	67	2,468
Number of patients at end of year							
Males .. .. .	6,722	4,752	2,530	1,387	1,087	382	16,860
Females .. .. .	7,039	5,048	2,080	1,280	839	375	16,661
<i>Persons</i> .. .. .	13,761	9,800	4,610	2,667	1,926	757	33,521
Average daily number of patients resident—							
Males .. .. .	5,861	4,042	2,406	1,348	982	371	15,010
Females .. .. .	5,832	4,261	1,921	1,222	699	378	14,313
<i>Persons</i> .. .. .	11,693	8,303	4,327	2,570	1,681	749	29,323
Number of patients at end of year per 1,000 of population—							
Males .. .. .	3.63	3.41	3.49	3.05	2.97	2.20	3.37
Females .. .. .	3.83	3.67	3.01	2.90	2.42	2.32	3.41
<i>Persons</i> .. .. .	3.73	3.54	3.25	2.97	2.70	2.26	3.39
Average number of patients resident in mental hospitals per 1,000 of population—							
Males .. .. .	3.19	2.93	3.35	3.00	2.71	2.15	3.03
Females .. .. .	3.20	3.13	2.81	2.80	2.04	2.34	2.96
<i>Persons</i> .. .. .	3.20	3.03	3.08	2.90	2.38	2.24	3.00

(a) Year ended 31st December, 1958.

(b) Includes persons treated at the Epileptic Home.

Persons who are well advanced towards recovery are allowed to leave the hospitals and live with their relatives or friends, but they are under supervision and their names are kept in the records. These persons have been included in the above table as patients at the end of the year.

4. Revenue and Expenditure, 1957-58.—Mental hospitals are maintained by the State Governments. They derive a small proportion of their revenue from other sources (chiefly patients' fees, pharmaceutical benefits and sale of farm produce), but in 1957-58 this source provided less than 4 per cent. of all their revenue. For a statement on the funds provided by the Commonwealth Government for mental hospitals, see para. 3. Mental Hospitals, page 661.

In New South Wales, the expenditure includes the cost of Broken Hill patients treated in South Australian mental hospitals:—

MENTAL HOSPITALS: FINANCES, 1957-58.  
(£.)

Particulars.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Australia.
<i>Revenue (excluding Government Grants)—</i>							
Fees of patients	391,872	..	76,077	51,264	40,742	6,581	566,536
Other ..	78,652	40,761	8,601	48,950	15,681	928	193,573
<i>Total</i>	<i>470,524</i>	<i>40,761</i>	<i>84,678</i>	<i>100,214</i>	<i>56,423</i>	<i>7,509</i>	<i>760,109</i>
<i>Expenditure—</i>							
Salaries and wages	2,670,620	2,760,369	1,175,843	557,470	496,641	245,610	7,906,553
Upkeep and repair of buildings, etc.	287,137	328,870	9,329	63,503	32,352	9,942	731,133
All other ..	1,793,180	2,292,894	792,748	400,492	265,691	145,095	5,690,100
Capital (b) ..	1,050,132	1,666,986	336,778	276,727	85,567	225,558	3,641,748
<i>Total</i> ..	<i>5,801,069</i>	<i>7,049,119</i>	<i>2,314,698</i>	<i>1,298,192</i>	<i>880,251</i>	<i>626,205</i>	<i>17,969,534</i>

(a) Includes the Epileptic Home. (b) Capital expenditure includes purchases of land, cost of new buildings, and additions to buildings.

5. Summary for Australia.—The following table gives a summary relating to mental hospitals in Australia for each of the years 1953-54 to 1957-58:—

MENTAL HOSPITALS: SUMMARY, AUSTRALIA.

Particulars.	1953-54.	1954-55.	1955-56.	1956-57.	1957-58.
Hospitals .. .. .	34	37	39	40	41
Medical Staff .. .. .	140	144	161	188	206
Nursing Staff and Attendants .. .. .	5,541	5,748	6,030	6,470	6,761
Beds .. .. .	29,244	29,690	30,089	30,617	31,587
Admissions .. .. .	5,628	5,722	7,524	8,276	9,244
Discharged as recovered, relieved, etc.	3,126	3,021	4,235	5,282	6,288
Deaths .. .. .	2,178	2,276	2,529	2,672	2,468
Patients at end of year .. .. .	30,798	31,223	32,453	32,775	33,521
Average daily number of patients resident .. .. .	27,921	28,012	28,639	29,032	29,323
Revenue (excluding Government Grants) .. .. .	£ 888,681	£ 654,486	£ 566,556	£ 689,744	£ 760,109
Total Expenditure .. .. .	£ 11,680,996	£ 13,189,269	£ 15,342,044	£ 17,326,981	£ 17,969,534

6. Number of Mental Patients.—The total number returned as under treatment at the end of each year shows a slight increase during the period but the proportion to total population shows a slight decline. A more rational attitude towards the treatment of mental cases has resulted in a greater willingness in recent years to submit afflicted persons to treatment at an early stage, and an increase in the number of recorded cases, therefore, does not necessarily imply an increase in mental diseases. The difference between States in the number of patients in mental hospitals per 1,000 of population may also to some extent be the result of differences in practice. Figures for Victoria and Western Australia relate to 31st December of the year shown; figures for the other States relate to 30th June of the year shown.

**PATIENTS IN MENTAL HOSPITALS.**

State.	1954.	1955.	1956.	1957.	1958.
<b>NUMBER.</b>					
New South Wales .. ..	13,169	13,422	13,767	13,741	13,761
Victoria .. ..	7,795	7,934	8,713	9,187	9,800
Queensland(a) .. ..	4,621	4,704	4,735	4,657	4,610
South Australia .. ..	2,644	2,613	2,658	2,592	2,667
Western Australia .. ..	1,798	1,790	1,814	1,845	1,926
Tasmania .. ..	771	760	766	753	757
<b>Australia .. ..</b>	<b>30,798</b>	<b>31,223</b>	<b>32,453</b>	<b>32,775</b>	<b>33,521</b>
<b>PER 1,000 OF POPULATION.</b>					
New South Wales .. ..	3.85	3.85	3.87	3.79	3.73
Victoria .. ..	3.14	3.11	3.31	3.40	3.54
Queensland(a) .. ..	3.51	3.50	3.45	3.33	3.25
South Australia .. ..	3.32	3.19	3.13	2.97	2.97
Western Australia .. ..	2.77	2.67	2.65	2.63	2.70
Tasmania .. ..	2.50	2.42	2.40	2.30	2.26
<b>Australia .. ..</b>	<b>3.41</b>	<b>3.38</b>	<b>3.43</b>	<b>3.39</b>	<b>3.39</b>

(a) Includes persons treated at the Epileptic Home.