

This page was added on 03 December 2012 to included the Disclaimer below.
No other amendments were made to this Product

DISCLAIMER

Users are warned that this historic issue of this publication series may contain language or views which, reflecting the authors' attitudes or that of the period in which the item was written, may be considered to be inappropriate or offensive today.

CHAPTER VIII.

PUBLIC HEALTH AND RELATED INSTITUTIONS.

A. PUBLIC HEALTH.

§ 1. State 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. He is assisted by a Deputy Director-General.

The Inspector-General of Mental Hospitals, who, under present arrangements, is also the Director-General of Public Health, is responsible for the administration of that part of the Lunacy Act relating to the care and treatment of mental patients. There is also a Deputy Inspector-General.

The following statutory authorities are constituted under Acts administered by the Minister for Health:—Board of Health (Public Health Act), Hospitals Commission of N.S.W. (Public Hospitals Act), Milk Board (Milk Act), Dental Board (Dentists Act), Pharmacy Board (Pharmacy Act), Medical Board (Medical Practitioners Act), Board of Optometrical Registration (Opticians Act), Ambulance Transport Service Board (Ambulance Transport Service Act), Physiotherapists Registration Board (Physiotherapists Registration Act) and Nurses Registration Board (Nurses Registration Act).

The Department's activities extend over the whole of the State and embrace all matters relating to the public health and the greater part of the general medical work of the Government. These include the following:—(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 Industrial Hygiene); (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 Ministry of Health Act 1943 made the Minister of Health responsible for all Acts administered up to that time by the Department of Public Health, the Hospitals and Charities Acts, the Mental Hygiene Acts, and all legislation and matters relating to the health and well-being of the people of the State.

The former Department of Public Health became the General Health Branch controlled by a Chief Health Officer. The latter also administers the Maternal and Child Hygiene Branch, and the recently constituted Tuberculosis Branch. These three with the Mental Hygiene Branch make up the four branches of the Department of Health.

The Secretary of the Department of Health and a number of administrative officers assist the Minister with all matters relating to policy, legislation, etc.

On 1st February, 1952 the Mental Hygiene Authority Act 1950 came into operation. This Act provides for the establishment of an Authority of three members with a medical expert in mental illnesses at its head. This Act established a pattern for the extension of the services of the Branch and for the improvement of treatment and accommodation of mental patients throughout the State. The Authority is responsible for the administration of the Mental Hygiene Branch.

The constant fight against infectious disease is actively carried on in the General Health Branch by seven District Health Officers and their staffs, in collaboration with the local health authorities. Where any specific infection is unduly prevalent, immunization is concentrated and the success obtained over a period of years is illustrated in the comparison of the following figures in respect of diphtheria :—Year 1927—cases, 3,254 ; deaths, 93 : Year 1950—cases, 326 ; deaths, 12.

The control and treatment of venereal disease is undertaken by a special division of the General Health Branch, and clinics for prophylaxis and treatment are attached to all hospitals receiving Government aid throughout the State.

The Poliomyelitis Division, formed during the outbreak of the disease in 1949 and expanded since that time, supervises treatment and after-care of patients throughout the State. The Division is staffed by three medical officers, ten physiotherapists and three visiting nurses. In addition to providing services for poliomyelitis sufferers, the Division gives some oversight to the care of persons suffering from spastic paralysis. For this latter purpose, a property has been purchased and is used as a training centre for children suffering from that condition.

Determining the suitability of sewerage projects and ensuring the safety of public buildings are the responsibilities of the Engineering Division of the General Health Branch, and it acts in an advisory and supervisory capacity in municipal undertakings of this nature. In conjunction with the Hospitals and Charities Commission of Victoria, it examines plans and advises on all hospital construction throughout the State.

The Industrial Hygiene Division supervises the environmental conditions of the 300,000 persons employed in industry in Victoria and consists of three medical officers, three special scientific officers and a number of inspectors.

Under the direction of a medical director, the Tuberculosis Branch comprises State sanatoria, tuberculosis clinics, tuberculosis bureaux and the Mass X-ray Survey Division. The latter service has visited every large Victorian centre and many of the smaller townships, affording to the population throughout the State every facility in obtaining an X-ray. A relatively new project, made possible by the acquisition by the Government of a suitable property, is a hostel for the accommodation of ex-tuberculosis patients during their rehabilitation.

As with the Tuberculosis Branch, a medical director supervises the activities of the Maternal and Child Hygiene Branch. This Branch embraces pre-natal hygiene, infant health, pre-school child hygiene and school medical and dental services. An extensive State-wide correspondence scheme for women during their pregnancy and early motherhood supplies these women with all the latest advice and information. With the recent appointment of a dental director to organize and develop the School Dental Services, it is hoped to provide regular and thorough dental attention for every school child in the State. Several well-equipped dental vans have already been purchased and will soon be in operation, and others are in the course of construction.

Legislation which comes within the purview of the Minister of Health includes the following :—Anti-Cancer Council Act, Birth Notification Act, Cancer Institute Act, Cemeteries Acts, Dietitians Registration Act, Goods Act, Hairdressers Registration Act, Health Acts, Hospitals and Charities Acts, Infectious Diseases Hospital Acts, Masseurs Acts, Medical Acts, Mental Deficiency Act, Mental Hygiene Acts, Midwives Act, Nurses Acts, Opticians Registration Act, Poisons Act and Venereal Diseases Act.

3. Queensland.—(i) *General*. The Health Acts 1937 to 1949 are administered by the Director-General of Health and Medical Services, under the direction of the Minister for Health and Home Affairs. The executive staff consists of the Director-General,

Deputy Director-General, State Health Officer, and twenty-seven food and sanitary inspectors and cadets. In addition, there is a Laboratory of Microbiology and Pathology under the control of a Director assisted by a medical officer, bacteriologists, and ancillary staff. Among other duties, the staff of this laboratory performs any necessary medico-legal work. A medical officer controls the Enthetic Diseases Section with the assistance of a female medical officer, nurses and trained attendants, while a microscopist and an inspector have charge of the Hookworm Campaign. A Leptospirosis Campaign, with head-quarters in Innisfail, North Queensland, is operating with a staff of five health inspectors.

The following services also come under the purview of the Department:—School Health Services, Maternal and Child Welfare Services, Chemical Laboratory, Mental Hygiene, Industrial Hygiene, and supervision of private hospitals.

The Health Acts of the State have made it obligatory for cases of certain diseases to be notified to the Health Department. These diseases are either of an infectious or contagious nature.

Branch offices, in charge of inspectors, are located at Toowoomba, Rockhampton, Mackay, Townsville, Cairns and Thursday Island, and, in conjunction with the Brisbane staff, are responsible for the enforcement of provisions of the Health Acts and Regulations dealing with food and drugs, milk sellers, health (food supply), fish supply, poisons, etc., and are concerned in a supervisory capacity with Local Authority health administration.

(ii) *Immunization.* Immunization of children against diphtheria and whooping cough is carried out on an extensive scale by Local Authorities. Active immunization against tetanus has been commenced in several areas. Up to the middle of 1950 the diphtheria prophylactic most favoured was formalinized toxoid, but recently local authorities have been using a more highly purified prophylactic with very satisfactory results. This toxoid will probably become the prophylactic of choice. Approximately 90 per cent. of children of school age have been immunized against diphtheria in Queensland. This is a highly satisfactory figure and diphtheria is no longer the menace of former years.

Although prophylaxis against whooping cough has not been practised as extensively as prophylaxis against diphtheria, most Local Authorities offer free immunization against whooping cough. The incidence of whooping cough appears to have declined markedly in recent years.

Several Local Authorities have already commenced campaigns for the active immunization of children against tetanus. It is believed that immunization against tetanus will become widely practised in this State.

Immunizing agents against diphtheria, tetanus and whooping cough are provided free to Local Authorities by the Commonwealth Government.

(iii) *Hospitals.* (a) *General.* There is a system of public hospitals throughout the State. The Brisbane General, South Brisbane Auxiliary, the Children's and the Brisbane Women's Hospitals provide public hospital accommodation for Brisbane. In addition, there are 66 private hospitals registered in the State, 35 per cent. of which are in Brisbane. The Mater Misericordiae has public, intermediate, private, and children's sections, and St. Martin's is a large private hospital. In the whole State, during 1950-51, there were 122 public hospitals, 2 tuberculosis sanatoria, and nine ambulance brigades, which were administered by 55 District Hospital Boards. Five other hospitals received aid from the Government. There were also 107 public maternity hospitals or sections of the foregoing hospitals.

Public hospitals supply free consultation and treatment, including radiological and pathological service, to out-patients. In-patient treatment in the public wards is also free. In conjunction with public hospitals, thirty dental clinics (excluding the Brisbane Dental Hospital) and twenty-one branch clinics are in operation.

The above-mentioned 66 private hospitals in Queensland are registered under the provisions of the Health Acts 1937 to 1949 (Division XI.). Licences may be issued under four categories:—(A) a general private hospital for medical, surgical, and maternity

cases; (b) a lying-in hospital for maternity cases only; (c) a hospital for mental cases only (other than persons who have been certified as insane pursuant to the Insanity Acts); (d) any hospital for the treatment of mothers and/or infants.

Convalescent homes are not licensed or registrable.

Leprosaria are situated at Peel Island, in Moreton Bay, and at Fantome Island, near Townsville, each with a full-time medical officer. The former is for white persons only, and the latter for aborigines. In Brisbane there is an Industrial Institution for the Blind, and a school for the Deaf and Dumb.

(b) *Public Hospitals.* The Hospitals Act Amendment Act 1944 provided, as from 1st July, 1945, that all the public hospitals in the State would come within the jurisdiction of District Hospitals Boards. Each board consists of not less than five and not more than nine members, including the chairman. One of the members is a representative elected by the component Local Authorities. The chairman and the remaining members are appointed by the Governor-in-Council.

The State Government is responsible for the net annual cost of administration and maintenance of all hospitals controlled by Hospital Boards, but from 1st January, 1946 the Commonwealth, under the Hospital Benefits Scheme, paid six shillings per patient per day for patients in public and private sections of public hospitals. The State Government agreed not to make any charge for patients in public sections of public hospitals. The Commonwealth subsidy extends to approved private hospitals. The amount was increased to eight shillings per day from 1st July, 1948 for patients in public wards of public hospitals, and from 1st November, 1948 for all other public hospital patients and private hospital patients.

4. *South Australia.*—The Department of Public Health embraces the activities of the Central Board of Health, the School Medical 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 each is elected by metropolitan local boards and all other local boards.

The Central Board of Health administers the Health, Food and Drugs, Dangerous Drugs, Noxious Trades, Bakehouses Registration 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 1935-1950 constitutes every municipal council and every district council a local board of health for its municipality or district. There are 143 of these local boards under the general control and supervision of the Central Board. Under the Food and Drugs Act every 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.

The medical staff of the Department includes the Director of Tuberculosis, a Senior Medical Officer and the Principal Medical Officer for Schools, five full-time medical officers, two temporary medical officers and six part-time medical officers. A dentist, dental assistant and six nurses are engaged in connexion with the School Medical Services.

There are seven full-time and sixteen part-time inspectors directly responsible to the Board.

There is also a nurse inspector employed to advise and assist local boards in connexion with infectious diseases.

The inspectors appointed under the Health and Food and Drugs Act periodically visit the local districts and see generally that the local boards are carrying out their duties.

5. **Western Australia.**—The legislation in this State is the Health Act 1911–1950. This was consolidated and reprinted in 1948 and amended by Act No. 25 of 1950. The Central Authority is the Department of Public Health, controlled by a Commissioner, who must be a qualified medical practitioner. The State is covered by Local Authorities which are constituted as Municipalities or Road Boards.

It is provided that a Local Board of Health may be set up in lieu of a Road Board, but this method of control is no longer used. In any emergency the Commissioner may exercise all the powers of a Local Health Authority in any part of the State.

Interesting features of recent legislation are as follows :—(a) Act No. 70 of 1948 gave compulsory power to control sufferers from tuberculosis and established a Tuberculosis Control Branch; and (b) Act No. 71 of 1948 provided that within areas declared for the purpose all still-born infants must be submitted for post-mortem examination and all still-births must be notified to the Commissioner by the attending medical practitioner.

All the usual provisions for public health control are embodied in the Health Act. They include the medical and dental examination of school children, control of public buildings, inspection of food and the provision of standards thereof. The Nurses Registration Act now makes provision for the registration of nurses in each of the following branches of the nursing profession—general, midwifery, tuberculosis, infant health, mothercraft, mental and children's.

6. **Tasmania.**—The Department of Public Health is under the jurisdiction of the Minister for Health, and the administration of the various services is controlled by the Director of Public Health, Hospital and Medical Services as permanent head of the Department. Associated with the permanent head are the Director of Tuberculosis, Director of Mental Hygiene, and two Assistant Medical Directors with varying duties allotted to each Director.

Public Health functions comprise administration of laws relating to public health, food and drugs, places of public entertainment and cremation, and the following services: School Medical and Dental, Maternal and Child Welfare, Venereal Disease Clinics, Analytical Laboratory, and Mothercraft Home. The Hospital and Medical Services section is responsible for administration of the laws relating to hospitals and nurses' registration, and the following services:—Government Medical Service, Bush Nursing Service, Institutions for the Aged and Infirm at St. John's Park and Cosgrove Park. The Tuberculosis section is responsible for administration of the laws relating to tuberculosis, and for the management of Chest Clinics and Chest Hospitals at New Town and Perth. The Mental Hygiene section is responsible for administration of the laws relating to mental hospitals and mental defectives, and for the management of Lachlan Park Hospital (Mental Hospital) and Millbrook Psychopathic Home.

§ 2. The 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 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 as to the expenditure of money specifically appropriated as money to be spent on the advice of this Council.

To advise the Commonwealth Government as to the expenditure of money upon medical research and as to 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), two officers of his Department, the official head of the Health Department in each State, together with representatives of 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 Australian Dental Association, and (jointly) the four Australian Universities having medical schools. A prominent layman and laywoman, appointed by the Commonwealth Government, also serve on the Council.

The first session of the National Health and Medical Research Council met at Hobart in February, 1937; the thirtieth session met at Sydney in November, 1950.

Under the Medical Research Endowment Act 1937, the Commonwealth Government has made an annual appropriation of funds to provide assistance :—

- (a) to Departments of the Commonwealth or of a State engaged in medical research ;
- (b) to Universities for the purpose of medical research ;
- (c) to institutions and persons engaged in medical research ;
- (d) in the training of persons in medical research.

Approved research institutions under this system now number 51. During the year 1950, grants numbered 46 in the following fields :—bacteriology, biochemistry, biophysics, clinical dentistry, epidemiology, neurology, neuro-physiology, obstetrics, parasitology, physiology and pharmacology, and tuberculosis and virus diseases. 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 in such subjects as industrial hygiene, public health, epidemiology, maternal and child welfare, radio-active isotopes, antibiotic distribution, tropical physiology and hygiene, tuberculosis 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 reputation. Beyond this practical achievement, the original objectives of the Council are being attained in encouraging young graduates to take up research work and in securing a continuity and permanence of medical research in Australia.

An insurance benefit scheme for medical workers on the lines of the Federated Superannuation System for Universities is now in operation.

§ 3. The Commonwealth Department of Health.

1. **General.**—An Order-in-Council dated 3rd March, 1921 defined various functions to be performed by the Commonwealth Department of Health in addition to Quarantine, which at that time was the only specific public health power of the Commonwealth Parliament under the Commonwealth Constitution. An amendment of the Constitution in 1946 gave the Commonwealth Government power to provide a complete Health Service to the nation including medical advice and treatment. The National Health Service Act 1948-1949 provides for Commonwealth activity in establishing hospitals, laboratories, health centres and clinics, post-graduate training in all branches of medicine, courses of training in the Auxiliary Medical Services, research, prevention of disease and medical education. Many essential services have been developed by the Department to meet current needs and to further public health throughout Australia. In earlier issues of the Official Year Book reference has been made to several features of this development,

including :—The Royal Commission on National Health, 1925 (*see* No. 22, pp. 509-10), the International Pacific Health Conferences (*see* No. 22, p. 510 and No. 29, p. 334), Industrial Hygiene (*see* No. 18, pp. 522-55), Tropical Hygiene (*see* No. 22, pp. 506-7, No. 25, pp. 415-7, and No. 32, p. 226), and the Commonwealth Advisory Council on Nutrition (*see* No. 32, pp. 222-23). Reference to quarantine is made below (*see* § 3, pars. 12 and 13 and § 4, par. 2).

2. **The Commonwealth Serum Laboratories.**—The establishment for the preparation of Jennerian vaccine situated at Royal Park, near Melbourne, formerly known as the "Calf Lymph Depot" was in 1918 greatly enlarged by the Commonwealth. The remodelled institution is designated the "Commonwealth Serum Laboratories" and is administered by the Commonwealth Department of Health. The laboratories are now installed in fully equipped buildings and a large staff is employed. At Broadmeadows, near Melbourne, a farm of 254 acres has been developed, under veterinary supervision, for the many thousands of animals required for the work of the laboratories.

The list of biological preparations produced by the laboratories has been extended, until at the present time almost the whole range of these products is manufactured and Australia is practically independent of other countries in thus producing its own requirements. Penicillin is being produced in increasingly large quantities, which it is anticipated will shortly suffice for total Australian requirements. Constant research is being conducted into every relevant aspect of bacteriology and immunology and new sera and prophylactic agents are being tested as the growth of medical knowledge opens up new avenues of treatment, prevention and diagnosis. Other original and applied research relating to all aspects of public health is maintained. The laboratories serve as the national centre for the maintenance in Australia of the international standards of the Permanent Commission on Biological Standards (World Health Organization Interim Commission). For the past 27 years the production of veterinary biological products has been a feature of the work of the laboratories. In recent years an extensive development has occurred in this direction and the products are being used in greatly increased amounts in all States for the prevention or treatment of diseases in domestic animals and stock.

3. **The Commonwealth Health Laboratories.**—The fifteen health laboratories of the Department are situated at strategic points throughout Australia. They are located at Darwin, Cairns, Townsville, Rockhampton, Toowoomba, Lismore, Bendigo, Launceston, Hobart, Port Pirie, Kalgoorlie, Broome, Tamworth, Wollongong and Albury. These laboratories were established as an essential part of the quarantine system but were also to undertake research into local health problems and to provide medical practitioners 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 hand, is essential to the efficient investigation of disease and the effective operation of control measures.

From this standpoint, the laboratories have already proved their value in the determination of Weil's disease and endemic typhus in North Queensland, in the investigation of special local problems at 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 is this so in Queensland where collaboration has yielded exceptionally valuable results in differentiating the groups of fevers hitherto 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 Sydney School of Public Health and Tropical Medicine.

A major part of the work performed at the Kalgoorlie laboratory, since its establishment in 1925, has been the medical examination, on behalf of the State Department of Mines, of employees and applicants for employment in the metalliferous mines in Western Australia. These examinations are performed in accordance with the provisions of the

State Mines Regulation Act and the Mine Workers' Relief Act, the objects of which are to provide a healthy body of men for the industry and to free the industry and protect the future of those found to be suffering from serious pulmonary disease. The examinations include clinical, laboratory and radiographic investigation. By means of a mobile X-ray unit an annual tour is also made of outlying mining centres.

X-ray facilities are also provided at the Bendigo laboratory, as part of the campaign against tuberculosis, for the examination of miners and for other radiographic work in the district.

4. **Commonwealth Acoustic Laboratories.**—The Department of Health established the first of the series of Acoustic Laboratories in January, 1947, in Erskine House, York-street, Sydney.

The laboratory continued and expanded the work of the Acoustic Research Laboratory which was sponsored by the National Health and Medical Research Council during the years 1942-1946 for the purpose of investigating problems of noise and difficulties of intercommunication in aircraft and tanks. With the cessation of hostilities the Acoustic Research Laboratory directed its attention to the problem of deafness in children, particularly the group whose affliction was caused by the mothers contracting rubella in the early months of pregnancy.

The taking over of the Acoustic Research Laboratory by the Department of Health was influenced by the request from the Repatriation Commission for technical assistance in the matter of the supply of hearing aids to deafened ex-servicemen. Arrangements for this purpose were completed and branch laboratories were established in all other State Capital Cities.

During the year 1948 the Acoustic Laboratories Act was passed to allow the expansion of activities on the following lines :—(1) To carry out the requirements of the Repatriation Commission for deafened ex-Service personnel and to provide a similar service for the Commonwealth Department of Social Services in respect of deafened ex-Service personnel whose disability was not caused by war service ; (2) to assist the Education Departments of the States in measuring deafness, fitting aids, and maintaining hearing aid equipment for school children ; (3) to act on behalf of various State and other authorities who desire to have independent tests made before assisting financially in the purchase of hearing aids for people under their care ; and (4) the investigation of problems associated with noise in industry.

The laboratory in Sydney is now known as the Commonwealth Central Acoustic Laboratory and is responsible for the training of personnel for the whole Acoustic Service, the production of equipment, the calibration of hearing aids and audiometers and the technical administration of the branch laboratories.

5. **Commonwealth Bureau of Dental Standards.**—The National Health and Medical Research Council sponsored the Dental Materials Research Laboratory during the years 1939-1946, for the purpose of assisting the Defence Services, the Medical Equipment Central Committee and other Government Departments in the selection and purchase of suitable dental equipment and materials. Valuable assistance was also given to Australian manufacturers of dental materials in relation to improvement of their products and the development of new materials.

Much of the work was of a routine nature and with the cessation of hostilities the National Health and Medical Research Council decided to cease its sponsorship but recommended that the Department of Health should take over the laboratory as it was serving a good purpose. This was done in January, 1947, and the laboratory was renamed the Commonwealth Bureau of Dental Standards and is at present situated in the grounds of the University of Melbourne.

The functions of the Bureau are as follows :—(1) Original research into dental equipment, materials, techniques and processes ; (2) the development, in consultation with a representative committee of the Commonwealth Department of Health, of the Australian Dental Association and the Standards Association of Australia of specifications for dental materials and equipment ; (3) regular systematic surveys of dental materials

on sale to the profession in Australia, and the reporting of the results of such investigations in recognized Australian scientific journals; and (4) the provision of a consultative service and testing facilities for local manufacturers of dental materials with the view to assisting them in the improvement of existing products and the development of new materials.

6. **The School of Public Health and Tropical Medicine.**—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 as from 4th March, 1930, 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 work of the school comprises both teaching and investigation. Courses are held for the University post-graduate diploma of public health and the diploma of tropical medicine and hygiene. Lectures are given in public health and preventive medicine as prescribed for the fifth year of the medical curriculum. Other classes include students in architectural, social and school hygiene, and lay officers and nurses in the tropical services and missionaries. In addition to this work throughout the war, all the resources of the School were made available for the training of medical and hygiene officers and other ranks from all the Services of the Australian and Allied Forces.

Investigational work covers a wide field of public health and medical subjects, both in the laboratory and in the field. Field work has been carried out not only in Australia but in co-operation with the local administrations in Papua, New Guinea, Norfolk Island and Nauru. Sections of Child Health and Occupational Disease have been established and suitable staff selected. Further details may be found in previous issues of the Official Year Book (*see* No. 29, p. 334).

7. **The Australian Institute of Anatomy.**—Information concerning the Australian Institute of Anatomy at Canberra is given in previous issues of the Official Year Book (*see* No. 32, pp. 919-21). In 1931 the Institute became an integral part of the Commonwealth Department of Health. The work of the Institute on general problems of comparative anatomy has now been concentrated on aspects of structure and function with special reference to the development of the growing child. Biochemical and biological research in this field is being developed in close association with the model kindergarten centres established by the Department in each capital city (*see* par. 10 below). Work in specialized aspects of nutrition has steadily increased. The Institute now plays an important part in research and the scientific application of nutritional knowledge under Australian conditions. The background of comparative anatomy and the museums of the Institute are maintained as part of the general plan of work, and an expert zoologist is a member of the body of research workers at the Institute. *See also* Chapter XXIX.—Miscellaneous.

8. **The Northern Territory Medical Service.**—As from 1st April, 1939, the Commonwealth Department of Health assumed administrative responsibility for the medical and health services of the Northern Territory, absorbing the Northern Territory Medical Service. With the growing importance of Darwin as the northern gateway to Australia and as an administrative and service centre, its health services were strengthened, a new hospital at Darwin was built and the hospital at Alice Springs was enlarged.

With civilian evacuation during the Pacific war, military control of the medical services operated in the years 1942 to 1945. Civilian control was resumed by the Department during the period November, 1945 to May, 1946, starting at Alice Springs and gradually extending north to Darwin. The hospitals at Alice Springs, Tennant Creek, Katherine and Darwin, and the Health Laboratory at Darwin were re-established as civilian institutions. A pathological laboratory and leprosarium are maintained at Darwin. Dental services are available at hospitals and mobile road and aerial district units serve the outback.

An aerial medical service, operated by the Department, is based on Darwin, and comprises two Dragon and a Miles Gemini aircraft and two pilots. Emergency and routine flights and surveys are undertaken by this service, and at Alice Springs medical officers of the Northern Territory Medical Service act for the Flying Doctor base.

The Commonwealth Department of Health maintains a Quarantine Station at Darwin which is a major first port of entry for oversea aircraft. Public health services are provided at the major centres.

9. *National Fitness*.—Health authorities in Australia have closely followed the world-wide movement for the advancement of physical fitness and in several States active work has been proceeding over some years. In 1938, following a recommendation of the National Health and Medical Research Council, the Commonwealth Government agreed to appoint a Commonwealth Council for National Fitness, under the Commonwealth Minister for Health, to effect collaboration of Commonwealth, State and local government authorities in the movement. Meetings of this Council are held at regular intervals, at least annually. Meanwhile, active State Councils have been formed in all States. As a result of the recommendations of the central Council, 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 July, 1941 a National Fitness Act was passed by the Commonwealth Parliament to ensure greater permanence to the movement, and in June, 1942 the Commonwealth grant was increased to £72,500 to include grants to State Education Departments and for the work in the Australian Capital Territory. In 1946 the total grants were extended for a further period of five years. The movement continues to develop and to gain public interest and support throughout Australia.

10. *The Pre-school Child*.—Sessions of the National Health and Medical Research Council and the reports of the Commonwealth Advisory Council on Nutrition have called attention to the need for greater effort throughout Australia directed towards the care of the growing child, especially during the pre-school period. Movements for the care of the infant and the welfare of the school child are already developed by State authorities as recorded in §§ 7 and 8 below. The Commonwealth Government felt that more could be done for the child of pre-school age, and it was decided to give a lead by making it possible to demonstrate what could be done and the practical methods which could be applied.

The Commonwealth Government therefore decided to establish in each capital city a pre-school demonstration centre, known as the Lady Gowrie Child Centre, and in order to achieve the best results in association with those who have had experience in this field it has secured the co-operation of the Federal Organization of Kindergarten Unions which is operating under the title of "The Australian Association for Pre-school Child Development". A suitable site was secured in each capital city and the necessary school structure was built. Formerly the administration of these centres was under the direction of the local Kindergarten Union and the employment of staff was made with the approval of the Commonwealth Department of Health. Recently the local Lady Gowrie Child Centre Committees were given a greater degree of autonomy, so that while the technical supervision still rests with the Australian Association for Pre-school Child Development, the management of each centre, including staffing, is in the hands of the local Committee. This development is associated with a change in the method of financial control. An annual grant is made to each Committee towards the cost of the centre, the disbursement of these funds being at the discretion of the local Committee, subject to the general supervision of the Australian Association for Pre-school Child Development. This applies in so far as the educational side is concerned, and in this field advantage is being taken of the opportunity to try new methods and to make systematic records of observations with the object of securing reliable knowledge of the educational technique of this pre-school period.

Along with this educational practice there proceeds also the study of physiological requirements of the child and of the interaction between physical and mental health under varying conditions. The children available at these centres provide a considerable mass of human material for control and study, which is of great value in view of the importance of the study of growth and of nutrition of their age-period. Not only are routine measurements made of height, weight and other bodily data, but problems of nutrition are studied in detail. The medical work at each State centre is conducted on a uniform basis, according to a scheme formulated at, and directed from, the Australian Institute of Anatomy, Canberra, where parallel investigations on the laboratory side are being undertaken.

11. Organization for the Control of Cancer.—The persistent increase in cancer mortality has led to the development in Australia of a national organization directed towards the control of this disease. The Commonwealth Department of Health has actively participated in this movement. Since 1928 the Australian Cancer Conferences, convened by the Department, have provided an opportunity each year for those actively engaged in the campaign against the disease to meet for the discussion of problems and the determination of lines of action and further development. The tenth conference in this series met in New Zealand in February, 1939, and so marked an association which has been maintained between Australia and the Dominion since the inception of the conferences.

A large amount 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 requiring it, irrespective of ability to pay. This work is co-ordinated by the Department.

Close co-operation is maintained between research workers, physicists and biochemists and the medical men engaged in the clinical investigation and treatment of the disease, so that problems are mutually investigated and treatment is applied with the highest attainable degree of scientific accuracy.

Realizing the essential importance of accuracy in determining the quality of radiation used in the treatment of cancer and in measuring the dosage of this radiation actually delivered to the tumour, and the need for the investigation of physical problems in connexion with the utilization of X-rays and radium in the treatment of disease, the Commonwealth Department of Health in 1935 extended the work of the Commonwealth Radium Laboratory, established in 1929, to include the investigation of the physical problems of radiation therapy generally. This laboratory, known as the Commonwealth X-ray and Radium Laboratory, is situated by agreement with the University of Melbourne within the University grounds, and is maintained, controlled, and staffed by the Commonwealth Department of Health. It is accommodated in a building specially designed for work with X-rays and radium, and is amply provided with all necessary equipment for research work, including a 500,000 volt high tension generator.

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.

The laboratory has continued to repair radium containers. It also undertakes investigations into physical problems arising in the use of X-ray and radium in treatment.

During the year 1950, a total of 95,290 millicuries of radon was prepared and issued from the laboratory, while 41,124 millicuries were issued by the associated centres in Sydney, Adelaide and Brisbane. The corresponding figures for 1949 were 81,187 and 38,858 millicuries respectively. The issue of radon from a few centres to serve hospitals all over the continent is a unique Australian development, and enables a very efficient use to be made of the radium available.

The development of atomic energy programmes overseas has made available supplies of artificial radio-isotopes which can be used as an alternative to natural isotopes such as radium and radon. Supplies of radio-phosphorus and radio-iodine are now being distributed by the laboratory for medical work throughout Australia according to a policy developed by the National Health and Medical Research Council Standing Committee on X-rays. The use of radio-iodine has involved the laboratory in the development of a scheme of physical measurements which can readily be made in hospitals.

12. Animal Quarantine.—The Division of Veterinary Hygiene was created in 1926 to deal with the administration of the Quarantine Act 1908-1950 in so far as it relates to animal products and other articles which might be the means of transmitting diseases of animals. Formerly the full responsibility of this aspect was carried by 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. By provision in the Quarantine Act and by arrangement with the States, 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, acting in their Commonwealth capacity, implement quarantine policy as formulated by the Central Administration. Quarantine accommodation is provided at permanent animal quarantine stations at each Capital City.

Animal Quarantine is authorized by the provisions of the Quarantine Act 1908-1950 and has as its objective the prevention of the introduction or spread of diseases of animals. This legislation covers the importation of all animals, raw animal products, biological cultures, etc., 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 of these premises are kept under constant surveillance.

Raw animal products such as hair, special types of wool, skins, hides, etc., are subjected to special treatment under quarantine control, whilst 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, ship's refuse, etc., are appropriately treated to destroy possible infection.

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 implementation of quarantine control of imports there is a close liaison with the Department of Trade and Customs.

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, straw, etc., being the subject of combined control.

13. **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 general powers are held by which the quarantine inspectors are required to examine all plant material at the first port of entry and to release only such material as is free from diseases and pests. Everyone reaching 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 deliberately 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. Such treatments are paid for by the importer. Air transport has created many new problems in maintaining effective control. It is impossible in this summary to give details of regulations governing the different types of plants, but the following will indicate certain broad principles in them.

- (a) The importation of plant diseases, insect pests, noxious fungi, certain weeds and poison plants, and soil likely to carry these things is prohibited.
- (b) Agricultural seed must conform to standards of purity.
- (c) Many commodities such as hops, cotton, peanuts in shell, nursery stock, potatoes, important crop seeds, vines and specified plants may only be imported by approved importers under special conditions.
- (d) Certain plant products, such as bulbs and timber (in logs or sawn), from specified areas may only be imported if accompanied by certificates showing that prescribed treatment has been given in the country of origin.

The regulations are constantly being amended in the light of experience, with the object of maintaining for Australia the freedom from a large number of serious diseases and pests of plants which ravage crops in other lands.

§ 4. Control of Infectious and Contagious Diseases.

1. **General.**—The provisions of the various Acts in 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 headings—Quarantine; Notifiable Diseases, including Venereal Diseases; and Vaccination.

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. (*See* § 3. pars. 12 and 13 above.)

In regard to interstate movements of animals and plants, the Act becomes operative only if the Governor-General be of opinion that Federal action is necessary for the protection of any State or States; in general, the administration of interstate movements of animals and plants is left in the hands of the States.

The Commonwealth controls stations in each State for the purposes of quarantine of humans, animals and plants.

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 and for the compulsory notification of infectious disease. When any such disease occurs, the local authority must at once be notified, and in some States notification must be made also to the Health Department. The duty of making this notification is generally imposed, first, on the head of the house to which the patient belongs, failing whom on the nearest relative present, and, on his default, on the person in charge of or in attendance on the patient, and, on his default, on the occupier of the building. Any medical practitioner visiting the patient is also bound to give notice.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State as to the health, cleanliness and general sanitary state of their several districts, and must report the appearance of certain diseases. Regulations are prescribed for the disinfection 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 small-pox 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 1949 and 1950 and the number of cases notified. Diseases not notifiable in a State or Territory are indicated by an asterisk.

[NOTE.—The table has been altered to conform to the recommendation of the National Health and Medical Research Council, Thirtieth Session, 1950, Meningococcal Infection being substituted for Cerebro-spinal Meningitis, Leptospirosis for Weil's Disease and Ornithosis for Psittacosis, while Beriberi, Coastal Fever, Erysipelas, Gastro-enteritis, Influenza, Measles and Whooping Cough have been deleted. Other diseases recommended to be notifiable will be included as appropriate legislation is amended and notification becomes operative in the States and Territories.]

DISEASES NOTIFIABLE IN EACH STATE AND TERRITORY AND NOTIFICATIONS FOR THE YEARS ENDED 31st DECEMBER, 1949 AND 1950.

Disease.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
YEAR 1949.									
Anchylostomiasis †	..	105	22	..	52	..	3	..	182
Anthrax ..	..	..	..	..	..	..	..	..	..
Bilharziasis ..	..	..	..	..	..	..	..	..	..
Brucellosis ..	4	16	5	2	9	..	..	3	39
Cholera ..	..	..	..	..	..	..	..	..	..
Dengue ..	..	..	..	..	1	..	..	..	1
Diarrhoea, infantile ‡	..	..	202	..	3	..	..	..	205
Diphtheria ..	627	401	169	38	170	19	5	1	1,430
Dysentery, amoebic ..	..	40	..	2	18	..	..	..	61
Dysentery, bacillary ..	..	12	79	3	22	3	82	44	245
Encephalitis ..	6	4	5	..	..	..	..	..	15
Filariasis ..	..	..	1	..	..	..	..	..	1
Hydatid §	..	15	..	..	..	9	..	..	24
Leprosy ..	2	..	4	..	51	..	24	..	81
Leptospirosis ..	..	..	11	..	..	..	..	..	11
Malaria ..	..	4	33	..	13	3	15	..	68
Meningococcal infection ..	86	67	20	16	13	9	..	..	211
Ophthalmia ..	..	..	..	..	3	..	158	..	161
Ornithosis ..	..	..	..	2	..	..	..	..	2
Paratyphoid ..	..	6	..	..	..	1	..	..	9
Plague ..	..	..	..	..	..	..	..	..	..
Polio-myelitis ..	183	761	20	582	61	36	..	5	1,648
Puerperal Fever ..	26	3	29	26	7	6	..	..	97
Rubella ||	..	..	76	..	101	4	..	27	208
Salmonella infection ¶	..	..	..	..	11	..	..	..	11
Scarlet Fever ..	1,514	1,260	367	372	199	109	..	21	3,842
Smallpox ..	..	..	..	..	..	..	..	..	..
Tetanus ..	..	6	32	..	10	..	..	..	48
Trachoma ..	..	..	..	..	..	..	..	..	..
Trichinosis ..	..	..	..	..	..	..	..	..	..
Tuberculosis ..	1,641	814	434	269	519	207	19	11	3,714
Typhoid Fever ..	8	9	22	7	15	4	..	..	65
Typhus, endemic (a)	11	..	69	6	61	..	1	..	148
Yellow Fever ..	..	..	..	..	..	..	..	..	..
YEAR 1950.									
Anchylostomiasis †	..	25	62	..	33	..	4	..	124
Anthrax ..	..	1	1	..	..	..	..	..	2
Bilharziasis ..	..	..	..	..	..	..	..	..	..
Brucellosis ..	1	21	4	2	7	..	..	..	35
Cholera ..	..	..	..	..	1	..	..	..	1
Dengue ..	..	..	..	..	..	..	..	..	..
Diarrhoea, infantile	..	..	167	..	4	..	..	..	171
Diphtheria ..	390	326	172	35	172	17	..	..	1,112
Dysentery, amoebic ..	..	25	2	4	19	10	..	..	60
Dysentery, bacillary ..	..	76	244	3	45	..	..	24	392
Encephalitis ..	2	1	4	..	6	..	..	..	13
Filariasis ..	..	..	2	..	..	..	..	..	2
Hydatid ..	..	15	..	..	..	1	..	..	16
Leprosy ..	1	..	1	1	60	..	25	..	88
Leptospirosis ..	..	..	55	..	..	..	..	..	55
Malaria ..	..	7	24	..	15	..	6	..	52
Meningococcal infection ..	98	63	44	14	24	14	2	..	259
Ophthalmia ..	..	..	..	..	14	..	200	..	214
Ornithosis ..	..	..	..	1	..	..	..	..	1
Paratyphoid ..	..	2	..	2	..	1	..	..	5
Plague ..	..	..	..	..	..	..	..	..	..
Polio-myelitis ..	789	202	106	972	59	51	..	27	2,206
Puerperal Fever ..	14	7	19	26	2	3	2	..	73
Rubella ||	..	..	6	..	45	14	..	19	84
Salmonella infection	..	..	..	..	6	..	..	..	6
Scarlet Fever ..	1,046	917	446	456	198	123	4	18	3,208
Smallpox ..	..	..	..	..	..	..	..	..	..
Tetanus ..	..	12	35	..	11	..	..	..	58
Trachoma ..	..	..	..	..	..	..	..	..	..
Trichinosis ..	..	..	..	..	..	..	..	..	..
Tuberculosis ..	1,787	836	594	362	604	231	69	8	4,491
Typhoid Fever ..	16	18	9	4	7	9	..	..	63
Typhus endemic (a)	21	1	53	7	32	..	..	..	114
Yellow Fever ..	..	..	..	..	..	..	..	..	..

* Not notifiable. † Victorian and Western Australian cases of Anchylostomiasis were ex-service personnel infected overseas. ‡ Diarrhoea of more than 48 hours' duration in infants under two years of age became notifiable in Queensland on 26th March, 1949; infantile diarrhoea became notifiable in Western Australia on 31st March, 1949. § Hydatid became notifiable in Tasmania on 12th January, 1949. || Rubella in females over 14 years of age became notifiable in Queensland on 17th September, 1949 and in Tasmania rubella was made notifiable on 9th November, 1949. ¶ Salmonella infection became notifiable in Western Australia on 31st March, 1949.

(a) Cases reported include flea-borne, tick-borne and mite-borne typhus.

(ii) *Veneral Diseases.* (a) *General.* The prevention and control of venereal diseases are undertaken by the States. Each State has a Venereal Diseases Act, or provisions in the Health Act govern the working of the measures taken to combat these diseases. Under these Acts notification has been made compulsory in every State. 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 only when 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.

For several years the Commonwealth Government granted a subsidy to each of the States to assist in providing hospital treatment and administrative control of venereal diseases, but this subsidy has been discontinued.

In 1927 a Division of Tuberculosis and Venereal Disease was established in the Commonwealth Department of Health, with a medical officer as Director. This Division ceased to exist in April, 1932.

(b) *Details by States.* A statement of the preventive provisions in each State, together with certain statistical data, appeared in earlier issues of the Official Year Book (see No. 22, pp. 503-4).

4. *Vaccination.*—(i) *Demand for Vaccination.* There is statutory provision for compulsory vaccination in all States except New South Wales. Jennerian vaccine for vaccination against small-pox is prepared at the Commonwealth Serum Laboratories in Melbourne. There has been a considerable increase in the demand for vaccination, especially by people about to travel overseas by air, so that they may conform with the quarantine requirements of countries to which they are travelling.

(ii) *Details by States.* In earlier issues of the Official Year Book (see No. 22, pp. 504-5) information was given concerning the provisions regarding vaccination in each State.

§ 5. Inspection and Sale of Food and Drugs.

Public Health legislation in force in all States provides for the inspection of foods and drugs with the object of ensuring that all those goods which are 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. For further particulars in this connexion see § 1. State Public Health Legislation and Administration, pp. 276-80.

§ 6. Supervision of Dairies, Milk Supply, Etc.

1. *General.*—In earlier issues of the Official Year Book (see No. 22, p. 498) reference is made to the legislation in force in the various States to ensure the purity of the milk supply and of dairy produce generally.

2. *Number of Dairy Premises Registered.*—The following table shows, so far as the particulars are available, the number of dairy premises registered and the number of cows in milk thereon. In some States registration is compulsory within certain proclaimed areas only.

DAIRY PREMISES REGISTERED, AND COWS IN MILK THEREON, 1950.

Particulars.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust. (b)	Tasmania. (c)
Premises registered . .	16,965	25,783	21,800	12,311	496	7,356
Cows in milk thereon . .	6587,735	669,976	690,200	113,000	18,034	87,655

(a) Year 1948. (b) Dairy farms registered with the Milk Board for whole milk for Metropolitan Area and country towns. (c) March, 1950.

§ 7. Medical Inspection of School Children.

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

2. **New South Wales.**—A complete system of medical inspection of school children is carried out by the School Medical Service, Department of Public Health. In the metropolitan area a full medical examination of all children in first and fifth classes is carried out and children in other classes are reviewed as necessary. In country districts, a full medical examination of every child is carried out two or three times during the usual period of school attendance (6–15 years). Parents are notified of the defects found, and urged to seek treatment for them. In the metropolitan area these notices are followed up in many cases by a visit from a school nurse who, in some instances, assists in arranging hospital and clinical treatment.

At the end of 1950 the establishment of the School Medical Service provided for 31 medical officers (including the Director, Deputy Director and 4 psychiatrists), 4 psychologists, 4 social workers, 19 school nurses, and 4 speech therapists. In the metropolitan area all primary schools are visited once each year.

Special attention is paid to the supervision of high school pupils, both girls and boys, and medical inspection is carried out annually in these schools in the metropolitan area, as well as certain country high schools. However, it is hoped in 1951 to carry out medical inspection of all schools, both primary and secondary, in the metropolitan area. This will be possible only if the establishment for medical officers is filled.

Every student, before entering a Teachers' College, is medically examined and X-rayed and any defects found must be remedied before final acceptance. Health supervision is maintained at these colleges by women medical officers, who are also lecturers to their respective colleges in hygiene and physiology.

The Child Guidance Clinics examine free of charge children referred by school medical officers, teachers, officers of the Child Welfare Department and various outside bodies. Boys coming before the Children's Court are examined at the clinic at the Metropolitan Boys' Shelter attached to the Court and at Yasmarr Hostel for Boys. Girl delinquents are examined at the two clinics at Blackfriars.

The medical examination of certain children under the jurisdiction of the Child Welfare Department and the Widows' Pensions Branch is also carried out by medical officers of this service.

During the year an audiometric survey by school nurses was commenced of children in the metropolitan, Wollongong and Newcastle areas to determine those who suffered from impairment of hearing. Those children who showed a loss of hearing were examined by a part-time Ear, Nose and Throat Surgeon Specialist, either at school or at the Deaf Clinic, established at Head Office. Recommendations with regard to the children were made to the Education Department as to the most suitable method of education, and through liaison with the Commonwealth Acoustic Laboratory a number of children were fitted with hearing aids free of cost.

During 1950, 73,718 children were fully examined (routine inspection) in schools and 19,551 were reviewed. Of those fully examined 40.04 per cent. were notified for medical and/or dental defects.

These figures do not include record of the medical examination and health supervision of children (1) in residence at the Glenfield Special School for backward children, and (2) attending the Department's Nursery Schools.

The School Medical Service carries out regular and/or periodical investigations into problems affecting the health of children, and special investigations into outbreaks of infectious diseases occurring in schools. One special survey carried out during 1950 was an anthropometric survey of samples of school children to assist the Education Department to design new school furniture. The sanitary condition of school buildings is also inspected. One medical officer attached to this service was included on the panel of lecturers to parents' groups on sex education of children.

The foregoing statement does not include record of the numerous medical examinations of teachers, and other Departmental work of a medical nature, done by the School Medical Service.

3. *Victoria*.—Medical inspection of school children was established in 1909, one of the objectives being to examine medically each child in the State three times during his or her school life.

The School Medical and School Dental Services were transferred in 1944 from the Education Department to the Department of Health under the Ministry of Health Act 1943.

At the routine inspection each child is weighed and measured, eyesight and hearing tested and defects of teeth, throat, skin and posture noted. The child is questioned and advised concerning general hygiene, cleanliness, etc., and is then undressed and examined. A school nurse assists each medical officer at the examination and is also responsible for the sending of defect notices to the parent. In many cases she also interviews the mother either at the school or in the home, thus acting as liaison between medical officer, parent and teacher. School nurses also visit metropolitan schools at regular intervals to examine for pediculosis, other infectious skin conditions, and lack of cleanliness.

Special classes or schools are provided by the Education Department for physically and mentally handicapped children, such as the partially sighted, partially deaf (in process of building), undernourished, those with minor postural defects, speech handicaps, mentally retarded, etc. Children attending these classes are referred by the School Medical Officers and kept under regular medical supervision during their school career. Many children are given special appointments on account of behaviour problems, truancy, etc. These cases are also investigated by a school nurse, and, if necessary, sent on to the appropriate psychiatric clinic. Visits to state schools within the metropolitan area are maintained regularly. Extension of the service to children attending registered primary schools in metropolitan districts and country areas as medical staff became available was agreed upon in April, 1950, and these schools are now included in the regular itineraries.

Country schools are gradually being included in regular inspection. A part-time medical officer for the provincial centre of Hamilton took up duty in August, 1949, and it is hoped to interest in this work, in other centres, medical women who are not engaged in private practice. Meanwhile, owing to a small increase in staff it has been possible to visit schools in the district of Glenelg in the far south-west of the State. Additional school nurses were appointed during the latter half of 1950, and regular visits are now being made to schools in the provincial cities, Bendigo, Ballarat and Geelong.

A limited number of metropolitan (industrial areas) and rural schools are covered by the School Dental Service, but owing to difficulties in obtaining staff it has not been possible to maintain the desired policy of providing dental treatment at regular yearly intervals with initial treatment at a maximum age of eight years. Children are transported from school to the Dental Centre and return by bus (under contract to the Department of Health). A medical officer has been appointed as part-time anaesthetist, part-time school medical officer. A new building has been purchased at 448 St. Kilda-road, to which the Dental Centre was transferred in January, 1951.

During the year ended 30th June, 1950, 28,621 children and 3,558 teachers were medically examined, and 16,539 children received dental treatment involving 20,766 visits with 21,842 extractions, 17,506 fillings and 7,614 other treatments. General anaesthetics numbering 543 were administered. The cost of the School Medical and Dental Services for 1949-50 was £36,025.

4. *Queensland*.—The School Health Services Branch, under the direction of the Chief Medical Officer, consists of three sections known as the Medical, Dental and Nursing Sections.

Medical inspection of schools and school children is carried out by two full-time and one part-time officer under the general direction of the Chief Medical Officer, School Health Services. These officers, as far as possible, examine children for cardiac and pulmonary conditions, and in addition make a thorough examination of all children referred to them by the school nurses.

The nurses now number 16. Each nurse is assigned a group of schools and is instructed to make a list at each school of those children who should be seen by the medical inspector at his next visit. She supervises the sanitation, cleanliness and ventilation of the school and notifies the head teacher of all infectious or verminous children or those suffering from impetigo, scabies, etc., who are then excluded. During 1949-50, school nurses examined 62,649 children. In the metropolitan area the nurses examine the teeth and report all eligible carious cases to the Dental Hospital for treatment.

The Department now has a staff of 21 dentists, and one part-time dental inspector. These officers are each assigned a district, which is not changed for three years unless for reasons which the Chief Medical Officer, on the recommendation of the Chief Dental Inspector, considers advisable. During 1949-50, 34,846 children were examined; 17,698 extractions were performed; and there were 72,568 fillings and 23,594 other treatments.

In order to give the same medical and dental facilities to the children of the back country as are obtainable by city dwellers, four Rail Dental Clinics equipped on the most modern lines have been constructed. A motor car is carried on a railway wagon attached to each clinic for use at each stopping place to visit the surrounding villages served by the rail centre.

At the Wilson Ophthalmic School Hostel children suffering from trachoma are treated and educated. They are admitted from time to time on the recommendation of the part-time Ophthalmic Officer. Beneficial results have already been obtained. The Institution is situated at Eildon Hill, Windsor, and is fully equipped to treat all types of eye cases.

The work of Hookworm Control (the dealing with *anchylostomiasis duodenale* and *nectator Americanus* infestation) throughout the State is under the control of the Director-General of Medical Services and his deputy. This activity has resulted in a marked reduction of the incidence of this dangerous menace on the northern coastal belt. Two sisters of the School Health Services are seconded for hookworm duty. The personnel consists of a microscopist, a health inspector and two trained sisters.

This service cost £48,690 in 1949-50.

5. *South Australia*.—The system of medical inspection in force requires the examination of all children attending both primary and secondary schools. As a rule they are examined three times during their primary course in Grades I, IV, and VII, and twice during their secondary course in the 2nd and 4th years. Country schools are not visited annually because of staff shortage, but approximately every three or four years. On these visits all the children are examined. Reports are furnished to the parents of any remediable defects found during these examinations. The medical inspectors meet the parents after the examination of the children and give an address on the prevention and treatment of the conditions which were found during the inspection. After these lectures the parents are given an opportunity to ask questions regarding their children. When there is an epidemic or a threatened epidemic in a district, similar lectures are given and special visits paid to all the schools in that locality. All students are examined before they enter the Teachers' College and before they begin teaching. Medical and physiological tests are conducted four times during the course (two years) on all candidates taking the Diploma of Physical Education. Courses of lectures in Hygiene and in First Aid are given to all College students and in Home Nursing to Domestic Arts students.

The medical staff consists of a principal medical officer, 3 full-time and 2 part-time medical inspectors and 5 trained nurses. Two dentists and 2 dental assistants are responsible for dental work in country schools.

The more important defects of the 22,079 children examined during 1950 were as follows :—Vision 525, hearing 147, and tonsils and adenoids 744.

No survey of children wearing spectacles was made in 1949. In 1950 the proportions per cent. of boys and of girls in primary schools who were wearing spectacles at the time of the medical examination were as follows:—Grade 1—boys 1.4, girls 1.4; Grade 2—2.5, 3.3; Grade 3—3.1, 4.4; Grade 4—3.5, 4.6; Grade 5—4.1, 4.4; Grade 6—5.1, 5.0; and Grade 7—4.0, 5.3.

Of the 5,999 children tested for hearing with a pure tone audiometer, 3,619 showed no hearing loss.

The Psychology Branch consists of a psychologist, two assistant psychologists, one senior guidance officer, two guidance officers, a social worker, an advisory teacher of opportunity classes and a special teacher of hard of hearing children. The work of the Branch may be divided into three sections—clinical, educational and vocational.

Clinical. The clinical work involves examining difficult children of many types, including those with such problems as backwardness, retardation, truanting, delinquency, etc. In addition, the parents of all children examined are always interviewed and their co-operation is sought.

Educational. In addition to supervising 36 opportunity and special classes for children backward in school work, the Branch advises on questions of placement and types of education for ordinary children in schools.

Vocational. The guidance officers test and advise all children about to leave school. The guidance officers are also responsible for the supervision of record cards where used in primary schools.

The Branch also undertakes lectures to students of the Teachers' College as well as to other interested organizations such as mothers' clubs.

The cost of these services combined in 1949-50 was £14,435.

6. **Western Australia.**—Under the Public Health Act 1911-1935 the medical officers appointed by the local authorities became medical officers of schools and of school children. The principle aimed at is—

- (a) in the metropolitan area, that each child shall be examined three times during his school life—
 - (i) when he enters school between 5 and 6 years,
 - (ii) in his eighth year, and
 - (iii) between the ages of 12 and 13 years;
- (b) in the country, that the child is examined twice during his school life, or more often if it is possible to arrange such medical examinations.

In the Health Department there are 2 full-time and 6 part-time medical officers for schools. One full-time medical officer and three half-time officers are employed in the country, and one full-time officer and three half-time officers are employed in the metropolitan area. During 1950, 39,023 children were examined (metropolitan 18,303, country 20,524, and summer camp classes 196), of whom 20,250 were boys and 18,773 girls. There were 357 schools visited, comprising—metropolitan, 74 State schools and 15 convents and country, 222 State schools and 46 convents. During 1950 the 11 full-time dental officers employed visited 29 metropolitan schools, and in five dental vans visited 135 country schools; the number of children examined was 7,858 of whom 4,913 were treated with parents' consent.

The cost of this service for 1949-50 was £19,817.

7. **Tasmania.**—During the year 1950 one full-time medical officer and two part-time officers were employed in the examination of school children. Six Government medical officers also performed routine examinations as part of their ordinary duties. Nine full-time and one part-time sister visit homes and schools regularly. In all, 13,925 children were examined, of whom 8,559 were found to have defects.

There are now three dental clinics—one at Hobart, another at Launceston and the third at Devonport—each with a full-time dental surgeon in charge. Three other dentists were employed for varying periods during the year, and the department paid four private dentists to do work in various areas. The mobile clinic is still operating along the north-west coast. There were 6,170 new visits paid to dental clinics in Tasmania and 5,229 repeat visits.

The cost of medical and dental services for the year ended June, 1950 was £13,498.

8. **Australian Capital Territory.**—By arrangement, education facilities are provided by the Education Department of New South Wales. The Commonwealth Department of Health, however, took over from the State in 1930 the medical inspection of school children and carried out examinations of entrants and those leaving during 1930.

Subsequently to 1931, examinations of entrants and those leaving the primary schools have taken place. During 1937 this examination was supplemented by examinations of all pupils of all rural schools (including Duntroon and Molonglo). No examinations were made in 1942. Since 1943 all primary pupils of Government schools in the Territory have been medically examined annually. During 1950 a total of 1,420 children were examined, comprising 732 boys and 688 girls. Defects found were—nose and throat, 94 or 6.6 per cent.; eye defects notified, 52 or 3.6 per cent.; hearing defects, 29 or 2 per cent.; nutrition unsatisfactory, 138 or 9.7 per cent. Dental defects were not recorded because school dental clinics were supervising most of the children examined.

§ 8. Supervision and Care of Infant Life.

1. **General.**—The number of infant deaths and the rate of infant mortality for the five years 1946 to 1950 are given in the following table, which shows that during this period no less than 24,385 children died in Australia (excluding Territories) before reaching their first birthday. Further information regarding infant mortality will be found in Chapter XIV.—Vital Statistics:—

INFANT DEATHS AND DEATH RATES.

State.	Metropolitan.					Remainder of State.				
	1946.	1947.	1948.	1949.	1950.	1946.	1947.	1948.	1949.	1950.
NUMBER OF INFANT DEATHS.										
New South Wales	786	856	810	754	754	1,246	1,213	1,227	1,124	1,182
Victoria ..	730	725	605	518	511	538	520	498	508	490
Queensland ..	251	353	293	210	232	540	521	486	476	487
South Australia ..	256	192	256	233	235	172	204	216	211	181
Western Australia	160	181	150	149	180	216	217	181	208	206.
Tasmania ..	58	66	46	53	52	149	129	147	117	120
Australia(a) ..	2,241	2,373	2,160	1,917	1,964	2,861	2,804	2,755	2,644	2,666.

RATE OF INFANT MORTALITY.(b)

New South Wales	24.74	26.82	26.96	25.19	25.44	35.12	32.36	33.00	28.91	28.18.
Victoria ..	27.07	26.82	23.77	19.97	19.13	27.27	25.57	24.12	24.27	21.20
Queensland ..	25.65	34.59	29.94	21.38	31.98	31.33	28.70	28.47	26.55	22.37
South Australia ..	27.89	20.73	28.79	26.11	24.68	25.93	28.91	30.96	29.64	23.25
Western Australia	25.01	26.99	23.59	21.52	25.41	37.84	35.18	28.78	31.57	28.83
Tasmania ..	29.59	31.52	22.32	26.21	23.29	30.49	25.56	29.89	23.00	23.96
Australia(a) ..	26.04	27.21	26.06	22.94	23.82	31.90	29.75	29.60	27.39	24.97

(a) Excludes Territories.
registered.

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

During recent years greater attention has been paid to the fact that the health of the community depends largely on pre-natal, as well as after-care, in the case of mothers and infants. Government and private organizations, therefore, provide instruction and treatment for mothers before and after confinement, while the health and well-being of mother and child are looked after by the institution of baby health centres, baby clinics, crèches, visits by qualified midwifery nurses, and special attention to the milk supply, etc.

2. **Government Activities.**—In all the States acts have been passed with the object of supervising and ameliorating the conditions of infant life and reducing the rate of mortality. Departments control the boarding-out to suitable persons of the wards of the State, and wherever possible the child is boarded out to its mother or 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. (See also in this connexion Chapter IX.—Welfare Services.) Under the provisions of the Maternity Allowances, Part V. of the Social Services Consolidation Act 1947–1951, from 1st July, 1947 a sum of £15 is payable to the mother in respect of each confinement at which a living or viable child is born. 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. Detailed particulars regarding Maternity Allowances are given in Chapter IX.—Welfare Services.

3. **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. 515–6) information may be found concerning the activities of institutions in each State.

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

BABY HEALTH CENTRES AND BUSH NURSING ASSOCIATIONS, 1950.

Heading.	N.S.W.	Victoria.	Qld. (a)	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
Baby Health Centres—								
Metropolitan .. No.	76	124	45	72	24	7	..	348
Urban-Provincial and Rural .. No.	202 (b)	324	155	156	21 (c)	67	4	929
Total .. No.	278	448	200	228	45	74	4	1,277
Attendances at Centres								
No.	1,072,174	1,005,996	382,227	250,097	188,322	130,900	19,599	3,049,375
Visits paid by Nurses								
No.	19,424	91,969	23,658	29,716	20,301	48,962	2,573	236,603
Bush Nursing Associations								
—Number of Centres ..	32	79	10	31	7	26	..	185

(a) Year ended 30th June, 1950.

(b) Includes five mobile units.

(c) Includes four mobile units.

In the last twenty years the number of attendances at the Baby Health Centres has more than trebled. The numbers of attendances, at five-yearly 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.

§ 9. Hospital Benefits Act.

Under the Hospital Benefits Act 1945–1948 the Commonwealth has entered into agreements with the States to pay to the States hospital benefits at an agreed rate for each bed occupied by a qualified person in a public ward in a public hospital, provided that the States abolish the means test for admission into public wards and cease charging fees to qualified persons admitted thereto. The benefit rate for public wards, which was six shillings per day until 30th June, 1948, was increased to eight shillings per day from 1st July, 1948. For dates of operation and payments made in the several States see page 302.

The agreements provide for the Commonwealth to pay benefits towards the cost of treatment of qualified persons occupying beds in non-public wards in public hospitals, and for the State Governments to reduce the hospital fees by the equivalent of the benefit rate, thus relieving qualified persons of fees to this extent. The benefit rate for non-public wards which was six shillings per day until 31st October, 1948, was increased to eight shillings per day from 1st November, 1948.

Private hospitals are entitled to claim benefits for beds occupied by qualified patients. These hospitals must be approved by a joint committee of Commonwealth and State Health authorities before payment of benefit is made. The hospitals are required to reduce each qualified patient's account by the amount of the benefit payable by the Commonwealth. The benefit rate for private hospitals which was six shillings per day until 31st October, 1948, was increased to eight shillings per day from 1st November, 1948.

Hospital benefits are payable also to, or in respect of, any person who, whilst temporarily absent from Australia, has been a qualified patient in a hospital in any country outside Australia. The benefit rate for persons temporarily absent from Australia which was six shillings (Australian currency) per day until 31st October, 1948, was increased to eight shillings (Australian currency) per day from 1st November, 1948. Arrangements have been made for these benefits to be paid in several countries overseas where Commonwealth Officers are established. Any claims not dealt with overseas receive attention in Australia.

The Commonwealth and States have agreed to form a National Hospital Council of Commonwealth and State representatives, the functions of which will be to advise the Commonwealth and State Governments on any hospital matters referred to it by their Governments.

§ 10. Mental Institution Benefits Act.

The Mental Institution Benefits Act was assented to on 17th December, 1948. It authorizes the execution, on behalf of the Commonwealth, of agreements with all or any of the States relating to the provision of mental institution benefits.

These agreements will provide for the Commonwealth to pay to the States, in respect of qualified persons in mental institutions, benefits at an agreed rate per patient-day, and for the States to ensure that no means test is imposed on, and that no fees are charged to, or in respect of, qualified persons.

§ 11. Tuberculosis Act.

The main provisions of this Act, which was assented to on 25th November, 1948, are as follows:—(a) Section 5, which authorizes the Commonwealth to enter into an arrangement with the States for an effectual national campaign against tuberculosis; (b) Section 6, which empowers the Commonwealth to take over or provide specified facilities for the diagnosis, treatment and control of tuberculosis; (c) Section 8, which 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, which authorizes the Commonwealth to pay allowances to sufferers from tuberculosis and their dependants to enable sufferers to give up work and undergo treatment, and thus minimize the spread of infection.

The Commonwealth has completed an arrangement with each State, and the National campaign is already under way. Under the arrangement each State is required to conduct an effectual campaign against tuberculosis and to provide adequate facilities for that purpose. In consideration of this, the Commonwealth undertakes to reimburse the State for all approved capital expenditure in relation to tuberculosis on and after 1st July, 1948, and for net maintenance expenditure to the extent it is in excess of net maintenance expenditure for the base year 1947-48. Thus, the States are required to carry out the actual physical or field work of the national campaign with the Commonwealth acting 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 and has already had three meetings. There are eleven members under the chairmanship of the Commonwealth Director-General of Health. The 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.

A system of tuberculosis allowances has been drawn up and is an important factor in the campaign against the disease. Payments under the scheme were commenced on 13th July, 1950. The rates of allowance from 1st November, 1951 were £8 5s. a week for a married sufferer with a dependent wife, £5 a week for a sufferer without dependants (reducible to £3 when maintained free of charge in an institution), and 9s. a week for each dependent child under the age of sixteen (which is additional to child endowment). There is a means test, generous to the sufferer, which has regard only to income and not to property.

§ 12. Pharmaceutical Benefits Act.

A Pharmaceutical Benefits Act was passed by the Commonwealth Parliament in March, 1944 and was amended in September, 1945. This Act was the subject of a High Court action, as a result of which the Government sought by means of a referendum of the people the constitutional power necessary to implement the Act. This power having been granted, a further Pharmaceutical Benefits Act, which repealed the Acts of 1944 and 1945, was assented to on 12th June, 1947. This Act embodied a scheme for providing pharmaceutical benefits to all persons ordinarily resident in Australia. The benefits provided were contained in a Commonwealth Pharmaceutical Formulary, which was subject to periodic revision by a Formulary Committee comprised of members of the medical and pharmaceutical professions. Benefits were supplied without cost to the person receiving the benefit, payment being made by the Commonwealth to authorized suppliers from the National Welfare Fund. Special arrangements existed for supplying benefits or their equivalent to persons residing in isolated areas. These pharmaceutical benefits were first made available to the public on 1st June, 1948. In August, 1950, the Government amended the regulations under the Act, thereby limiting the range of benefits to a list of life-saving and disease-preventing drugs compiled on the recommendation of a special Medical Advisory Committee. These regulations came into force on 4th September, 1950.

§ 13. Disposal of the Dead by Cremation.

The disposal of the dead by cremation has been in existence in Australia for many years, as the first crematorium was opened in South Australia in 1903. The number of crematoria in New South Wales is five; the first was opened in 1925. There are two crematoria in Victoria; the first crematorium opened in 1905, but was closed in 1926 and re-opened in 1936, while the other one was opened in 1927. There are two crematoria in Queensland, the first being opened in 1934. In South Australia there is one crematorium which opened in 1903. In Western Australia there is one crematorium which opened in 1939. In Tasmania there are two crematoria; the first was opened in 1936.

The following table shows the number of cremations in each State for the years 1940 to 1951 :—

CREMATIONS.

Year.	N.S.W.	Victoria.	Q'land.(a)	S. Aust.(a)	W. Aust.	Tas.	Australia.
1940	4,605	1,624	892	109	242	167	7,639
1941	5,081	1,826	1,063	137	302	210	8,619
1942	5,630	1,999	1,183	135	348	244	9,539
1943	6,312	2,198	1,344	142	376	272	10,644
1944	6,132	2,394	1,482	145	389	333	10,875
1945	6,418	2,604	1,481	167	479	325	11,474
1946	7,054	2,950	1,593	155	504	328	12,584
1947	7,443	3,162	1,742	176	527	355	13,405
1948	8,273	3,642	1,925	214	627	434	15,115
1949	8,591	4,157	2,010	231	610	406	16,005
1950	9,170	4,425	2,155	225	726	421	17,122
1951	9,815	4,808	2,377	280	874	485	18,639

(a) Year ended 30th June.

B. INSTITUTIONS.

§ 1. General.

In Australia, institutions related to public health may be classified in 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 regard to (c) general tabulation is, for obvious reasons, 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 hospitals for infectious diseases, tubercular patients, women, children, incurables, etc.

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. The particulars for New South Wales in the following tables relate to hospitals operating under the control of the Hospitals Commission.

2. Principal Hospitals in each State.—In earlier issues of the Official Year Book (see No. 22, pp. 481–2) particulars respecting staff, accommodation, etc., of each of the principal hospitals were given.

3. Number, Staff and Accommodation, 1949-50.—Details regarding the number of hospitals, staffs and accommodation for the year 1949-50 are given in the following table:—

PUBLIC HOSPITALS : NUMBER, STAFF AND ACCOMMODATION, 1949-50.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
Number of Hospitals ..	251	94	126	59	92	25	1	648
Medical Staff—								
Honorary	2,556	1,096	1,411	323	163	117	18	4,414
Salaried	508	395	362	114	51	69	4	1,503
Total	3,064	1,491	503	437	214	186	22	5,917
Nursing Staff	8,706	5,048	4,236	1,690	1,730	759	66	22,235
Accommodation—								
Number of beds and cots	18,257	9,851	7,995	3,336	3,994	1,942	184	45,559

(a) Year ended 31st March, 1950.

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 out-door or verandah sleeping places.

4. In-Patients Treated.—The following table furnishes particulars of in-patients treated (newborn are excluded).

PUBLIC HOSPITALS : IN-PATIENTS TREATED, 1949-50.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S.Aust.	W.A.	Tas.	A.C.T.	Total.
Inmates at beginning of year—								
Males	5,413	6,678	2,851	1,018	1,141	494	58	30,696
Females	6,813		2,897	1,315	1,240	701	77	
Total	12,226		5,748	2,333	2,381	1,195	135	
Admissions and Re-admissions during year—								
Males	134,423	151,263	72,854	22,353	31,669	11,769	1,761	792,699
Females	197,348		84,631	29,648	33,433	18,877	2,670	
Total	331,771		157,485	52,001	65,102	30,646	4,431	
Total in-patients treated—								
Males	139,836	157,941	75,705	23,371	32,810	12,263	1,819	823,395
Females	204,161		87,528	30,963	34,673	19,578	2,747	
Total	343,997		163,233	54,334	67,483	31,841	4,566	
Discharges—								
Males	127,849	144,442	69,865	21,090	30,272	11,279	1,717	763,607
Females	192,230		82,488	28,676	32,590	18,481	2,628	
Total	320,079		152,353	49,766	62,862	29,760	4,345	
Deaths—								
Males	6,124	6,616	2,926	1,291	1,280	503	44	27,057
Females	4,286		1,908	906	726	416	31	
Total	10,410		4,834	2,197	2,006	919	75	
Inmates at end of year—								
Males	5,863	6,883	2,914	990	1,258	481	58	32,731
Females	7,645		3,132	1,381	1,337	681	88	
Total	13,508		6,046	2,371	2,615	1,162	146	
Average Daily Number Resident	13,016	6,982	5,774	2,305	2,445	1,227	136	31,885

(a) Year ended 31st March, 1950, and includes private and intermediate patients previously excluded.

In addition to those admitted to the hospitals there are large numbers of out-patients. During 1949-50 there were 927,459 out-patients treated in New South Wales, 404,743 in Victoria, 438,694 in Queensland, 102,055 in South Australia, 69,894 (estimated) in Western Australia, 80,444 in Tasmania and 11,028 in the Australian Capital Territory, making a total for Australia of 2,034,317.

5. **Revenue and Expenditure.**—Details of the revenue and expenditure for the year 1949-50 are shown in the next table. The revenue includes the Commonwealth Hospital Benefit Scheme which operated in Victoria, Queensland, Western Australia and Tasmania from 1st January, 1946, in South Australia from 1st February, 1946, and in New South Wales and the Australian Capital Territory from 1st July, 1946.

PUBLIC HOSPITALS : REVENUE AND EXPENDITURE, 1949-50.

(£.)

Particulars.	N.S.W.	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
Revenue—								
Government Aid ..	7,247,828	3,257,056	2,885,602	1,054,536	1,504,427	570,761	79,094	16,599,304
Commonwealth Hospital Benefits ..	(b) 777,764	1,043,000	898,377	336,672	301,501	173,707	22,288	3,553,309
Municipal Aid ..	(c)	75,751	..	69,155	1,293	..	..	146,199
Public Subscriptions, Legacies, etc. ..	169,512	639,625	7,007	81,883	70,081	6,027	8	974,143
Fees ..	1,488,127	820,571	308,821	199,268	137,722	85,007	6,889	3,046,405
Other ..	207,194	183,337	37,241	117,961	23,769	54,639	90	624,231
Total 1949-50 ..	9,890,425	6,019,340	4,137,048	1,859,475	2,038,793	890,141	108,369	24,943,591
1948-49 ..	8,423,459	3,503,346	3,611,116	1,532,339	1,579,258	736,336	79,604	19,465,458
Expenditure—								
Salaries and Wages	6,087,401	2,686,708	2,357,259	974,561	922,761	524,925	51,570	13,605,185
Upkeep and Repair of Buildings and Grounds ..	457,460	165,172	103,721	120,282	71,053	16,045	4,554	938,287
All Other Ordinary Capital (d) ..	3,394,413	2,213,113	1,710,441	677,499	674,124	336,011	36,204	9,041,805
	(e)	1,392,410	782,999	134,224	294,139	..	16,145	2,619,917
Total 1949-50 ..	9,939,274	6,457,403	4,954,420	1,906,566	1,962,077	876,981	108,473	26,205,194
1948-49 ..	8,585,591	3,954,252	4,122,121	1,598,260	1,585,896	735,376	79,779	20,661,275

(a) Year ended 31st March, 1950. (b) Portion only of amount allocated to State hospitals.
 (c) Included in "Other". (d) Includes such items as Purchases of Land, Cost of New Buildings and Additions to Buildings. (e) Not available. (f) Incomplete.

6. **Summary, 1938-39 and 1946-47 to 1949-50.**—A summary, for the years 1938-39 and 1946-47 to 1949-50, of the number of 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. The figures relate to both general and special hospitals.

PUBLIC HOSPITALS : AUSTRALIA.

Particulars.		1938-39.	1946-47.	1947-48.	1948-49.	1949-50.
Hospitals ..	No.	563	604	612	624	648
Medical Staff ..	"	4,059	5,199	5,336	5,476	5,917
Nursing Staff ..	"	13,582	18,411	20,153	21,360	22,235
Beds and cots ..	"	35,711	42,601	43,473	44,509	45,559
Admissions during year ..	"	527,055	674,957	691,453	700,321	792,699
Total indoor cases treated	No.	552,051	703,488	719,956	730,009	823,395
Out-patients (cases) (a) ..	"	1,272,147	1,631,918	1,783,674	1,836,122	2,034,317
Deaths ..	"	23,372	24,536	25,046	24,699	27,057
Average daily resident ..	"	25,608	28,216	28,554	28,942	31,885
Revenue ..	£	7,106,642	13,943,952	17,392,541	19,465,458	24,943,591
Expenditure ..	£	6,351,055	14,096,849	17,805,479	20,661,275	26,205,194

(a) Partly estimated.

§ 3. Leper Hospitals.

Isolation hospitals for the care and treatment of lepers have been established in New South Wales (Little Bay); Queensland (Peel Island, near Brisbane, and Fantome Island, North Queensland); Western Australia (Derby); and the Northern Territory (Channel Island, near Darwin). At the end of 1950 there were 20 cases in residence at Little Bay, 54 at Peel Island, 72 at Fantome Island, 305 at Derby, 133 at Channel Island, and 3 cases at Woooloo, Western Australia. Of the 587 cases, 456 were full-blood aborigines, 51 half-caste aborigines, 4 Asiatics and 76 Europeans.

§ 4. Mental Hospitals.

1. **General.**—The methods of compiling statistics of mental diseases 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. The figures for the States cannot be brought to a common year; consequently the following particulars relate to a combination of calendar and financial years. Licensed houses are included in all particulars excepting revenue and expenditure for New South Wales. The figures exclude those of reception houses and observation wards in gaols. In New South Wales the expenditure includes the cost of Broken Hill patients treated in South Australian mental hospitals.

2. **Hospitals, Staff, etc., 1949-50.**—Particulars regarding the number of hospitals, the medical and nursing staffs, and accommodation are given in the following table for the year 1949-50:—

MENTAL HOSPITALS : NUMBER, STAFF, ACCOMMODATION, 1949-50.(a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of Hospitals ..	13	9	4	2	4	1	33
Medical Staff—							
Males	39	56	9	7	5	4	120
Females	7	..	1	..	..	..	8
Total	46	56	10	7	5	4	128
Nursing Staff and Attendants—							
Males	945	622	495	215	188	93	2,558
Females	972	526	297	179	92	70	2,136
Total	1,917	1,148	792	394	280	163	4,694
Accommodation—							
Number of beds and cots	11,854	6,762	4,196	2,317	1,506	762	27,397

(a) The figures relate to years ended as follows:—New South Wales, Queensland, South Australia and Tasmania—30th June, 1950; Victoria and Western Australia—31st December, 1949.

3. **Patients, 1949-50.**—Information regarding patients treated, deaths, etc., for 1949-50 is given in the following table:—

MENTAL HOSPITALS : PATIENTS, DEATHS, ETC., 1949-50.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of distinct persons treated during year (b)—							
Males	6,702	3,756	2,546	1,277	1,053	435	15,769
Females	6,991	4,377	2,374	1,315	690	494	16,241
Total	13,693	8,133	4,920	2,592	1,743	929	32,010

(a) See footnote (a) to previous table.

(b) Excludes transfers to other institutions.

MENTAL HOSPITALS: PATIENTS, DEATHS, ETC., 1949-50 (a)—continued.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Number of patients on books at beginning of year—</i>							
Males	5,836	3,307	2,111	1,097	929	306	13,586
Females	5,987	3,813	1,957	1,116	608	356	13,837
Total	11,823	7,120	4,068	2,213	1,537	662	27,423
<i>Admissions and re-admissions (excluding absconders retaken and transfers from other hospitals)—</i>							
Males	866	449	435	180	124	129	2,183
Females	1,004	564	417	199	82	138	2,404
Total	1,870	1,013	852	379	206	267	4,587
<i>Discharges (including absconders not retaken)—</i>							
Males	404	222	241	41	38	97	1,043
Females	468	256	271	49	22	93	1,159
Total	872	478	512	90	60	190	2,202
<i>Deaths—</i>							
Males	400	230	143	96	82	17	966
Females	398	222	112	96	54	36	918
Total	798	452	255	192	136	53	1,886
<i>Number of patients on books at end of year—</i>							
Males	5,898	3,304	2,162	1,140	933	321	13,758
Females	6,125	3,899	1,991	1,170	614	365	14,164
Total	12,023	7,203	4,153	2,310	1,547	686	27,922
<i>Average daily number resident—</i>							
Males	5,351	2,922	2,063	1,093	901	314	12,644
Females	5,361	3,383	1,893	1,099	579	360	12,675
Total	10,712	6,305	3,956	2,192	1,480	674	25,319
<i>Number of patients on books at end of year per 1,000 of population—</i>							
Males	3.64	3.08	3.57	3.26	3.33	2.24	3.38
Females	3.82	3.57	3.44	3.34	2.32	2.68	3.52
Total	3.73	3.33	3.51	3.30	2.84	2.46	3.45
<i>Average number of patients resident in mental hospitals per 1,000 of population—</i>							
Males	3.36	2.76	3.46	3.19	3.29	2.21	3.01
Females	3.40	3.13	3.34	3.19	2.23	2.66	3.20
Total	3.38	2.95	3.41	3.19	2.78	2.43	3.18

(a) See footnote (a) to previous table.

Persons who are well advanced towards recovery are allowed to leave the hospitals and reside with their relatives or friends, but they are under supervision and their names are kept in the records.

4. Revenue and Expenditure, 1949-50.—The revenue of Government mental hospitals is small in comparison with their cost, and consists chiefly of patients' fees, and mental institution benefits. The proportion of expenditure borne by the State amounts to about 88 per cent. In New South Wales the expenditure includes the cost of Broken Hill patients treated in South Australian mental hospitals:—

MENTAL HOSPITALS : FINANCES, 1949-50.

(£.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Revenue (excluding Government Grants)—							
Fees of Patients	174,581	77,543	66,109	18,975	25,676	366	363,250
Mental Institution Benefits	97,035	108,241	..	32,752	8,525	9,033	255,586
Other	63,030	17,038	800	20,693	4,731	277	106,569
Total	334,646	202,822	66,909	72,420	38,932	9,676	725,405
Expenditure—							
Salaries and Wages	1,060,100	663,421	424,395	213,816	175,547	104,535	2,641,814
Upkeep and Repair of Buildings, &c.	79,738	..	4,700	29,772	11,378	4,838	130,426
All Other(a)	1,119,587	1,696,254	326,661	155,585	101,766	66,863	3,466,716
Total	2,259,425	2,359,675	755,756	399,173	288,691	176,236	6,238,956
Expenditure per Average Daily Resident	£210/18/6	£374/5/1	£191/0/10	£182/2/1	£195/1/3	£261/9/7	£246/8/3

(a) Includes the following amounts for capital expenditure on Purchases of Land, Cost of New Buildings, and Additions to Buildings: New South Wales, £265,441; Victoria, £1,123,243; South Australia, £6,599.

5. Summary for Australia, 1938-39 and 1946-47 to 1949-50.—The following table gives a summary relating to mental hospitals in Australia during 1938-39 and for each of the years 1946-47 to 1949-50:—

MENTAL HOSPITALS : SUMMARY, AUSTRALIA.

Particulars.	1938-39.	1946-47.	1947-48.	1948-49.	1949-50.
Hospitals No.	35	33	34	33	33
Medical Staff	92	99	108	116	128
Nursing Staff	4,922	4,078	4,198	4,487	4,694
Beds	25,654	26,984	27,219	27,272	27,397
Admissions	3,757	3,925	4,061	4,289	4,587
Discharged as recovered, relieved, etc.	1,800	2,150	1,969	2,089	2,202
Deaths	1,632	1,888	1,923	1,991	1,886
Inmates at end of year	26,509	27,045	27,214	27,425	27,922
Revenue (excluding Government Grants)	£ 262,817	457,131	508,201	593,601	725,405
Expenditure—Total	£ 1,903,817	2,893,208	3,575,676	4,484,879	6,238,956
—Per Average Daily Resident	£79/2/4	£116/6/11	£143/7/11	£179/11/9	£246/8/3

6. **Number of Mental Patients, 1938-39 and 1946-47 to 1949-50.**—The total number returned as under treatment shows slight fluctuations during the period but the proportion to total population shows a slight decline to 1949-50. 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 actual increase in mental diseases.

MENTAL PATIENTS IN HOSPITALS.

State.	1938-39.	1946-47.	1947-48.	1948-49.	1949-50.
NUMBER.					
New South Wales	11,678	11,834	11,836	11,825	12,023
Victoria	7,326	7,037	7,052	7,120	7,203
Queensland	3,650	3,933	4,008	4,068	4,153
South Australia	1,747	2,107	2,165	2,213	2,310
Western Australia	1,477	1,471	1,505	1,537	1,547
Tasmania	631	663	648	662	686
Australia	26,509	27,045	27,214	27,425	27,922

PER 1,000 OF POPULATION.

New South Wales	4.25	3.96	3.91	3.80	3.73
Victoria	3.92	3.45	3.42	3.38	3.33
Queensland	3.59	3.55	3.55	3.54	3.51
South Australia	2.93	3.26	3.29	3.29	3.30
Western Australia	3.16	2.96	2.96	2.94	2.84
Tasmania	2.66	2.58	2.47	2.46	2.46
Australia	3.81	3.59	3.56	3.50	3.45

The difference between States in the number of mental patients in hospitals per 1,000 of population may be due to some extent to differences in classification.

7. **Causes of Mental Diseases.**—The general information available, respecting the causes of the mental diseases of persons admitted to institutions is too unsatisfactory to enable a classification of patients by cause to be given.

8. **Length of Residence in Hospital, 1949-50.**—(i) *New South Wales and Victoria.* Particulars are not available regarding the average length of residence in hospitals of persons who died or were discharged during the year.

(ii) *Queensland.* The average residence of those who died during 1949-50 was 9 years 189 days for males, and 7 years 235 days for females; of those discharged, 295 days for males, and 1 year 7 days for females.

(iii) *South Australia.* The average residence of those who died during 1949-50 was 8 years 11 months 23 days for males, and 6 years 9 months 22 days for females; of those discharged, 3 years 7 months 9 days for males, and 2 years 8 months 9 days for females.

(iv) *Western Australia.* The average residence of those who died in 1949 was 9 years 11 months 11 days for males, and 8 years 8 months 1 day for females; of those discharged, 1 year 7 months 28 days for males, and 3 years 11 months 6 days for females.

(v) *Tasmania.* The average residence of those who died during 1949-50 was 5 years 28 days for males, and 6 years 1 month 14 days for females; of those discharged, 1 year 1 month 8 days for males, and 1 year 3 months 21 days for females.