

## CHAPTER IX.

### PUBLIC HYGIENE.

#### § 1. Public Health Legislation and Administration.

Reference to the various public health authorities, Commonwealth and State, their functions, and the legislation administered, may be found in earlier issues of the Official Year Book (see No. 22, pp. 493-5).

#### § 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, 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 twentieth session met at Canberra in November, 1945.

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 44. During the year 1945 grants numbered 28 in the following fields.—bacteriology, biochemistry, chemotherapy, dentistry, medical survey, obstetrics, ophthalmology, pathology physiology and pharmacology, 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 work that is being done under these grants is already yielding results; 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. During recent years, researches very largely were directed to problems associated with the war.

### § 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 is the only specific public health power of the Commonwealth Parliament under the Commonwealth Constitution. 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. 222-3). Reference to quarantine is made below (see § 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 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. War needs greatly increased all activities. Penicillin is being produced in quantities sufficient for ordinary commercial purposes. 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 22 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 twelve 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 and Broome. 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 of, 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 other radiographic work in the district.

4. **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 tropical 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. Further details may be found in previous issues of the Official Year Book (see No. 29, p. 334).

5. **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, p. 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. 8 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 XXVIII. "Miscellaneous".

6. **The Northern Territory Medical Service.**—As from 1st April, 1930, 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.

An aerial medical service, operated by the Department, is based on Darwin, and comprises two Dragon aircraft and a pilot. The Flying Doctor Service of Australia has a base at Alice Springs, and the medical officers at the hospital act as the doctors for this service.

7. **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.

8. **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 carried on 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.

**9. 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. Records of treatment and the results obtained are kept by all treatment centres on uniform lines and are collected and analysed. These records, in respect of certain parts of the body, are also collated in accordance with the international inquiry which was carried out under the auspices of the Cancer Commission of the Health Organization of the United Nations in collaboration with the International Radiological Association.

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 has now extended the work of the Commonwealth Radium Laboratory, which was established in 1929, to include the investigation of the physical problems of radiation therapy generally. This laboratory, which is now known as the Commonwealth X-ray and Radium Laboratory, was established at the University of Melbourne by agreement with the Council of the University, and is maintained, controlled and staffed by the Commonwealth Department of Health. It is accommodated in a separate laboratory building of sixteen rooms specially designed for X-ray and radium work, and is well provided with all necessary equipment for research work, including a high-tension generator capable of supplying 500,000 volts to an X-ray tube. This laboratory is actively at work and its specialist officers co-operate closely with the local physical services which are being developed at the Universities in the other capital cities of Australia. The laboratory also continues its earlier work of production of radon for

treatment, the repair of radium apparatus, and research into problems of treatment and protection. During the year 1945 a total quantity of 78,043 millicuries of radon was prepared and issued by this laboratory and the associated centres in Sydney, Adelaide and Brisbane, and in 1946 a total quantity of 83,077 millicuries was issued. Used in the treatment of cancer and for research purposes this production represents a continuing increase over the output of previous years.

10. **Veterinary Hygiene and Plant Quarantine.**—In 1927 Directors were appointed to control divisions of the Commonwealth Department of Health which have been created to deal with veterinary hygiene and plant quarantine.

#### § 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.

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) *Details by States.* In earlier issues of the Official Year Book (see No. 22, p. 501) information was given concerning the notification, etc., of diseases under State headings.

(c) *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 the Australian Capital Territory the diseases notifiable in 1945 and 1946 and the number of cases notified. Diseases not notifiable in a State or Territory are indicated by an asterisk.

DISEASES NOTIFIABLE IN EACH STATE AND TERRITORY† AND NOTIFICATIONS FOR THE YEARS ENDED 31st DECEMBER, 1945 AND 1946.

| Disease.                      | N.S.W. | Vic.  | Q'land. | S.A.  | W.A. | Tas. | N.T.† | Anst. Cap. Terr. | Aust.  |
|-------------------------------|--------|-------|---------|-------|------|------|-------|------------------|--------|
| YEAR 1945.                    |        |       |         |       |      |      |       |                  |        |
| Anchylostomiasis .. .. .      | ..     | 1     | 15      | ..    | ..   | ..   | ..    | ..               | 16     |
| Anthrax .. .. .               | ..     | 3     | ..      | ..    | ..   | ..   | ..    | ..               | 3      |
| Beriberi .. .. .              | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Bilharziasis .. .. .          | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Cerebro-spinal Meningitis ..  | 117    | 117   | 54      | 23    | 29   | 19   | ..    | 1                | 360    |
| Cholera .. .. .               | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Dengue .. .. .                | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Diphtheria .. .. .            | 1,478  | 899   | 499     | 210   | 425  | 403  | ..    | 2                | 3,916  |
| Dysentery (Amoebic) .. .. .   | ..     | 4     | ..      | 3     | 14   | ..   | ..    | ..               | 21     |
| Dysentery (Bacillary) .. .. . | ..     | 12    | 26      | 27    | ..   | ..   | ..    | ..               | 65     |
| Encephalitis Lethargica .. .. | 3      | ..    | 3       | 1     | 1    | 1    | ..    | 1                | 10     |
| Erysipelas .. .. .            | ..     | ..    | ..      | 65    | ..   | ..   | ..    | ..               | 65     |
| Filariasis .. .. .            | ..     | ..    | 1       | ..    | ..   | ..   | ..    | ..               | 1      |
| Helminthiasis .. .. .         | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Hydatid .. .. .               | ..     | 28    | ..      | ..    | ..   | ..   | ..    | ..               | 28     |
| Influenza .. .. .             | ..     | ..    | ..      | 1     | ..   | ..   | ..    | ..               | 1      |
| Leprisy .. .. .               | 3      | ..    | 5       | ..    | 31   | ..   | ..    | ..               | 39     |
| Malaria(a) .. .. .            | ..     | 621   | 396     | 12    | 1    | ..   | ..    | ..               | 1,030  |
| Measles .. .. .               | ..     | ..    | ..      | 740   | ..   | ..   | ..    | 6                | 746    |
| Plague .. .. .                | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Polomyelitis .. .. .          | 668    | 238   | 299     | 9     | 5    | 4    | ..    | 3                | 1,226  |
| Psittacosis .. .. .           | ..     | ..    | ..      | 2     | ..   | ..   | ..    | ..               | 2      |
| Puerperal Pyrexia .. .. .     | ..     | ..    | 90      | 27    | ..   | 16   | ..    | ..               | 133    |
| Puerperal Fever .. .. .       | 151    | 21    | 10      | ..    | 3    | 7    | ..    | ..               | 192    |
| Rubella .. .. .               | ..     | ..    | ..      | ..    | ..   | ..   | ..    | 3                | 3      |
| Scarlet Fever .. .. .         | 6,977  | 2,710 | 605     | 788   | 99   | 260  | ..    | 53               | 11,492 |
| Smallpox .. .. .              | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Tetanus .. .. .               | ..     | 10    | 38      | ..    | ..   | ..   | ..    | ..               | 48     |
| Trachoma .. .. .              | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Tuberculosis(b) .. .. .       | 1,688  | 613   | 424     | 248   | 287  | 197  | ..    | 1                | 3,458  |
| Typhoid Fever(c) .. .. .      | 29     | 30    | 37      | 9     | 24   | 1    | ..    | ..               | 130    |
| Typhus (Endemic)(d) .. .. .   | 26     | 1     | 98      | 5     | 77   | ..   | ..    | ..               | 207    |
| Undulant Fever .. .. .        | 2      | 9     | ..      | 2     | 5    | ..   | ..    | 1                | 19     |
| Weil's Disease(e) .. .. .     | ..     | ..    | 6       | ..    | ..   | ..   | ..    | ..               | 6      |
| Whooping Cough .. .. .        | ..     | ..    | ..      | 1,883 | ..   | ..   | ..    | 1                | 1,884  |
| Yellow Fever .. .. .          | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| YEAR 1946.                    |        |       |         |       |      |      |       |                  |        |
| Anchylostomiasis .. .. .      | ..     | 202   | 21      | ..    | ..   | 2    | ..    | ..               | 225    |
| Anthrax .. .. .               | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Beriberi .. .. .              | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Bilharziasis .. .. .          | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Cerebro-spinal Meningitis ..  | 89     | 86    | 36      | 14    | 37   | 23   | ..    | 1                | 286    |
| Cholera .. .. .               | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Dengue .. .. .                | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Diphtheria .. .. .            | 1,279  | 494   | 461     | 161   | 366  | 256  | ..    | 1                | 3,018  |
| Dysentery (Amoebic) .. .. .   | ..     | 22    | 1       | 28    | 6    | 1    | ..    | ..               | 58     |
| Dysentery (Bacillary) .. .. . | ..     | 1     | 3       | 14    | 1    | ..   | ..    | ..               | 29     |
| Encephalitis Lethargica .. .. | 3      | 2     | 2       | 3     | 1    | ..   | ..    | ..               | 11     |
| Erysipelas .. .. .            | ..     | ..    | ..      | 67    | ..   | ..   | ..    | ..               | 67     |
| Filariasis .. .. .            | ..     | ..    | 1       | ..    | ..   | ..   | ..    | ..               | 1      |
| Helminthiasis .. .. .         | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Hydatid .. .. .               | ..     | 19    | ..      | ..    | ..   | ..   | ..    | ..               | 19     |
| Influenza .. .. .             | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Leprisy .. .. .               | 4      | ..    | 12      | ..    | 27   | ..   | ..    | ..               | 43     |
| Malaria(a) .. .. .            | ..     | 3,413 | 1,994   | 89    | ..   | ..   | ..    | ..               | 5,490  |
| Measles .. .. .               | ..     | ..    | ..      | 8,986 | ..   | ..   | ..    | 114              | 9,100  |
| Plague .. .. .                | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Polomyelitis .. .. .          | 656    | 247   | 149     | 66    | 2    | 98   | ..    | 5                | 1,223  |
| Psittacosis .. .. .           | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Puerperal Pyrexia .. .. .     | ..     | ..    | 133     | 36    | ..   | 5    | ..    | ..               | 174    |
| Puerperal Fever .. .. .       | ..     | ..    | ..      | ..    | 8    | 4    | ..    | ..               | 244    |
| Rubella .. .. .               | 185    | 15    | 12      | ..    | 28   | ..   | ..    | 3                | 311    |
| Scarlet Fever .. .. .         | 3,090  | 3,282 | 491     | 547   | 88   | 231  | ..    | 58               | 7,787  |
| Smallpox .. .. .              | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Tetanus .. .. .               | ..     | 14    | 41      | ..    | ..   | ..   | ..    | ..               | 55     |
| Trachoma .. .. .              | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | 1      |
| Tuberculosis(b) .. .. .       | 1,671  | 687   | 398     | 241   | 412  | 219  | ..    | 6                | 3,634  |
| Typhoid Fever(c) .. .. .      | 25     | 34    | 11      | 4     | 18   | 2    | ..    | ..               | 94     |
| Typhus (Endemic)(d) .. .. .   | 43     | 1     | 75      | 6     | 70   | ..   | ..    | ..               | 195    |
| Undulant Fever .. .. .        | ..     | 16    | 1       | ..    | 6    | ..   | ..    | ..               | 23     |
| Weil's Disease(e) .. .. .     | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |
| Whooping Cough .. .. .        | ..     | ..    | ..      | 264   | ..   | ..   | ..    | 6                | 270    |
| Yellow Fever .. .. .          | ..     | ..    | ..      | ..    | ..   | ..   | ..    | ..               | ..     |

\* Not notifiable. † Northern Territory statistics of civilian notifications are not available.

(a) Comprised mainly of relapses in Service cases infected overseas. (b) Includes all forms except in New South Wales, where only pulmonary tuberculosis is notifiable. (c) Includes Enteric Fever and Para-typhoid Fevers. (d) Cases reported are all of the mild type known as Brill's Disease or Endemic Typhus (including Scrub and Urban types). (e) Includes Leptospirosis, Weil's and Para-Weil's Disease.

(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 except South Australia, where the Venereal Diseases Act has not yet been proclaimed. 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. Yearly subsidies have been paid to the States to assist in coping with the special conditions created by the large numbers of people in the Armed Forces during the Pacific war.

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.

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, and with respect also to the sale and custody of poisons, reference should be made to Official Year Book, No. 22, pp. 495-7.

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

1. **General.**—In earlier issues (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, 1946.

| Particulars.             | N.S.W.  | Victoria. | Q'land. | S. Aust. | W. Aust.<br>(a) | Tasmania. |
|--------------------------|---------|-----------|---------|----------|-----------------|-----------|
| Premises registered . .  | 18,196  | 22,777    | 23,000  | 13,455   | 346             | (c) 6,161 |
| Cows in milk thereon . . | 594,809 | 579,142   | 668,650 | 136,338  | 12,890          | (d)       |

(a) Premises within a district extending 25 miles north and 90 miles south of Perth only. (b) Estimated.  
 (c) March, 1947. (d) Not available.

§ 7. Medical Inspection of School Children.

1. **General.**—Medical inspection of school children is carried out in all the States. 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 which passed from the control of the Minister for Education to that of the Minister for Health as from 1st July, 1946. Medical inspection was continued as formerly, viz., in the metropolitan area, full medical examination of all children in first and fifth classes, and review of children in other classes who have been found defective in previous years, and, in country districts, the full medical examination of every child two or three times during the usual period of school attendance (6–15 years). Parents are notified of the defects found, and urged to have them treated. In the metropolitan area these notices are reinforced by “follow-up” work of school nurses, who also arrange hospital and clinic treatment in many cases.

The return of officers from active service and new appointments resulted by November, 1946, in a staff of 20 medical officers (including 3 psychiatrists of the Child Guidance Clinics and 1 oculist), 4 psychologists, 14 dental officers, 8 dental assistants, 14 school nurses, 3 social workers, 1 speech therapist, and 9 clerical officers. Seven school medical officers were engaged in country districts, and 9 in the metropolitan area, and of the 13 travelling dental clinics, 8 were engaged in metropolitan schools and 5 in country districts. One of the metropolitan dental officers was also engaged half-time at the clinic attached to the Out-patient's Department of the Royal Alexandra Hospital for Children.

Special attention is paid to the supervision of the health of high school pupils, both girls and boys, and medical inspection is carried out annually in high schools in the metropolitan area, as well as certain country schools.

Every student, before entering a Teachers' College, is medically examined, and any defects found must be remedied before final acceptance. Health supervision is maintained at these Colleges by women medical officers, who give courses of lectures on 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 were examined at the Clinic at the Metropolitan Boys' Shelter attached to the Court and at Yasmarr Hostel for Boys.

Similar examinations are made in the case of girl delinquents.

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

The following summary furnishes particulars of children medically examined in schools in 1946:—

|                                                                          |    |    |                 |
|--------------------------------------------------------------------------|----|----|-----------------|
| Number fully examined (routine inspection)                               | .. | .. | 63,022          |
| Number reviewed                                                          | .. | .. | 24,501          |
| Of those examined—percentage notified for defects, medical and/or dental | .. | .. | 41.94 per cent. |

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. 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.

The cost of this service, excluding administration charges, for the year ended 30th June, 1946, was £35,738.

3. **Victoria.**—Medical inspection of school children was established in 1909. One of the objectives of the system is to have each child medically examined once every three years in its school life. In 1925 the Department concentrated on country work, and medical inspection has been undertaken since that date in country and rural districts, reaching the most remote corners of the State. In spite of the comparatively small medical inspection staff, the plan for triennial visits to State schools is being fairly well maintained though owing to unsurmountable difficulties in transport and accommodation medical inspection in country schools has been in temporary abeyance. Only a few of the registered and institutional schools are visited.

At the medical inspection every child is first weighed and measured, tested for vision and hearing, then undressed to the waist and medically examined as for life assurance, but with a fuller investigation of many hygienic factors, which at that age greatly influence the health and growth of the child. Opportunity is also taken to teach the child healthy habits and how to correct faults, and to get its co-operation for the remedying of defects found. In schools with an attendance of 70 or more, the older boys are examined by a medical man and the older girls by a medical woman. School nurses employed by the Department are devoted to "follow-up" work, i.e., visiting the homes and getting treatment for children found defective by the school medical officers. Owing to the smallness of the staff their work is confined to the metropolitan area.

In addition to the medical examination, each child in those schools visited by the school dentist receives dental treatment on entrance to school (if under 8 years of age), and each year thereafter, until it is 12 years of age, when it is left dentally fit. The present staff is arranged so that 3 dentists and 4 dental attendants are always on duty at the Melbourne Dental Centre, where children from the inner metropolitan schools are brought by the teacher for dental treatment. One dentist with dental attendants and equipment travels along the railway line far enough to give one year's work, using practically every town large enough to provide a day's work as a base. The school committees of the outlying schools are notified of the visit, and the parents are invited to bring to the base all children eligible for treatment, i.e., all children under 8 years of age, and all other children treated by the school dentists on previous visits. Two dentists with dental attendants are in charge of two fully equipped dental vans, each of which has an annual itinerary. In the year ended 30th June, 1946, the number of children examined was 14,837, extractions made 27,352, number of fillings 16,911, and other treatments 9,308.

Special attention is given to mentally and physically handicapped children. Retardants attending "special" schools and "opportunity" grades are examined annually. Those with defective eyesight ineligible for admission to the Blind Institute attend a "partially sighted" class and are kept under constant supervision. Others with minor postural defects attend a "remedial" gymnasium where special exercises are given under medical attention.

A Nose and Throat Clinic for the treatment of children with defective tonsils and adenoids was established in June, 1942. This clinic consists of 6 beds and is staffed by 5 full-time hospital nurses, the operations being performed by visiting nose and throat

specialists. A nominal fee of 15s. is charged for each operation. To the 30th June, 1946, 5,307 operations had been performed. The clinic was temporarily closed on 6th August, 1945, owing to a mild epidemic of poliomyelitis.

The staff of the medical branch consists of 6 full-time and 1 part-time medical officers, 6 dentists, 10 dental attendants and 12 school nurses.

During the year ended 30th June, 1946, 19,203 children and 1,696 teachers were medically examined, and 14,837 children received dental treatment. In addition 5,567 homes were visited by the school nurses.

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 one 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 23. 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 1945-46, school nurses examined 43,427 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 in its employ a staff of 20 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 1945-46, 37,161 children were examined; 22,902 extractions were performed; and there were 20,839 fillings and 10,185 other treatments.

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 ankylostomiasis duodenale and necator 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. Several sisters of the School Health Services are seconded for hookworm duty. The personnel consists of a microscopist, a health inspector and three trained sisters.

In order to give the same medical and dental facilities to the children of the back country as are obtainable by city dwellers, three Rail Dental Clinics equipped on the most modern lines have been constructed. Another one is in course of construction and will shortly be in commission. 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.

This service cost £32,336 in 1945-46.

5. **South Australia.**—The system of medical inspection in force requires the examination of all children attending primary, junior technical, high and technical high schools. Children in the primary schools are examined in grades I, IV and VII; in the junior technical and high schools, children are examined in their second and fourth years. 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 on all candidates taking the Diploma of Physical Education are conducted four times during the course (2 years). Courses of lectures in Hygiene and in First Aid are given to all College students.

The medical staff consists of a principal medical officer, 3 full-time and one part-time medical inspectors and 4 trained nurses. A dentist, a dental assistant and a speech therapist are attached to the Medical Branch. The speech therapist examines children with defective speech, ascertains the nature of the defect and teaches the child how to overcome it.

During 1946, 14,284 children were examined by medical inspectors; of these, 707 required notices for defective vision, 99 for defective hearing, and 930 for tonsils and adenoids.

The following table shows the percentages of primary school children who were wearing spectacles in 1946 compared with 1932 :—

| Year.         | Grade 1. | Grade 2. | Grade 3. | Grade 4. | Grade 5. | Grade 6. | Grade 7. |
|---------------|----------|----------|----------|----------|----------|----------|----------|
| <b>Boys.</b>  |          |          |          |          |          |          |          |
| 1932 ..       | 1.39     | 3.0      | 2.48     | 2.34     | 3.32     | 4.04     | 2.43     |
| 1946 ..       | 1.31     | 1.75     | 2.28     | 3.41     | 2.04     | 2.13     | 3.32     |
| <b>GIRLS.</b> |          |          |          |          |          |          |          |
| 1932 ..       | 1.34     | 2.83     | 2.45     | 3.09     | 2.51     | 3.14     | 2.6      |
| 1946 ..       | 1.12     | 2.45     | 1.95     | 2.67     | 3.02     | 3.39     | 4.63     |

This survey will be continued in 1947 and will include children attending secondary schools.

The Psychology Branch consists of a psychologist, assistant psychologist, vocational guidance officer, aptitude testing officer, employment officer, social worker and advisory teacher of opportunity classes. 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, and covers such problems as backwardness, retardation, behaviour, truancy, delinquency, etc. The parents of all children examined are always interviewed and their co-operation is sought.

*Educational.* In addition to supervising 38 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 vocational guidance officer tests and advises all children about to leave school.

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

The annual cost of these services is approximately £6,100.

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

In the Health Department there are two full-time and one part-time medical officers for schools and four school nurses employed. One of the medical officers is employed full-time in the country, and one full-time officer and one half-time officer are employed in the metropolitan area. One school nurse is employed in the country in special work connected with eye epidemics, etc. The other three nurses are employed in the metropolitan area. During 1946, 21,301 children were examined (metropolitan, 13,602 and country, 7,699, of whom 10,479 were boys and 10,822 girls). There were 198 schools visited, comprising—metropolitan, 79 State schools and 32 convents, and country, 77 State schools and ten convents. The two full-time and one part-time dental officers employed in 1946 visited 18 metropolitan and 12 country schools and gave attention to 2,653 children.

The cost of this service for 1945-46 was £4,727.

7. **Tasmania.**—During the year 1946 the School Medical Service occupied the full-time services of one medical officer. In addition arrangements were made with six private practitioners to carry out medical inspection of school children in the areas in which they practised. This work also formed part of the duties of twelve Government Medical officers, and nine school nurses were engaged full-time on this work in association with the doctors.

Two dental clinics, one each at Hobart and Launceston, attended to the needs of children in those centres, while three mobile dental clinics were in operation in the North-West, North-East and Southern parts of the State.

The number of children examined during 1946 by medical inspectors was 13,039, of whom 5,267 had defects. First visits to dentists numbered 8,357 and repeat visits 9,079.

The cost of medical and dental services for the year ended June, 1946, was £10,232.

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.

Subsequent 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 1946 the examinations showed that 34 per cent. had dental defects, 2.7 per cent. had some pathological condition of the nasopharynx, 7.2 per cent. had eye defects, 3.7 per cent. had ear defects, 11 per cent. showed some evidence of mirror chest deformity, and 1.4 per cent. were 10 per cent. or more underweight for their height and age.

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

1. **General.**—The number of infantile deaths and the rate of infantile mortality for the last five years are given in the following table, which shows that during the period 1942 to 1946 no less than 25,391 children died in Australia (excluding Territories, before reaching their first birthday. Further information regarding infantile mortality will be found in Chapter XVII. "Vital Statistics":—

#### INFANTILE DEATHS AND DEATH RATES.

| State.                             | Metropolitan. |       |       |       |       | Remainder of State. |       |       |       |       |
|------------------------------------|---------------|-------|-------|-------|-------|---------------------|-------|-------|-------|-------|
|                                    | 1942.         | 1943. | 1944. | 1945. | 1946. | 1942.               | 1943. | 1944. | 1945. | 1946. |
| <b>NUMBER OF INFANTILE DEATHS.</b> |               |       |       |       |       |                     |       |       |       |       |
| New South Wales                    | 877           | 860   | 749   | 813   | 786   | 1,239               | 1,212 | 1,080 | 1,076 | 1,246 |
| Victoria ..                        | 888           | 809   | 705   | 637   | 730   | 609                 | 590   | 553   | 518   | 538   |
| Queensland ..                      | 234           | 291   | 258   | 270   | 251   | 502                 | 587   | 510   | 525   | 540   |
| South Australia ..                 | 245           | 259   | 211   | 224   | 256   | 203                 | 223   | 176   | 170   | 172   |
| Western Australia ..               | 184           | 170   | 173   | 146   | 160   | 181                 | 172   | 181   | 169   | 216   |
| Tasmania ..                        | 60            | 74    | 57    | 28    | 58    | 165                 | 153   | 142   | 131   | 149   |
| Australia(a) ..                    | 2,488         | 2,463 | 2,153 | 2,118 | 2,241 | 2,899               | 2,937 | 2,642 | 2,589 | 2,861 |

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

|                      |       |       |       |       |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| New South Wales      | 37.73 | 31.86 | 26.45 | 27.56 | 24.74 | 42.10 | 40.03 | 34.51 | 33.46 | 35.12 |
| Victoria ..          | 43.93 | 35.03 | 31.00 | 26.87 | 27.07 | 38.76 | 36.83 | 33.29 | 29.61 | 27.27 |
| Queensland ..        | 37.49 | 37.46 | 30.18 | 28.18 | 25.65 | 33.57 | 37.95 | 31.93 | 30.65 | 31.33 |
| South Australia ..   | 39.48 | 34.67 | 28.53 | 28.11 | 27.89 | 40.02 | 39.30 | 29.76 | 28.03 | 25.93 |
| Western Australia .. | 37.51 | 29.66 | 29.27 | 25.16 | 25.01 | 36.24 | 36.22 | 36.49 | 34.72 | 37.84 |
| Tasmania ..          | 42.37 | 47.13 | 39.31 | 17.85 | 29.59 | 42.43 | 37.99 | 37.87 | 31.07 | 30.49 |
| Australia(a) ..      | 39.98 | 33.91 | 28.95 | 27.11 | 26.04 | 39.17 | 38.54 | 33.65 | 31.60 | 31.90 |

(a) Excludes Territories.

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

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 VIII. "Public Benevolence," etc.). Under the provisions of the Maternity Allowances Part V. of the Social Services Consolidation Act 1947, 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 VIII. "Public Benevolence, etc."

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, 1946.**

| Heading.                                                  | N.S.W.     | Victoria.<br>(a) | Qld.<br>(a) | S. Aust.   | W. Aust.<br>(a) | Tas.      | A.C.T.    | Total.       |
|-----------------------------------------------------------|------------|------------------|-------------|------------|-----------------|-----------|-----------|--------------|
| <b>Baby Health Centres—</b>                               |            |                  |             |            |                 |           |           |              |
| Metropolitan .. No.                                       | 69         | 106              | 39          | 59         | 15              | 15        | ..        | 303          |
| Urban-Provincial<br>and Rural .. No.                      | 188        | 210              | 133         | 114        | 16              | 41        | 12        | 714          |
| <b>Total .. No.</b>                                       | <b>257</b> | <b>316</b>       | <b>172</b>  | <b>173</b> | <b>31</b>       | <b>56</b> | <b>12</b> | <b>1,017</b> |
| <b>Attendances at Centres</b><br>No.                      | 1,176,854  | 833,248          | 352,726     | 220,300    | 120,383         | 101,252   | 11,823    | 2,816,586    |
| <b>Visits paid by Nurses</b><br>No.                       | 28,993     | 82,460           | 20,246      | 30,869     | 14,072          | 33,092    | 3,128     | 212,860      |
| <b>Bush Nursing Associations</b><br>—Number of Centres .. | 30         | 75               | 11          | 30         | 2               | 22        | ..        | 170          |

(a) Year ended 30th June, 1946.

The number of attendances at the Baby Health Centres has increased very considerably in recent years. The following are the figures for the years 1939 to 1945 :— 1939, 1,869,770 ; 1940, 2,035,299 ; 1941, 2,128,961 ; 1942, 2,240,294 ; 1943, 2,327,279 ; 1944, 2,677,030 ; and 1945, 2,927,764.