

CHAPTER 14

PUBLIC HEALTH

This chapter is concerned with the activities of the Australian Department of Health, including quarantine, national health benefits, and Federal grants for health purposes; activities of the State health departments; statistics of hospitals and nursing homes, hansenide hospitals, and mental health institutions; statistics of notifiable diseases; and cremations. Statistics relating to causes of death are presented in Chapter 8, Vital Statistics (Pages 197–202).

Further information about the administration of public health services is contained in the annual reports of the Director-General of Health; the annual reports of the State health authorities; and in the Year Books and annual bulletins published by the State offices of the Australian Bureau of Statistics. For more detailed statistics of in-patient institutions, see the Bureau's annual bulletin *Hospitals and Nursing Homes* (Reference No. 16.1).

NATIONAL HEALTH SERVICES

Prior to an amendment to the Constitution in 1946 the only health function of the Australian Department of Health was in relation to quarantine. Consequent upon this amendment the Australian Government was given powers to make laws in respect to pharmaceutical, hospital and sickness benefits and medical and dental services. The responsibility for hospital and medical benefits was transferred to the Department of Social Security in 1972. In the same year the Department of Tourism and Recreation was established to administer Australian Government activities and encourage development in these fields. Amongst these activities, administration of the National Fitness Trust Fund had previously been the responsibility of the Department of Health. The Australian Government also has used its powers under section 96 of the Constitution to make grants to the States for health purposes. In addition the Australian Government gives financial assistance to certain organisations concerned with public health matters. A number of Australian Government health organisations have been established; detailed information on the functions and operations of these organisations is given in this and previous Year Books and in the annual reports of the Australian Director-General of Health.

Quarantine

The *Quarantine Act* 1908–1973 is administered by the Australian Department of Health and has three sections of disease control, as follows: (i) human quarantine; (ii) animal quarantine; and (iii) plant quarantine.

In respect of interstate movements of animals and plants, the Act becomes operative only if the Governor-General considers that Australian Government 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.

Human quarantine

With a few exceptions, which concern persons who have spent at least 14 days in areas adjacent to Australia (e.g. New Zealand, Papua New Guinea, Fiji and Lord Howe Island) all passengers and crews arriving in Australia from overseas, whether by air or sea, are subject to medical inspection for the purpose of preventing the introduction of disease into Australia. At the major ports full-time quarantine officers carry out the work, but in the minor ports local doctors act as part-time quarantine officers. Quarantine activities are controlled by the Directors of Health in each State who are senior medical officers of the Australian Department of Health.

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

Valid International Certificates of Vaccination are required of travellers to Australia as follows:

Smallpox. All arrivals from all countries except American Samoa, Antarctic Territories, Canada, Christmas (Indian Ocean), Cocos (Keeling) and Cook Islands, Fiji, French Polynesia, Gilbert and Ellice Islands Colony (including Ocean and Fanning Islands), Lord Howe Island, Nauru, New Caledonia, New Hebrides, New Zealand, Niue and Norfolk Islands, Papua New Guinea, Solomon and Tokelau Islands, Tonga, United States of America, Western Samoa, provided travellers have not been outside these areas for at least fourteen days before arrival and that these areas are free from smallpox. Australia reserves the right, in respect of arrivals from other countries, to isolate any person who arrives by air without a smallpox vaccination certificate and refuses to be vaccinated. Children under one year of age are exempt. For passengers arriving in Australia by sea, exemption is granted to infants under twelve months of age and to persons who hold religious convictions against vaccination or who are suffering from a medical condition certified by a medical practitioner to contra-indicate smallpox vaccination.

Cholera. All arrivals from countries with locally infected areas. No certificate is required in respect of children under one year of age.

Yellow fever. All arrivals from yellow fever endemic zones.

All passengers, whether they arrive by sea or air, are required to give their intended place of residence in Australia, so that they may be traced if a case of disease occurs among the passengers on the aircraft or ship by which they travelled to Australia.

Isolation. Under the Quarantine Act, airline and shipping operators are responsible for the expenses of isolation of all travellers who disembark either (i) having been in a country with locally infected areas, within 5 days of arrival and not possessing a cholera vaccination certificate; or (ii) having been in an endemic zone within 6 days of arrival and not possessing a yellow fever vaccination certificate; or (iii) having arrived by air without a smallpox vaccination certificate and refusing to be vaccinated on arrival.

The numbers of cases of infectious (non-quarantinable) diseases which were discovered among the passengers and crew of overseas vessels and aircraft calling at Australian ports are shown in the following tables.

**HUMAN QUARANTINE: CASES OF INFECTIOUS
(NON-QUARANTINABLE) DISEASES ON OVERSEAS
VESSELS AND AIRCRAFT CALLING AT
AUSTRALIAN PORTS 1972-73**

<i>Disease</i>	<i>Total number of cases of infectious disease</i>
Chicken pox	36
Dysentery	2
Gastro-enteritis	45
Glandular fever	2
Infectious dermatitis	5
Infectious hepatitis	4
Influenza	13
Leprosy	15
Measles	53
Meningitis	5
Mumps	16
Rubella	2
Salmonella infection	4
Tuberculosis	1
Venereal disease	308
Total	511

**HUMAN QUARANTINE: OVERSEAS VESSELS AND AIRCRAFT ARRIVING
IN AUSTRALIA AND CASES OF INFECTIOUS (NON-QUARANTINABLE)
DISEASES FOUND**

Year	Number of Overseas vessels and aircraft cleared		Number of cases of infectious disease
	Ships	Aircraft	
1969-70	5,297	6,887	840
1970-71	6,233	8,127	562
1971-72	5,872	7,895	477
1972-73	5,975	11,879	511

The provisions of the State Health Acts with regard to the compulsory notification of infectious diseases and statistics of cases notified in the years 1969 to 1973 are dealt with on pages 469-70 of this chapter.

Animal quarantine

Animal quarantine, authorised by the provisions of the *Quarantine Act* 1908-1973, aims at preventing the introduction or spread of animal diseases. It covers the importation of all animals, raw animal products and biological cultures associated with animal diseases, and goods associated with animals.

Of the domesticated animals, only horses, dogs and cats, are admitted from a limited number of countries outside Australasia depending on diseases being absent in the country of origin. Cattle, sheep, goats and pigs may be imported only from New Zealand. All must be accompanied by health certificates which may include prescribed tests. Dogs and cats, except those from New Zealand, are subject to quarantine detention on arrival in Australia. 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 similar manner, animals for scientific purposes are imported to approved laboratories. All these premises are kept under constant surveillance. Bovine semen may be imported only from the United Kingdom, Ireland, Canada and New Zealand. Raw animal products such as hair, types of wool, skins, and hides are specially treated under quarantine control. Such items as raw meat, which cannot be sterilised, are admitted only from New Zealand. Other items may be treated to destroy any possible infection. Special attention is given to the importation of biological substances of animal origin. The Animal Quarantine Service is also responsible for the health certification of animals for export overseas in accordance with the requirements of the various countries.

The Division of Animal Quarantine was created in 1926. The central administration is situated within the Health Department in Canberra, with an Assistant Director-General and veterinary officers. The Principal Veterinary Officer of the Department of Agriculture in each State is appointed Chief Quarantine Officer (Animals) of that State, and members of his staff Quarantine Officers (Animals). These State officers carry out the quarantine policy formulated by the central administration. Quarantine accommodation is provided in permanent animal quarantine stations at each State capital.

The Division participates in world-wide international notifications of the more serious contagious diseases of animals and maintains a register 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. In matters of policy and the quarantine control of imports there is a close liaison with the Department of Customs and Excise.

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

Plant quarantine

Australia is free of many of the pests and diseases of agriculture which occur in other parts of the world. Since 1 July 1909 the importation into Australia of plant materials has been subject to an increasingly stringent quarantine; some materials are admitted only under certain conditions while others are prohibited altogether. The quarantines are designed to keep out of the country any additional pests and diseases which, while not a danger in their natural habitat, may thrive in the Australian environment and, if introduced, bring about serious economic losses to Australian agriculture.

The quarantine of plants and plant material entering Australia is the responsibility of the Australian Government; the State Governments provide co-operation in the operation of the plant quarantine service. The movement of specified fruits and other plant materials within Australia is the responsibility of the State Governments.

The Australian Government regulations governing plant quarantine apply to all plants or parts of plants, whether living or dead, and include seeds and fruits as well as timber, soil, living insects, cultures of organisms, containers, machinery, vehicles, furniture, packing materials and some foods, toys, sporting goods or tools of trade. All such goods must be declared whether they are imported as commercial consignments or as personal effects, curios, souvenirs and unprocessed food carried in luggage or on the persons of tourists, immigrants or other travellers. Heavy penalties are laid down for evasion of the regulations.

Quarantine inspectors are required to examine all plant material at the first port of entry and to release only material which is not considered to be a danger to agriculture or for which prior approval to import has been obtained. Any material found to be carrying diseases or pests, or suspected of doing so, may be ordered into quarantine for remedial treatment, the cost of which is met by the importer. All bamboo, cane and rattan articles are automatically fumigated. Destruction may be ordered where treatment or return to sender is impracticable, or no prior approval has been obtained, or the goods are prohibited imports.

Certain material, such as nursery stock and some seeds, may be imported only with special permission, and then in small quantities sufficient merely to establish a variety or strain. Arrangements must be made for this material to be grown in post-entry quarantine in Australia at a nursery registered by the Australian authorities. Application to import goods of this nature must be lodged in advance with the Chief Quarantine Officer (Plants) of the State Department of Agriculture in the capital city of the State of destination or with the Director of Quarantine in Canberra. Other restricted seeds or materials of plant origin for use as human or animal food or for manufacturing purposes, may have to be processed under quarantine supervision, and imports of this description also require prior approval.

Strict supervision by way of inspection and treatment, where necessary, is exercised over the timber components as well as the contents of cargo containers and unit cargoes. Packing materials of straw, raw cotton, rice hulls or rice straw are prohibited imports which will be destroyed at the port of entry. Cases or cartons which have previously contained fruit or plant materials are prohibited imports, while dunnage and scantlings used in containers or cargo holds are subject to quarantine. All timber, including logs or sawn timber, is carefully inspected to ensure that it does not contain insects which could spread to forests or timber constructions.

Facilities for quarantine treatments and inspections including the propagation of plants and seeds are available in each State, the Northern Territory and in the Australian Capital Territory where a plant quarantine research station has been established to undertake research into plant quarantine techniques and special treatments not usually investigated by established research groups within Australia or overseas. The Plant Quarantine Research Station in Canberra is equipped to undertake studies in the disciplines of plant pathology, entomology, nematology and virology as well as providing assessment and development of quarantine equipment and treatments.

Additional information concerning Australian plant quarantine regulations, treatments and lists of prohibitions and restrictions, may be obtained from Australian consular offices abroad, the Director of Plant Quarantine with the Australian Department of Health in Canberra or from the Chief Quarantine Officer (Plants) with the respective State Departments of Agriculture in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart.

Personal health services and subsidies

National Health Benefits

For details of Hospital and Medical and other related benefits administered by the Department of Social Security *see* Chapter 13, Social Security and Welfare Services.

Milk for school children scheme

Under the *States Grants (Milk for School Children) Act 1950* the Australian Government has reimbursed the States for the cost of one third of a pint of milk supplied free to children under the age of thirteen years attending primary and other schools. At the end of 1972 approximately 1,913,000 children were entitled to receive free milk. The scheme was discontinued as from the 1974 school year. Australian Government expenditure under the scheme during the past five years was as follows.

**AUSTRALIAN GOVERNMENT EXPENDITURE ON MILK FOR SCHOOL CHILDREN
SCHEME
(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1968-69	3,380	2,641	1,549	1,065	800	431	110	109	10,085
1969-70	3,458	2,650	1,570	910	800	476	95	124	10,083
1970-71	3,497	2,350	1,697	895	838	682	115	126	10,199
1971-72	3,662	3,501	1,869	1,065	1,001	516	127	153	11,894
1972-73	4,010	3,000	1,990	1,013	1,090	394	139	145	11,781

The figures in the foregoing table represent amounts reimbursed to the States in each financial year for cash benefits to persons and other related expenditure and are not the actual State expenditures in that year.

Pharmaceutical benefits

All persons receiving treatment from a medical practitioner registered in Australia are eligible for benefits on a comprehensive range of drugs and medicines when supplied by an approved pharmacist upon presentation of a prescription, or by an approved hospital to patients receiving treatment at the hospital. Special arrangements exist to cover prescriptions dispensed at locations outside the normal conditions of supply, e.g. in remote areas.

Patients, other than eligible pensioners and their dependants and those covered by provisions relating to the Subsidised Health Benefit Plan (*see* page 438), pay a contribution of \$1.00 for each benefit prescribed. Total cost of prescriptions for eligible pensioners and their dependants is met in full by the Australian Government. Patients qualifying under the Subsidised Health Benefit Plan contribute 50 cents for each benefit prescription supplied. Prior to November 1971 all patients other than eligible pensioners and their dependants paid 50 cents for each benefit prescription supplied.

Total Australian Government expenditure on pharmaceutical benefits in the year 1972-73 was \$177,632,588.

The following table sets out the number of prescriptions and expenditure on the more frequently prescribed therapeutic preparations under the Pharmaceutical Benefits Scheme for 1971-72 and 1972-73. The expenditure for both years includes patient contributions, which totalled \$48,640,243 in 1972-73. Prescriptions issued free to pensioners are included, and these amounted to \$58,139,459 in 1972-73. Benefits dispensed by hospitals and those covered by special arrangements are not included, these amounted to \$32,061,691 in 1972-73.

**PRESCRIPTIONS DISPENSED UNDER THE PHARMACEUTICAL BENEFITS SCHEME(a)
1972 AND 1973**

Drug group	Year ended 30 June			
	1972		1973	
	Prescriptions	Expenditure	Prescriptions	Expenditure
	000's	\$'000	000's	\$'000
Analgesics	6,646	14,934	6,965	16,618
Anovulants (b) . . . . .	..	..	900	1,438
Antacids	2,550	3,948	2,389	3,947
Anti-cholinergics	1,213	4,147	1,199	4,257
Anti-convulsants	453	1,876	445	1,927
Anti-depressants	2,315	7,228	2,759	6,941
Anti-diabetics	740	3,408	714	3,670
Anti-histamines	4,517	8,580	4,255	8,625
Blood vessels-Drugs acting on	3,754	14,814	3,749	15,609
Broad spectrum antibiotics	6,803	20,721	6,907	21,749
Bronchial spasm preparations	2,414	8,053	2,633	9,844
Corticosteroids	774	3,308	765	2,775
Diuretics	3,737	13,138	4,113	14,858
Expectorants and cough suppressants	1,294	1,119	475	464
Eye drops	1,418	2,424	1,413	2,583
Gastro-intestinal sedatives	789	1,484	733	1,524
Genito-urinary infections-Drugs acting on	1,330	4,676	1,378	4,357
Heart-Drugs acting on	1,481	3,533	1,541	4,884
Iron preparations	1,418	1,676	1,226	1,581
Parkinsons-Drugs used for	376	1,554	376	1,761
Penicillins	5,210	14,534	5,522	16,077
Sedatives and hypnotics	5,107	5,867	4,678	5,515
Sera vaccines	681	971	897	1,324
Sulphonamides	927	1,852	1,230	3,124
Tranquillisers	2,023	7,028	3,569	9,911
Water and electrolyte replacement	1,690	3,208	1,877	3,902
Other drug groups	12,782	23,453	11,969	24,246
Total	72,442	177,534	74,676	193,508

(a) Excludes benefits dispensed by hospitals and those covered by special arrangements. (b) Anovulants were included as Pharmaceutical Benefits in February 1973.

Anti-tuberculosis campaign

Under an arrangement with the Australian Government, each State conducts a campaign against tuberculosis. The Australian Government reimburses the State for all approved capital expenditure in relation to tuberculosis, and for net maintenance expenditure to the extent that it exceeds maintenance expenditure for the year 1947-48. Thus the States carry out the physical or field work of the national campaign and the Australian Government acts in an advisory, co-ordinating, and financial capacity. The National Tuberculosis Advisory Council has been set up to advise the Minister with respect to the running of the campaign. There are twelve members, the chairman being the Director-General of the Australian Department of Health.

To reduce the spread of infection the Australian Government pays allowances to persons suffering from infectious tuberculosis, so that they may give up work and undergo treatment. These allowances have been in operation since 13 July 1950 and the current rates payable with effect from 4 April 1974 are shown in the following table.

RATES OF TUBERCULOSIS ALLOWANCE: AUSTRALIA, 1974 (\$)

Classification	Weekly allowance
Sufferer with dependant spouse	24.50
Dependant spouse of sufferer	24.50
Sufferer without spouse but with a dependant child	30.00
Sufferer without dependants	(a)29.25

(a) Reduced to \$26.00 where treatment is received free of charge in an institution.

In addition to the above rates there may be payable a mother's or guardian's allowance of up to \$6.00 a week or supplementary assistance of up to \$4.00 a week. An allowance of \$5.00 a week is payable in respect of each dependent child of a sufferer.

There is a means test on income but not on property. The allowance is reduced by half the amount by which a person's income from sources other than his allowance exceeds, in the case of a married person \$17.25 a week and in the case of a person who is without a spouse or dependent \$20.00 a week.

Australian Government expenditure. Expenditure by the Australian Government on its anti-tuberculosis campaign is set out in the following tables.

**AUSTRALIAN GOVERNMENT EXPENDITURE ON ANTI-TUBERCULOSIS
CAMPAIGN 1972-73**
(\$'000)

State or Territory	Cash benefits to persons(a)	Grants to States		Final consumption expenditure	Total(c)
		Current(b)	Capital		
New South Wales	225	3,498	50	..	3,773
Victoria	198	3,197	16	..	3,411
Queensland	157	1,896	27	..	2,080
South Australia	116	760	243	..	1,119
Western Australia	46	778	20	..	844
Tasmania	38	289	32	..	359
Northern Territory	..	..	..	373	373
Australian Capital Territory	..	..	..	64	64
Australia	780	10,418	388	437	12,023

(a) Allowances to sufferers. (b) Tuberculosis campaign. (c) Includes administrative costs.

**AUSTRALIAN GOVERNMENT EXPENDITURE ON ANTI-TUBERCULOSIS
CAMPAIGN**
(\$'000)

Year	Cash benefits to persons(a)	Grants to States		Final consumption expenditure	Total(c)
		Current(b)	Capital		
1968-69	921	11,460	847	..	13,511
1969-70	771	10,554	593	..	12,246
1970-71	659	10,597	469	..	12,067
1971-72	630	9,595	438	1	10,664
1972-73	780	10,418	388	437	12,023

(a) Allowances to sufferers. (b) Tuberculosis campaign. (c) Includes administrative costs.

Mass immunisation campaigns

Poliomyelitis. An anti-poliomyelitis campaign, using Salk vaccine, was commenced in 1956. This campaign continued until 1967 when, following a recommendation by the National Health and Medical Research Council, a campaign using Sabin vaccine was commenced in all States, the Northern Territory and the Australian Capital Territory. The Sabin vaccine is taken orally and a course of treatment consists of three doses. These are given at intervals of eight weeks. In the five years prior to 1972 seven new cases of poliomyelitis were notified, one of them being in 1971. During 1972 seven new cases were notified, three from Victoria and four from Western Australia. No cases were notified in 1973.

Measles. As a result of a recommendation by the National Health and Medical Research Council in May 1969, campaigns against measles commenced in early 1970 and during 1972 were in operation in all States, the Australian Capital Territory and the Northern Territory. The vaccine being used is derived from the Schwarz virus strain which is a live attenuated virus. It is administered by intramuscular injection to children in their second year of life. A course of treatment consists of one dose. A total of 179,220 doses was distributed through the Commonwealth Serum Laboratories during 1973.

Rubella. In 1969, the National Health and Medical Research Council recommended that the Cendehill rubella vaccine be used in anti-rubella (German measles) campaigns in Australia. Consequently, the Australian Government agreed to make this vaccine available to the States on the same basis as poliomyelitis and measles vaccines. By December 1970 all States had indicated that they would accept this offer. Immunisation campaigns have been conducted in all States, the Northern Territory and the Australian Capital Territory since 1971 amongst girls in the twelve to fourteen years age group. The vaccine is available from health departments and, through them, from private practitioners to other women at risk. A course of treatment with rubella vaccine, given intra-muscularly, is one dose.

Community health services and subsidies

The Australian Government, through the Department of Health, introduced two programs in 1973-74 aimed at developing and maintaining community-based health services. These programs form part of the Government's policy to promote the regionalisation and modernisation of hospitals, linked with the development of community-based health services and preventive health programs.

The *Hospitals and Health Services Commission* has the responsibility of submitting recommendations to the Minister for Health for allocation of both capital and operating funds to develop and maintain community-based general health care services, including prevention, treatment, rehabilitation and related welfare aspects of community health. The implementation of the approved programs is undertaken by the Department of Health in co-operation with State Governments. (For further details see page 459.)

Under the *Mental Health and Related Services Assistance Act* 1973, grants are made available to State Governments, local government authorities or voluntary agencies for the provision of "medical and other services or facilities for, or in relation to, the prevention or diagnosis of, or the treatment or rehabilitation of persons suffering from mental illness, mental disability, alcoholism or drug dependence".

The *Home Nursing Subsidy Scheme*, which is a continuing service at the community level provides for a Federal subsidy to assist in the expansion of home nursing activities. Organisations eligible for the subsidy are those which are non-profit making, employ registered nurses, and receive assistance from a State Government, local government body or other authority established by or under State legislation. During 1972-73 subsidies totalling \$2,502,116 were paid to 133 organisations providing home nursing services in the States. Home nursing services in the Northern Territory and the Australian Capital Territory are provided by the Australian Department of Health.

National health services organisations

The *Australian Department of Health Pathology Laboratory Service* was originally established under provisions of the *National Health Act* 1953-1973. The laboratories provide diagnostic and investigational facilities at sixteen locations, principally in country areas, throughout Australia. Laboratories are situated in Albury, Alice Springs, Bendigo, Cairns, Canberra, Darwin, Gove, Hobart, Kalgoorlie, Launceston, Lismore, Port Pirie, Rockhampton, Tamworth, Toowoomba and Townsville. Their primary role is to assist medical practitioners in the diagnosis of illness and disease and to provide facilities for investigations into public health and aspects of preventive medicine. During 1972-73, the laboratories carried out approximately 3.7 million pathology tests and investigations in respect of 1.1 million patient requests.

The *Commonwealth Serum Laboratories (CSL)* are controlled by the Commonwealth Serum Laboratories Commission, a corporate body established under the *Commonwealth Serum Laboratories Act* 1961-70. CSL is Australia's leading centre for the production and supply of biological products for human and veterinary use and one of Australia's foremost scientific institutes.

Its main functions are to produce and sell prescribed biological products used for therapeutic purposes and to ensure the supply of prescribed essential biological products in accordance with national health needs. The functions include research and development relating to the range of products in its charter and allied fields and the maintenance of potential production capacity for use in emergencies. Located at Parkville, Melbourne, CSL's research laboratories and manufacturing and storage buildings now cover most of the 27-acre site of Crown Land granted in 1918.

For several decades, CSL has been Australia's chief supplier of biological medicines, insulins, vaccines, penicillins, human blood fractions, BCG and an ever-increasing range of veterinary biological products needed by Australia's sheep, cattle, pig and poultry industries.

In addition, biological research into many kinds of human and veterinary disease is carried out, covering the fields of bacteriology, biochemistry, immunology and virology.

The Laboratories employ more than 1,000 people, including medical officers, veterinarians, bacteriologists, biochemists, physicists, engineers, accountants, laboratory assistants and skilled tradesmen.

The Australian Radiation Laboratory was originally established in 1929 as the Commonwealth Radium Laboratory, and has served from that time as the Australian centre for radiological physics and as custodian of all Australian-owned radium used for medical purposes. The laboratory's functions have expanded over the years to include the physical aspects of the use of X-rays and of other ionising radiations for medical diagnosis and treatment; the distribution of all radiopharmaceuticals used in Australia for medical purposes; the maintenance of facilities for radio-chemical investigation; the assay of radioactive substances in the Australian environment; and the maintenance of a whole-body monitor. National standards for the measurement of X-rays and of radionuclides are also maintained. The laboratory provides assistance in matters relating to protection against ionising radiations and operates a film-badge service to monitor the radiation exposure of those who work with such radiation. The laboratory also provides advice on the hazards associated with the use of microwave and laser radiations. In 1972-73 there were 13,558 deliveries of radiopharmaceuticals, comprising 25 different isotopes, procured for use in medicine and medical research. Of these 12,058 deliveries were obtained from the Australian Atomic Energy Commission. Free issues for medical diagnosis and therapy, supplied for patients throughout Australia, were 497,524, the cost of \$1,326,240 being met from the National Welfare Fund. Film badges, numbering 79,550 were processed, assessed, and reported on. The Laboratory also supplied radon to approved hospitals and private practitioners in Australia and New Zealand. In 1972-73, 23,127 millicuries of radon were issued. Administrative costs for 1972-73 were \$450,377 and \$67,375 was expended on plant and equipment.

The *National Acoustic Laboratories* undertake scientific investigations into hearing and problems associated with noise as it affects individuals. The Laboratories' functions also include research into medical applications of ultrasound and advice to the Armed Forces and Australian Government Departments and instrumentalities on hearing conservation and the reduction of noise. Audiological services are provided in major centres throughout Australia to assist children, ex-servicemen and pensioners with hearing problems. Hearing aids are supplied and serviced free of charge to persons under 21 years, and to pensioners and their dependants. Hearing aids are also provided and maintained on behalf of the Repatriation and other Australian Government Departments. During 1972-73 the number of new cases examined at the laboratories was 30,067 including 13,036 children, 4,983 repatriation cases, 728 members of the defence forces, 9,119 pensioners and 616 civil aviation referrals; 16,036 calaid hearing aids were fitted and 82,593 were on loan at the end of the year. The cost of supply and maintenance of hearing aids to persons under 21 years and pensioners was \$543,157. Administrative costs of the laboratories were \$1,548,273 and expenditure on plant and equipment \$194,032.

Australian Government health advisory organisations

The National Health and Medical Research Council advises the Australian Government and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public, and on medical research. It also advises the Australian Government and State Governments on the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition. The Council advises the Australian Minister for Health on the application of expenditure from the Medical Research Endowment Fund which provides assistance to Australian Government Departments or to a State Department engaged in medical research; to universities for the purpose of medical research; to institutions and persons engaged in medical research and in the training of persons in medical research. The Australian Government makes a triennial appropriation for the Fund, that for 1973 to 1975 being \$15,400,000. The secretariat for the Council and its Committees is provided by the Australian Department of Health and is located in Canberra.

The School of Public Health and Tropical Medicine, located at the University of Sydney, provides training in public health, tropical medicine and occupational health for medical graduates and certain undergraduates, in addition to carrying out research and consultative activities in these and allied fields. During 1973, twelve diplomas were awarded in Public Health and seven in Tropical Medicine and Hygiene. A diploma in Occupational Health was offered for the first time in 1974. Costs met by the Australian Government during 1972-73 were \$820,782 for administration and \$17,472 for plant and equipment.

The Institute of Child Health is associated with the School of Public Health and Tropical Medicine at the University of Sydney and with the Royal Alexandra Hospital for Children at Camperdown. Its activities include research into medical and social problems of childhood, undergraduate and

postgraduate teaching at the University of Sydney, collaboration with other national and international organisations concerned with child health and disease, and the training of United Nations and Colombo Plan Fellows. Costs of the Institute paid by the Australian Government during 1972-73 were \$187,598 for administration and \$70,303 for plant and equipment.

The Australian Dental Standards Laboratory, formerly the Commonwealth Bureau of Dental Standards, operates under Section 9 of the *National Health Act 1953-1974*. It is a part of the Australian Department of Health and is concerned with research and testing related to dental and allied materials, instruments, equipment and processes. It assists in the preparation of standards for materials, instruments and equipment by providing technical data for standards prepared in co-operation with the Standards Association of Australia. It provides Chairmen for the Dental Standards Committees. It co-operates with the Australian Dental Association in its program of accreditation of dental products. Its functions include instruction to the dental profession and its auxiliaries on the handling of dental materials and the provision of a consultative service and testing facilities for the armed services, public instrumentalities, the dental profession and manufacturers and distributors of dental products.

Regular surveys are made of the quality of dental products and the results are made available to the profession. It participates in the preparation of international standards for dental materials. The number of products tested during 1972-73 was 488. These included assessment of deterioration of dental products under tropical conditions. Expenditure on plant and equipment for 1972-73 was \$17,800 and administrative expenses, including salaries, were \$77,690.

The National Biological Standards Laboratory is responsible for the development of standards for therapeutic goods for human and veterinary use, and for testing such products for compliance with standards thereby ensuring that they are safe, pure, potent and efficacious. Other responsibilities including the inspection of manufacturing premises and the evaluation of new and modified products make it the lynchpin of a uniform national system of control over therapeutic goods.

The Laboratory was established within the Australian Department of Health in 1958 under powers provided by the *Therapeutic Substances Act 1953-1959*. The *Therapeutic Goods Act 1966*, proclaimed on the 12 November 1970, which repealed the *Therapeutic Substances Act*, simplified the machinery for creating standards and extended the Australian Government's powers over medical devices, containers and packages for therapeutic goods.

The British Pharmacopoeia, the British Pharmaceutical Codex and the British Veterinary Codex are specified in the Act as primary standards. In addition, the Minister has powers to make orders setting standards for specific types of goods and general classes of goods which are imported, or the subject of interstate trade, or supplied to the Australian Government. Standards developed by the National Biological Standards Laboratory are submitted to a statutory committee, the Therapeutic Goods Standards Committee which advises the Minister on their suitability.

The Laboratory jointly with State officials and the pharmaceutical industry prepares and revises an Australian Code of Good Manufacturing Practice which is the criterion employed by inspectors for the licensing of pharmaceutical manufacturers.

The Laboratory has sections which deal with viral products, bacterial products, pharmaceutical products, antibiotics and pharmacology. Administrative costs for 1972-73 were \$934,462 and a further \$104,445 was expended on plant and equipment.

The Australian Drug Evaluation Committee operates under the *Therapeutic Goods Act 1966*, to advise the Minister for Health by: (a) making medical and scientific evaluations of such goods for therapeutic use as the Minister refers to it for evaluation; (b) making medical and scientific evaluations of other goods for therapeutic use if, in the opinion of the Committee, it is desirable that it should do so; and (c) furnishing such advice to the Minister as the Committee considers necessary relating to the importation into, and the distribution within, Australia of goods for therapeutic use that have been the subject of evaluations made by the Committee.

It has the power to co-opt and seek advice from specialist medical colleges and associations and from the medical and allied professions, drug manufacturers and other sources. The Committee's reports and resolutions resulted in amendments to the Customs (Prohibited Imports) Regulations which were implemented on 1 August 1970 to provide control on the importation of new drugs. The *Australian Registry of Adverse Reactions to Drugs* was established in August 1964 on the recommendation of the Australian Drug Evaluation Committee to provide an early warning system based on reports of reactions to drugs forwarded voluntarily by medical practitioners. To enable more detailed evaluations of reports and increase feedback activities to the medical profession, the *Adverse Drug Reaction Advisory Committee* was formed in May 1970 as a sub-committee of the Australian Drug Evaluation Committee. Three other sub-committees were also formed, the Vaccines and Sera Sub-committee, the Endocrinology Sub-committee and the Congenital

Abnormalities Sub-committee, to provide expertise and advise in their respective fields. During 1972-73, 157 applications for general marketing were received, an increase of 19 over the previous year. In addition 79 applications for clinical trials were submitted, an increase of 5 over the previous year.

The Therapeutic Goods Advisory Committee was established in 1974 to consider and advise the Minister for Health on any matters relating to standards applicable to goods for therapeutic use and the administration of the Therapeutic Goods Act.

The National Therapeutic Goods Committee comprises Federal and State representatives. Its function is to make recommendations to the Australian and State Governments on action necessary to bring about co-ordination of legislation and administrative controls on therapeutic goods. Sub-committees have been formed to consider specific matters notably Advertising, Registration and Code of Good Manufacturing Practice.

The Hospital and Allied Services Advisory Council was established by the 1970 Australian Health Ministers Conference to provide advice on the co-ordination of matters connected with hospital and allied services. This Council consists of representatives of each State health and hospital Department or Commission and the Australian Departments of Health and Social Security. The Repatriation Department has two representatives with observer status.

Four committees—Computer Committee, Construction Planning Committee, Research Committee and Uniform Costing Committee—were established to assist and advise the Council. A fifth committee, the Postgraduate Accreditation Committee was established following the 1973 Australian Health Ministers Conference.

The Hospitals and Health Services Commission was formally established on 10 April 1974 to ascertain health care needs and to make recommendations to the Australian Government concerning health care delivery systems, funds to be allocated for these systems, the education of health personnel, the accreditation of services and financial assistance to be made available to States, Territories, regions, local governments, charitable organisations and other persons. In addition the Commission is to promote and participate in planning in relation to health services. Prior to the formal establishment of the Commission under the *Hospitals and Health Services Commission Act 1973*, an Interim Committee on Hospitals and Health Services had been operating since early in 1973.

In the 1973-74 financial year the Government approved grants, under the Community Health Program, to the States totalling \$8,900,000 as recommended by the Interim Committee, and a further grant of \$1,100,000 was approved for the Royal Australian College of General Practitioners to establish a program to train increased numbers of general practitioners to undertake the role of the modern family doctor. In addition, a three-year program of planning and research for health services, totalling \$1,025,000 each year, is being implemented by the Commission. The Commission's Reports on Hospitals in Australia and a Medical Rehabilitation Program for Australia were tabled in the Australian Parliament in 1973-74.

Australian Government grants to States

Grants for mental health institutions

Since 1955 the Australian Government has been providing financial assistance to the States for the buildings and equipment of mental health institutions. The *States Grants (Mental Health Institutions) Act 1964-1970* provides for the reimbursement of one third of approved capital expenditure incurred by the States up to 30 June 1973. Details of these payments during recent years are given in the following table.

EXPENDITURE ON MENTAL HEALTH INSTITUTIONS BY THE AUSTRALIAN GOVERNMENT (\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
1968-69	1,925	1,200	323	433	375	399	4,655
1969-70	2,305	947	602	1,299	241	108	5,501
1970-71	1,414	798	464	909	395	219	4,199
1971-72	1,325	828	1,169	246	454	185	4,207
1972-73	873	831	967	453	219	87	3,430

NOTE: Ongoing assistance in the mental health field is being provided under the Community Mental Health Program.

Paramedical services

The *States Grants (Paramedical Services) Act 1969* provides for the Australian Government to share on a \$1 for \$1 basis with participating States the cost of approved paramedical services, such as chiropody, occupational therapy, physiotherapy and speech therapy, provided wholly or mainly for aged persons in their homes. Matching grant payments during 1972-73 amounted to \$76,964.

Australian Government grants to organisations associated with public health

In addition to providing the services mentioned on pages 449-59 the Australian Government gives financial assistance to certain organisations concerned with public health. Examples of organisations included in this category are given in the following text.

The Royal Flying Doctor Service is a non-profit organisation providing medical services in remote areas of Australia. It is distinct from, but co-ordinates with, the Aerial Medical Services operated by the Australian Department of Health from Darwin and Alice Springs in the Northern Territory. The Royal Flying Doctor Service is financed mostly from donations and government contributions. During the triennium ended 30 June 1974 the Australian Government contributed at the rate of \$485,000 per annum—\$170,000 capital assistance and \$315,000 towards operational costs. In addition, payments of \$131,596 have been made up to 30 June 1973 towards the cost of the changeover of twelve radio base stations to single side band operation. The Service made 3,886 flights during 1972-73, travelling 1,833,128 miles and transporting 5,561 patients. In the same period medical staff conducted a total of 97,737 consultations and dental treatment was given to 1,344 patients.

The Red Cross Blood Transfusion Service is conducted by the Australian Red Cross Society throughout Australia. Up to 30 June 1973 the operating costs of the service in the States have been met by the State Governments paying 60 per cent; the Australian Government, 30 per cent; and the Society, 10 per cent. In the Northern Territory and Australian Capital Territory the Australian Government has paid 90 per cent and the Society 10 per cent. Since 1 July 1973 the Australian Government contribution has been increased to 35 per cent in the States and 95 per cent in the Territories. Australian Government expenditure for each State and Territory during 1972-73 was as follows: New South Wales, \$267,389; Victoria, \$366,860; Queensland, \$211,823; South Australia, \$159,681; Western Australia, \$133,862; Tasmania, \$30,357; Northern Territory, \$60,500; and the Australian Capital Territory, \$31,100, making a total of \$1,261,572.

The National Heart Foundation of Australia is a private national organisation established to promote research in cardiovascular disease, to rehabilitate heart sufferers and to foster the dissemination of information about heart diseases. The foundation was formed in 1960 as a result of a public appeal yielding \$5 million to which the Australian Government contributed \$20,000. A further appeal in 1969 raised \$1.6 million and the Foundation now has an annual income from public donations of over \$800,000. Expenditure in 1973 came to \$1,117,000 of which almost half was devoted to supporting research into cardiovascular disease. This is the single most important function of the Foundation and from its inception to the end of 1973 it has allocated well over \$5 million for grants-in-aid towards research in university departments, hospitals and research institutes; research fellowships tenable in Australia and overseas; and overseas travel grants for study purposes.

The World Health Organisation (WHO), founded during 1948, is a specialised agency of the United Nations having as its objective the attainment by all peoples of the highest level of health. It functions as the directing and co-ordinating authority in international health work; provides consultative and technical assistance to governments and special groups; examines all aspects of health including preventive and curative medicine and research; sets international standards with respect to food, biological, pharmaceutical and similar products; and determines regulations for the control of quarantinable diseases. The organs of WHO are the World Health Assembly and the six Regional Committees which meet annually and the Executive Board which meets twice a year. Australia is assigned to the Western Pacific Region the headquarters of which is at Manila, and was represented at both the 26th World Health Assembly in Geneva in May 1973 and the Regional Committee Meeting in Wellington, New Zealand in August 1973. Australia's contribution to WHO for 1972-73 was \$A981,185.

The International Agency for Research on Cancer was established by the 18th World Health Assembly in 1965 within the framework of the World Health Organisation. The headquarters of the Agency are located in Lyon, France. The objectives and functions of the Agency are the provision for planning, promoting and developing research in all phases of the causation, treatment and prevention of cancer; collection and dissemination of information on epidemiology and cancer research throughout the world; education and training of personnel for cancer research; and the

encouragement of, and assistance at national level if necessary by the direct establishment of, research organisations. Participation in the Agency is subject to membership of the World Health Organisation and, at the determination of the Governing Council, the ability of the State to contribute effectively to the scientific and technical work of the Agency. Australia became a Participating State within a few months after the establishment of the Agency. At present there are 10 Participating States namely: Australia, Belgium, France, the Federal Republic of Germany, Italy, Japan, The Netherlands, The Union of Soviet Socialist Republics, the United Kingdom and the United States of America. Australia's contribution to the I.A.R.C. for 1972-73 was \$A147,733.

STATE GOVERNMENT ACTIVITIES

(Includes activities of the Australian Government in the Northern Territory and the Australian Capital Territory)

Public health legislation and administration

For a comprehensive account of the administration of health services in each State, the Northern Territory and the Australian Capital Territory, see the annual reports of the respective Departments of Health. For details of legislation and administrative changes in previous years see earlier issues of the Year Book. The following paragraphs refer briefly to recent developments.

In *New South Wales*, as part of the planning for complete regionalisation of hospital services, thirteen Regional Directors of Health have been or will be appointed to establish the system of regional health administration throughout the State. These Directors need substantial administrative resources to implement the system fully and at this stage three regions only are operating fully—Western Metropolitan, Hunter and Illawarra. There is a reasonable expectation that all regions will be fully operating by July 1974.

The Health Commission Act, 1972, was assented to on 23 November 1972 to constitute the Health Commission of New South Wales and to define its powers, authorities, duties and functions; to dissolve the Hospitals Commission of New South Wales and the Board of Health and to abolish the Department of Health; to amend the Public Health Act, 1902, the Public Hospitals Act, 1929, and certain other Acts. All the provisions of this Act had come into force by 1 August 1973.

The Clean Air (Amendment) Act, 1972, was introduced and empowers the Minister to prohibit, by order, burning in open fires of any matter except for certain purposes such as recreational, domestic and agricultural purposes. Also, the Clean Air (Further Amendment) Act, 1972, was introduced and prohibits the sale or use of motor vehicles that emit excessive air impurities, to enable regulations to be made requiring that motor vehicles be fitted with prescribed anti-pollution devices. Both these Acts amend the Clean Air Act of 1961.

The Nurses Registration Act, 1973, is an Act to enable annual practising fees to be made payable by different registered nurses and enrolled nursing aides at different times. This Act amends the Nurses Registration Act, 1953.

The Venereal Diseases (Amendment) Act, 1973, is an Act to make further provision for restricting the spread of venereal disease. This Act will amend the Venereal Diseases Act, 1918, and was assented to on 10 April 1973.

In *Victoria* the *Health (Fluoridation) Act* 1973 was introduced enabling water supply authorities in Victoria to add fluoride to public water supplies so as to bring the fluoride content to a desirable level from the dental health point of view.

The *Hospitals and Charities Act* 1958 was amended to overcome certain irregularities in legislation relating to a number of long established philanthropic societies. An additional amendment requires any institution or benevolent society to obtain prior approval of the Minister to any agreement, contract or arrangement made by the hospital society or institution regarding construction of buildings or extension when the finance is to come from Government funds whether State or Federal.

The *Poisons (Fees) Act* 1973 increased fees for the issue of various licences in respect of the manufacture, sale by wholesale and sale by retail of poisons and deleterious substances.

The *Melbourne Family Care Organization Act* 1973 authorized the Melbourne Family Care Organization to sell certain land granted to trustees of the Melbourne Orphan Asylum by the Crown on 12 January 1872.

The *Health (Special Accommodation Houses) Act* 1973 amended the *Health Act* 1958 by the introduction of a new division providing for the registration of special types of boarding houses in which are lodged or to be lodged persons aged 60 years or over.

A *Dental Technicians Act* 1972 has been introduced to control the training, registration and practice of dental technicians.

A general amendment of the Health Act was introduced to provide for better control of private hospitals but incorporating a number of necessary amendments relating to the control of dangerous substances, the supervision of tents and amusement structures used by the public; the supervision of food premises and the adoption from time to time of new issues of the British Pharmacopoeia.

An amendment of the *Medical Practitioners Act* 1970 provides for a compulsory twelve month period as an intern in a hospital for all persons registered by the Medical Board of Victoria after 1 October 1973.

A Joint Select Committee of the Parliament was established by special Act to inquire into and report upon the activities of Osteopaths, Chiropractors and Naturopaths and to make recommendations for future forms of control of these practices.

In *Queensland, The Medical Act Amendment Act* of 1973 was passed to enable medical practitioners who hold satisfactory qualifications gained in Canada to become eligible for registration in Queensland without further examination.

The Medical Act and Other Acts (Administration) Act Amendment Act of 1973 allowed the implementation of more efficient methods for collection of fees and accounting procedures in the composite office of the Registrar, Medical and Other Boards.

The Dental Act Amendment Act of 1973 clarified the varying functions of operative dental auxiliaries and the by-law making power in relation thereto, permitted trainee operative dental auxiliaries to perform duties prescribed under certain conditions and allowed the recognition of high honorary qualifications in dentistry.

The Health Act Amendment Act of 1973 amended existing legislation dealing with health hazards which may arise from the use of paint and the provisions which cover offences arising from the unauthorised possession of drugs.

In *South Australia* the Physiotherapists Act Amendment Bill amended the Physiotherapists Act 1945-1972 to enable the Board to grant licences to permit the practice of physiotherapy.

In *Western Australia* the *Dentists Act Amendment Act*, 1972 was assented to on 6 December 1972, making provision for the training and employment of Dental Therapists as well as establishing a committee to be known as the Dental Charges Committee with power to investigate fees or remuneration payable to a dentist for dental service.

The Noise Abatement Act, 1972 was also assented to on 6 December 1972, which allows for the appointment of a Noise and Vibration Council which, with the assistance of an Advisory Committee, may make regulations or model by-laws to initiate the means of preventing, abating or mitigating the nuisance arising from noise and vibration.

The Health Act Amendment Act, 1973 was assented to on 28 December 1973, giving the Governor power to make regulations for the control of patients confined in or released from a leprosarium and of persons wishing to visit such establishments. The amendment also provides for the establishment of a school dental service to provide dental care and treatment of pre-school and school children. The Commissioner of Public Health is also provided with the power to prohibit the sale, distribution or possession of any article or thing offered for sale as a child's toy which he considers unsafe or a danger to the health or life of any person.

In the *Northern Territory* the *Emergency Medical Operations Ordinance* 1973 allows (a) a medical practitioner to perform an operation, which includes the administration of an anaesthetic or a blood transfusion, without having the consent of the patient or the next-of-kin where the patient is in danger of dying or suffering permanent disability if the operation had to be delayed till the consent could be sought, (b) a medical practitioner to perform an operation on an infant if the parent or guardian fails to give consent and if in the opinion of that medical practitioner and at least one other medical practitioner that an operation is deemed to be necessary.

The Dentists Registration Ordinance Amendment 1973 makes provision for the registration and employment of dental therapists.

The Midwives Regulations under the Nurses Registration Ordinance allows for the setting up of schools to provide for the training of midwives.

Supervision and care of infant life

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

In all States, Acts have been passed with the object of supervising the conditions of infant life and reducing the rate of mortality. (Information about infant mortality will be found in Chapter 8, Vital Statistics.) Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons.

Under the provisions of the *Social Services Act 1947-1973* maternity allowances provide financial assistance towards the expenses associated with the birth of children. Information about maternity allowances is given in Chapter 13, Social Security and Welfare Services.

Nursing activities

Several State Governments maintain centres which provide advice and treatment for mothers and children and, in addition, subsidies are granted to various associations engaged in welfare work.

Infant welfare centres. The following table gives particulars of the activities of infant welfare centres for the year 1973. The figures relate to all centres, whether permanently staffed or on a temporary or part-time basis. Centres may be located at accommodation specially provided for this purpose, or may be conducted in temporary premises in halls, schools, etc.

INFANT WELFARE CENTRES, 1973

	N.S.W.	Vic.	Qld(a)	S.A.(a)	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Number of centres(b)	444	745	292	301	93	114	22	51	2,062
Attendances at centres—									
Pre-natal	21,847	n.a.	2,154	9,950	2,385	2,638	n.a.	..	n.a.
Post-natal—Number of children	1,213,820	1,505,761	560,405	296,182	254,545	146,399	36,169	81,808	4,095,089
Nurses' home-visits(c)	31,602	141,133	4,124	35,898	32,598	72,905	8,648	18,166	345,074
Nurses' hospital-visits(d)	65,229	19,698	31,535	n.a.	18,013	n.a.	2,091	(e)208	n.a.

(a) Year ended 30 June 1973. (b) At end of year. (c) Pre- and post-natal. (d) Post-natal. (e) Visits to hospitals, not to individual mothers.

Mobile units are used to service centres in some States. In 1973, the numbers of units and centres served, included in the above table, were as follows: Victoria, 4 and 14; Queensland, 5 and 42; South Australia, 3 and 34; Western Australia, 4 and 32. The number of centres for Tasmania includes 13 areas visited by sisters in cars. The number of centres for the Australian Capital Territory includes 2 areas covered by home visits.

Since 1930, the number of attendances at the infant welfare centres has increased more than four-fold. The numbers of attendances at ten year intervals since 1930 were as follows: 1930, 919,893; 1940, 2,035,299; 1950, 3,049,375; 1960, 3,482,383; and 1970, 4,010,906.

Bush Nursing Associations. Treatment for mothers and children is also provided by the Bush Nursing Associations. The numbers of centres maintained by the Associations in 1973 were: New South Wales, 11; Victoria, 58; Queensland, 5; South Australia, 39; and Western Australia, 12. In Tasmania, all of the district nursing centres have been taken over by the nearest public hospital and are no longer distinct entities.

Medical and dental inspection of school children

For details of the administration of school health services in each State, the Northern Territory, and the Australian Capital Territory, see Year Book No. 55, pages 458-61. Further information about the operation of the school medical and dental services is given in State Year Books. The following paragraphs summarise features common to most States.

Medical and dental inspection of school children is carried out in all States under the control of State health departments, and in the Northern Territory and the Australian Capital Territory under the control of the Australian Department of Health. The school health services are available to both government and non-government schools in metropolitan areas and larger country towns. In some States, special arrangements are made for children attending schools in more remote country areas.

The aim of the school medical services is to medically examine all children at least once during their school careers, usually on entry into primary school. Review examinations or, in some States, tests of vision and hearing by school nurses, are conducted in upper-primary and lower-secondary grades. Parents or guardians are notified of any departure from normal health and advised to seek further attention if necessary.

The aim of the school dental services is to examine and give regular dental treatment to children. Usually, acceptance for treatment is limited to children in primary schools. Some school children are treated at hospital dental clinics. Aboriginal missions and orphanages are also visited by school

dentists. The consent of a parent or guardian is necessary before treatment can be given. In some States, priority is given to children who live in areas beyond the easy reach of other dental services. Treatment in remote areas is facilitated by the use of travelling dental clinics.

The following table summarises school health services in the States and Territories. Uniform concepts and definitions have not been developed, so Australian totals have not been shown.

SCHOOL HEALTH SERVICES, 1973

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld(a)</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.(a)</i>	<i>A.C.T.</i>
School medical services—								
Staff(b)—								
Medical officers . . .	70	45	6	15	8	15	6	3
School nurses . . .	100	54	35	17	26	33	14	7
Medical examinations—								
Children examined . .	323,856	222,237	137,637	(c)80,489	34,404	(c)25,978	(d)19,174	21,787
Found with defects . .	26,372	15,474	(e)9,840	(c)11,687	7,666	4,879	2,697	1,796
School dental services—								
Number of dental clinics—								
Stationary . . .	14	3	..	27	28	32	n.a.	44
Mobile . . .	(f)19	11	(g)4		3	24	n.a.	1
Staff(b)—								
Dental officers . . .	31	28	25	28	26	20	n.a.	17
Dental assistants, therapists and nurses . .	49	34	3	56	43	53	n.a.	51
Dental examinations—								
Children examined . .	89,916	29,276	(h)31,239	34,200	63,251	51,832	20,985	22,203
Number treated . . .	23,208	24,783	(h)9,193	26,958	n.a.	n.a.	n.a.	22,002

(a) Year ended 30 June 1973. (b) Full-time and part-time. (c) Excludes some children tested for hearing and vision by school sisters. (d) Includes pre-school children. (e) Number of defects found. (f) There is also a dental team with the Royal Flying Doctor Service (based at Broken Hill). (g) In addition, portable dental equipment is possessed by 18 dental officers who function from departmental vehicles. (h) Only children who reside in more remote areas.

HOSPITALS, NOTIFIABLE DISEASES AND CREMATIONS

This section provides statistical information on hospitals and nursing homes; notifiable diseases; a survey of chronic illnesses and impairments; and cremations. The institutions referred to under this heading are classified into the following groups: public hospitals and nursing homes; private hospitals and nursing homes; repatriation hospitals; hansenide hospitals; and mental health institutions. Statistics of quarantine stations, and of hospitals maintained by the Armed Services, are not included.

Public hospitals and nursing homes

The statistics shown for public hospitals and nursing homes refer to the following institutions: *New South Wales*—all in-patient institutions under the authority of the New South Wales Hospitals Commission, and which receive a government subsidy during the year, and the six State hospitals and nursing homes under the control of the Department of Public Health; *Victoria*—all hospitals including hospitals for the aged subsidised by the Victorian Hospitals and Charities Commission, one tuberculosis sanatorium, and the Peter MacCallum Clinic, but not the exotic diseases block at the Fairfield Hospital; *Queensland*—all hospitals and nursing homes open to all sectors of the public and which are controlled or operated by the State Government or by District Hospital Boards or those which are approved by the Australian Health Department as public and have all of their beds approved as public; *South Australia*—all hospitals controlled and maintained by, or which receive a regular annual grant or subsidy for maintenance purposes from, the State, local government or semi-government authorities; *Western Australia*—all departmental and subsidised board hospitals, including Perth Dental Hospital, but excluding the Australian Inland Mission hospitals; *Tasmania*—all public hospitals designated as such by the Director-General of Health Services, together with three homes for the aged, and one chest hospital; *Northern Territory*—departmental hospitals at Darwin, Alice Springs, Tennant Creek, and Katherine; *Australian Capital Territory*—the Canberra Hospital, the Woden Valley Hospital and the Queen Elizabeth II Coronation Home for post-natal care.

A number of institutions classified by the Australian Department of Health as 'public' hospitals or nursing homes are not included in the statistics of public hospitals and nursing homes: there were 94 such institutions at June 1972 with an approved bed capacity of 4,394.

Number, staff and accommodation

The number of public hospitals and nursing homes, the number of staff and accommodation provided are shown in the following table.

**PUBLIC HOSPITALS AND NURSING HOMES: NUMBER, STAFF AND ACCOMMODATION
JUNE 1972**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Number of hospitals and nursing homes	274	158	146	69	100	24	5	2	778
Medical staff—									
Salaried	1,545	1,678	658	446	392	183	69	39	5,010
Other(a)	6,059	2,546	176	527	408	192	24	251	10,183
Nursing staff(b)	24,020	18,064	8,763	6,351	6,171	2,219	688	832	67,108
Accommodation—									
Number of beds and cots	29,202	18,206	12,956	5,470	7,280	3,002	742	699	77,557

(a) Includes honorary and visiting medical officers who may hold appointments at more than one hospital. (b) Qualified and student nurses, assistant nurses, assistant nurse trainees, nursing aides, and nursing aide trainees.

In-patients treated

The following table gives particulars of in-patients treated. The figures shown refer to cases, that is to say, a person who is admitted to hospital or nursing home twice during a year is counted twice. Newborn babies are excluded unless they remain in hospital or nursing home after their mothers' discharge.

PUBLIC HOSPITALS AND NURSING HOMES: IN-PATIENTS TREATED, 1971-72

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
In-patients at beginning of year	22,524	14,242	8,558	3,906	5,367	2,220	572	604	57,993
Admissions and re-admissions during year	710,492	403,132	279,983	147,058	168,436	50,468	18,538	25,200	1,803,307
Total in-patients (cases) treated	733,016	417,374	288,541	150,964	173,803	52,688	19,110	25,804	1,861,300
Discharges and deaths	710,338	402,880	280,234	146,988	168,424	50,468	18,578	25,182	1,803,092
In-patients at end of year	22,678	14,494	8,307	3,976	5,379	2,220	532	622	58,208
Average daily number resident	21,894	13,893	8,100	3,899	5,338	2,156	546	590	56,416
Number of out-patients treated	2,242,844	1,028,469	997,699	n.a.	464,016	145,687	n.a.	42,253	n.a.
Number of out-patient attendances	5,366,880	2,740,402	2,441,680	536,446	1,112,704	453,809	217,248	59,052	12,928,221

Revenue and expenditure

Details of revenue and expenditure for the year 1971-72 are shown in the next table. 'Government aid' includes municipal aid which was shown as a separate revenue item for some States in previous Year Books. Australian Government pharmaceutical benefits and tuberculosis allowances paid direct to the institutions have also been included as 'government aid'.

Australian Government hospital and nursing home benefits paid direct to public hospitals and nursing homes (in either full or part payment of fees incurred by pensioners and other uninsured patients) are treated on the same basis as Government benefits used to reimburse insured patients, and included in the amounts shown for 'fees'. Details of Australian Government expenditure on each of the different categories of hospital benefits are shown on page 434.

For some States, expenditure on capital items out of hospitals' own funds are not included in the figures shown. Comparison between the States should therefore be made with caution.

PUBLIC HOSPITALS AND NURSING HOMES: REVENUE AND EXPENDITURE, 1971-72
 (\$'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Revenue—									
Government aid	161,570	110,071	58,891	45,091	51,763	17,810	15,512	5,313	466,021
Public subscriptions, legacies, etc.	172	7,511	412	465	2				8,562
Fees	117,283	72,460	16,251	22,628	24,629	7,377	960	3,255	264,843
Other	3,619	(a)3,589	(b)9,832	1,751	3,172	68			22,031
Total revenue	282,644	193,631	85,386	69,935	79,566	25,256	16,472	8,568	761,458
Expenditure—									
Salaries and wages	189,031	128,792	52,019	36,308	47,114	15,142	5,576	6,052	480,034
Upkeep and repair of buildings and grounds	6,993	3,857	23,353	2,122	7,072	424	528	321	191,347
All other maintenance	62,506	40,739		14,196	19,767	5,449	2,206	1,814	
Total maintenance	258,531	173,387	75,372	52,626	73,953	21,015	8,310	8,187	671,381
Capital	24,610	19,137	10,105	16,073	5,231	4,544	8,162	1,019	88,881
Total expenditure	283,141	192,524	85,477	68,699	79,183	25,559	16,472	9,206	760,261

(a) Includes income from investments, income from sundry sources, special purposes medical, non-operating income.
 (b) Includes loans of \$9.2 million from financial institutions.

Summary for Australia

A summary of statistics relating to public hospitals and nursing homes in Australia is given in the following table.

PUBLIC HOSPITALS AND NURSING HOMES: AUSTRALIA

	1967-68	1968-69	1969-70	1970-71	1971-72
Hospitals and nursing homes	762	768	772	777	778
Medical staff—					
Salaried	4,324	4,706	4,526	4,815	5,010
Other(a)	9,265	9,579	9,723	9,865	10,183
Nursing staff(b)	52,236	55,219	59,707	62,334	67,108
Beds and cots	74,768	75,242	75,415	76,240	77,557
Admissions	1,500,662	1,572,225	1,617,797	1,694,661	1,803,307
Total in-patients (cases) treated	1,554,331	1,626,998	1,673,807	1,752,573	1,861,300
Average daily number resident	53,467	54,600	54,329	55,156	56,416
Out-patients (cases)(c)	4,365,000	4,656,000	4,901,000	5,058,000	5,226,000
Revenue \$'000	413,183	464,117	519,542	618,517	761,458
Expenditure \$'000	411,869	460,393	518,536	620,548	760,261

(a) Includes honorary and visiting medical officers, who may hold appointments at more than one hospital.
 (b) Qualified and student nurses, assistant nurses, assistant nurse trainees, nursing aides, and nursing aide trainees.
 (c) Estimated

Private hospitals and nursing homes

The figures shown in the following table refer to those private hospitals and nursing homes which have been approved for the payment of Government hospital benefits under the *National Health Act* 1953-1974. A small number of institutions classified as 'private' by the Department of Social Security are included in public hospital statistics, and these have been omitted from the following two tables. Statistical information about patients, staff and finance of these institutions is not available on a uniform Australia-wide basis.

PRIVATE HOSPITALS AND NURSING HOMES

State	30 June—				
	1968	1969	1970	1971	1972
NUMBER OF PRIVATE HOSPITALS AND NURSING HOMES					
New South Wales . . .	541	536	(a)546	(a)569	(a)587
Victoria	310	311	313	317	319
Queensland	155	156	163	167	177
South Australia(b) . . .	185	187	184	184	180
Western Australia . . .	102	104	105	107	116
Tasmania	43	44	47	49	49
Australia	1,336	1,338	1,358	1,393	1,428

NUMBER OF BEDS FOR PATIENTS

New South Wales . . .	17,016	18,377	(a)19,665	(a)22,235	(a)25,085
Victoria	7,267	7,385	7,790	8,187	8,698
Queensland	4,908	5,117	5,949	6,434	7,163
South Australia(b) . . .	4,542	4,778	4,908	5,146	5,519
Western Australia . . .	3,333	3,484	3,643	3,923	4,679
Tasmania	1,084	1,160	1,294	1,443	1,486
Australia	38,150	40,301	43,249	47,368	52,630

(a) Includes three institutions in the Australian Capital Territory. There were no institutions of this nature in the A.C.T. prior to 1970. (b) Includes one institution in the Northern Territory.

Repatriation hospitals

The medical care of eligible ex-servicemen and dependants of deceased ex-servicemen is a major function of the Department of Repatriation and Compensation, which provides a comprehensive service.

In-patient treatment is provided at the six Repatriation General Hospitals (one in each State) and at seven auxiliary hospitals and sanatoria. In-patient treatment may also be provided in country hospitals at the Department's expense in certain circumstances. Mental patients requiring custodial care are, by agreement with the State Governments, accommodated at the expense of the Department in mental hospitals administered by the State authorities.

Details of patients, staff and expenditure on Repatriation institutions and other medical services are given in Chapter 5, Repatriation.

Hansenide hospitals

There are four isolation hospitals in Australia for the care and treatment of persons suffering from Hansen's disease (leprosy). The numbers of isolation patients at these hospitals at 31 December 1973 were: Little Bay (New South Wales), 2; Fairfield (Victoria), 7; Palm Island (North Queensland) (Patients formerly located at Fontome Island), 5; and Derby (Western Australia), 77. At 31 December 1973 there were 850 leprosy patients in the Northern Territory of whom approximately 50 were in-patients for the care and repair of deformity and not from the point of view of isolation. With the exception of the Institute of Tropical Medicine at Little Bay, nursing services are provided mostly by sisters of religious orders under supervision of Government medical officers.

A special ward for the isolation and treatment of leprosy patients is provided at the Princess Alexandra Hospital (Queensland). The number of isolation patients resident at 31 December 1973 was 5.

Mental health institutions

The presentation of meaningful statistics of mental health services has become increasingly difficult because of changes in recent years in the institutions and services for the care of mental patients. The emphasis has shifted from institutions for care of patients certified insane to a range of mental health services provided for in-patients and out-patients at psychiatric hospitals, admission and reception centres, day hospitals, out-patient clinics, training centres, homes for the mentally retarded and geriatric patients, psychiatric units in general hospitals, and the like.

In-patient institutions

The following table shows the number of major in-patient institutions in each State in 1972, the accommodation they provide for patients, and staff. In-patient care for voluntary patients is also provided at many general public and a number of private hospitals. There are also psychiatric units attached to gaols, juvenile corrective centres and similar institutions. Only the following institutions, under the control of the State mental health authorities, are included in this table: *New South Wales*—the sixteen State psychiatric centres (a psychiatric hospital and associated admission centre being regarded as one psychiatric centre) and the four authorised private psychiatric hospitals (several other institutions provide in-patient care for voluntary patients only, but are excluded from the scope of the statistics); *Victoria*—the eight psychiatric hospitals, eleven mental hospitals, seven informal hospitals, one alcohol and drug dependency and rehabilitation centre, and nine intellectual deficiency training centres; *Queensland*—six psychiatric hospitals, three training centres, and one rehabilitation clinic; *South Australia*—six in-patient institutions; *Western Australia*—the three approved mental hospitals and two training centres; and *Tasmania*—the Royal Derwent hospital.

**MENTAL HEALTH: IN-PATIENT INSTITUTIONS, ACCOMMODATION AND STAFF
AT 30 JUNE 1972**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
In-patient institutions	20	(a)36	10	6	5	1	78
Beds and cots for patients	9,723	(b)8,712	3,760	2,144	1,494	1,028	26,861
Staff—Medical	194	(a)149	(c)27	48	25	11	454
Nursing(d)	4,137	(a)3,209	1,419	858	827	377	10,827

(a) At 30 November 1972. (b) The number of beds and cots occupied on 30 November 1972. (c) Full-time staff and full-time equivalent of part-time staff. (d) Includes attendants.

There are no separate in-patient institutions for mental patients in the Northern Territory or the Australian Capital Territory. With the appointment of a Director of Psychiatric Services the organisation of a psychiatric service was begun in the Australian Capital Territory in 1967-68.

Patients

The following table sets out statistics of in-patients under the care of the respective State mental health services.

IN-PATIENTS AT MENTAL HEALTH INSTITUTIONS, 1971-72

	<i>N.S.W.</i>	<i>Vic.</i> (a)(b)	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust.</i>
In-patients at beginning of year—							
Males	5,666	5,418	2,436	1,198	1,496	467	16,681
Females	4,273	4,751	1,465	995	1,007	473	12,964
Persons	9,939	10,169	3,901	2,193	2,503	940	29,645
Admissions and re-admissions during year—							
Males	10,065	6,482	2,284	1,809	1,737	589	22,966
Females	8,573	5,946	1,100	1,793	1,294	383	19,089
Persons	18,638	12,428	3,384	3,602	3,031	972	42,055
Total in-patients (cases) treated—							
Males	15,731	11,900	4,720	3,007	3,233	1,056	39,647
Females	12,846	10,697	2,565	2,788	2,301	856	32,053
Persons	28,577	22,597	7,285	5,795	5,534	1,912	71,700
Discharges, including deaths—							
Males	9,902	6,148	2,288	1,779	1,550	566	22,233
Females	8,803	5,768	1,130	1,707	1,107	371	18,886
Persons	18,705	11,916	3,418	3,486	2,657	937	41,119
In-patients at end of year—							
Males	5,466	5,369	2,295	1,142	1,611	464	16,347
Females	3,811	4,589	1,351	1,017	1,169	460	12,397
Persons	9,277	9,958	3,646	2,159	2,780	924	28,744

(a) Twelve months ended 30 November 1972. (b) Includes transfers from one institution to another. (c) At 1 January 1972.

State government expenditure on mental health services

The following figures show particulars of expenditure by States for the year 1971-72. Maintenance expenditure represents expenditure on wages and salaries, upkeep and repair of buildings and grounds, and other maintenance. The figure for New South Wales relates to the 16 State psychiatric centres and the Master in Protective Jurisdiction of the Supreme Court. Capital expenditure is expenditure as approved under the *State Grants (Mental Health Institutions) Act* 1964 only, and excludes the Australian Government contributions paid under this Act—(see page 459).

MENTAL HEALTH: EXPENDITURE, 1971-72
(*\$'000*)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>All States</i>
Maintenance . . .	38,011	34,862	12,214	8,043	9,412	3,230	105,772
Capital	2,650	1,656	2,338	492	908	370	8,414

Notifiable diseases**Methods of prevention and control**

Provision exists in the Health Acts of all States for the compulsory notification of certain infectious and other diseases and for the application of preventive measures. When any such disease occurs the local authority must be notified at once, and in some States notification must be made also to the Health Department.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State on the health, cleanliness and general sanitary state of their several districts and on the appearance of certain diseases. Regulations provide 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. Regulations also provide that persons suspected to be suffering from, or to be carriers of, infectious disease must submit to clinical and laboratory examination. Persons suffering from certain diseases, for example, smallpox, are detained in isolation.

Notifiable diseases and cases notified, 1973

The following table shows, by State and Territory, the number of cases notified in 1973 for those diseases notifiable in all States and Territories. In May 1965 the National Health and Medical Research Council at its Fifty-ninth Session proposed a basic list of diseases to be notifiable in each State and Territory, and this table is based upon that proposal. The table does not include all diseases which are notifiable in a State or Territory. Factors such as the following affect both the completeness of the figures and the comparability from State to State and from year to year: availability of medical and diagnostic services; varying degrees of attention to notification of diseases; and enforcement and follow-up of notifications by Health Departments.

NOTIFIABLE DISEASES(a): NUMBER OF CASES NOTIFIED, 1973

<i>Disease</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Brucellosis . . .	45	17	7	4	1	..	..	..	74
Diphtheria . . .	13	2	61	1	5	..	..	..	82
Gonorrhoea . . .	3,356	1,931	2,192	1,472	1,662	165	524	35	11,337
Hepatitis, Infective . .	1,460	993	(b)793	319	473	40	236	44	4,358
Hydatid	6	4	..	4	1	9	..	..	24
Hansen's disease (leprosy)	..	7	4	1	5	..	14	..	31
Leptospirosis . . .	9	6	29	3	3	..	..	..	50
Malaria	29	44	59	15	9	2	27	18	203
Ornithosis	2	2	2	..	..	..	..	..	6
Syphilis	363	143	362	178	296	1	85	2	1,430
Tetanus	6	4	6	..	..	1	..	..	17
Tuberculosis . . .	591	369	(c)226	109	136	48	59	23	1,561
Typhoid Fever . . .	6	8	2	2	..	..	..	..	18
Typhus (all forms) . .	..	..	4	..	..	..	..	..	4

(a) No cases of cholera, plague, poliomyelitis, smallpox or yellow fever were notified. (homologous). (c) Includes erythema nodosum and pleural effusion.

(b) Includes hepatitis, serum

New infectious hepatitis cases notified. The following table shows the number of cases of infectious hepatitis notified during recent years.

INFECTIOUS HEPATITIS: CASES NOTIFIED

<i>State or Territory</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>	<i>1972</i>	<i>1973</i>
New South Wales . . .	2,820	2,851	2,615	2,211	1,457
Victoria . . .	2,364	2,401	1,895	1,226	993
Queensland(a) . . .	886	1,000	1,258	1,379	793
South Australia . . .	615	485	504	630	319
Western Australia . . .	146	166	554	389	473
Tasmania . . .	493	318	287	93	40
Northern Territory . . .	74	229	296	133	236
Australian Capital Territory . . .	52	121	100	57	44
Australia . . .	7,450	7,571	7,509	6,118	4,355

(a) Includes hepatitis, serum (homologous).

New tuberculosis cases notified. The following table gives particulars of the number of new cases of tuberculosis notified in Australia for 1973.

TUBERCULOSIS: NEW CASES NOTIFIED(a), 1973

<i>State or Territory</i>	<i>Age group (years)</i>					<i>Total</i>
	<i>0-14</i>	<i>15-34</i>	<i>35-54</i>	<i>55 and over</i>	<i>Not stated</i>	
New South Wales . . .	40	110	210	230	1	591
Victoria . . .	42	57	135	135	..	369
Queensland(b) . . .	5	17	84	119	1	226
South Australia . . .	8	18	50	33	..	109
Western Australia . . .	16	29	36	55	..	136
Tasmania . . .	3	10	19	16	..	48
Northern Territory . . .	4	17	24	14	..	59
Australian Capital Territory . . .	1	6	9	7	..	23
Australia . . .	119	264	567	609	2	1,561

(a) Figures supplied by the Director of Tuberculosis in each State and the Australian Department of Health. (b) Includes erythema nodosum and pleural effusion.

Chronic illnesses, injuries, and impairments

As part of the quarterly population survey (see Chapter 20, Employment and Unemployment) a survey was conducted in May 1968, in all States except Victoria, in order to obtain estimates of the incidence of chronic illnesses, injuries and impairments in the population, the nature of these conditions and their cause (e.g. whether they were congenital or due to war, accident, etc.). In addition, the survey obtained information on the effect of these conditions on the activities of those who suffered from them.

Estimates derived from the survey were published in a mimeographed bulletin *Chronic Illnesses Injuries and Impairments, May 1968* (Ref. No. 17.3). A summary of the principal results is given in the Appendix to Year Book No. 56.

Disposal of dead by cremation

The first crematorium in Australia was opened in South Australia in 1903. At 31 December 1973 there were thirty-two crematoria in Australia, situated as follows: New South Wales, 15; Victoria, 4; Queensland, 6; South Australia, 2; Western Australia, 2; Tasmania, 2; Australian Capital Territory, 1. There is no crematorium in the Northern Territory. The following table shows the number of cremations and total deaths in each State and Territory for each of the years 1969 to 1973.

CREMATIONS AND TOTAL DEATHS(a)

State or Territory	1969		1970		1971		1972		1973	
	Crema- tions	Total deaths	Crema- tions	Total deaths	Crema- tions	Total deaths	Crema- tions	Total deaths	Crema- tions	Total deaths
New South Wales	18,564	40,655	20,087	43,601	19,966	41,691	20,117	41,652	19,991	41,122
Victoria	10,617	28,976	11,265	30,335	11,134	30,598	11,226	29,856	11,677	30,696
Queensland	5,733	15,786	6,303	17,055	6,203	16,339	6,269	16,598	6,697	16,732
South Australia	2,464	9,337	2,884	10,138	2,917	9,686	3,182	9,764	3,402	9,835
Western Australia	2,590	7,350	2,826	7,543	2,996	7,806	3,013	7,441	3,387	7,845
Tasmania	1,066	3,309	1,039	3,174	1,157	3,295	1,135	3,227	1,205	3,347
Northern Territory		485		608		637		553		580
Australian Capital Territory	309	588	338	594	341	598	374	669	365	665
Australia	41,343	106,486	44,742	113,048	44,714	110,650	45,316	109,760	46,724	110,822

(a) Cremations are not necessarily carried out in the State or Territory where the death was registered.

