CHAPTER 10

HEALTH

This chapter is concerned with activities of the Commonwealth relating to health including quarantine, national health benefits programs and health insurance; grants for health purposes; activities of national health services organisations, Commonwealth Government health advisory organisations and organisations associated with public health such as the Royal Flying Doctor Service and the National Heart Foundation of Australia. Also included are statistics of personal health benefit payments, notifiable diseases, health related surveys, causes of death, perinatal deaths and cremations.

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 publications published by the Australian Bureau of Statistics.

NATIONAL HEALTH SERVICES

Prior to an amendment to the Constitution in 1946, the only health function of the Commonwealth Department of Health was in relation to quarantine. Consequent upon this amendment, the Commonwealth Government was given powers to make laws about pharmaceutical, hospital and sickness benefits and medical and dental services. The Commonwealth Government also has used its powers under *Section* 96 of the Constitution to make grants to the States for health purposes. In addition, the Commonwealth Government gives financial assistance to certain organisations concerned with public health matters. A number of Commonwealth 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 Commonwealth Director-General of Health.

Quarantine

The *Quarantine Act* 1908 is administered by the Commonwealth Department of Health and provides for the taking of measures to prevent the introduction or spread of diseases affecting humans, animals and plants.

Human quarantine

The masters of all ships and aircraft arriving in Australia from overseas are required to notify medical officers acting on behalf of the Commonwealth Department of Health of all cases of illness on board their vessel at the time of arrival. Passengers or crew members who are believed to be suffering from a quarantine illness may be examined by Quarantine Medical Officers located at all ports of entry.

The main concern of examining officers is the detection of quarantine diseases including cholera, yellow fever, plague, typhus fever and viral haemorrhagic fevers. These diseases are not endemic to Australia and it is of great importance to prevent their entry. Sufferers or suspected sufferers may be isolated to prevent the possible spread of the disease.

A valid International Certificate of Vaccination is required of travellers to Australia over one year of age who have been in *yellow fever* endemic zones within the past 6 days.

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 ship or aircraft 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 from their aircraft or ship and who fail to meet Australia's vaccination requirements.

Animal quarantine

The objectives of animal quarantine being developed within the Department in consultation with Australia's agricultural and livestock groups, seek to combine the need to provide improved genetic material for Australia's livestock industries, with the maximum practical protection against the entry of exotic livestock diseases.

Importation of animals is restricted to certain species from designated overseas countries whose diseases status and pre-entry quarantine facilities meet Australia's stringent requirement. With few exceptions all imported animals are required to serve a period in quarantine on arrival.

Animal quarantine stations are located at most capital cities. A high security animal quarantine station on the Cocos (Keeling) Islands provides the means whereby the safe importation of a wide range of animals is possible.

Measures to prevent the entry of exotic diseases are also applied through the recently enhanced Northern Surveillance program and the rigorous screening of applications to import biological materials and animal products.

Plant quarantine

Arising from both its dependence upon exotic plant species for agriculture, horticulture and forestry and its island continental isolation, Australia is free of numerous plant pests and diseases that occur elsewhere in 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 exclude from the country unwanted pests and plant diseases. It is not possible to predict how a new plant pest or disease will perform when introduced to a new environment free of its natural enemies. Hence the general objective is to keep any pest or disease out of the country which could cause serious economic losses to Australia's agriculture, horticulture or forests.

For further details *see* Year Book No. 61, page 449.

The Australian Health Scheme

Under the Federal/State system of Government in Australia, State Governments are responsible for the provision of hospital and health services within their own borders. The Commonwealth Government is responsible for national health matters such as quarantine, and as well, maintains specific assistance programs relating to pharmaceutical benefits, medical benefits, nursing home benefits and health insurance. In general the Commonwealth Government's role in the Australian health scheme is to provide Australian residents with protection against medical, hospital, nursing home and home care costs.

The Commonwealth Government provides finance in respect of health care through Commonwealth medical benefits, its contribution to the Reinsurance trust fund, the payment of Commonwealth nursing home benefits, and the funding of deficit financed nursing homes. The Commonwealth also provides a *Domiciliary Nursing Care Benefit* and daily bed subsidies towards the cost of accommodation in private hospitals.

Health insurance coverage is available from registered medical benefits organisations and registered hospital benefits organisations. These are private non-profit organisations. Some commercial organisations also offer types of health insurance.

The various sectors of the health scheme are authorised by, and administered under, the following Commonwealth legislation:

Health Insurance Act;
National Health Act;
Nursing Homes Assistance Act; and
States (Tax Sharing and Health Grants) Act.

In all States and the Northern Territory, except South Australia and Tasmania, the hospital cost sharing agreements have been terminated. The Commonwealth, under new arrangements now provides funds to these States and the Northern Territory in the form of untied identifiable general purpose grants within tax sharing arrangements, in lieu of the previous specific funding for public hospitals, the Community Health Program and the School Dental Scheme.

South Australia and Tasmania also receive an identifiable general purpose health grant for services previously funded under the *Community Health Program* and the *School Dental Scheme*. For hospitals in these two States, the cost sharing arrangements continue with the Commonwealth meeting 50 per cent of the agreed net operating costs of recognised public hospitals.

Health Program Grants

Health program grants, authorised under the Health Insurance Act, are payable to eligible organisations to meet the cost, or such proportion of the cost as the Minister may determine, of approved health services provided by medical practitioners employed on a salaried or sessional basis. Eligible organisations are required to impose charges, where appropriate, for services involving privately insured

patients. Generally, the grant covers the cost of medical services provided to patients in respect of whom a doctor in private practice would bulk-bill, i.e. Pensioner Health Benefits cardholders and their dependants, and eligible people in special need.

Community Health Program—National Projects

Under the Community Health Program National Projects arrangements, the Commonwealth provides 100 per cent funding to organisations in respect of specific activity which has been approved for the purpose of the Program.

The largest of these projects is the Family Medicine Program (FMP) of the Royal Australian College of General Practitioners, which provides vocational training for young doctors who intend to enter general practice. The trainees receive their training through attachments to participating private general practitioner practices and by attendance at educational events organised by the FMP.

The other national projects are either national co-ordinating secretariats of voluntary non-profit organisations operating in more than one State or specific health-related projects which have national application.

Program of Aids for Disabled People

The principal aim of the Program of Aids for Disabled People (PADP) arrangements is to enable people with disabilities of a permanent or indefinite duration to live more independently in a domestic situation, with a consequent reduction in demand for more costly institutional care. Under the program certain aids to daily living including wheelchairs, surgical shoes, braces, splints, calipers, surgical wigs, aids for incontinence, walking aids, personal aids (eating and cooking utensils, toilet articles) and basic home modifications (ramps, rails, grips, doorwidenings, etc.) may be provided to eligible people. PADP is operated through health services networks administered by the State and Territory health authorities.

Commonwealth Medical Benefits

The Health Insurance Act provides for a Medical Benefits Schedule which lists medical services and the Schedule (standard) fee applicable in each State in respect of each medical service. The Schedule covers all services rendered by legally qualified medical practitioners, certain prescribed medical services rendered by approved dentists in the operating theatres of approved hospitals, and optometrical consultations by participating optometrists. Schedule fees are set and updated by an independent fees tribunal which is appointed by the Government. The fees so determined are those to apply for medical benefits purposes only. Medical services in Australia are generally delivered by either private medical practitioners on a fee-for-service basis, or medical practitioners employed in hospitals.

All persons who are insured for at least basic cover with a registered medical benefits organisation are entitled to Commonwealth medical benefits at a rate of 30 per cent of the Schedule fee for each medical service. Patients also have to pay any amount charged in excess of the Schedule fee.

These Commonwealth medical benefits are paid through medical benefits organisations which are registered under the National Health Act and act as agents for the Commonwealth in this regard. Benefits may be claimed either before the doctor has been paid, in which case the benefits are used to help pay the doctor's account, or alternatively the benefits may be claimed after the doctor's account has been settled.

Special arrangements apply in respect of pensioners with pensioner health benefit entitlement and people who satisfy certain criteria as people in special need. People in special need, as defined, comprise migrants during their first six months in Australia, unemployment and special beneficiaries, and people on low incomes. Pensioners who qualify, are eligible for Commonwealth medical benefits equal to 85 per cent of the Schedule fee for each medical service, or the Schedule fee less $5 whichever is the greater amount. The maximum personal contribution by an eligible pensioner would be $5 where the Schedule fee is charged. Doctors may bulk bill the Department of Health direct for these benefits. Alternatively, the pensioners may pay the doctors' accounts and then claim the benefits from the medical benefits organisations with which they have registered.

For people who satisfy the criteria as being in special need Commonwealth medical benefits equal to 85 per cent of the Schedule fee for each medical service or the Schedule fee less $5, whichever is the greater amount are payable. Doctors who bulk bill the Commonwealth in respect of services to people in special need must accept the Commonwealth benefit of 85 per cent in full settlement of the account. If doctors do not bulk bill, these patients may be required to make a personal contribution to the doctor's charges after claiming the appropriate Commonwealth medical benefit from a medical benefits organisation. Where the Schedule fee is charged the maximum contribution by a person in special need would be $5 under these circumstances i.e. when not bulk billed.

Medical Insurance Benefits

All registered medical benefits organisations are required to operate a basic medical benefits table and may, in addition, operate other tables of benefits.

The basic medical benefits table must, together with the Commonwealth benefit, cover either 85 per cent of the Schedule fee for each medical service or the Schedule fee less $10, whichever is the greater amount, where the Schedule fee is charged. The organisations may not refuse to accept members to the basic table on the grounds of state of health, nor may they refuse to pay basic table benefits on the basis of pre-existing illness and chronic illness, or limit benefits to a maximum number of services.

Registered organisations can impose a two months waiting period from the date a new member joins a basic benefits table until fund benefits are payable. The Commonwealth benefit component (30 per cent) of basic medical benefits is, however, payable immediately.

The organisations may also operate other tables of benefits with the proviso that at least the basic level of benefits are paid and that total medical benefits do not exceed the Schedule fee or the amount charged by the doctor, which ever is the lesser amount. These tables may also provide benefits for a wide range of paramedical services and aids, dental services, etc.

Hospital Costs

The Commonwealth Government requires that accommodation in public hospitals with treatment by hospital doctors be available without charge to eligible pensioners and persons in special need. Subject to decisions by State Governments on extending access to free hospital treatment, all other patients must meet any charges raised either through health insurance or from their own resources. The process of determining the actual level of hospital charges and their application is the responsibility of the State health authorities.

The Commonwealth Government provides a private hospital bed day subsidy of $28 for each day's hospitalisation of a patient for predetermined (prescribed) surgical procedures in private hospitals. For patients not receiving prescribed surgical procedures, a Commonwealth bed day subsidy of $16 for each day's hospitalisation is provided. These subsidies are claimed by the private hospital on the patient's behalf and are subsequently deducted from the patient's account.

Hospital Insurance Benefits

Hospital fees in recognised public hospitals are determined by the State Governments. The Commonwealth declares standard fees for benefit purposes. Private hospitals charge varying fees and there is no Government fee control over the private hospital sector.

All registered hospital benefits organisations are required to operate a basic hospital benefits table and may, in addition, operate other tables of benefits.

The basic table currently provides the following benefits:

(a) hospital fund benefit equal to the standard fee for shared-ward accommodation in a recognised hospital. This benefit may also be utilised to partly cover the fee for a private room in a recognised hospital or for accommodation in a private hospital;
(b) benefits to cover fees raised for 'professional services' rendered to private patients in recognised hospitals by doctors employed by the hospitals. This situation arises where a private patient chooses to be treated by doctors engaged by the hospital rather than by a private doctor;
(c) outpatient benefits in respect of outpatient services provided in those States where recognised hospitals charge for these services; and
(d) long stay nursing home type patients accommodated in hospitals.

As in the medical basic table, the organisations may not refuse to accept members to the basic hospital table on the grounds of state of health. Although the organisations may not refuse fund benefits at the basic level because of pre-existing illness, chronic illness etc., they do receive financial assistance from the Government to maintain benefit payments to persons who require extensive hospitalisation. This assistance is provided under the *Hospital Benefits Reinsurance Trust Fund*, which will be referred to later.

In addition to the basic hospital benefits table, the hospital benefits organisation may also operate other tables of benefits with the proviso that the total benefits will not exceed the amount of the charge. Most organisations operate a supplementary table which, when combined with the basic table provides cover equal to the charge for a private room in a recognised hospital. Benefits under these tables may, in combination with the basic benefit table also be used to at least partly cover the net cost of accommodation in a private hospital. Some organisations also have additional tables of benefits to cover higher private hospital charges and to cover some paramedical services and aids.

Insurance Contribution Rates

Private medical and hospital insurance coverage is voluntary. It is Government policy that the contribution rates for medical benefits tables and hospital benefits tables are to be based on the community rating principle, i.e. all contributors to a table pay the same contribution regardless of such factors as age, sex, state of health, etc. The only permitted exception to this rule is that persons without dependants need only pay half the normal rate of contribution.

Contributions to basic hospital and/or basic medical insurance are eligible for a taxation rebate at the rate of 30.67 per cent for the 1982-83 income year and 30 per cent in subsequent years.

Hospital Benefits Reinsurance Trust Fund

Hospital benefits organisations are permitted to transfer to their reinsurance accounts benefits at the basic table rate for those contributors who spend more than thirty-five days in hospital in any one year.

The Commonwealth Government contributes $100 million per year to the Reinsurance Trust Fund and the remaining benefits liability is shared equitably between the hospital benefits organisations according to claims experience and total membership of the basic table.

The reinsurance arrangements ensure that the financial liability for long-term hospital patients (i.e. the aged and chronically ill) is shared by the Government and all hospital benefits organisations in an equitable manner.

Long-term (Nursing Home Type) Patients

In general long-term patients accommodated in hospitals who no longer require hospital treatment are reclassified as nursing home type patients and are required to contribute towards their care and accommodation in the same way as patients in nursing homes. A 'nursing home type patient' is an inpatient whose hospitalisation exceeds 60 days, unless a certificate has been issued by a medical practitioner to certify that a patient is in need of acute care. The arrangements operate in all hospitals except New South Wales and Northern Territory public hospitals.

Government Nursing Home Benefits

There are two forms of Commonwealth benefit payable in respect of patients accommodated in premises approved as nursing homes under the National Health Act. These benefits are as follows:

(a) *Basic Nursing Home Benefit.* The Commonwealth pays basic nursing home benefits in respect of all qualified nursing home patients other than those who are eligible to receive benefits from some other source such as workers' compensation or third party insurance. Basic benefit levels are reviewed and adjusted annually to a level whereby the fees charged in respect of 70 per cent of beds in non-Government nursing homes, approved under the National Health Act, (i.e. participating nursing homes) are covered by a combination of the prescribed minimum patient contribution (explained below) plus the Commonwealth basic nursing home benefit. As the general level of fees in these nursing homes varies between States, the amount of basic benefit payable also varies between States under the above formula. As at 5 November 1981, the maximum amount of basic nursing home benefit payable per day in each State and Territory was: New South Wales and Australian Capital Territory $23.00; Victoria $31.65; Queensland $20.40; South Australia and Northern Territory $27.60; Western Australia $18.55; and Tasmania $20.65; and

(b) *Commonwealth Extensive Care Benefit.* The Commonwealth extensive care benefit is payable at the rate of $6 a day, in addition to the Commonwealth basic benefit, in respect of patients who need and receive 'extensive care' as defined in the National Health Act. Application must be made for payment of the extensive care benefit. As in the case of the Commonwealth basic benefit, the extensive care benefit is payable in respect only of qualified patients who are not entitled to receive such benefits from workers' compensation or third party insurance.

Minimum Patient Contribution

Generally speaking, all participating nursing home patients are required to make a minimum contribution towards the cost of their accommodation in the nursing home. Patients are required to make this contribution towards the cost of their accommodation and care in recognition of those costs which would otherwise be incurred outside the nursing home; the nursing home is usually a long-term residence for most patients and the patient contribution is related to the pension which is paid to assist towards the cost of living.

The minimum patient contribution equals 87.5 per cent of the sum of the standard pension plus supplementary assistance and at 6 May 1982 was $10.25 a day.

Where the fees charged by a participating nursing home are in excess of the combined total of nursing home benefits plus the minimum patient contribution, the difference must be met by the patients. Conversely, where the nursing home fee is less than this combined total, the basic benefit is reduced by that amount.

Fees charged to patients in Government nursing homes are determined by State Governments. Patients in these homes also attract basic and extensive care benefits from the Commonwealth Government.

Deficit Financing Arrangements

As an alternative to the provision of patient benefits under the National Health Act (as outlined above), the *Nursing Homes Assistance Act,* 1974 provides for direct funding of nursing homes conducted by local government and charitable and benevolent organisations.

Under the deficit financing arrangements the Commonwealth meets the approved operating deficits and the cost of approved asset replacements of nursing homes. Financial assistance is provided by way of monthly advances based on a budget approved by the Department. An annual settlement is effected when audited financial statements are forwarded to the Department.

Nursing homes wishing to participate in the deficit financing arrangements must enter into a formal agreement with the Government for that purpose. Patients in deficit financed nursing homes are required to pay a prescribed fee equivalent to the minimum statutory patient contribution. Higher fees are prescribed for patients entitled to damages or compensation.

Domiciliary Nursing Care Benefit

The Commonwealth Government provides a benefit to assist people who choose to care, in their own homes, for chronically ill or infirm relatives who would require admission to a nursing home if this care in their own home was not available. Patients who qualify for this benefit are, typically, those people who are incapable of caring for themselves and of being left unsupervised for any significant period.

This benefit, the domiciliary nursing care benefit, is payable at the rate of $42 per fortnight. The basic criteria for the payment of the benefit are that the patient must be aged 16 years or over and be in need of continuing nursing care and receiving regular visits by a registered nurse.

Australian Residents Overseas

Generally speaking, Australian residents who are temporarily absent from Australia overseas, are eligible to receive Commonwealth medical benefits provided they are either insured with a registered medical benefits organisation or an eligible pensioner. Commonwealth medical benefits payable in respect of medical treatment overseas are based on the Schedule fees for equivalent services in New South Wales. All other persons—uninsured and people in special need—must meet costs for medical treatment overseas from their own resources.

The Commonwealth does not provide any assistance in respect of hospital accommodation overseas for Australian residents.

Visitors to Australia

Visitors to Australia, along with all Australian residents who do not qualify for special Government assistance, are responsible for the full cost of their medical and hospital treatment.

Visitors to Australia can insure themselves with travel agents, commercial insurers or registered health insurance organisations prior to arrival or on arrival in Australia. There is normally a two month waiting period before benefits become payable by the registered health insurance organisation although Commonwealth medical benefits are immediately available.

Commonwealth Authorities Expenditure

Pharmaceutical benefits

A person receiving treatment from a medical practitioner or a participating dental practitioner registered in Australia is eligible for benefits on a wide range of drugs and medicines when they are supplied by an approved pharmacist upon presentation of a prescription or by an approved private hospital when that person is receiving treatment at the hospital. Special arrangements exist to cover the supply of pharmaceutical benefits in situations where the normal conditions of supply do not apply, e.g. in remote areas.

A three-tier system of patient contribution for each supply of a pharmaceutical benefit was introduced on 1 January 1983. Under these arrangements:

- pensioners with Pensioner Health Benefit cards and sickness beneficiaries with Health Benefits cards, and the dependants of both groups, receive pharmaceutical benefit items free of charge;
- persons in special need who hold Health Care cards, together with Social Security and Veterans' Affairs pensioners who are not eligible for a Pensioner Health Benefits or Health Benefits card, and dependants of these groups, are required to pay a patient contribution of $2 per benefit item;
- other members of the general public pay a patient contribution of $4 per benefit item.

Under the Pharmaceutical Benefit Scheme the total cost, including patient contributions, for prescription drugs was $428.9 million in 1980-81 and $526.0 million in 1981-82. These figures do not include benefits supplied by certain hospitals and miscellaneous services or retrospective adjustments of chemists' remunerations.

Summary of personal benefit payments

For an analysis by purpose and economic type of expenditure by all Commonwealth Government authorities *see* Chapter 22, Public Finance.

Most Commonwealth Government health benefits are financed through the National Welfare Fund and the Health Insurance Commission. The following table shows personal benefit payments by Commonwealth Authorities for 1980–81.

COMMONWEALTH AUTHORITIES: PERSONAL BENEFIT PAYMENTS—HEALTH 1980–81

($'000)

	N.S.W. *(a)*	*Vic.*	*Qld*	*S.A.* *(a)*	*W.A.*	*Tas.*	*N.T.* *(a)*	*A.C.T.* *(a)*	*Total*
Hospital and clinical services—									
Hospital benefits reinsurance	31,233	47,326	15,968	17,711	677	871	–	1,383	115,169
Private hospital daily bed payments	20,411	19,727	13,803	8,698	5,438	1,894	632	904	71,508
Hospital benefits, n.e.c.	*(b)*	*(b)*	*(b)*	*(b)*	*(b)*	*(b)*	*(b)*	*(b)*	1
Nursing home benefits	135,411	90,840	53,655	42,772	36,418	13,389	1,690	5,996	380,171
Tuberculosis campaign allowances	319	623	215	44	54	15	37	10	1,318
Rehabilitation of ex-servicemen	250	175	69	21	65	26	–	35	641
Total	*187,624*	*158,691*	*83,710*	*69,246*	*42,652*	*16,195*	*2,359*	*8,329*	*568,808*
Other health services—									
Medical benefits	299,915	165,694	89,471	55,535	46,540	13,427	3,269	9,056	682,907
Isolated patients travel and accommodation assistance	1,113	410	1,733	295	594	156	534	–	4,837
Pharmaceutical benefits for pensioners	80,647	44,561	30,312	15,952	13,346	5,083	131	1,011	191,044
Pharmaceutical benefits, n.e.c.	46,484	30,914	17,600	9,292	8,792	2,951	344	1,794	118,171
Domiciliary care	5,850	4,259	3,200	1,438	1,501	1,238	–	–	17,485
Total	*434,009*	*245,838*	*142,316*	*82,512*	*70,773*	*22,855*	*4,278*	*11,861*	*1,014,442*
Total health	**621,633**	**404,529**	**226,026**	**151,758**	**113,425**	**39,050**	**6,637**	**20,190**	**1,583,250**

(*a*) State totals for New South Wales and South Australia also include most of the unallocatable expenditure on personal benefit payments to residents in the Australian Capital Territory and the Northern Territory respectively. (*b*) A State and Territory dissection of the total for *Hospital benefits, n.e.c.* is not available.

Tuberculosis

An arrangement between the Commonwealth and the States under which the Commonwealth reimbursed the States for all approved capital expenditure on tuberculosis and for net maintenance expenditure to the extent that it exceeded that for 1947–48 was discontinued from 31 December 1976. The National Tuberculosis Advisory Council, however, has been retained to keep abreast of advances and to advise the Minister for Health and, through him, the State Ministers for Health on the best means of prevention, diagnosis and control of tuberculosis. There are eleven members of the Council, the chairman being the Director-General of the Commonwealth Department of Health.

To reduce the spread of infection the Commonwealth Government pays allowances to persons suffering from infectious tuberculosis so that they may give up work and undergo treatment. Commonwealth Government Expenditure on Tuberculosis Allowances over the last three years has been $1,207,200 in 1979–1980, $1,317,000 in 1980–81 and $1,103,200 in 1981–82.

Immunisation campaigns

Continuing immunisation programs against poliomyelitis, measles, rubella, diphtheria, tetanus, and whooping cough are maintained in all States and Territories. Mumps immunisation programs commenced late in 1982.

Mass campaigns for rubella immunisation are routinely undertaken only on girls aged between 10 and 14 years. Rubella immunisation is also available when appropriate to females during their reproductive years. Whooping cough immunisation is currently given only to infants less than 1 year of age.

National health services organisations

The *Commonwealth Department of Health Pathology Laboratory Service* provides clinical diagnostic and investigational facilities at laboratories situated in Albury, Bendigo, Cairns, 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 1981–82, these laboratories carried out approximately 5.6 million pathology tests and investigations in respect of 0.7 million patient requests. On 1 July 1982 the laboratory at Kalgoorlie was transferred to the control of the Western Australian State Government.

The Commonwealth Serum Laboratories Commission (CSL) produces pharmaceutical products for human and veterinary use and is one of Australia's foremost scientific institutes. The Commission's main function is to produce and sell prescribed pharmaceutical products used for therapeutic purposes and to ensure the supply of essential pharmaceutical products in accordance with national health needs. The Commission's functions also include research and development relating to many kinds of human and veterinary diseases covering the fields of bacteriology, biochemistry, immunology and virology. The Commission's laboratories and central administration are located at Parkville, Victoria, with storage and distribution facilities in all States.

For over sixty years, CSL has been Australia's chief supplier of biological medicines, insulins, vaccines, penicillin, human blood fractions, Bacillus Calmette-Guerin (BCG) and an increasing range of veterinary biological products needed by Australia's sheep, cattle, pig and poultry industries. The role of CSL has expanded as a result of amendments to the CSL Act from 1 July 1980 that allow CSL to produce, buy, import, supply, sell or export prescribed pharmaceutical products (either of a biological or non-biological nature).

The Commission employs more than 1,000 people, including medical officers, veterinarians, bacteriologists, biochemists, physicists, engineers, accountants, laboratory assistants, skilled tradesmen and experienced marketing staff to promote the sale of its products.

The *Australian Radiation Laboratory* is concerned with:

(a) The formulation of policy, development of codes of practice, national surveillance and provision of scientific services relating to the public and occupational health implications of ionising and non-ionising radiation; and

(b) The maintenance of national radiation measurement standards and quality evaluation and assurance of radioactive materials used for medicine diagnosis and treatment.

The *National Acoustic Laboratories* undertake scientific investigations into hearing and problems associated with noise as it affects individuals, and advise Commonwealth Government Departments and instrumentalities on hearing conservation and the reduction of noise. A free audiological service is provided for pensioners with medical benefit entitlements and their dependants, persons under 21, war widows, Social Security rehabilitees and Veterans' Affairs patients. During 1981–82 the number of appointments provided was 148,595 and the number of hearing aids fitted was 46,832.

The *Ultrasonic Institute* conducts research and provides advisory services on the use of ultrasonic radiation in the diagnosis and treatment of disease. The Institute is recognised as a world leader in its field.

Commonwealth Government health advisory organisations

The *National Health and Medical Research Council* advises the Commonwealth Government and State Governments on matters of public health legislation and administration, on matters concerning the health of the public and on medical research. It also advises the Commonwealth 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 Commonwealth Minister for Health on the application of funds from the Medical Research Endowment Fund which provides assistance to Commonwealth Government Departments, State Departments, Universities, Institutions and persons

for the purposes of medical research and for the training of persons in medical research. The Commonwealth Government makes annual appropriations to the fund. The allocation for 1982–83 is $30.0 million. The secretariat for the Council and its Committees is provided by the Commonwealth Department of Health and is located in Canberra.

The *Commonwealth Institute of Health* is located in the University of Sydney and provides teaching, research and consultation in all fields relating to health and its maintenance and promotion including resources devoted to the study of health problems of work, the tropics and developing nations. The Institute's academic functions are under the direction of the University, whilst its various training, research and consultative roles are maintained by the Commonwealth Department of Health which funds the Institute's activities.

The Institute has an important role as a resource and data collection centre for the nation and it is endeavouring to promote health and a better understanding of health care and its delivery throughout Australia and neighbouring countries.

The Institute offers undergraduate and postgraduate training in a wide range of Public Health specialities, the largest programme being the Master of Public Health.

Costs for the Institute paid by the Commonwealth Government during 1981–82 were $2,869,765 for administration and $49,485 for plant and equipment.

The *Institute of Child Health* which was associated with the Commonwealth Institute of Health located at the University of Sydney and with the Royal Alexandra Hospital for Children at Camperdown closed on 31 December 1981. Its activities included 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 Colombo Plan Fellows. Costs of the Institute paid by the Commonwealth Government during 1981–82 were $361,972 for administration and $3,301 for plant and equipment.

The *National Biological Standards Laboratory*, including the *Australian Dental Standards Laboratory*, is responsible for the development of standards for therapeutic goods and for testing such products for compliance with standards to ensure that they are safe, pure, potent and efficacious. Other responsibilities, including the inspection of manufacturing premises, the evaluation of new and modified products and the investigation of complaints, make it the linchpin of a uniform national system of control over therapeutic goods.

The British Pharmacopoeia, the British Pharmaceutical Codex and the British Veterinary Codex are specified 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 Commonwealth 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, testing dental products and some medical devices.

The *Australian Drug Evaluation Committee* makes medical and scientific evaluations both of such goods for therapeutic use as the Minister for Health refers to it for evaluation and of other goods for therapeutic use which, in the opinion of the Committee, should be so evaluated, and advises the Minister for Health as it considers necessary relating to the importation into and the distribution within Australia of goods for therapeutic use that have been the subject of evaluation by the Committee. It has the powers to co-opt and seek advice from specialist medical colleges and associations and from the medical and allied professions, drug manufacturers and other sources. During 1981–82 sixty-four applications for approval to market new drugs and twenty-five applications to extend the indications or amend dosage regimes for currently marketed drugs were considered by the Committee. Sixty-seven applications were approved, twenty-one rejected and one deferred pending production of further information on safety and efficacy. Under the Committee's control are the Australian Registry of Adverse Reactions to Drugs, which provides an early warning system based on reports of reactions to drugs forwarded voluntarily by medical practitioners, pharmacists, hospitals, etc; the Adverse Drug Reaction Advisory Committee, which gives initial consideration to the adverse drug reaction reports received by the Registry and arranges feedback to the medical profession; the Vaccines Sub-Committee; the Endocrinology Sub-Committee; the Congenital Abnormalities Sub-Committee; the Parenteral Nutrition Sub-Committee; the Anti-Cancer Drugs Sub-Committee; the Radiopharmaceuticals Sub-Committee; and the National Drug Information Advisory Sub-Committee, formed to oversight administrative aspects of the technical input to the National Drug Information Service.

The *Therapeutic Goods Advisory Committee* considers, and advises 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 *Therapeutic Goods Standards Committee*, under the same Act, advises the Minister for Health on standards applicable to goods for therapeutic use and requirements relating to the labelling and packaging of any such goods.

The *National Therapeutic Goods Committee* comprises Federal and State representatives. Its function is to make recommendations to the Commonwealth and State Governments on action necessary to bring about co-ordination of legislation and administrative controls on therapeutic goods. Subcommittees have been formed to consider specific matters, notably advertising, establishment of a National Product Register, a Code of Good Manufacturing Practice, and standards for disinfectants.

The *Standing Committee of the Health Ministers' Conference* was established by the 1980 Australian Health Ministers' Conference to carry out any tasks or directions referred to it by the Conference. The Committee's membership consists of representatives from the Commonwealth Departments of Health and Veterans' Affairs, each State health authority, the Northern Territory Department of Health and the Capital Territory Health Commission.

Other Commonwealth Government subsidies and grants to States

Home nursing subsidy scheme

The *Home Nursing Subsidy Scheme* provides for an annual Commonwealth subsidy to approved home nursing services. Organisations eligible for the subsidy are those which are non-profit making, employ registered nurses, and receive assistance from a State Government or from local government bodies. During 1981–82 subsidies totalling $16.5m were paid to 191 organisations providing home nursing services in the States. Home nursing services in the Northern Territory were provided by the Commonwealth Department of Health until 1 January 1979, when responsibility was transferred to the Northern Territory Government. In the Australian Capital Territory, these services have been provided by the Capital Territory Health Commission.

Paramedical services

The *States Grants (Paramedical Services) Act* 1969 provides for the Commonwealth Government to share on $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 1981–82 amounted to $1,182,291.

Commonwealth Government grants to organisations associated with public health

In addition to providing the services already mentioned in this Chapter, the Commonwealth 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 Service which, while formerly operated by the Commonwealth Department of Health, has been operated by the Northern Territory Government since 1 January 1979. The Royal Flying Doctor Service is financed mostly from donations and government contributions. For the year ended 30 June 1982 the Commonwealth Government paid grants totalling $3,536,866 towards operational costs and matching assistance of $632,250 towards an approved program of capital expenditure. The Service made flights during 1981–82 totalling 5.6 million kilometres and transported 8,357 patients. In the same period medical staff conducted a total of 86,041 consultations and dental treatment was given to 4,321 patients.

The *Red Cross Blood Transfusion Service* is conducted by the Australian Red Cross Society throughout Australia. The operating costs of the Service in the States are met by the State Governments paying 60 per cent, the Society 5 per cent of net operating costs or 10 per cent of donations, whichever is the lesser, and the Commonwealth Government meeting the balance. In the Northern Territory the Society contributes to operating costs as it does in the States, and the Commonwealth met the balance prior to 1 January 1979. After this date the Northern Territory is in the same position as the States. Approved capital expenditure by the Service in the States is shared on a $1 per $1 basis with the States and the Northern Territory Government. Commonwealth Government expenditure for each State and the Northern Territory during 1981–82 was $8,906,802, made up as follows: New South Wales, $2,597,579; Victoria, $2,958,481; Queensland, $1,182,384; South Australia, $948,577; Western Australia, $949,590; Tasmania, $168,791; and Northern Territory, $101,400.

The *National Heart Foundation of Australia* is a voluntary organisation, supported almost entirely by public donations, established with the objective of reducing the toll of heart disease in Australia. It approaches this objective by programs sponsoring research in cardiovascular disease, community and professional education directed to prevention, treatment and rehabilitation of heart disease and community service programs including rehabilitation of heart patients, risk assessment clinics and surveys and documentation of various aspects of heart disease and treatment of heart disease in Australia. The Foundation's income in 1981 was $5,071,000 of which $4,190,000 was from public donations and bequests. Federal, State and Semi-Government authorities made grants of $132,314 for specific projects conducted by the Foundation. Since the inception of the Foundation research has been a major function and a total of $14,285,000 has been expended in grants to university departments, hospitals and research institutes and for fellowships tenable in Australia and overseas. It is notable however that with increasing opportunities for prevention and control of heart disease, the Foundation's education and community service activities are increasing significantly. In 1981 the expenditure on research was $1,482,000 while expenditure on education and community service was $959,000.

The *World Health Organization* (WHO) is a specialised agency of the United Nations having as the objective the attainment by all peoples of the highest level of health. Australia is assigned to the Western Pacific Region, the headquarters of which is at Manila and is represented annually at both the World Health Assembly in Geneva and the Regional Committee Meeting in Manila. Australia's contribution to WHO for 1981–82 was $3,465,825.

The *International Agency for Research on Cancer* (IARC) was established in 1965 within the framework of the World Health Organization. The headquarters of the Agency are located in Lyon, France. The objectives and functions of the Agency are to provide for planning, promoting and developing research in all phases of the causation, treatment and prevention of cancer. Australia's contribution to the IARC for 1981–82 was $473,755.

The *Isolated Patients Travel and Accommodation Assistance Scheme* commenced on 1 October 1978. The purpose of the Scheme is to financially assist patients living in isolated areas with costs incurred where they need to travel in excess of 200 kilometres to obtain specialist medical treatment from the nearest suitable medical specialist or consultant physician. The scheme has now been extended to include referral for specialist oral surgery as well as special provisions for isolated cleft lip and/or cleft palate patients. For the 12 months up to 30 June 1982, 51,809 patients had been approved for benefit under the Scheme with a cost to the Commonwealth of $6,298,027.

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 health departments and health commissions. For details of legislation and administrative changes in previous years *see* earlier issues of the Year Book.

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, créches, etc.

In all States, Acts have been passed with the object of supervising the conditions of infant life and reducing the rate of mortality. Stringent conditions regulate the adopting, nursing and maintaining of children placed in foster-homes by private persons.

HOSPITALS AND NOTIFIABLE DISEASES

Repatriation hospitals

A full range of services for the medical care and treatment of eligible veterans and certain dependants is available from the Department of Veterans' Affairs hospital system. Patients from the general community may also receive treatment at Repatriation hospitals provided bed capacity is available above the needs of the entitled veteran and the hospital facilities are appropriate to the treatment required.

In-patient treatment is provided at the six acute-care Repatriation General Hospitals (one in each State) and three auxiliary hospitals. In-patient treatment may also be provided in non-departmental public and private 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 9, Social Security and Welfare.

Hansenide hospitals

The two isolation hospitals in Australia for the care and treatment of persons suffering from Hansen's Disease (leprosy) are at Little Bay in New South Wales and Derby in Western Australia. In North Queensland, a leprosy annexe is attached to the Palm Island Hospital near Ingham and in the Northern Territory leprosy sufferers are treated and cared for at the East Arm Hospital in Darwin. Treatment is also provided at a number of other hospitals in Australia which do not have facilities set aside specifically for leprosy patients.

In Australia, new cases of leprosy notified to the Commonwealth Department of Health numbered 59 in 1979, 35 in 1980 and 38 in 1981.

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. Numbers of institutions, beds available, staff and patients treated at locations catering only for the mentally ill in 1973–74 were published in Year Book No. 61, page 465. More recent figures indicate that fewer patients were treated as in-patients in nearly every State, but this should not be considered as an indication of improved mental health; it is rather a more advanced method of treatment, allowing patients greater contact with the outside world.

Hospital morbidity statistics

A major factor in the cost of health care in Australia is hospital treatment of patients. Attempts to measure the number of in-patients treated and bed-days involved for each disease or injury have been going on for some years, but as coverage is incomplete it is not possible to present national statistics. Figures for New South Wales, Queensland, South Australia, Western Australia and Tasmania, however, have been published in the ABS publications *Hospital and Nursing Home Inpatients* (4306.1), *Patients Treated in Hospitals* (4303.3), *Hospital Morbidity* (4302.4), *Hospital In-patient Statistics* (4301.5) and *Hospital Morbidity* (4301.6) respectively.

An examination of the New South Wales figures for 1980, which include psychiatric hospitals, indicates that the largest numbers of patients were treated for conditions of pregnancy, childbirth and the puerperium (10.6 per cent), genito-urinary diseases (9.7 per cent) and injury (9.7 per cent) but, in terms of hospital bed-days, the greatest occupancy rate was caused by mental disorders (27.0 per cent) followed by diseases of the circulatory system (15.0 per cent) and injury (6.9 per cent). Of the principal operations performed the largest number was for female genital organ surgery (13.1 per cent) followed by digestive system surgery (9.9 per cent) and obstetric surgery (9.1 per cent).

Notifiable diseases

Although State and Territory health authorities are responsible for the prevention and control of infectious diseases within their areas of jurisdiction, certain powers and responsibility may be delegated to local authorities within each State. These usually involve such activities as personal health services, environmental sanitation and local communicable disease control.

The Commonwealth Department of Health receives notification figures from the States and Territories on a monthly basis which are published in *Communicable Diseases Intelligence*. The national totals for the year are published in the annual report of the Director-General of Health.

The following table shows, by State and Territory, the number of cases notified in 1981 for those diseases which are notifiable in all States and Territories. The table does not include diseases which are

notifiable only in certain States or Territories. 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 authorities.

NOTIFIABLE DISEASES(*a*), NUMBER OF CASES NOTIFIED 1981

Disease	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Arbovirus infection	1	3	10	2	1	—	—	—	17
Brucellosis	17	3	4	11	—	1	—	—	36
Cholera	2	—	—	—	—	—	—	—	2
Diphtheria	—	2	1	—	—	—	15	—	18
Gonorrhoea	3,841	2,243	1,353	976	1,458	172	967	187	11,197
Hepatitis A (infectious)	594	356	149	107	66	40	115	26	1,453
Hepatitis B (serum)	175	150	51	84	17	—	18	5	500
Hydatid disease	15	—	—	3	—	4	—	2	24
Leprosy	—	5	6	2	8	—	17	—	38
Leptospirosis	5	64	4	11	11	—	—	—	95
Malaria	70	73	172	38	30	2	9	14	408
Ornithosis	—	5	—	8	—	—	—	—	13
Salmonella infections	357	374	269	745	167	32	302	23	2,269
Syphilis	1,339	171	470	122	230	—	575	9	2,916
Tetanus	—	5	2	5	—	—	—	—	12
Tuberculosis (all forms)	499	407	215	110	160	—	39	30	1,460
Typhoid fever	17	6	2	1	—	—	—	—	26

(*a*) There were no cases of anthrax, plague, poliomyelitis, smallpox, yellow fever or any form of typhus.

Health-related surveys conducted by the ABS

Australian Health Survey

A survey was conducted by ABS during the period July 1977–June 1978 to obtain information on the health of Australians and the use of and need for various health services and facilities. Topics covered by the survey included recent and chronic illness, accidents, use of medicines, and use of doctors, dentists, and other health workers and facilities, as well as a range of personal characteristics. The items are described more fully in *Australian Health Survey Information Paper* (4340.0). Summary results of the survey have been published in *Australian Health Survey 1977–1978* (4311.0); detailed results are published in a series of publications (4313.0 to 4322.0) dealing with the special topics of the survey. The survey is explained in detail in *Outline of Concepts, Methodology and Procedures Used* (4323.0).

Health Insurance Survey

In March 1982 the ABS conducted a survey throughout Australia to obtain information about levels of health insurance cover in the Australian community. The survey obtained, in respect of contributor units, details of the hospital and medical insurance arrangements they had at the time of the survey. The survey found that as at March 1982, 65.8 per cent of all possible contributor units had some type of private health insurance. A further 17.7 per cent were identified as being covered by special Commonwealth health benefits, leaving 16.5 per cent of all possible contributor units without health insurance nor identified access to special Commonwealth health benefits.

Compared with an estimate of 56.2 per cent obtained in a similar survey in March 1981, the above estimate represents a net increase of 9.6 percentage points in the previous twelve months in the proportion of possible contributor units with some type of health insurance cover. An estimated 1,953,000 persons were without health insurance nor identified access to special Commonwealth health benefits.

Results of the survey showing such details as type and level of health insurance cover; income and composition of contributor unit; age of head of contributor unit; special Commonwealth health benefits, and an outline of the medical and hospital benefits schemes 1 November 1978 to 30 June 1982 are published in *Health Insurance Survey, Australia, March 1982* (4335.0).

Hearing Survey

In September 1978 the ABS conducted a survey to obtain information about hearing problems for persons aged 15 years or more. Details included the cause and extent of their problem, whether a hearing aid was used, and if not, the reason for not using an aid. It also contained data on whether persons have had their hearing tested in the last 5 years.

Results of the survey have been published in the publication *Hearing and the Use of Hearing Aids (Persons aged 15 years or more) September 1978* (4336.0).

A similar survey was conducted for persons aged 2 to 14 years but contained data only on cause of hearing problem and whether persons have had their hearing tested in the last 5 years. Results of this survey are contained in the publication *Sight, Hearing and Dental Health (Persons aged 2 to 14 years) February–May 1979* (4337.0).

Sight Survey

During February to May 1979 the ABS conducted a survey to obtain information on sight problems and the use of glasses/contact lenses for the Australian population aged 2 years or more. Details included type of sight problems, reason glasses/contact lenses are worn, how often they are worn and whether persons have had their sight tested in the last 5 years.

Results of the survey for persons aged 2 to 14 years have been published in the publication *Sight, Hearing and Dental Health (persons aged 2 to 14 years) February–May 1979* (4337.0). For persons aged 15 years or more the relevant publication is *Sight Problems and the Use of Glasses/Contact Lenses (persons aged 15 years or more) February–May 1979* (4338.0).

Dental Survey

During February to May 1979 the ABS conducted a survey to obtain information on the dental health of the Australian population aged 2 years or more. Information collected included time since last visit to a dentist; number of visits in the last 12 months, treatment received at last visit and usual number of check-ups per year. Data were also collected for persons aged 15 years or more as to whether false teeth were worn.

Results of the survey for persons aged 2 to 14 years have been published in the publication *Sight, Hearing and Dental Health (persons aged 2 to 14 years) February–May 1979* (4337.0). For persons aged 15 years or more the relevant publication is *Dental Health (persons aged 15 years or more) February–May 1979* (4339.0).

Survey of Handicapped Persons

During February to May 1981 a survey was conducted throughout Australia to obtain information about the nature and extent of various disabilities and handicaps in the Australian community.

The survey examined the needs of and the kinds of problems experienced by persons with different types of handicaps. The areas examined in respect of handicapped persons included causes, disabling conditions, services, aids, accommodation, employment, education, income, transport, recreation and institutionalised care.

The sample for the survey consisted of two distinct parts. In the first part, a sample of 33,000 households was selected from all households in Australia and in the second part, a sample of 5,300 patients or residents was selected from 723 randomly selected health establishments throughout Australia.

For the purposes of the survey, a disabled person was defined as a person who had one or more of a set of selected disabilities or impairments (e.g. loss of sight, loss of hearing, slowness at learning or understanding, incomplete use of arms and fingers, restriction in physical activities). These had to have lasted or be likely to last for 6 months or more.

A handicapped person was defined as a disabled person who was further identified as being limited to some degree in his/her ability to perform certain activities or tasks in relation to one or more of the following five areas: self care, mobility, communication, schooling, employment. Since the measurement of handicap could not be readily applied to children under 5 years of age, all disabled persons in this age group were regarded as being handicapped.

The main features of the survey results are:

- 1,264,600 Australians or 8.6 per cent of the population are handicapped. A further 4.6 per cent of the population are disabled but suffer no subsequent handicap.
- Of the 1,264,600 handicapped persons, 295,800 were mildly handicapped, 253,700 were moderately handicapped and 513,900 were severely handicapped. (Severity of handicap was not determined for 201,200 persons with only a schooling or employment limitation, or aged less than 5 years).
- Of those who are handicapped, 111,000 are residents of health establishments and 1,153,600 are resident in households.
- The handicaps of persons in health establishments tended to be more severe than those of persons in households. For example, over 90 per cent of handicapped persons in health establishments were severely handicapped compared with 36 per cent of handicapped persons in households.
- As age increases the likelihood of being handicapped also generally increases. For example, in the age range 15 to 24 years, there were 66,200 handicapped persons (2.6% of persons aged 15 to 24) whilst in the age range 65 to 74 years there were over 220,000 (24.1% of persons aged 65 to 74).

DEATHS

Causes of Death and Perinatal Deaths

Causes of death in Australia are currently classified according to the Ninth Revision of the International Classification of Diseases (ICD) produced by the World Health Organization (WHO). For the years 1968 to 1978, causes of death were classified according to the Eighth Revision of the ICD. A summary of age-specific death rates for major cause groups in this period was published in *Causes of Death: Age-specific Death Rates, Australia, 1968 to 1978* (3308.0). Detailed statistics are published in the publication *Causes of Death, Australia* (3303.0), and only broad groupings of causes of death are shown in the table below. The statistics in the table relate to 1981 and represent the number of deaths registered that year rather than the number of deaths which actually occurred in 1981.

The major causes of death in the community in 1981 were ischaemic heart disease (accounting for 28.8 per cent), malignant neoplasms (cancers) (21.8 per cent), cerebrovascular disease (strokes) (12.6 per cent) and external causes of injury or poisoning (7.2 per cent). Infectious diseases have caused few deaths in Australia in recent years, largely as a result of quarantine activities, immunisation campaigns and similar measures. In 1981, only 0.5 per cent of all deaths were due to such diseases.

The relative importance of groups of causes of death varies with age. Heart disease, cancer and strokes are predominant in middle and old age. Accidents, particularly those involving motor vehicles, are the primary cause of death in childhood and early adulthood. The majority of infant deaths (65 per cent in 1981) occur within 28 days after birth. Nearly all of these neonatal deaths are due to congenital anomalies, birth injury or other conditions present from birth.

CAUSES OF DEATH IN EACH AGE GROUP, AUSTRALIA, 1981

	Age group (years)									
Causes of death	*Under one*	*1–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65–74*	*75 and over*	*Total (a)*
	NUMBER OF DEATHS									
Malignant neoplasms	17	181	147	335	830	2,361	5,221	7,459	7,256	23,812
Ischaemic heart disease	–	1	6	66	433	1,909	5,203	9,663	14,143	31,433
Cerebrovascular disease	2	13	16	58	144	461	1,221	2,973	8,816	13,706
Other diseases of the circulatory system	13	31	57	96	143	409	1,009	2,065	7,079	10,906
Congenital anomalies	694	97	31	22	13	12	36	25	7	937
Certain conditions originating in the perinatal period	953	3	–	–	–	–	–	–	–	956
Bronchitis, emphysema and asthma	1	20	37	36	40	117	331	633	907	2,123
Other diseases of the respiratory system	53	46	28	43	46	192	614	1,350	2,840	5,212
Motor vehicle accidents	18	267	1,240	571	325	273	260	209	209	3,373
Other accidents	29	246	261	301	226	239	219	272	700	2,493
Suicides and self-inflicted injuries	–	5	294	342	295	275	224	156	80	1,672
All other causes(*b*)	567	240	302	374	458	973	1,644	2,659	5,149	12,380
All causes	**2,347**	**1,150**	**2,419**	**2,244**	**2,953**	**7,221**	**15,982**	**27,464**	**47,186**	**109,003**
	RATE(*c*)									
Malignant neoplasms	7	5	6	14	46	157	385	796	1,400	160
Ischaemic heart disease	–	–	–	3	24	127	384	1,031	2,729	211
Cerebrovascular disease	1	–	1	2	8	31	90	317	1,701	92
Other diseases of the circulatory system	6	1	2	4	8	27	74	220	1,366	73
Congenital anomalies	294	3	1	1	1	1	3	3	1	6
Certain conditions originating in the perinatal period	404	–	–	–	–	–	–	–	–	6
Bronchitis, emphysema and asthma	–	1	1	1	2	8	24	68	175	14
Other diseases of the respiratory system	22	1	1	2	3	13	45	144	548	35
Motor vehicle accidents	8	8	48	23	18	18	19	22	40	23
Other accidents	12	7	10	12	12	16	16	29	135	17
Suicides and self-inflicted injuries	–	–	11	14	16	18	17	17	15	11
All other causes	240	7	12	15	25	65	121	284	994	83
All causes	**995**	**33**	**93**	**91**	**162**	**479**	**1,180**	**2,931**	**9,106**	**730**

CAUSES OF DEATH IN EACH AGE GROUP, AUSTRALIA, 1981—*continued*

Causes of death	Age group (years) Under one	1–14	15–24	25–34	35–44	45–54	55–64	65–74	75 and over	Total (a)
	PERCENTAGE(d)									
Malignant neoplasms	0.7	15.7	6.1	14.9	28.1	32.7	32.7	27.2	15.4	21.8
Ischaemic heart disease	–	0.1	0.2	2.9	14.7	26.4	32.6	35.2	30.0	28.8
Cerebrovascular disease	0.1	1.1	0.7	2.6	4.9	6.4	7.6	10.8	18.7	12.6
Other diseases of the circulatory system	0.6	2.7	2.4	4.3	4.8	5.7	6.3	7.5	15.0	10.0
Congenital anomalies	29.6	8.4	1.3	1.0	0.4	0.2	0.2	0.1	–	0.9
Certain conditions originating in the perinatal period	40.6	0.3	–	–	–	–	–	–	–	0.9
Bronchitis, emphysema and asthma	–	1.7	1.5	1.6	1.4	1.6	2.1	2.3	1.9	1.9
Other diseases of the respiratory system	2.3	4.0	1.2	1.9	1.6	2.7	3.8	4.9	6.0	4.8
Motor vehicle accidents	0.8	23.2	51.3	25.4	11.0	3.8	1.6	0.8	0.4	3.1
Other accidents	1.2	21.4	10.8	13.4	7.7	3.3	1.4	1.0	1.5	2.3
Suicides and self-inflicted injuries	–	0.4	12.2	15.2	10.0	3.8	1.4	0.6	0.2	1.5
All other causes	24.2	21.0	12.5	16.7	15.5	13.5	10.3	9.7	10.9	11.4
All causes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) *Total* includes 37 deaths where age is not known. (*b*) Includes 349 deaths from external causes and 545 deaths from infectious diseases. (*c*) Rates are per 100,000 of population at risk, except for children under one year of age which are per 100,000 live births registered. (*d*) Percentage of all deaths within each age group.

Perinatal deaths

Since deaths within the first four weeks of life (neonatal deaths) are mainly due to conditions originating before or during birth, and the same conditions can cause fetal death (stillbirth), special tabulations are prepared combining the two. These are termed 'perinatal deaths'. The statistical definition of perinatal deaths in Australia was amended in 1979 from that previously used, in accordance with a recommendation of the Ninth Revision Conference (1975) of the World Health Organization "that national perinatal statistics should include all fetuses and infants delivered weighing at least 500 grams (or, when birthweight is unavailable, the corresponding gestational age (22 weeks) or body length (25 cm crown-heel)), whether alive or dead". The following table incorporates a further recommendation of the Conference in that it shows for 1981 the number of fetal, neonatal and total perinatal deaths in Australia classified by both the main condition in the fetus/infant and the main condition in the mother.

The perinatal death rate for Australia continues to decline. In 1981 the rate (on the new definition) was 13.25 per 1,000 total births whereas, on the same definition, it was 14.14 in 1980 and 18.65 in 1976.

Of the conditions in the child, the two main groups responsible for perinatal deaths were *Hypoxia, birth asphyxia and other respiratory conditions* (37.9 per cent of the total) and *Congenital anomalies* (24.0 per cent). Thirty-eight per cent of all perinatal deaths did not mention any condition in the mother as contributing to the death. Of those deaths where maternal conditions were reported, 47 per cent were reported as being due to *Complications of placenta, cord and membranes.*

PERINATAL DEATHS BY CAUSE, AUSTRALIA, 1981

Cause of death	Number of deaths			Rate		
	Fetal	Neonatal	Perinatal	Fetal(a)	Neonatal (b)	Perinatal (a)
Conditions in fetus/infant—						
Slow fetal growth, fetal malnutrition and immaturity	147	173	320	0.62	0.73	1.35
Birth trauma	5	36	41	0.02	0.15	0.17
Hypoxia, birth asphyxia and other respiratory conditions	764	429	1,193	3.22	1.82	5.02
Fetal and neonatal haemorrhage	31	99	130	0.13	0.42	0.55
Haemolytic disease of fetus and newborn	21	6	27	0.09	0.03	0.11
Other conditions originating in the perinatal period	510	102	612	2.15	0.43	2.58
Congenital anomalies	224	532	756	0.94	2.26	3.18
Infectious and parasitic diseases	—	2	2	—	0.01	0.01
All other causes	4	61	65	0.02	0.26	0.27
Conditions in mother—						
Maternal conditions which may be unrelated to present pregnancy	212	88	300	0.89	0.37	1.26
Maternal complications of pregnancy	210	455	665	0.88	1.93	2.80
Complications of placenta, cord and membranes	745	173	918	3.14	0.73	3.87
Other complications of labour and delivery	30	32	62	0.13	0.14	0.26
No maternal condition reported	509	692	1,201	2.14	2.94	5.06
All causes—1981	**1,706**	**1,440**	**3,146**	**7.18**	**6.11**	**13.25**
1980	1,708	1,503	3,211	7.52	6.67	14.14
1979	1,757	1,605	3,362	7.82	7.20	14.96
1978	1,904	1,737	3,641	8.43	7.75	16.11
1977	1,896	1,869	3,765	8.31	8.26	16.51
1976	2,121	2,165	4,286	9.23	9.51	18.65

(*a*) Per 1,000 births registered (live births and stillbirths) weighing 500 grams or more at birth. (*b*) Per 1,000 live births registered weighing 500 grams or more at birth.

Note: The statistics for the years 1976 to 1978 in this table are also based on the revised definition.

Cremations

The first crematorium in Australia was opened in South Australia in 1903. At 31 December 1981 there were thirty-eight crematoria in Australia, situated as follows: New South Wales, 17; Victoria, 4; Queensland, 9; South Australia, 2; Western Australia, 3; Tasmania, 2; Australian Capital Territory, 1. There is no crematorium in the Northern Territory. The number of cremations carried out in 1979 was 49,568 (46.5 per cent of all deaths); in 1980 it was 50,629 (46.6 per cent of all deaths) and in 1981 the number was 51,673 (47.4 per cent of all deaths).