## COMMONWEALTH GOVERNMENT HEALTH SERVICES

## Commonwealth Department of Health

The Commonwealth Department of Health implements government policies and administers Commonwealth legislation in health and health-related matters. It plans, develops, and co-ordinates approved national health programmes and it is responsible for advice on health matters to Australia's external territories.

The Commonwealth Minister for Health is responsible for the administration of the Department and three statutory authorities – the Capital Territory Health Commission, the Commonwealth Serum Laboratories Commission, and the Health Insurance Commission. In addition, the Commonwealth controls the Commonwealth Institute of Health.

The Department is organised on a geographic basis with its Central Office located in Canberra and a Regional Office in each State and Northern Territory. The Victorian Regional Office of the Department is responsible for administering a wide range of the Department's programmes, which include the following:

- (1) human, animal, and plant quarantine programmes which aim to prevent the entry and spread of diseases;
- (2) provision of medical examinations and assessments for Commonwealth Government employment and for other purposes such as invalid pensions and the handicapped children's allowance;
- (3) provision of occupational health services to Australia Post, the Australian Telecommunications Commission, and other Commonwealth Government departments and instrumentalities;
- (4) administration of the provisions of the National Health Act relating to the Pharmaceutical Benefits Scheme, including processing of chemists' claims and pharmaceutical inspection and liaison;
- (5) supervision of the operation of the Commonwealth Pathology Laboratory at Bendigo which provides a diagnostic pathology service to hospitals and medical practitioners;
- (6) supervision of the operation of the National Acoustic Laboratories' hearing centres in the provision and servicing of hearing aids;
- (7) administration of the provisions of the Isolated Patients' Travel and Accommodation Assistance Scheme;
- (8) supervision of the operation of the nursing homes scheme under the National Health Act and the deficit financing arrangements under the Nursing Homes Assistance Act;
- (9) undertaking the registration, inspection, and control of private hospitals and nursing homes;
- (10) administration of the Domiciliary Nursing Care Benefit scheme; and
- (11) administration of health insurance arrangements within Victoria, including control, supervision, and financial monitoring of registered health benefits organisations, investigation of suspected breaches of Commonwealth legislation, and monitoring the servicing patterns of medical practitioners.

In Victoria, the Department is also responsible for the operations of the Australian Radiation Laboratory, the Australian Dental Standards Laboratory, and the National Biological Standards Laboratory.

#### Community Health Programme

The Community Health Programme was introduced in 1973-74 to encourage the provision of comprehensive and integrated community-based health care and support services. Its objectives

emphasise prevention, education, rehabilitation, and domiciliary services as an alternative to institutional care. Although by no means are all community health services supported under this one programme, it is seen as a major source of support for new initiatives in community health services. There is a clear preference for proposals in which the community itself has been involved in the planning of programmes, together with the relevant State health authorities.

This programme promotes community health by allocating funds to State and Territory health authorities for salaried/sessional medical and associated health services; and by providing funds directly to organisations conducting projects for community-based health related services which are national in character.

The grants to the State and Territory health authorities were introduced as part of Medicare on 1 February 1984. In 1984-85 these grants are estimated to be \$18m. In addition to the Medicare grants, the Commonwealth also provides funds to the States and the Northern Territory for community health services through a component of the Identified Health Grants. As these grants are part of the General Revenue Grants, their use and distribution within each State and the Northern Territory is determined by the recipient State/Territory.

In 1984-85, \$11m will be provided for health related programmes and services of national significance and to maintain the national secretariats which co-ordinate voluntary services in the health field.

# COMMUNITY HEALTH PROGRAMME, EXPENDITURE, AUSTRALIA

(\$m)							
1983-84	1984-85 (a)						
7.3 9.2	18.0 11.0						
16.5	29.0						
	7.3 9.2						

(a) Estimated.

#### Health Services Research and Development Grants

The purpose of these grants is to improve through research, demonstration, and evaluation, the administration, planning, and delivery of health care and to study the quality, efficiency, and effectiveness of health and aged care services. An amount of \$3.2m was made available in 1983-84 in grants for all States; this included funding of approximately \$2m for the development of aged care assessment systems.

#### Health Insurance Commission

From 1 November 1978, the role of the Health Insurance Commission was reduced to that of a private registered organisation (while still a statutory authority) and its former functions were taken over by the Commonwealth Department of Health. From 1 February 1984, the Health Insurance Commission has been charged with responsibility for the operation of Medicare which is funded through the Department of Health.

Further references: Victorian Year Book 1976, pp.675-6; 1977, pp.755-6; 1978, pp.658-61; 1984, pp.568-70

#### VICTORIAN GOVERNMENT HEALTH SERVICES

#### **Health Commission of Victoria**

The Health Commission of Victoria commenced operations in December 1978. It operates through four line divisions — Public Health, Hospitals, Mental Health, and Mental Retardation. These are supported by four service divisions — Planning, Building and Services, Finance, and Personnel. The Commission is currently in the process of regionalising its administration, and by mid-1985, eight newly created and decentralised regional administrations will be in operation.

#### Public Health Division

The Public Health Division provides its services through six branches - Clinical Services, Inspection Services, Occupational Health, Dental, Pre-school Child Development, and Family Health.

#### Clinical Services Branch

Prison Medical Service. The Prison Medical Service provides medical and dental treatment for all prisoners in Victoria. In country prisons, treatment is provided through local general practitioners and

hospitals. At Pentridge Prison there is a twenty bed hospital with a large out-patient department staffed by Prison Medical Officers and a range of visiting specialists. There are also twelve beds in St Vincent's Public Hospital.

Other programmes include dental and optometry services.

Child Care. The Health Commission meets the cost of medical, dental, and optical treatment rendered to State Wards and other children under the care of the Department of Community Welfare Services

In addition, a range of medical and pharmaceutical supplies is provided free of charge to group homes, orphanages, and other child care groups.

Medical Assessment Services. These are responsible for the examination and assessment of applicants to the Victorian Public Service and semi-government organisations, and for advice to various State Authorities on matters of ill-health and retirement of officers.

Communicable Diseases Centre. This is responsible for the operation of a specialist clinic for the free treatment of sexually transmitted diseases and for contact tracing and follow-up of patients.

Tuberculosis Services. These are responsible for the prevention, early detection, and treatment of the disease tuberculosis and maintaining public awareness of it. The broad policy of tuberculosis control continues as in recent years, but compulsory mass x-ray surveys have been suspended since December 1976. The number of beds reserved for treatment of tuberculosis patients continues to decline.

Persons born outside Australia show a considerably higher incidence of tuberculosis than those born in Australia and special attention is being directed to the medical supervision of south-east Asian refugees arriving in this country. Other groups requiring surveillance include persons with a past history or significant radiological evidence of past tuberculosis infection and heavy users of alcohol. Because of their higher risk of developing active tuberculosis, these persons are asked to remain under review at clinics or by private doctors.

Tuberculin testing among school children continued and in 1983, 107,255 were tested and 79,372 were given B.C.G. vaccination. This compares with 93,833 tests and 58,779 vaccinations for 1982.

Medical supervision of all new cases and diligent contact control have kept the situation within control. A major credit for improving the situation is the availability of modern anti-tuberculosis chemotherapy. The four drugs – Streptomycin, Isoniazid, Rifampicin, and Ethambutol – make it possible to render virtually all persons with active tuberculosis non-infectious. This applies to both new cases and those who have reactivated and both categories usually need only a short period of institutional care. Treatment on a domiciliary basis, under direct supervision, is being used when warranted. Experience is showing that reactivation of tuberculosis is being markedly reduced among those who have had full courses of drug treatment.

Compulsory community chest x-ray surveys were conducted throughout Victoria from 1963 to 1976. Three mobile x-ray units have been retained by Tuberculosis Services and are being used for special community groups and others at special risk, for example, mental hospitals, prisons, homes for the aged and indigent, and contact surveys. The general situation of community surveys is reviewed periodically with special reference to high risk areas.

## TUBERCULOSIS BUREAU AND CLINICS, VICTORIA

Activities	1978	1979	1980	1981	1982	1983
New cases referred (a)	5,399	5,877	6,732	7,031	7,168	7,123
Active cases –						
New	293	395	392	380	357	244
Reactivated	25	18	16	13	14	10
Chronic	4	3	4	6	6	7
Reattendances	21,212	21,167	21,807	24,830	24,011	23,310
Home visits by nurses	10,006	13,970	15,863	15,433	15,972	14,831
x-ray examinations (films taken) (b)	36,312	35,368	38,235	39,535	39,690	36,433
Tuberculin tests (c)	6,076	6,870	7,222	7,031	7,205	6,626
B.C.G. vaccinations (c)	1,603	1,675	1,951	1,903	1,871	1,724
Chest x-ray surveys (x rays taken)	48,301	40,848	48,501	39,993	31,980	28,953

<sup>(</sup>a) Referred to investigation from all sources for the first time in that year.

Further references: Compulsory chest x rays, Victorian Year Book 1965, p. 241; Tuberculosis and mass x-ray surveys, 1967, pp. 507-8

 <sup>(</sup>b) Large and micro films, excluding mass x-ray surveys with mobile units.
 (c) Excludes tests and vaccinations undertaken by the Schools BCG Section of Tuberculosis Services.

The constant danger to unprotected persons proceeding to areas of high risk is emphasised and the Branch considers that all susceptible persons should be advised to have B.C.G. vaccinations before leaving Australia. There were 29 deaths in Victoria in 1982 of persons with active tuberculosis.

Inspection Services Branch

The Medical and Health Surveying Section. This Section superintends and advises local government in matters of public health. It is operated by medical officers and health surveyors, and is regionalised into six specific health areas for the State. The Section is closely involved in reported cases of food poisoning and infectious disease. With the assistance of local government, the Section locates all known contacts, arranges testing to be carried out and initiates appropriate action to insulate the community effectively from the causes of such problems. A mosquito vector programme is conducted throughout Victoria to control the breeding of the mosquito Culex Annulirostris. This reduces the possibility of transmission of Australian arbo-encephalitis. A programme of screening of all Indo-Asian refugees for health problems is also conducted at the time of their entry into Victoria.

The Engineering and Sanitation Section. This Section exercises responsibility in the installation of safe water supplies, the sanitary disposal of effluent, the fluoridation of water supplies, and the cleanliness of public swimming pools. Other activities include the approval of septic tanks installed by local councils, the supervision of sewage treatment processes, the approval of council-owned cattle saleyards and other offensive trade premises, and the licensing of waste water re-use.

The Poisons Control Section. This Section monitors the margin of safety that applies in the manufacture, storage, distribution, and use of poisons and deleterious substances. From advice of an expert Committee and recommendations of the National Health and Medical Research Council, it supervises the methods of manufacture, and sale of poisons and deleterious substances through a complete licensing system. Monitoring of required labelling provisions is also conducted. Included in the role of the Section is the detection of illegal supply and possession of restricted substances.

The Drugs of Dependence Unit. This Unit monitors and controls the use and misuse of drugs of dependence in the community. It prepares for approval and co-ordinates the issue of permits and authorisations for drugs of addiction, monitors computer records of drug movements and, from these data, detects drug dependent persons. The Unit also investigates the activities of pharmacists and doctors in relation to the Poisons Act.

The Proprietary Medicines Section. Through a registration system, this Section requires all medicines for human use to conform to certain standards of efficacy and safety in manufacture, storage, wholesale and retail distribution, and consumer use. All medicines considered acceptable for marketing in Victoria are given a specific registration number which must appear on the outer container of such medicine. Claims made in any labelling utilised in the sale of a product are screened to ensure that the formulation of the product can satisfy such claims. Within the context of this Section, matters related to therapeutic goods and devices are also considered.

The Food Standards Section. This Section superintends and advises local government on prescribed standards for food and food products. The standards are based on recommendations of the National Health and Medical Research Council and resolutions of an expert Food Standards Committee. Regulations prescribing appropriate standards for food and food products cover purity and wholesomeness, manufacturing and storage requirements, and the manner in which food and food products may be labelled.

The State Health Laboratories. These provide service to local government, the Commission and other government departments in analyses of material submitted for examination. Ongoing analyses of foodstuffs are carried out to ensure compliance with relevant food standards. Testing of toys and cosmetics for lead content is also carried out.

The Legislation Section. This Section is responsible for preparing new draft legislation from advice received from the various Branches and Sections of the Public Health Division. The Section is also responsible for conducting a continual review of existing legislation to ensure that it is both adequate and relevant to the current needs of the community. Exhaustive consideration is given to matters requiring legislation and all interested parties are given the opportunity to supply arguments for or against prepared drafts so that a desired result is obtained.

Cemeteries Section. The Health Commission's Cemeteries Section administers the Cemeteries Act and Regulations under which cemeteries and crematoria operate. The Commission's role centres around supervision, guidance of local cemetery trusts, and planning for future burial and cremation needs. Day to day operations at cemeteries are carried out by trustees appointed by the Governor in Council. There are more than 600 public cemeteries and forty-eight approved private cemeteries.

#### Dental Health Branch

The main aim of the dental therapy scheme in Victoria (conducted by the Dental Health Branch of the Public Health Division) is to develop a comprehensive dental service offering free dental care to pre-school and primary school children. This scheme will be staffed basically by dental therapists working under the general direction and control of dentists.

The dental therapy course extends over a period of two years and the students, who must have reached university entrance requirements, are appointed to the Victorian Public Service as cadets. The main theme is preventive dentistry with lectures and projects that emphasise this aspect in every subject. During second year, cadets experience several hours of practical dentistry each day. The maximum intake at the Dental Therapy School is sixty students.

After graduation, dental therapists work in one or two dental surgery clinics being established in school grounds where practicable. Other schools are visited by mobile dental clinics. A building programme in metropolitan and country areas is being continued to accommodate dental therapists as they graduate.

Having controlled existing dental decay and gum disease by treatment procedures, the dental therapists then aim to ensure that by regular re-examinations, clinical methods of prevention, and through dietary and oral hygiene education, children suffer from less dental disease. In 1978, newly graduated dental therapists were mainly posted to the western and north-western suburbs of Melbourne. In 1979, expansion of the scheme was centred in the Geelong/Bellarine Peninsula and Warragul/La Trobe Valley areas. In 1981 children in the eastern suburbs of Melbourne became eligible for treatment at the Dental clinic at 448 St Kilda Road, Melbourne, on an appointment basis.

Because of lack of funds in late 1982, it was decided that, in future, dental therapists would concentrate on dental examinations and dental health education for all primary school children. Free treatment was only to be given to children classified as disadvantaged or handicapped due to geographic isolation. Other children requiring treatment would be advised to visit private dentists, and payment for treatment would be a parental responsibility.

## Pre-school Child Development Branch

The Pre-School Child Development Branch of the Public Health Division is responsible for educational, care, and developmental services for children of pre-school age (until attendance at primary school). It is concerned with both government subsidised and privately operated centres.

The Branch has a staff of regional pre-school advisers. They work closely with community groups and the staff of shire and city councils to integrate services, where possible, and to utilise buildings to the fullest. The Branch's responsibilities, through its advisers, include: maintaining standards in kindergartens and other types of centres; being a resource to play groups, living and learning centres, and occasional care programmes; assisting councils and other organisations to establish services; being a liaison with infant health centres and other organisations involved in early childhood services; providing information and assistance to the public, parents, and staff of centres; conducting in-service work for teachers and advisory committees on the administration of centres; assisting in placing children with special needs in appropriate centres and establishing services for particular needs; and where appropriate, being part of the Early Childhood Development Programme team.

The type of service established varies according to the needs of the region and the age of the children. The range of services includes the following:

Toddler groups (Subsidised). For children aged between eighteen months and three years and their parents. Conducted by a trained kindergarten teacher and infant welfare sister in an infant welfare centre, this service not only offers parents the opportunity to learn more about the growth and development of young children, but also demonstrates and recommends suitable learning activities. Kindergartens and pre-school play centres (Subsidised). Provide educational programmes for children from three years of age onwards for up to five half-day sessions per week during the school term. A trained teacher with an untrained assistant plans an educational programme suited to the needs of the individual children in the groups.

Day care centres (Subsidised). Cater for pre-school children whose parents desire full-day care either on a regular basis or occasionally. These centres vary in size and administration, from a large centre

for up to sixty children, in the charge of a qualified director, to a small group, cared for by parents on a co-operative basis. Most centres employ trained staff to carry out an individually planned programme. *Private child minding centres*. Centres must be registered, and although the programmes are not professionally supervised, the facilities and programmes are monitored by the regional pre-school adviser in accordance with child minding regulations.

Early Childhood Development Programmes. These are a community based network of services for young children and their families. They seek to build on to, and to integrate, existing services such as infant welfare, pre-school, and school medical services in accordance with the developmental needs of families with young children. Through consultations and explanations a multi-disciplinary team is established, the aim being to make the services more accessible to the people.

Fourteen Early Childhood Development Programmes (ECDPs) have so far been set up in the following regions: South Western, Central Highlands, Central Gippsland, Diamond Valley/Eltham, Knox/Sherbrooke, Barwon, Broadmeadows, City of Melbourne, Mallee (Mildura/Swan Hill areas), Footscray/Sunshine, Goulburn Valley, Eastern Divide (Lilydale area), Frankston, and Gisborne. They are at various stages of development and in some cases have not yet reached their full staffing strength. It is estimated that approximately thirty-two Early Childhood Development Programmes will be required to give a comprehensive coverage of Victoria.

A recent innovation in the Community Health area saw the integration of Broadmeadows ECDP with the Broadmeadows Community Health and Community Mental Health Services. It is anticipated that further initiatives along these lines will continue.

#### Family Health Services Branch

School Medical Service. At a time of changing emphasis in community and child health needs, the School Medical Service provides support to children and families with a wide variety of needs. Where early childhood development complexes are established, doctors and school nurses work closely with the allied health professionals based in these centres. In addition to this supporting role, increasing emphasis is placed on the preventative aspects of child health, in particular that of the early identification and management of a wide variety of handicapping conditions.

In 1982, a developmental medical examination was offered to children attending subsidised pre-school and day care centres and 42,778 were examined by medical officers. Previously unrecognised disability was found to be present in 6,431 of these children.

Examination of the school age child is conducted by specially trained school nurses and 33,131 Year 1 children were examined in 1982. In other areas doctor/nurse teams work together and a further 2,687 Year 1 children received an examination by a medical officer, preference being given, where possible, to those children who had not been medically examined in pre-school.

The school nurse has an increasingly important and specialised role in the Service and works within a group of schools which are her responsibility. Vision is screened regularly in Year 1, Year 4, and Year 8; pure tone audiometry is used to screen hearing in Year 1 and wherever hearing impairment is suspected. Children with a previously recognised disability are reviewed to ensure that ongoing management is appropriate, and referrals of children thought to be educationally or otherwise at risk are taken from teachers. In 1982, 255,699 school age children were examined of whom 13,078 were referred for further investigation.

Special services are provided to children with intellectual disability and twenty-nine special schools and fifteen special development schools in Victoria were visited throughout the year by a doctor/nurse team. Consultative services are also provided and 126 children were examined in the clinic for the partially sighted and 844 hearing impaired children were examined. These examinations are part of an inter-disciplinary assessment in collaboration with Victorian Education Department psychologists and teachers to determine the best educational programme for the individual child. Input is also provided to regional ascertainment committees for the hearing impaired.

Medical examinations were performed on children referred for assessment of learning difficulties at school and 294 pre-school children were seen for assessment and ongoing management of developmental delay. The services of seventeen sessional paediatricians, regionally based, are now available throughout Victoria.

The uniformly high standards of examination required for this type of work in the educationalmedical field are maintained by a constant ongoing programme of in-service training for all personnel, both nursing and medical. The aim of the service is as always to help the individual child to develop to his or her full potential and to promote better health within the community.

Maternal and infant health services. These services, operated by the Public Health Division's

Family Health Services Branch, include the supervision of infants from the first weeks of life throughout the pre-school years, and the guidance of mothers during pregnancy, the post-natal period, and the early child rearing years.

The aim of the Infant Welfare Service is to promote health, in its broadest sense, from the pre-natal period through the child's earliest weeks to school age. The service is delivered, in conjunction with local government, by infant welfare nurses at infant welfare centres. There are 502 nurses employed in 799 centres throughout Victoria. The service is free and readily available to parents. The Health Commission employs a team of infant welfare nursing advisers to assist nurses employed by local government. Direct services are provided to migrant hostels, to Puckapunyal Army Camp, and to four infant welfare circuits in northern and eastern Victoria.

Family planning is an integral part of family health, and family planning clinics are conducted at a growing number of infant welfare centres. The centres are run jointly by the Health Commission and local government, and are staffed by Health Commission doctors and nurses trained in family planning methods. A wide range of free services is offered.

Particulars	1981-82	1982-83
Family planning and pre-natal services -		
Number of clinics	88	93
New enrolments	9,393	9,682
Attendances of patients	32,233	35,945
Infant welfare services –	,	,
Number of infant welfare centres (all		
types)	798	799
Infant welfare sisters employed	521	502
Attendances of children	1,323,801	1,336,563
Home visits	173,078	174,182
Post-natal visits to hospital	35,478	36,194

## Hospitals Division

Under the *Hospitals and Charities Act* 1958, all institutions and benevolent societies as defined in the Act must be registered. The Division ensures that the main requirements for registration, that is, the setting of suitable objectives and the provision of appropriate constitutions, are complied with.

Registration of institutions and benevolent societies under the Act entitles such organisations to share in the Hospitals and Charities Fund for maintenance (operating) subsidies. The great proportion of financial assistance is allocated to hospitals, and hospitals for the aged. The award of grants is dependent upon the availability of funds and the purposes for which they are to be applied. Close scrutiny is maintained by the Division over hospital budgets. Each institution is required to submit budgets for approval covering the succeeding year's operations. The cost of operating the public hospital system has increased substantially in the last decade. In 1969-70, the average cost per bed per day was \$23.53 compared with \$287.21 in 1982-83.

The Health Commission, through the Hospitals Division, exercises control over State funds for capital works. Commission approval is required at all stages for hospital building projects from the original discussions, through preliminary sketch plans to documentation, tendering, and supervision of the projects. Capital expenditure for 1969-70 amounted to \$18.2m compared with \$40.2m in 1982-83. Included in this amount was a contribution of \$10m from the Hospitals and Charities Fund for maintenance works at hospitals.

The Division co-ordinates hospital and institutional activities, and has the power to inquire into the administration of institutions and societies. It also has various responsibilities for nursing in Victoria, deciding in consultation with the Victorian Nursing Council whether any particular hospital will participate in approved basic or post-basic registered general nursing courses: it determines the establishment of nursing staff for hospitals; advises intending applicants for basic courses in nursing on the educational standard required and subjects preferred for entry into the various branches of nursing; produces publicity and information, including films and other advice; offers scholarships for recommended registered general nurses to attend tertiary institutions to undertake postgraduate courses; directs a staff of nurses to relieve matrons in country hospitals when they are on leave, and assist when urgent shortages of nursing staff occur; and helps generally in nursing matters in hospitals and community health services.

## Mental Health Division

This Division of the Health Commission operates treatment and preventive services for mental illness, alcoholism and drug dependence, and forensic psychiatry.

Psychiatric care is provided by psychiatric and mental hospitals, clinics, child and adolescent centres, community mental health centres, domiciliary services, and day hospitals.

Direct alcoholism and drug dependence services are provided by assessment centres, detoxification units, and rehabilitation centres. The Division is also involved in the development of services through voluntary organisations.

Forensic psychiatry is provided to Victoria's prisons, and the Children's Clinic receives psychiatric referrals from the Children's Court.

#### Mental Retardation Division

This newly established Division has responsibility for the operation of training centres and other centres for the mentally retarded. The primary objective of the Division is to enable mentally retarded persons to live in the community with the greatest possible degree of independence and dignity.

The Division has four branches – Regional Services, Institutional Services, Resources Development, and Administration.

Further references: History of the Victorian Department of Health, Victorian Year Book 1961, pp 215-17; Health of the Victorian Community, 1962, pp. 243-6; Hospital Regional Planning, 1962, pp 261-2; Historical Outline, 1965, pp. 253-5; Hospital Architecture, 1966, 241-2; Charities in Victoria, 1968, pp. 514-15; Rationalised Medical Services, 1971, pp. 511-12; Committee of Inquiry into Hospital and Health Services in Victoria, 1976, pp. 671-5; Victorian Department of Health, 1978, pp. 622-4; Local Government Authorities, 1978, p. 665; Victorian Government Health Services, 1984, pp. 570-1

#### HEALTH INSURANCE IN AUSTRALIA

In 1946, the Commonwealth Parliament was empowered by referendum to provide medical and dental services as well as pharmaceutical, sickness, and hospital benefits throughout Australia.

The original national health insurance system was introduced on 1 July 1953 to enable the public to obtain protection against the cost of medical and hospital services by taking out insurance with non-profit registered health insurance organisations. The Commonwealth Government supplemented hospital and medical benefits paid by these organisations.

Under this system which remained virtually unchanged for nearly twenty years, a person who had incurred medical or hospital costs presented the receipt to his fund, which paid a benefit from the fund and also, as agent for the Commonwealth, a benefit from the Government.

Following extensive Parliamentary debate on health insurance issues in the late-1960s and the criticisms contained in the report of the Nimmo Committee in 1969, the system was modified in several ways.

A list of most common medical fees was drawn up and incorporated in the National Health Act as the Schedule of Fees for Medical Benefits Purposes (now known as the Medical Benefits Schedule and reviewed from time to time by an independent tribunal). Benefits were substantially increased to reduce the gap between cost and benefits. Commonwealth Government subsidisation was made available for low income and certain other disadvantaged groups to obtain private insurance, and funding was made available to increase the insurability for persons with chronic illnesses, disabilities, or pre-existing illnesses.

In July 1975, the Commonwealth Government introduced the scheme known as Medibank. This scheme provided for medical benefits to be paid to all persons at the rate of eighty-five per cent of the scheduled fee with a maximum gap per service of \$5; in addition, every Australian became entitled to free standard ward public hospital treatment. A bulk billing facility for doctors was introduced, the Commonwealth and State Governments entered cost sharing agreements for the funding of public hospitals on a 50-50 basis, and a levy on taxable income was proposed to finance the Medibank scheme in part.

Following the Commonwealth Government's consideration of the deliberations of the Medibank Review Committee in 1976, changes were made to the Medibank arrangements from 1 October 1976. In the interest of maintaining universal coverage, Australians could choose to remain insured with Medibank by the payment of a levy, or contribute to a private insurance organisation.

On 1 July 1978, medical benefits were reduced to seventy-five per cent of the scheduled fee with a maximum gap of \$10.

The health insurance levy, Medibank Standard, and the concept of compulsory health insurance were abolished on 1 November 1978. A universal new Commonwealth benefit was introduced to

provide benefits to cover forty per cent of the scheduled fee with a maximum gap of \$20. Private health funds provided additional benefits as an optional extra and doctors could bulk bill the Commonwealth Government for pensioners and persons they identified as socially disadvantaged at seventy-five per cent of the scheduled fee. Persons had to register with a private fund to receive the Commonwealth Benefit.

On 1 September 1979, the Commonwealth Government abolished the forty per cent – \$20 scheme and substituted a Commonwealth medical benefit to meet the cost over \$20 for each service up to the limit of the scheduled fee.

Further changes to the health insurance arrangements which became operative on 1 September 1981 were made by the Commonwealth Government with the objective of achieving a greater public participation in the cost of health care in Australia.

From 1 September 1981, a Commonwealth Medical Benefit (CMB) became available only to persons insured with a registered medical benefits organisation for at least the basic level of medical benefits (except pensioners holding Pensioner Health Benefit cards and their dependants and 'persons in special need' and their dependants in receipt of a Health Care Card). The basic level of medical benefits was equal to eighty-five per cent of the scheduled fee or the scheduled fee less \$10, whichever was the greater amount. This was a combined medical benefit composed of a flat rate of CMB of thirty per cent of the scheduled fee and the remainder fund benefit. The schedule refers to medical benefits for services by medical practitioners and dental practitioners, benefits for consultation by participating optometrists, and medical benefits for services by accredited dental practitioners in the treatment of cleft lip and cleft palate conditions.

Doctors continued to bill the Commonwealth for pensioners with Pensioner Health Benefit (PHB) cards and for persons identified as being in special need, who were in possession of a Health Care Card. Registered medical benefits organisations were restricted to offering a basic table of medical benefits, a gap medical table and ancillary tables for paramedical services. Contriutions paid to a registered medical benefits organisation for the basic table of benefits were subject to a tax rebate of thirty-two cents in the dollar.

#### Medicare benefits

## General features

Further changes to the health insurance arrangements occurred on 1 February 1984 with the commencement of Medicare, a health insurance scheme based on the principles of universality, equity, simplicity, and ease of access.

The scheme is funded by a one per cent levy on taxable incomes with exemptions from the levy for low income earners and a ceiling for high income earners. The tax rebate formerly paid for basic health insurance contributions ceased from 30 June 1983.

Medicare provides a benefit of eighty-five per cent of the scheduled fee with a maximum gap of \$10 per service to all permanent residents of Australia, which includes visitors staying for more than six months. The same Medicare benefits are payable to Australians while overseas. Patients who have paid \$150 in meeting costs between Medicare benefits and the scheduled fee in a financial year are entitled thereafter in that year to Medicare benefits of 100 per cent of the scheduled fee.

'Gap' medical insurance is not permitted to be offered by health insurance organisations. With the exception of a few regional health funds, Medibank Private is the sole agent for administering Medicare and for payment of Medicare benefits. Medicare entitlements also include access without direct charge to public hospital accommodation and to inpatient and outpatient treatment by doctors appointed by the hospital.

Doctors, approved dentists, and participating optometrists are permitted to bulk bill any eligible person. When bulk billing, the practitioner undertakes to accept the relevant Medicare benefit as full payment for the service.

The Commonwealth Department of Health allocates each medical practitioner a unique number called the provider number. Doctors must use their provider number on accounts and receipts to ensure payment of Medicare benefits. Private medical practitioners normally charge for treatment provided on a fee-for-service basis. Each medical service which attracts a medical benefit has a scheduled fee which is set by an independent tribunal. The fees are set for medical benefit payment purposes only and doctors are not compelled to charge them.

The Australian Medical Association (AMA) publishes its own list of medical services and fees which in the opinion of the Association are fair, reasonable, and appropriate for the services listed. While there is some variation between individual items, generally speaking the AMA fees are in

excess of the scheduled fees (e.g. GP standard surgery consultation recommended by the AMA is \$16.80, compared with \$14.20 for the scheduled fee).

## Pathology benefits

Following the consideration of the Final Report by the Pathology Services Working Party, the Commonwealth Government introduced on 1 August 1977, a number of measures intended to eliminate abuses and contain the escalating costs of medical benefits for pathology services.

A new pathology services and fees section of the medical benefits schedule was introduced which reduced the number of pathology items and fee levels, adjusted fees to stimulate the use of cost saving technology, and generally improved the rules on multiple testing of pathology specimens. The new section also contains a division of pathology items into two groups. The first group of items applies only where the pathology services are rendered by approved pathology practitioners. The second group of items applies where the services are performed by medical practitioners who are not approved pathology practitioners. Approval as a pathology practitioner is obtained from the Commonwealth Minister for Health through the Approved Pathology Practitioner Scheme. This approval is conditional on the signing of an undertaking to observe a code of conduct. At 31 July 1984, there were 800 medical practitioners approved as pathology practitioners in Victoria, compared with 756 practitioners at 31 July 1983.

The items in the first group attract fees and benefits at either the 'SP' or 'OP' rate. The 'SP' rate applies only where the service is performed by an approved pathology practitioner who is a recognised specialist pathologist or by a recognised specialist pathologist employed by an approved pathology practitioner. Also, certain other conditions have to be met. The 'OP' rate applies where the service is performed by an approved pathology practitioner who is not a recognised specialist pathologist, and who does not employ a recognised specialist pathologist. This 'OP' rate also applies to services performed by an approved pathology practitioner who is, or employs a recognised specialist pathologist but where all the other 'SP' rate conditions have not been met.

The Health Insurance Act has been amended so that medical benefits are not payable in respect of pathology services unless a practitioner has determined that the service is reasonably necessary for the adequate medical care of the patient concerned, whether he performs the service or requests another practitioner to perform the pathology tests. It is also a requirement that requests for pathology services within the above mentioned first group of items must be in the requesting practitioner's own handwriting unless these services are self-determined. A request in writing is required within a partnership or group of practitioners. Approved pathology practitioners must retain requests in writing for eighteen months. Requests in writing are not required for services listed in the second group of items.

Medical practitioners who request pathology services must be identified on the patient's account so that they can be made accountable to the Medical Services Committee of Inquiry which is able to ask them to show that the services requested were reasonably necessary for the adequate medical care of their patients.

In November 1977, a further 'HP'fee and benefit rate was introduced and applies to pathology services in respect of private patients of recognised hospitals where recognised hospital or government laboratory equipment and/or staff is used. At the same time, the range of pathology services attracting the 'OP' fee and benefit rate was extended to include services where government (including university) laboratories' staff or equipment is used. This brings these laboratories into line with recognised hospitals' laboratories.

## Specialist recognition

Since 1970, a feature of the Australian medical benefits arrangements has been the payment of a higher rate of benefit for medical services performed by recognised specialists and consultant physicians. Thus, for medical benefit payment purposes, Specialist Recognition Advisory Committees were established in each State to consider applications for recognition from medical practitioners. At 30 June 1984, there were 2,212 recognised specialists and 1,011 recognised consultant physicians in Victoria. This compares with 2,176 and 1,020, respectively, at 30 June 1983.

#### Claims review and investigation

The Commonwealth Department of Health has responsibility for ensuring that claims by medical practitioners or members of the public for payment of Medicare benefits for medical services are legally correct and justifiable under the provisions of the Health Insurance Act.

To this end, claims submitted for payment are reviewed by the Department and, where indications of fraud or other abuse of the health insurance programme are found, investigations are conducted by the Department to determine the nature and extent of the abuse.

Evidence of fraud or offences against the Health Insurance Act is passed to the Australian Federal Police for prosecution while the evidence of non-criminal irregularities is dealt with by means of counselling, referral to the Medical Services Committee of Inquiry, and/or recovery of benefits overpaid.

#### **Committees of Inquiry**

## Medical Services Committee of Inquiry

Under the Health Insurance Act, Committees of Inquiry have been appointed to inquire into or conduct hearings concerning pathology services, undertakings, or any medical service which may appear to be excessive. Excessive services are defined in the Act as professional services which are not reasonably necessary for the adequate medical care of the patient concerned and for which a Medicare benefit may become payable. These Committees do not examine cases of possible fraud, which are covered by other sections of the Health Insurance Act.

Each Committee consists of five members appointed by the Federal Minister for Health, four of whom are appointed by the Minister after consultation with the Australian Medical Association. The four members comprise two general practitioners, a specialist surgeon, and a specialist physician. There are two Medical Services Committees of Inquiry operating in Victoria at present, the first of which was established in 1977.

## Optometrical Services Committee of Inquiry

A Committee of Inquiry into Optometrical Services was established in 1979. To date, only one such Committee is in operation in Australia. The Committee inquires into and reports to the Minister on optometrical undertakings or any optometrical service which may appear to be excessive.

## Medical and Pharmaceutical Services Committee of Inquiry

Under the National Health Act, Committees of Inquiry have been appointed to inquire into and conduct hearings concerning the services of medical practitioners and approved pharmaceutical chemists in connection with the supply of pharmaceutical benefits and the provision of pensioner pharmaceutical benefits.

The Medical Services Committee of Inquiry consists of four medical practitioners appointed by the Federal Minister for Health after consultation with the Australian Medical Association. The Pharmaceutical Services Committee of Inquiry consists of four pharmaceutical chemists appointed by the Minister after consultation with official pharmacy organisations.

#### Statistical data

As part of the existing Medicare benefits arrangements, a comprehensive range of statistics on medical services and payments is being maintained under the health insurance medical statistical system. Data are obtained from Medicare cash payment centres and processing centres and from within the Commonwealth Department of Health. Through the use of computers these data are being used for effective monitoring of the overall operation and costs of the medical benefits scheme; analysis for use in fee and benefit negotiations and inquiries; providing information as a basis for reviewing and restructuring the medical benefits schedule, and for assessing the effects and cost of such review and restructuring; and analysing medical practitioner servicing patterns and providing basic data for Medical Services Committees of Inquiry.

## **Health Programme Grants Scheme**

Health programme grants were introduced as part of the Medibank arrangements with effect from 1 July 1975, primarily to provide an alternative source of financing to the payment of medical benefits for services provided outside of hospitals by medical practitioners employed on a salaried or sessional basis. It was believed that meeting the cost of these services by means of a grant would result in savings to the Commonwealth Government as under the then existing arrangements that Government would have had to meet under Medibank the rest of the medical benefits for services rendered. The grants were also used to assist organisations in the provision of appropriate health-type services.

Organisations receiving such grants include family planning associations, low vision clinics, and Aboriginal medical services.

Since 1 February 1984, organisations in receipt of grants are not permitted to raise a fee for services provided to patients and their operating costs are funded by the Commonwealth Government through the Department of Health on a deficit financed basis.

Commonwealth Government concern about the serious cost escalation being experienced by Australia's health care delivery system has led to the introduction of health programme grants for development projects and associated evaluative research which consider new and different forms of health care, quality assurance processes, and cost containment in health services.

## Hospital benefits

Since September 1981, block grants from the Commonwealth Government have formed the basis for funding of public hospitals; with the introduction of Medicare on 1 February 1984 the Commonwealth has entered into agreements with the States to ensure that all permanent residents of Australia have access without direct charge to accommodation and treatment at public hospitals by salaried hospital doctors. This includes both inpatient and outpatient treatment.

If a patient elects to be a private patient (i.e. requests a doctor of his/her choice) in a public hospital, then the responsibility for payment of both the hospital and medical expenses lies with the patient, as for a patient in a private hospital.

Health benefit organisations are permitted to offer private insurance to private patients requiring cover for shared ward charges in public hospitals (the basic private table) and higher hospital insurance to cover or assist with costs of private hospital accommodation (supplementary tables).

For private hospitals, there are three levels of basic private table benefits, based on a three-tier categorisation of hospitals. The basic private table benefits are supplemented by Commonwealth bed day subsidies paid directly to private hospitals on the basis of their category. The Commonwealth bed day subsidy is \$40, \$30, or \$20 per day, depending on the hospital categorisation as 1, 2, or 3. Decisions as to the categorisation of individual hospitals are made on the basis of the size of the hospital and the level of services and facilities provided. Also, through its Reinsurance Account arrangements with the health benefit organisations, the Commonwealth provides special assistance for those basic private table contributors with chronic or other illnesses requiring prolonged hospitalisation. The Commonwealth Government contribution to the Reinsurance arrangements has been set at \$20m annually from 1 February 1984.

Basically, both private and public hospitals are for acute patients. Patients accommodated in hospitals may be reclassified as 'nursing home type' patients after a continuous period as an inpatient exceeding thirty-five days, unless a medical practitioner certifies that such a patient is in need of acute care.

All nursing home type patients are charged an uninsurable amount towards the cost of hospital accommodation. At 30 June 1984, this charge was \$12.75 per day in Victoria.

## Aged care services

## Nursing home benefits

Nursing home benefit arrangements provide for the payment of a basic nursing home benefit for approved patients in approved nursing homes. This benefit varies between States. At 30 June 1984, this benefit in Victoria was payable up to a maximum of \$48.50 per day. An extensive care benefit of \$6 per day was available to persons who required and received extensive care at the nursing home.

Prior approval for the admission of patients to participating or deficit financing nursing homes must be obtained from the Commonwealth Department of Health. Approval for admission also acts as approval for the payment of basic nursing home benefits. Approval is also required for the payment of extensive care benefits.

From 1 September 1981, the Commonwealth Government pays the appropriate benefits on behalf of all patients in participating and State nursing homes direct to the nursing homes. Previously, hospital benefits organisations paid nursing home benefits from their basic table for insuring persons.

The notion of patients paying a prescribed minimum contribution towards the nursing home accommodation costs established under the previous scheme has been retained. In May 1978, the procedures for establishing this minimum patient contribution were altered so that this contribution is now set at seven-eighths (87.5 per cent) of the singe rate pension plus supplementary assistance. At 30 June 1984, the rate of contribution in all States was \$12.75 per day for participating nursing home patients and deficit financing nursing home patients. These rates may be waived or reduced in cases of financial hardship. State Government nursing homes set their own patient contribution levels, which are dependent on the means of each patient.

The rates of benefit now payable in any one State, when combined with the prescribed minimum patient contribution, are designed to cover fully the approved fees charged for seventy per cent of the beds in non-government nursing homes in that State.

Nursing home inspections are conducted to ensure that patients are receiving the appropriate level of nursing care and to ensure that the patient classifications are correct. The National Health Act includes provisions under which the construction of new nursing homes or extensions to existing approved premises require departmental approval.

The Commonwealth Government has adopted a policy of growth control of nursing home accommodation in order to redress the current imbalance in services provided for the aged, where nursing homes predominate. The government's objective is to secure a range of services for the aged which is equitable, comprehensive, balanced, and cost effective and best meets the particular needs of the aged.

As part of this policy the Minister for Health has established a formal Federal/State Co-ordinating Committee for Nursing Home Accommodation in each State. The Committee's function is to consider applications to provide nursing home accommodation in specific regions in the context of aged care facilities and to make recommendations to the Minister as to the possible need for additional nursing home beds within that region.

The Commonwealth Government has maintained its control over nursing home fees by continuing to make it a condition of approval under the National Health Act that participating nursing homes cannot charge fees in excess of those determined by the Commonwealth Department of Health. This control is designed to ensure that the fees for such nursing homes are not increased beyond the level justified by rises in operating costs. Nursing homes operated by State Government are not subject to the same control by the Commonwealth Department of Health, since it has been agreed that the fee fixing policies of such nursing homes are the responsibility of State Governments.

Since 1 January 1975, the Nursing Home Assistance Act has provided for a deficit financing scheme for eligible organisations operating religious or charitable type nursing homes. Under the scheme, the nursing homes submit budgets for approval and their approved operating deficits are financed by the Commonwealth Government. Because of these arrangements, the Commonwealth Government does not pay nursing home benefits on behalf of uninsured patients and no charge other than the prescribed fee of \$89.25 per week is made for these patients.

## NURSING HOME BENEFITS PAID, VICTORIA (\$'000)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Commonwealth Department of Health Private health insurance funds	50,505 31,142	60,975 34,935	78,431 41,407	(a)124,043 25,925	163,045 —	188,046
Total benefits paid	81,647	95,910	119,838	149,968	163,045	188,046

(a) The increase in benefits paid by the Commonwealth Department of Health is due to the change in nursing home arrangements from 1 September 1981.

#### Domiciliary nursing care benefits

A Commonwealth domiciliary nursing care benefit is available to help meet the cost of home nursing and other professional care required by aged persons living in private homes. This benefit was previously available only for aged persons of sixty-five years of age or over. From 1 November 1979, the benefit was made available to persons sixteen years and over.

From 4 September 1980, a person who provides continuous care for a person aged sixteen years and over may be eligible to receive a fortnightly benefit of \$42.00 (previously \$2 per day) provided a number of conditions are met. The beneficiary and patient must live together in a private home. The patients must be at least sixteen years of age and must have an official certificate from their doctors stating that because of infirmity, illness, or incapacity, they have a continuing need for nursing care by a registered nurse as would warrant his/her admission to a nursing home. They must receive care from a registered nurse on a regular basis involving multiple visits each week. These visits can be made on a less frequent basis provided the beneficiary has a competency certificate. The benefit is not subject to a means test and is not considered as taxable income.

## DOMICILIARY NURSING CARE BENEFITS, VICTORIA

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Number of beneficiaries(a) Benefits paid (\$'000)	2,565	3,474	4,268	3,693	4,412	5,296
	1,965	2,363	4,259	5,116	5,685	6,484

(a) At the end of the financial year.

#### Home and Community Care Programme

The Commonwealth Government recently announced the development of the Home and Community Care Programme, which is aimed at improving home care for the aged and disabled.

The programme provides a major increase in funding for home care services, including home help, delivered meals, home maintenance, home nursing, and para-medical services. In addition to expanding existing services, consideration is to be given to the funding of additional services and community based respite care.

The programme is to be funded triennially on a cost shared basis with the State governments and has been specifically designed to accommodate regional needs through negotiation of agreements with the States over the best means of meeting their requirements for care of the aged.

It is expected that the Commonwealth Government's contribution to the programme will exceed \$300m over the first three years.

#### Isolated Patients Travel and Accommodation Assistance Scheme

The Isolated Patients Travel and Accommodation Assistance Scheme provides financial help for persons in remote areas of Australia who require specialist medical treatment or services. The Commonwealth Government will help to meet the cost of travel and accommodation for patients who have to travel more than 200 kilometres to the nearest suitable specialist for treatment.

Patients are required to pay the first \$20 of the cost of travel. The Commonwealth Government will pay the balance and up to \$30 a night towards the cost of necessary accommodation. The scheme also provides identical help for a person accompanying the patient when the medical condition of the patient warrants it. If the patient is a child under seventeen years of age, the financial assistance will be given to a parent or other escort, irrespective of the child's condition. There is no means test for the scheme, which commenced on 1 October 1978.

#### Pharmaceutical benefits

The National Pharmaceutical Benefits Scheme was introduced in 1950, along with a restricted free list of life-saving and disease-preventing drugs. In 1951, an additional comprehensive range of medicines was provided free to pensioners. The Scheme, considerably expanded in 1960, introduced a patient contribution fee of 50 cents for prescriptions written for the general public. This contribution was increased to \$1.00 in 1971, \$1.50 in 1975, \$2.00 in 1976, \$2.50 in July 1978, \$2.75 in September 1979, \$3.20 in December 1981, and \$4.00 from 1 January 1983. Eligible pensioners and their dependants who hold a valid Pensioner Health Benefits Card and sickness benefits recipients and their dependants holding a valid Health Benefits Card receive pharmaceutical benefit prescriptions free of charge. A concession of \$2 per benefit item was introduced from 1 January 1983 for persons holding Health Care Cards and Social Services and Veterans Affairs' pensioners who are not eligible for a Pensioner Health Benefits or Health Benefits Card, and dependants of these groups.

The drugs and medicinal preparations available as pharmaceutical benefits are determined by the Commonwealth Minister for Health on the advice of the Commonwealth Pharmaceutical Benefits Advisory Committee. Pharmaceutical benefits are supplied by approved pharmaceutical chemists on medical practitioners' prescriptions. In regions with no approved chemist, a medical practitioner may be approved as supplier. An amendment to the National Health Act in May 1981 established the Pharmaceutical Benefits Renumeration Tribunal as the body responsible for determining payments to approved pharmaceutical chemists for the supply of pharmaceutical benefits. Previously approved chemists' fees were set by the Joint Committee on Pharmaceutical Benefits Pricing Arrangements.

#### Optometrical services

Underpinning the provision of optometrical consultation benefits is a Participating Optometrists Scheme, whereby optometrists, or if applicable, their employees, must undertake to charge consultation fees no higher than those set out in the Schedule to the Commonwealth Health Insurance Act and that consultations will be provided generally at no direct cost to eligible pensioners and their dependants by means of assignment of Commonwealth medical benefits.

Most optometrists in Victoria are participating in the Scheme. At 31 July 1984 (1983), 197 (186) undertakings were in effect in respect of 349 (318) practice locations. These undertakings cover 344 (335) optometrists out of a total of 376 (362).

Before the introduction of the Participating Optometrists Scheme, optometrists who made their services available to isolated areas recouped the additional costs incurred by raising a surcharge. The current arrangements preclude such additional charges. To ensure that an adequate optometrical service is available in isolated areas, the Commonwealth Government covers the approved costs incurred by making per capita grants directly related to the number of patients seen in these isolated areas. This assistance is in addition to the optometrical consultation benefits.

At 30 June 1984, ten Victorian optometrists were receiving such assistance with the per capita grants ranging from \$2.50 to \$4.50.

#### Medical laboratories

#### National Acoustic Laboratories

The Commonwealth Acoustic Laboratory (now the National Acoustic Laboratories) was established as part of the Commonwealth Department of Health in 1947.

It had its origins in the Acoustic Research Laboratory established and financed by the National Health and Medical Research Council in 1942 to investigate military problems of noise and blast, the protection of the hearing of service personnel, and the efficiency of communication systems under conditions of noise.

In 1945 the Director of the Laboratory was approached about the problem of congenital deafness due to maternal rubella as, due to an earlier epidemic, there was a considerable number of rubella deaf children requiring special audiological facilities. Research reports regarding problems of deafness with children and ex-servicemen resulted in demands for assistance and application throughout the Commonwealth.

The Commonwealth Government set up a series of branch acoustic laboratories in each State, with smaller laboratories where necessary, and a Central Office, for research and administration.

The Acoustic Laboratories Act was passed in 1948, and the main functions were as follows:

'The Minister may establish, maintain and operate within the Commonwealth Acoustic Laboratories for scientific investigations including tests in respect of hearing aids, and their application to the needs of individuals, and in respect of problems associated with noise as it affects individuals.'

In 1968, a major expansion of the Acoustic Laboratories' clinical services occurred with the introduction of the Pensioner Hearing Aid Service.

The main functions of the National Acoustic Laboratories hearing centres are to provide audiological (hearing) tests, ensure specialist medical examinations and, where necessary, fit and maintain hearing aids. They also assist in the general aural rehabilitation of clients.

Clients eligible to use the services of the hearing centres include all Australians up to twenty-one years of age, eligible pensioners and their dependants, members of the Armed Services, exservicemen and women with hearing impairments, Commonwealth compensation claimants, and civil aviation flight personnel undergoing audiological assessments as part of their regular medical examinations.

In Victoria, clients are currently serviced by five branch laboratories located in the Melbourne metropolitan area and one laboratory at Geelong. Ballarat and Bendigo will become permanently staffed laboratories in 1985 and are presently serviced by visiting audiological staff from Melbourne. Other centres visited on a regular basis are Frankston, Horsham, Mildura, Morwell, Shepparton, Swan Hill, Wangaratta, and Warrnambool.

## Pathology services

Commonwealth Pathology Laboratories, located at eleven regional centres throughout Australia, provide a clinical pathology service to hospitals and medical practitioners in their areas. There is one Commonwealth Pathology Laboratory in Victoria located in Bendigo. Since the commencement of Medicare on 1 February 1984, Commonwealth Pathology Laboratories no longer charge for their services.

#### Australian Radiation Laboratory

The Australian Radiation Laboratory is located at Yallambie, Victoria, and is primarily concerned with all aspects of radiation which have implications for public or occupational health. Its activities

cover many different forms of radiation ranging from emissions from microwave ovens to radioactivity associated with uranium mining.

Much of the Laboratory's energy is devoted to research in applied physics and chemistry in areas relevant to the Laboratory's public health purpose.

The Laboratory is active in the development of radiation protection standards through the Radiation Health Committee of the National Health and Medical Research Council for which it provides logistic and research support. In addition, it participates in the development of standards through the Standards Association of Australia and the development of nuclear codes of practice to regulate the mining and milling of uranium.

## National Biological Standards Laboratory

The primary responsibility of the National Biological Standards Laboratory is to ensure that therapeutic goods available in Australia for human and veterinary use are safe and effective.

The Laboratory evaluates the quality of therapeutic goods before marketing, carries out research and develops standards and ascertains whether therapeutic goods conform to such standards. In conjunction with the States, Laboratory staff inspect manufacturing operations and facilities for compliance with good manufacturing practices. The Laboratory also has the responsibility for investigating complaints about, and recalls of, therapeutic goods.

#### Australian Dental Standards Laboratory

The National Biological Standards Laboratory administers the Australian Dental Standards Laboratory, located in Abbotsford, Victoria. The Australian Dental Standards Laboratory conducts research on dental and allied equipment, materials and techniques, tests available materials and continues to contribute to new or revised Australian standards. The Laboratory also provides an education service and disseminates information to the dental profession and ancillary staff.

Further reference: Victorian Year Book 1978, pp. 665-73

#### MEDICAL TRAINING AND MANPOWER

### Training of doctors

#### Undergraduate training

Medical undergraduate training in Victoria is carried out at the University of Melbourne and Monash University. The Melbourne Medical School began in 1862 and now admits 182 students into the first year of the course, and 200 students into the second year. This enables an entry into second year of students who have another relevant degree or part thereof. The Monash Medical School admits 145 students into the first year of the course, and into the second and third years allows for a lateral entry of suitably qualified students to replace wastage. In both universities the pre-clinical course lasts three years, followed by three years of clinical instruction. After six years there is a final examination which, if passed, confers on the student the degrees of MB, BS. The major hospitals where the University of Melbourne sends its undergraduates are the Royal Melbourne Hospital, St Vincent's Hospital, Austin Hospital, Repatriation General Hospital, Royal Children's Hospital, Royal Women's Hospital, Fairfield Hospital, Mt Royal, and hospitals under the control of the Mental Health Division of the Victorian Health Commission. Monash University students are trained at the Alfred Hospital, Prince Henry's Hospital, Queen Victoria Medical Centre, Geelong Hospital, Royal Southern Memorial Hospital, Western General Hospital, Fairfield Hospital, hospitals under the control of the Mental Health Division of the Victorian Health Commission, and a number of associated hospitals.

The Medical Board of Victoria grants provisional registration to new graduates who, after one year's experience as interns, are registered as legally qualified medical practitioners. The aim of the university medical schools is to produce a generalist who, with further training, may become a general practitioner, physician, surgeon, obstetrician, paediatrician, psychiatrist, or other specialist.

#### Postgraduate training

Vocational training of recent medical graduates is usually directed towards obtaining membership of the appropriate professional college, e.g. the Royal Australasian College of Surgeons, the Royal Australasian College of Physicians, and the Royal Australian College of General Practitioners. Assistance in providing such training is maintained by the Boards of Graduate Studies in hospitals and by the Victorian Medical Postgraduate Foundation.

Each of these colleges is a body which conducts its own examinations for membership, stipulates the criteria required for the training necessary before examination can be undertaken and, in most

instances, the post-examination training needed before membership and fellowship status can be achieved. In all, this normally takes between five and six years after the intern year.

The Graduate Boards of Studies at each hospital provide vocational training in each speciality, given by the specialist staff free of charge to the trainee. This is apart from the patient care that the trainee is giving to the patients of the hospital which pays the trainee for this service.

In addition, the Victorian Medical Postgraduate Foundation arranges continuing education and conducts refresher courses for both specialists and generalists. These courses are conducted both in the Melbourne metropolitan area and in the country. Particular emphasis is placed on the continuing education of country medical practitioners. The universities have postgraduate degrees which they offer to medical graduates. These may be obtained by course work and/or thesis. Clinical academics also take part in training programmes arranged by Boards of Graduate Studies.

#### Specialist status

When a specialist qualification is granted by a college and the appropriate experience is gained, the recipient may be registered as a specialist with the Commonwealth Department of Health. Registration as a specialist was introduced at the Commonwealth level as part of the differential fee rebate scheme. This does not provide at present for specialist recognition of general practice. However, it is the aim of the Royal College of General Practitioners to achieve such recognition. Further references: Development in medicine, 1910-1960; Victorian Year Book 1963, pp. 230-8; Hospitals in medical education, 1967, pp. 519-20; Melbourne Medical Postgraduate Committee, 1963, pp. 264-5, 1967, pp. 527-8; Medical education: the second medical school, 1972, pp. 494-6; Registration procedure, 1977, pp. 765-6; Supply of doctors, 1977, p. 767

## Nursing

Nursing is a discipline that provides a wide range and scope of health services in a variety of settings. The services include health education, promotion and maintenance of health and the prevention of illness or injury, rehabilitation and implementation of prescribed medical regimes.

Nursing activities may include conducting preventative health examinations, teaching and counselling of children in school, teenagers in clinics, adults at work, senior citizens in private and public nursing homes, new mothers in clinics and at home; performing complex tasks to help maintain life of patients in intensive care units in hospitals; and providing supportive physical and/or emotional care to individuals undergoing surgical, medical, or psychiatric care.

The majority of registered nurses in Victoria continue to work in hospitals. Other areas of employment are psychiatric clinics, public health facilities, nursing homes and homes for the aged, doctors' professional rooms, community health clinics, industry, and educational institutions.

Nursing education and practice are supervised by the Victorian Nursing Council, the statutory nursing body constituted under the *Nurses Act* 1958. The Council membership consists mainly of nurses from various nursing interests; there are also members from legal, medical, hospital, and general education fields. The Council is particularly concerned with standards of nursing courses, teaching personnel, examinations, and schools of nursing. Every person practising nursing for a fee or reward is required to be registered under the Nurses Act, and to hold a current annual practising certificate issued by the Victorian Nursing Council. Registers of nurses in each branch of nursing, and a roll of current practising certificate holders, are maintained by the Council.

Tertiary level nursing education courses are offered by the Schools of Nursing at Lincoln Institute of Health Sciences and Phillip Institute of Technology. The courses offered include the Bachelor of Applied Science, Advanced Nursing (with major studies in clinical nursing, community health nursing, nursing administration, and nursing education), the Diploma in Applied Science, Community Health Nursing, and the Diploma in Applied Science, Advanced Psychiatric Nursing. Both of these colleges also conduct basic nursing education programmes leading to a Diploma in Applied Science, Nursing.

To assist nurses who have been absent from nursing to return to the profession, some hospitals and health agencies offer orientation and refresher courses. In-service nursing courses in various specialist areas such as intensive care, coronary care, operating theatre, cardio-thoracic, geriatric, oncological, eye, ear, nose, and throat, gynaecological, and communicable diseases nursing, ensure a sufficient supply of skilled staff in these fields.

## NURSES, VICTORIA, 1982-83

Courses	Approved training institutions at 30 June 1983	Students at 30 June 1983	Completed course during 1982-83	Registrations approved, including interstate and overseas applicants	Qualifications of holders of annual practising certificates issued for year ended 31 December 1982
Basic courses –					
General nurse	26	4,381	1,432	2,640	40,327
Psychiatric nurse					
(regional)	3	460	149	282	2,574
Mental retardation					
nurse	6	161	55	89	548
Mothercraft nurse	5	433	133	154	2,118
State enrolled nurse	45	1,027	1,067	1,931	20,315
Post-basic courses –		•			
Midwives	11	457	479	829	14,980
Infant welfare	2	n.a.	81	87	2,004
Total nurses holding a current annual practising					
certificate	••				63,752

<sup>(</sup>a) Some institutions conduct more than one type of nursing education programme.

## NURSES, VICTORIA, 1983-84

Courses	Approved training institutions at 30 June 1984	Students at 30 June 1984	Completed course during 1983-84	Registrations approved, including interstate and overseas applicants	Qualifications of holders of annual practising certificates issued for year ended 31 December 1983
Basic courses -					
General nurse	28	4,744	1,502	2,435	41,585
Psychiatric nurse					
(regional)	3	531	163	307	2,768
Mental retardation					
nurse	6	172	50	85	603
Mothercraft nurse	5	454	143	142	2,206
State enrolled nurse	43	1,009	1,029	2,002	21,361
Post-basic courses -			•		
Midwives	13	443	452	711	15,371
Infant welfare	2	74	76	102	2,033
Total nurses holding a current annual practising					
certificate					66,078

<sup>(</sup>a) Some institutions conduct more than one type of nursing education programme.

Further references: History of nursing in Victoria, Victorian Year Book 1961, pp. 240-1; Graduate nursing education, 1962, pp. 270-1; Nursing training, 1962, p. 263; Nursing recruitment, 1964, p. 277; Paramedical services, 1969, pp. 548-9; 1978, p. 675

## INSTITUTIONAL HEALTH CARE

## **Public hospitals**

Organisation

Since their inception in 1846, Victorian public hospitals have maintained a distinctive, if variable, pattern. Essentially, they are corporate bodies under the provisions of the Hospitals and Charities Act and are managed by committees appointed by the Governor in Council. They receive financial assistance by way of government subsidies.

Staffing of public hospitals was, prior to 1975, based on the former traditional British pattern of honorary service. In 1975, the honorary medical staff who had been treating 'hospital' patients free of charge became paid members of the hospital staff on fee for service, contract or sessional remuneration. This system of paying all medical staff who provided free treatment for 'hospital' patients was brought about by the Hospitals Cost Sharing Agreement between the Commonwealth and Victorian Governments. Under this agreement, both governments contracted to share equally in the net approved operating costs of all public hospitals in Victoria. However, the agreement was

terminated in July 1981, and replaced with one whereby the amount of money allocated by the Commonwealth Government is based on a block grant, and the State is required to meet the balance of net operating costs.

Improved medical methods and more effective drugs have shortened the average patient stay in hospital, with an important effect upon the community need for acute hospital beds. In Victoria, the present acute hospital bed need is assessed at approximately 4 beds per 1,000 persons compared with 7.5 beds per 1,000 persons in 1948. The fall is significant, not only in its effect on hospital building costs to provide for an expanding population, but also in terms of cost of patient treatment.

In earlier times, hospitals could attempt to provide all possible services to their patients, but the increasing complexity of diagnostic and therapeutic services, as well as rapidly increasing costs, have encouraged the development of rationalised and co-ordinated services. The former Hospitals and Charities Commission made reference to a number of standing expert committees and consultants to advise on the implementation of such developments, e.g. on cardiac equipment, nuclear medicine, and regional dental services. The Hospitals Division of the Health Commission is presently maintaining these committees.

Certain metropolitan hospitals are designed for special purposes (e.g. maternity, rehabilitation, paediatrics), while others serve as general hospitals in their local communities, and may also function as referral centres for the smaller hospitals and offer services in certain specialised fields of medicine.

Since 1954, country hospitals have been organised on a regional basis. The smaller hospitals refer patients with more complicated conditions to the base hospitals which have more specialised staff and facilities. Regionalised services including pathology, pharmacy, radiology, blood banks, physiotherapy, speech therapy, audiology, and occupational therapy, are being progressively established. Group laundries have been sited at strategic locations and each hospital has access to the services of a regional engineer.

The Hospitals Division has initiated two new services. The central Health Interpreter Service, which comprises persons proficient in Arabic, Croatian, Cambodian, Greek, Chinese, Italian, Serbian, Turkish, Spanish, and Vietnamese, to assist in the health interpreting requirements of public hospitals, community health centres, and the voluntary non-profit organisations affiliated with the Health Commission in the north-western and central areas of Melbourne; and the Ethnic Health Service, whose members are deployed throughout Victoria to liaise between professional and public health organisations and ethnic communities.

#### NUMBER OF PUBLIC HOSPITALS AT 30 JUNE, VICTORIA

Type of institution	1978	1979	1980	1981	1982	1983
Melbourne Statistical Division -						
Special hospitals (including Cancer						
Institute) (a)	12	13	13	13	13	(b)24
General and auxillary hospitals	31	30	30	30	30	(c)29
Convalescent hospital	1	1	1	1	1	_
Hospitals for the aged	4	4	4	4	4	5
Sanatorium	1	1	1	1	1	_
Total	49	49	49	49	49	58
Remainder of State -						
Base hospitals	10	10	10	10	10	10
General hospitals	96	95	95	95	95	91
Hospitals for the aged	7	7	7	7	7	(d)5
Total	113	112	112	112	112	106
Total hospitals	162	161	161	161	161	164

<sup>(</sup>a) Special hospitals are those having accommodation for specific cases only or for women and/or children exclusively.

(b) Includes seventeen special and teaching hospitals plus seven other specialised hospitals.
(c) Includes twelve metropolitan major and general hospitals and seventeen small community hospitals.

Further references: Fairfield Hospital, Victorian Year Book 1961, pp. 241-2; Geelong Hospital, 1962, pp. 273-4; Royal Melbourne Hospital, 1962, pp. 271-3; Alfred Hospital, 1963, pp. 265-6; Prince Henry's Hospital, 1964, pp. 286-7; History of hospitals in Victoria, 1964, pp. 267-72; Royal Children's Hospital, 1964, pp. 284-6, 1976, pp. 691-3; St. Vincent's Hospital, 1965, pp. 266-7; Dental Hospital, 1965, pp. 267-8; Austin Hospital, 1966, pp. 250-1; Queen Victoria Memorial Hospital, 1967, pp. 529-32; Royal Victorian Eye and Ear Hospital, 1968, pp. 525-8; Mayfield Centre, 1980, pp. 629-30

<sup>(</sup>d) Lyndoch and Gippsland geriatric centres are excluded from Hospitals for the aged because they are classified as nursing homes. Source: Health Commission of Victoria, Health Service Statistics, 1982-83.

## Private hospitals and nursing homes

Most private hospitals are privately owned and administered along profitable business lines, although some hospitals may best be described as non-profit organisations with their ownership resting mainly in religious denominations.

While private hospitals accommodate short-term and acutely ill patients, private nursing homes accommodate patients requiring constant nursing care for an indefinite period. Patients may be the frail aged, bed-fast, near bed-fast, or totally dependent children.

Private hospitals and nursing homes must meet building regulations as laid down by the *Victorian Health Act* 1958, as well as regulations relating to private hospitals, uniform building regulations, and fire regulations.

At 30 June 1983, there were 372 private hospitals and nursing homes in Victoria totalling 14,103 beds.

## District nursing services

District nursing services are conducted by four district nursing societies, some community health centres, four hospitals in the Melbourne metropolitan area, and 88 country hospitals. The district nurses are responsible for the general nursing care of patients in their own homes, thus reducing the number who would otherwise be admitted to hospital for care.

In Victoria during 1981-82, the 97 approved district nursing services employed 506 full-time and 258 part-time nurses who treated 57,661 patients and made 1,528,874 visits.

## Royal District Nursing Service

In 1985 the Royal District Nursing Service commemorates one hundred years of home nursing service to the community of Melbourne.

On 17 February 1885, a group of nineteen concerned citizens met to discuss ways of alleviating the suffering of the sick poor in Melbourne. The outcome of the meeting was the formation of the Melbourne District Nursing Society. Its stated objectives at the time were:

'... carrying the benefits of skilled nursing, medical treatment and comforts to the homes of the sick poor of the city; to attend chronic and septic cases which cannot be accepted by the general hospitals; to complete cures which exigencies of space necessitated leaving the hospitals; to attend cases where the removal would entail the breaking up of the home'.

In 1898, the Society was incorporated under the Hospitals and Charities Act. The need for a convalescent nursing home for the Society's patients prompted the building of the After Care Hospital in 1925. Unfortunately this hospital did not fulfil the role originally intended and in 1957, at the request of the Hospitals and Charities Commission, separate boards of management for the After Care Hospital and the District Nursing Society were developed and the District Nursing Service was incorporated as a separate entity. At this time the name of the Melbourne District Nursing Society was changed to Melbourne District Nursing Service. The 'Royal' prefix was granted to the Society by charter in 1966 and in the same year the first regional centre of the service was developed. The Service is subsidised by both State and Commonwealth Governments.

Over the years, in response to developments in medical science, trends in community care, and the identified needs of the community, the emphasis and type of service provided has changed. The Service is now available to all residents of the Melbourne Metropolitan area and not only to the sick poor at home. Referrals are accepted from a variety of sources: medical practitioners, hospitals, allied health professionals, neighbours, families and sometimes self-referrals. The primary objective of the Service continues to be the provision of quality nursing care to patients at home, work or school, according to their assessed health needs. However, the focus is on patients participating in their own plan of care to achieve optimal rehabilitation and independence.

In the 1960s a liaison service with public hospitals was developed with a district nurse being available to a hospital to participate in discharge planning for patients and to ensure continuity and co-ordination of care. Today there are nineteen liaison nurses located in major teaching hospitals and some private hospitals throughout the Melbourne and Metropolitan area.

A comprehensive range of general and specialist nursing care is provided by the Service. This includes: hygiene care, nursing treatments such as catheterisation, stoma care, and injections; rehabilitation nursing care, such as supervision of exercise programmes and assessment of people at home regarding aids to daily living; psycho-social supportive care to patients and their relatives who may be under stress or grieving; health teaching in all aspects of health maintenance and self care, e.g. dietary management, understanding disease processes, etc.

The Royal District Nursing Service has an education department providing an in-service education programme and post-basic courses which are available to all district nurses in Victoria. In addition, all Royal District Nursing Service staff have access to and receive support from a range of consultative staff including a psycho-geriatric nurse, mental health nurses, breast prosthesis and stomal therapist nurses, physiotherapists, and social workers.

The growth of the Service in response to demand necessitated the development of a management model which would be efficient and effective, i.e. centralised administration and regionalised centres for the provision of nursing services. Currently, fifteen regional centres have been developed throughout Melbourne. These centres are located at Broadmeadows, Box Hill, Camberwell, Caulfield, Diamond Valley, Essendon, Frankston, Footscray, Heidelberg, Knox, Moorabbin, Richmond, Rosebud, Springvale, and Sunshine. The regionalised centres have an up-to-date knowledge of the health needs of the local community, are able to respond quickly to requests for care, and work closely with other health/welfare agencies in the community.

The Service began with one nurse who visited patients on foot; in 1984 the Service in Melbourne employed 377 registered nurses and maintained a fleet of 342 cars. In the year ending June 1984, 700,236 visits were made to 34,649 patients. Despite limiting financial constraints over the years, and a growing demand for care at home, the Service has continued to provide quality nursing care to the community. Perhaps its commitment is best expressed in the slogan adopted some years ago: 'We care . . . we can be there!'

Further reference: Royal District Nursing Service, Victorian Year Book 1975, pp. 787-8

## Repatriation hospitals and clinics

The largest of the Commonwealth Department of Veterans' Affairs institutions in Victoria is the Repatriation General Hospital (RGH) at Heidelberg. This large acute general teaching hospital is a clinical school of the University of Melbourne, with professorial units in medicine and surgery and university units in psychiatry and pathology. It has fully equipped facilities for the care of 500 patients (mainly entitled veterans, eligible beneficiaries, and serving members) with acute conditions.

The hospital is recognised for post-graduate training in surgery, medicine, anaesthetics, pathology, and psychiatry. It is approved by the Victorian Nursing Council as a training school for general nurses and State enrolled nurses. Post-basic courses in graduate nurse year, operating theatre technique and management, and intensive care nursing are also conducted.

Other teaching affiliations include supervised clinical experience for students of physiotherapy, occupational therapy, speech therapy, general nursing, and graduate general nurses from the Lincoln Institute of Health Sciences; general and graduate general nurses from the Phillip Institute of Technology; and student radiographers and nucleographers from the Royal Melbourne Institute of Technology. In addition the hospital has trainee technical (medical laboratory) officers and apprentice cooks.

In 1983-84 (1982-83) there were 15,508 (15,092) admissions, and 176,805 (161,562) outpatient attendances to various clinics in the Hospital. The average length of stay was 9.7 (9.8) days. At 30 June 1984 (1983) there were 1,586 (1,519) full-time and 155 (151) part-time staff at the hospital.

The other institutions conducted by the Department in Victoria are: Macleod Repatriation Hospital (MRH), Mont Park; Repatriation Artificial Limb and Appliance Centre, South Melbourne; Repatriation Hospital, Bundoora; and Anzac Hostel, Brighton.

In administering the *Commonwealth Repatriation Act* 1920 and associated legislation, the Department has responsibility for the medical care of eligible beneficiaries. An extensive range of treatment is provided for outpatients through approximately 2,650 Victorian general practitioners under the Department's Local Medical Officer Scheme, at the Departmental outpatient clinics and by various specialists. The Local Dental Officer Scheme, involving more than 1,150 dentists in Victoria, and dental units located at Departmental institutions, provide a full range of dental services for those eligible. In addition allied health services, including physiotherapy, occupational therapy, domiciliary nursing, and podiatry, are provided to outpatients on a fee-for-service basis.

Nursing home care is also provided for patients with service-related disabilities which require long-term care. For certain other beneficiaries, nursing home care is provided for chronic conditions not related to service, subject to a patient contribution.

Under arrangements with State Government, psychiatric patients requiring custodial care for service-related conditions are admitted at Departmental expense to separate repatriation psychiatric wards administered by State authorities. In Victoria, this is provided at the Repatriation Hospital, Bundoora.

The Repatriation Artificial Limb and Appliance Centre provides artificial limbs and orthoses. The limbs are supplied free to all persons in the community who need them.

A Geriatric Assessment Unit has been established to assess patients at both RGH Heidelberg and MRH Mont Park, thus ensuring appropriate care is provided. The Unit also uses the services of State Geriatricians to assess outpatients.

## State geriatric centres

Historically, providing facilities for aged persons has centred on making long-term accommodation available. This concept has been the basis on which many of Victoria's institutions have built up long lists of persons waiting for admission. However, changing patterns in geriatric care have made waiting list figures an unrealistic factor in gaining an accurate assessment of needs.

It will always be essential to provide accommodation for those patients whose assessed medical conditions have made them totally dependent on nursing support, and some 5,800 beds are available for this purpose within State geriatric centres or in units attached to public hospitals. The part played by these centres in a health system for the aged has been expanded beyond this original one aspect of care. The responsibilities of each geriatric centre are to:

- (1) ensure that in each community there will be a co-ordinated, comprehensive, domiciliary care service incorporating nursing, housekeeping, medical and paramedical personnel, which will allow many aged persons to remain in their own homes;
- (2) provide specialist assessment of each person's physical, psychological, and social needs and resources, so that appropriate plans for treatment and future care may be made;
- (3) develop rehabilitation programmes;
- (4) assist the families of aged persons being cared for at home with planned, intermittent, short-term admissions for relative relief; and
- (5) provide on-going education for all levels of staff engaged in geriatric care.

In 1976, the University of Melbourne established a Chair of Geriatrics and Gerontology in conjunction with Mt Royal Hospital. The National Institute of Geriatrics and Gerontology is also located at Mt Royal.

## **Bush nursing services**

## Bush Nursing centres

Each bush nursing centre functions as an outpatient service; patients attend the centre, or the nurse provides care for the patients in their own homes, thus alleviating long periods of hospitalisation. Accommodation is provided at the centre for a trained nurse and usually her family. The nurse is responsible for the health and welfare of her community with medical supervision from a distant town.

A local autonomous committee of management administers each centre, and is elected annually by contributors; the committee members act in an honorary capacity. Finance for administration and capital works projects is provided directly to each centre by the Victorian Government through the Hospitals Division of the Health Commission. Commonwealth Government finance is received through the Community Health Program and the pharmaceutical benefits and home nursing subsidy schemes. To supplement these funds, each centre's committee of management raises local finance by membership subscriptions, charging treatment fees, fund raising, and donations.

During the year ended 30 June 1983, 28,248 patients received treatment with 29,800 surgery visits and 19,183 home nursing visits. A staff of sixteen full-time and thirteen part-time trained sisters was employed at 30 June 1983.

## Bush nursing hospitals

The first bush nursing hospital in Victoria was founded in 1923 at Cowes, Phillip Island. In 1983, there were 38 bush nursing hospitals registered with the Health Commission of Victoria. These hospitals provide 648 acute beds and an additional 177 nursing home beds in separate annexes; twelve hostel beds are also provided.

Primary, non-specialised care is provided but in the event of complications setting in or specialist treatment and paramedical services being required, patients are transferred to nearby base or city hospitals.

As with bush nursing centres, each hospital is administered by an annually elected local autonomous committee. The members of the committee act in an honorary capacity but most committees employ a full-time or part-time secretary. The committees have the responsibility of providing funds for the operation of the hospital. No Victorian Government maintenance grants were paid to bush nursing hospitals in 1982-83.

The Victorian Government announced during the year that capital grants to bush nursing hospitals would cease after completion of specified building projects. Capital grants totalling \$785,908 were made during 1982-83 for projects commenced in 1982-83.

## **Bush Nursing Association**

The Victorian Bush Nursing Association is an incorporated body registered with the Hospitals Division of the Health Commission of Victoria. Its constitutional objects are to provide nursing, hospital and related services to persons in country areas of Victoria.

The Association is administered by an honorary Council comprising twelve persons elected by members, six persons nominated by defined organisations and five persons co-opted on an annual basis. The elected members are usually associated with hospitals and centres, thus providing local committees of management with direct representation on the Council.

The Association, through the Council, employs a full-time administrator, who is the chief executive officer of the Association, and appropriate staff to maintain the Association office in Melbourne. A qualified architect is usually co-opted to the Council, providing, in conjunction with the administrator, an honorary consultancy for committees engaged in building projects.

The nursing staff are mainly employed and paid centrally by the Association. Some nurses and all domestic and administrative staff are employed and paid by local committees. Equivalent full-time staff employed at hospitals, nursing homes and centres on 30 June 1983 were: nursing 538, domestic 232; and administrative 112.

#### Psychiatric services

The State psychiatric services are organised within twelve regions. The Mental Health Division intends that each will have an early treatment unit supported by adjacent long-term beds for chronically ill and psychogeriatric patients, and by community facilities appropriate to regional needs.

The Division's philosophy is to provide early treatment centres in association with general hospitals. The newer centres at Geelong, Footscray, and Mildura are examples of this philosophy. This form of development requires a concomitant expansion of community facilities, and its corollary is the reduction in bed capacity of the older hospitals which, by modern standards, are too large.

The early treatment centres provide inpatient and outpatient care for those with established psychiatric disorders. The primary facilities are acute beds, day hospitals, and outpatient clinics. The patients are referred by community mental health centres, general hospitals, general practitioners, and private psychiatrists. Within the early treatment centre, the distinction between inpatient and day patient lies in the use of the residential facilities, the day hospital providing care for patients not requiring hospitalisation but benefiting from the comprehensive treatment programmes available only in the hospital situation. Victoria has 1,068 hospital beds for short-term psychiatric patients, 65 per cent of whom are admitted voluntarily. The remainder enter on medical recommendation.

Outpatient clinics provide continuous specialised care, such as psychopharmacological treatment and psychotherapy, or they advise the patient's general practitioner on the required course of treatment. These clinics are located within psychiatric hospitals, in the community and, in twenty cases, at country general hospitals.

Long-term hospitals for the chronically mentally ill and psychogeriatric patients serve those persons requiring prolonged rehabilitative or inpatient care. Advances in psychotropic drug use have diminished the number of chronic patients, and the waiting list for psychogeriatric beds has been almost eliminated through the efforts of the Division's psychogeriatric services, which emphasise reliance on appropriate community support facilities and the use of mobile specialist assessment teams.

Child psychiatric services are based around one residential unit, Travancore, and the specialist outpatient facilities at Travancore, the South Eastern Child and Family Centre, Bouverie Family Therapy Centre, Children's clinics, Dandenong Psychiatric Centre, and the Austin Hospital's Department of Psychiatry. Most of these centres provide consultative services to outlying psychiatric facilities (on a regional basis) and most provide some form of community mental health care to the children of adjacent communities. Adolescent services are being developed at Parkville.

To meet the demand for specialist child care staff, the Mental Health Division and the Austin Hospital provide a training course in child psychiatry.

Community mental health centres have the aim of preventing the development of psychiatric disorders that would require the patient to go to hospital. Staffed by psychiatrists, psychologists, social workers, occupational therapists, and nurses, these centres are strategically located in shopping

centres and residential areas, and offer a walk-in service to those with psychological, social, or family problems and to those in crisis situations. The Division operated twenty-eight such services, including domiciliary services operating from psychiatric hospitals.

The three major categories of patient attending the community mental health centre are psychiatric patients who can be treated on an outpatient basis, discharged hospital patients needing help in adjusting to community life, and those who do not show an established psychiatric disorder but who nevertheless require help. The staff's activities include the organisation of self-help groups, the education of community leaders, detection of 'at risk' groups, participation in community projects, assistance to educational, social, religious, ethnic and other community organisations, and the practice of most forms of accepted mental health therapy.

The Division provides three types of after-care for ex-hospital patients:

- (1) psychiatric after-care hostels and half-way houses for patients who are unable to manage independently some patients require accommodation for short periods only, while others require it for the rest of their lives;
- (2) day hospitals for patients staying with their families or in hostels but whose daily activities require some supervision; and
- (3) sheltered workshops providing non-competitive work for the chronically mentally ill some patients attend these workshops only until they find a place in the normal labour market, while other patients will never be able to transfer to unsheltered employment.

MENTAL HEALTH, NUMBER OF INSTITUTIONS, VICTORIA

Type of institution		At 30 June —				
type of institution	1978	1979	1980	1981	1982	1983
Mental hospitals (a) Psychiatric and informal hospitals	11 19	11 19	11 20	11 20	11 20	11 22
Mental retardation training centres Alcohol and drug dependency	12	12	12	12	12	12
rehabilitation centres	4	4	4	4	4	4
Total	46	46	47	47	47	49

(a) Includes Repatriation Mental Hospital.

Further reference: Modern psychiatric services, Victorian Year Book 1963, pp. 248-50

#### Alcohol and drug services

The alcohol and drug services provided through the Alcohol, Drug and Forensic Branch of the Mental Health Division have been developed as a co-ordinated response to individual and community problems. Four specialised centres, co-ordinated from head office, provide treatment, rehabilitation, research, training, and prevention programmes. In response to the complex community problems of alcohol and drug abuse, the Alcohol, Drug and Forensic Branch liaises closely with the many community agencies working in these fields. There is an increasing number of non-government agencies supported by government funds provided through the Health Commission which are providing direct service at the local community level. The Branch is monitoring these developments, providing assistance when requested and establishing guidelines.

Treatment methods are based on the multi-disciplinary community medicine approach. Psychiatrists, doctors, nurses, social workers, and others provide individual and group therapy. Family and other types of community oriented therapy and rehabilitation are emphasised, and drug therapy, behaviour therapy, and other types of therapy based on learning, diet, work, crisis intervention, and similar methods are used where appropriate. The management programmes are flexible and varied to fit the needs of the patient.

#### **Cancer Institute**

The Cancer Institute, with its treatment section, the Peter MacCallum Hospital, is Australia's only comprehensive, specialist centre for treatment, research, and education in cancer and allied diseases. Established under the *Victorian Cancer Institute Act* 1949, the Institute today provides a full range of patient services, including inpatient and outpatient care, backed by supportive services such as social services, physiotherapy, occupational therapy, and the visting nursing service. In addition, it operates clinics in twelve Melbourne public hospitals and institutes and six country hospitals, and is responsible for radiotherapy services in Tasmania.

Research is a primary responsibility of the Institute and the wide ranging research programmes comprise both clinical trials and laboratory research. There are four research units — biological research, haematology research, experimental chemotherapy, and immunogenetics research.

The Institute's education responsibilities cover medical, paramedical, and technical areas and the Peter MacCallum Hospital is a teaching hospital for the University of Melbourne and Monash University. The Institute also runs a post-basic course in oncological nursing.

In August 1984 a Department of Cancer Medicine was established at the Cancer Institute-Peter MacCallum Hospital by the University of Melbourne and is involved in patient care, teaching and research.

#### CANCER INSTITUTE, VICTORIA

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Patients -						
New patients registered (hospital						
patients)	4,303	4,501	4,197	4,137	3,850	4,088
Inpatients (ward and hostel) –	.,	.,	.,	.,	,	,,,,,
Number of beds available at 30 June	147	147	147	163	163	163
Admissions (a)	4,553	6,294	7,809	8,667	9,120	8,667
Daily average (a)	87.7	115.3	113.4	115.8	116.4	114.2
Outpatients –	67.7	113.3	113.7	115.6	110.4	114.2
Attendances at consultative clinics	45 (00	46 154	12 112	49.051	47 170	10 116
(hospital patients) (b)	45,692	46,154	42,443	48,951	47,179	48,446
Radiotherapy Department (b) (c) -						
Attendances for treatment (hospital and						
private)	66,167	61,503	59,954	62,000	68,663	69,084
Fields treated (hospital and private)	131,932	124,316	118,876	126,311	139,029	153,732
Visiting Nursing Service –						
Patients visited	1,220	1,235	1,093	1,049	832	971
Total visits	42,349	51,368	51,289	47,302	43,132	45,233
Other services (at Peter MacCallum	,.	01,000	,	,,,,,,	,	,
Hospital) (c) (d)						
Attendances (hospital and private)	123,021	129,166	127,458	152,582	173,513	164,901
						1,091
Paid staff (e)	1,125	1,129	1,147	1,147	1,093	1,091

Further reference: Victorian Year Book 1984, pp. 571-6

#### NON-INSTITUTIONAL HEALTH SERVICES

## Services for the aged

Community health and welfare services for the aged

#### Health services

In June 1983, nursing home and rehabilitation beds available in State, voluntary, and private hospitals totalled 16,994 beds, while hostels had provision for 13,291 beds. Since the provision of beds alone could not adequately serve disabled or elderly persons, community health centres, improved domiciliary services, and more day hospitals and centres are being established. Day hospital attendances exceeded 425,000 at June 1983.

Elderly persons in the Melbourne metropolitan area receive dental care at the dental clinic in the Royal Dental Hospital of Melbourne. Treatment is also provided at clinics established in eighteen major country centres, in geriatric centres, and in some community health centres.

Meals-on-wheels services for the year ended 30 June 1983 were supplied by 187 municipal councils. Approximately 12,068 meals were provided each week to senior citizen centres and 58,243 to dwellings.

## Welfare services

#### General home help

The aim of the Home Help Service, senior citizens' clubs, handicap services, and municipal welfare officers engaged in the welfare of the aged, is to assist the aged in pursuing independent lives in their own surroundings for as long as possible.

 <sup>(</sup>a) Includes day patients.
 (b) Includes patienta at Peter MacCallum Hospital and Peter MacCallum clinics at the Austin and Alfred Hospitals and in the country.
 (c) Includes inpatients and outpatients.

gnostic radiations, pathology, physiotherapy, pharmacy, medical, social work, theatre, and photography.

A subsidy is made available to those municipal councils which establish and maintain a Home Help Service in order to promote the health and autonomy of the elderly, infirm and convalescent. This service is now available in every municipality in Victoria. It originally developed for the main purpose of providing home help in the homes of parents with young families for periods of up to three weeks when the mother became incapacitated through pregnancy or illness. While this service to young families is continuing, the trend in recent years has been for an increase in the demand for the provision of home help to the elderly and infirm and this now constitutes over eighty per cent of the service provided. The service is available on the basis of medical and social need and allotted according to the priority of each case. Duties of a home helper are to maintain the household's routine, assist with household chores, do the shopping, and prepare meals. Assessment of charges is made according to the person's ability to pay. Health Commission advisers are available to discuss problems and they make regular visits to municipalities for this purpose.

Special home help extension and Senior Citizens' Centres

This is an extension of the General Home Help Service to provide the parents of disabled dependants some relief from their constant responsibilities, so that they may participate in a family or social outing or in community life.

Senior citizens' centres provide facilities for fostering social companionship for the elderly and supply the environment for them to make new friends and to take a renewed interest in life. Senior citizens' centres also encourage health promotion through programmes of swimming, exercises, and dancing. They also provide community activities such as assistance with slow reading groups, and occasionally, handyman services. Municipal councils are paid a subsidy through the Health Commission to establish and maintain these centres, which provide activities such as carpet bowls, billiards, crafts, and entertainment. Services such as hot meals and chiropody assist in maintaining the health and comfort of the elderly, while meals-on-wheels are confined to those housebound elderly persons unable to attend a centre because of infirmity. Routine visits are made by advisers to municipal councils to discuss existing centres, the implementation of new services, or the formation of new centres. Regular discussions are conducted with centre members in an attempt to broaden centre activities and the size and scope of membership.

A municipal welfare officer, subsidised by the Health Commission, is employed by a municipal council to ensure the development, co-ordination, and continuing provision of the most appropriate welfare services to meet the needs of the elderly, supervise existing services, foster co-operation between welfare activities for the aged, promote purposeful activity within senior citizens' centres, and help the elderly realise that aid is available.

Further references: Care of the aged, Victorian Year Book 1962, p.264, 1965, p.258; Home Help Service, 1966, pp.229-30; Elderly Citizens' Clubs, 1966, pp.230-1

## Community services

Health care of the physically and intellectually handicapped

Physically disabled services

Physically handicapped persons can receive acute specialist treatment within the public hospital system, both at inpatient and outpatient levels. Many attend private practitioners for medical care and physiotherapy service.

Rehabilitation is an important area of health care, and extended care programmes designed to meet ongoing individual needs are offered at public hospitals, geriatric and rehabilitation centres, and in various day-care centres. Occupational therapy, physiotherapy, speech therapy, and social work personnel provide the paramedical services in these units to enable full assessment and planning of the individual's rehabilitation programme.

The Austin Hospital spinal injuries unit provides a State wide service for those who suffered from paraplegia or quadriplegia as a result of accident or injury. Many hospitals have associated nursing home and domiciliary support services. The Victorian Health Commission provides a domiciliary medical and physiotherapy service to poliomyelitis and multiple sclerosis patients throughout the State. The development of the community health centre and day centre network will enable more physically handicapped persons to obtain medical, paramedical, and nursing care at a regional/local level.

Several independent voluntary organisations provide medical and paramedical services (usually in association with specialists from public hospitals) in addition to their educative or other training functions.

## Disabled Persons' Information Bureau

The Bureau is part of the Extended Care Section of the Hospitals Division of the Health Commission. It gathers and disseminates information relating to disability. The Administrator maintains close links with the self-help and service provision areas, which cover physical, sensory, and mental impairments. Information is provided, free of charge, to any interested person. Lists of relevant self-help groups, sheltered workshops, municipal advisory committees on disability, and service providing agencies are available on request.

#### Free travel service

The Health Commission makes free travel on public transport available to pensioners and persons of limited means who require treatment at public hospitals. Eligible persons can apply for rail vouchers and/or tram tickets at the Commission's offices at 555 Collins Street, Melbourne.

## Mental retardation services

A regionalisation programme has been adopted to provide a more comprehensive and equitable development of services. This programme works in conjunction with the Division's policy to allow the maximum number of handicapped persons to leave institutions, live in the community, and be given adequate support services to enable them to do so.

At October 1984, the Division operated twelve residential training centres with 3,013 residents. Another 3,571 retarded persons attend 66 day training centres and four private training centres subsidised by the Health Commission.

#### Ambulance services

Ambulances are operated by 16 regional services, collectively known as Ambulance Service — Victoria. They provide 24 hour cover by trained ambulance officers, with specially designed and equipped vehicles from 16 headquarter stations and 87 branch stations. There are 39 stations operated by volunteers.

## Organisation

Autonomous committees are responsible for the provision of service in their regions. Regionalisation has provided extension of service to all areas, including those of sparse population; co-ordination with hospital and medical services and of patients in each region; rational deployment and training of staff; and adequate support when officers or vehicles are otherwise engaged or out of service. The Victorian Government, through the Hospitals Division of the Health Commission, provides substantial capital and operating funds to each service.

Users are charged for ambulance transport, unless they are pensioners. To avoid this heavy expense, individuals and families are encouraged to become subscribers to their regional service. A small annual fee entitles them to free ambulance transport by any Victorian or interstate service. A central, computerised administrative unit has been developed, as has a common subscription rate.

## Mobile Intensive Care Ambulance (MICA)

The MICA scheme was introduced into Melbourne in 1971 on an experimental basis, under the guidance of an expert advisory committee to the Hospitals Division. Since 1973, the Mobile Intensive Care Ambulance has been manned by specially trained ambulance officers and is now a well established operation. There are six MICA vehicles in service in the Melbourne metropolitan area, of which five are operated by Ambulance Service — Melbourne from parent hospitals (the Austin, Alfred, Box Hill, Royal Melbourne, and Western General). The sixth unit is based at Frankston and operated by the Peninsula Ambulance Service. The vehicles carry sophisticated medical and radio equipment and a range of appropriate drugs to deal with cardiac and other emergencies.

#### Air Ambulance Service

The Air Ambulance Service, managed by Ambulance Service — Melbourne, mainly carries patients from distant country hospitals to Melbourne hospitals, and back. Patients are also brought from interstate when necessary. The air service is more comfortable and far quicker than long road journeys, and is comparable in cost. During 1982-83, 6,783 patients were carried a distance of 4,234,000 kilometres.

#### Ambulance Officers Training Centre

The Centre, which is fully maintained by the Health Commission of Victoria, provides trainee ambulance officers and higher ranks with the classroom components of their training, in conjunction with the services which provide the practical experience components. The basic course for ambulance

officer training leads to the Certificate of Applied Science (Ambulance Officer), awarded by the Education Department of Victoria.

Newborn Emergency Transport Service (NETS)

NETS is a co-operative scheme between Ambulance Service — Melbourne and the four Melbourne hospitals with newborn intensive care units (Mercy Maternity Hospital, Queen Victoria Medical Centre, Royal Children's Hospital, and Royal Women's Hospital). Based at the Royal Women's Hospital, a highly qualified team of doctors and sisters, with a full range of equipment and drugs which fits into a standard ambulance, can travel to a hospital to treat a sick baby, and then supervise transport to an intensive care unit. In full operation since October 1976, this service has improved the condition of many newborn babies on arrival at intensive care units, and contributed to an increased rate of survival, better condition after survival, and a shorter stay in hospital.

#### AMBULANCE SERVICES, VICTORIA

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Vehicles (including						
administration)	530	549	560	560	593	617
Staff (including administration)	1,154	1,211	1,295	1,384	1,430	1,437
Subscribers	724,275	801,176	864,967	915,636	986,776	1,014,765
Patients carried (a)	485,532	465,868	534,800	585,875	610,669	618,494
Distance travelled by						
ambulances (kilometres)	13,171,865	14,336,462	15,634,687	16,753,413	18,004,994	22,455,408

(a) The basis of collecting statistics was altered from 1979-80 onwards.

#### MORBIDITY AND MORTALITY STATISTICS

#### **Hospital Morbidity Collection**

Hospital morbidity identifies the incidence of disease, medical condition, or external injury obtained from the records of inpatients treated at public hospitals in Victoria.

In July 1978, the Health Commission of Victoria assumed responsibility for the development of Victorian hospital morbidity statistics. The tables on pages 646-7 have been prepared by the ABS from data provided by the Commission.

The scope of the Hospital Morbidity Collection is restricted to information concerning inpatients who were separated from public hospitals by discharge, transfer, or death during the year.

Public hospitals are those hospitals listed in Tables A and B of the Fifth Schedule of the Hospitals and Charities Act 1958.

Repatriation hospitals are not included in this Act but have supplied data independently to the Health Commission of Victoria. Separations from private hospitals, psychiatric hospitals, rehabilitation hospitals, hospitals for the aged, and nursing homes are not included.

The coverage of the collection in 1983 was approximately 92 per cent of public hospital beds, and statistics have been compiled using the following definitions:

- (1) an inpatient is any person in respect of whom the hospital admission procedures have been completed, or whom the hospital assesses as an inpatient for financial purposes;
- (2) babies born in hospital who experience no morbidity are excluded as inpatients;
- (3) a separation occurs when an inpatient is discharged from hospital, transferred to another hospital or other health care accommodation, or dies in hospital following formal admission;
- (4) inpatients who had more than one episode in hospital during the year are counted more than once in the statistics (i.e. each time they are discharged);
- (5) the principal diagnosis is the main condition, disease, or injury treated or investigated during the patient's stay in hospital;
- (6) length of stay is the difference in days between the date of admission and the date of discharge;
- (7) average length of stay is calculated by totalling the lengths of stay, in days, of the relevant separations and dividing by the number of separations in the category. Where an inpatient is admitted and separated on the same day, the length of stay is taken as zero in the calculation of average length of stay; and
- (8) age is calculated at the date of admission, and is shown in completed years.

Statistics have been collected on 494,372 inpatients in Victorian public hospitals during 1983. Females accounted for 58 per cent of inpatients.

PUBLIC HOSPITAL SEPARATIONS BY AGE GROUP AND SEX OF INPATIENTS, VICTORIA, 1983

Age group (years)	Males	Females	Persons
Under 1	10,611	7,363	17,974
1-4	13,829	9,197	23,026
5-14	22,842	16,396	39,238
15-24	22,617	47,868	70,485
25-34	19,125	69,909	89,034
35-44	17,842	31,106	48,948
45-54	21,100	22,971	44,071
55-64	29,950	26,503	56,453
65-74	28,940	28,274	57,214
75 and over	20,106	27,507	47,613
Not stated	170	146	316
Total	207,132	287,240	494,372

Length of stay in hospitals of all the inpatients totalled 3.4 million days (9,375 patient years) of which 13 per cent of inpatients stayed for under 1 day, 56 per cent for 1 day and under 1 week, 29 per cent for 1 week and under 1 month, 2 per cent for 1 month and under 2 months, and 1 per cent for 2 months or more. Average stay per inpatient was 6.9 days.

PUBLIC HOSPITAL SEPARATIONS BY AGE GROUP AND LENGTH OF STAY, VICTORIA, 1983

	Length of stay							
Age group (years)	Under I day	l day and under l week	l week and under 1 month	1 month and under 2 months	2 months and under 3 months	3 months and under 6 months	6 months and over	Total
Under 1	1,613	11,794	3,909	472	123	52	11	17,974
1-4	2,809	18,267	1.787	133	12	10	8	23,026
5-14	4,502	31,007	3,360	278	61	25	5	39,238
15-24	9,062	45,232	15,291	640	143	101	16	70,485
25-34	10,768	51,568	25,801	663	134	78	22	89,034
35-44	9,372	27,458	11,487	486	83	43	19	48,948
45-54	8,736	22,310	12,014	788	117	82	24	44,071
55-64	9,211	26,497	18,732	1,517	297	155	44	56,453
65-74	5,917	24,900	23,066	2,482	430	311	108	57,214
75 and over	2,545	17,869	21,844	3,554	838	604	359	47,613
Not stated	33	184	85	10	3	1	_	316
Total	64,568	277,086	137,376	11,023	2,241	1,462	616	494,372

While in hospital approximately 257,000 inpatients underwent at least one medical procedure. Surgical operations accounted for 72 per cent of this total with approximately 122,000 females and 63,000 males undergoing at least one surgical operation.

The most common principal diagnoses reported in 1983 relating to males were injuries (14 per cent), circulatory diseases (12 per cent), digestive diseases (12 per cent), respiratory diseases (10 per cent), and neoplasms (cancers) (8 per cent). For females, principal diagnoses reported were delivery and other obstetrics (22 per cent), genito-urinary diseases (11 per cent), digestive diseases (8 per cent), injuries (7 per cent), and circulatory diseases (7 per cent).

# PUBLIC HOSPITAL SEPARATIONS: PRINCIPAL DIAGNOSES BY NUMBER OF SEPARATIONS, SEX, LENGTH OF STAY, AND AVERAGE STAY, VICTORIA, 1983

International Classification	Principal	Number of separations			Length of stay	,	A	verage stay (da	ys)	
of Diseases (ICD) class (a)	diagnosis	Males	Females	Persons	Males	Females	Persons	Males	Females	Person
I	Infectious and parasitic diseases	3,773	3,963	7,736	18,174	18,500	36,674	4.8	4.7	4.7
II	Neoplasms	15,382	18,173	33,555	127,055	142,940	269,995	8.3	7.9	8.0
Ш	Endocrine, nutritional and metabolic diseases, and									
	immunity disorders	2,689	4,131	6,820	23,702	45,474	69,176	8.8	11.0	10.1
IV	Diseases of the blood and blood-forming organs	1,839	2,192	4,031	9,872	12,437	22,309	5.4	5.7	5.5
V	Mental disorders	3,668	6,284	9,952	34,513	72,113	106,626	9.4	11.5	10.7
VI	Diseases of the nervous system and sense organs	11,180	12,218	23,398	61,376	81,981	143,357	5.5	6.7	6.1
VII	Diseases of the circulatory system	24,190	19,392	43,582	241,618	260,327	501,945	10.0	13.4	11.5
VIII	Diseases of the respiratory system	20,632	15,770	36,402	112,880	98,613	211,493	5.5	6.3	5.8
IX	Diseases of the digestive system	24,096	21,994	46,090	125,545	130,476	256,021	5.2	5.9	5.6
X	Diseases of the genito-urinary system	11,421	31,300	42,721	61,652	127,720	189,372	5.4	4.1	4.4
XI	Complications of pregnancy, childbirth and the									
	puerperium		60,574	60,574	_	385,931	385,931	_	6.4	6.4
XII	Diseases of the skin and subcutaneous tissue	4,501	4,283	8,784	27,576	35,152	62,728	6.1	8.2	7.1
XIII	Diseases of the musculoskeletal system and									
	connective tissue	8,764	10,236	19,000	63,947	96,094	160,041	7.3	9.4	8.4
XIV	Congenital anomalies	3,291	2,228	5,519	17,688	14,599	32,287	5.4	6.6	5.9
XV	Certain conditions originating in the perinatal period	3,107	2,556	5,663	28,090	23,896	51,986	9.0	9.3	9.2
XVI	Signs, symptoms, and ill-defined conditions	12,349	14,161	26,510	59,209	77,423	136,632	4.8	5.5	5.2
XVII	Injury and poisoning	27,403	18,745	46,148	176,138	179,853	355,991	6.4	9.6	7.7
V01-V82	Supplementary classification of factors influencing									
	health status and contact with health services	18,302	29,502	47,804	69,671	149,190	218,861	3.8	5.1	4.6
	Total reported principal diagnoses	196,587	277,702	474,289	1,258,706	1,952,719	3,211,425	6.4	7.0	6.8
	Total unreported principal diagnoses	10,542	9,538	20,080	106,505	103,898	210,403	10.1	10.9	10.5
	Grand total	207,129	287,240	494,369	1,365,211	2,056,617	3,421,828	6.6	7.2	6.9

<sup>(</sup>a) The classes selected in this table are in accordance with the Morbidity List of the Ninth International Classification of Diseases (ICD9).

## Causes of death

## Classification

Causes of death in Australia from 1979 onwards have been classified according to the Ninth (1975) Revision of the World Health Organisation's (WHO) International Classification of Diseases (ICD9). Particulars relate to the underlying cause of death, which WHO has defined as the disease or injury which initiated the train of morbid events leading directly to death. Accidental and violent deaths are classified according to external cause, that is, to the circumstances of the accident or violence which produced the fatal injury, rather than the nature of the injury.

In 1982, 16,493 male and 14,118 female deaths were registered in Victoria.

CAUSES OF DEATH (ABBREVIATED LIST), NUMBERS AND RATES, VICTORIA, 1982

		ICD9			Rate per
	Cause of death (a)	category code numbers	Number of deaths	Proportion of total	1,000,000 of mean population
S1-10	Infectious and parasitic diseases	001-139	159	0.52	40
<b>S</b> 1	Intestinal infectious diseases	001-009	26	0.08	7
<b>S</b> 2	Tuberculosis	010-018	29	0.09	7
<b>S</b> 3	Whooping cough	033	1	_	_
<b>S</b> 4	Meningococcal infection	036	3	0.01	1
<b>S</b> 5	Tetanus	037	2	0.01	1
<b>S</b> 6	Septicaemia	038	40	0.13	10
S10	All other infectious and parasitic diseases	<i>(b)</i>	58	0.19	15
S11-20	Malignant neoplasms	140-208	6,939	22.67	1,738
S11	Malignant neoplasm of stomach	151	412	1.35	103
S12	Malignant neoplasm of colon	153	771	2.52	193
S13	Malignant neoplasm of rectum, rectosigmoid				
	junction, and anus	154	303	0.99	76
S14	Malignant neoplasm of trachea, bronchus, and lung		1,395	4.56	349
S15	Malignant neoplasm of skin	172,173	186	0.61	47
S16	Malignant neoplasm of female breast	174	598	1.95	150
<b>S</b> 17	Malignant neoplasm of cervix uteri	180	97	0.32	24
S18	Malignant neoplasm of prostate	185	377	1.23	94
S19	Leukaemia	204-208	267	0.87	67
S20	All other malignant neoplasms	(c)	2,533	8.27	634
S21	Benign neoplasms and neoplasms of unspecified	240 220			
000	nature	210-239	63	0.21	16
S22	Diabetes mellitus	250	522	1.71	131
S24	Other protein-calorie malnutrition	262,263	4	0.01	1
S25	Anaemias	280-285	87	0.28	22
S26	Meningitis	320-322	8	0.03	2
S27	Acute rheumatic fever	390-392	1		_
S28	Chronic rheumatic heart disease	393-398	123	0.40	31
S29	Hypertensive disease	401-405	421	1.38	105
S30-31	Ischaemic heart disease	410-414	8,284	27.06	2,075
S30	Acute myocardial infarction	410	5,698	18.61	1,427
S31	Other ischaemic heart disease	411-414	2,586	8.45	648
S32	Other forms of heart disease	[415,416,]	1,638	5.35	410
		\420-429∫			
S33	Cerebrovascular disease	430-438	3,594	11.74	900
S34	Atherosclerosis	440	577	1.88	144
S35	All other diseases of circulatory system	${417, 441-459}$	497	1.62	124
S36	Pneumonia	480- 486	603	1.97	151
S37	Influenza	487	155	0.51	39
S38	Bronchitis, emphysema, and asthma	490-493	725	2.37	182
S39	All other diseases of the respiratory system	(460-478,) (494-519)	1,066	3.48	267
S40	Ulcer of stomach and duodenum	531-533	212	0.69	53
S41	Appendicitis	540-543	10	0.03	3
S42	Chronic liver disease and cirrhosis	571	342	1.12	86
S43	Nephritis, nephrotic syndrome, and nephrosis	580-589	189	0.62	47
S44	Hyperplasia of prostate	600	24	0.02	6
045.45					ŭ
S45-47	Complications of pregnancy, childbirth, and	(20 (7)	_	0.02	_
	puerperium	<i>630-676</i>	8	0.03	2

CAUSES OF DEATH (ABBREVIATED LIST), NUMBERS AND RATES, VICTORIA, 1982 - continued

	Cause of death (a)	ICD9 category code numbers	Number of deaths	Proportion of total	Rate per 1,000,000 of mean population
S46	Direct obstetric deaths	{640-646,} {651-676}	6	0.02	. 2
S47	Other complications of pregnancy, childbirth, and	(			
	the puerperium	647,648	2	0.01	1
S48	Congenital anomalies	740-759	296	0.97	74
S49-51	Certain conditions, originating in the perinatal				
	period	760-779	248	0.81	62
S49	Birth trauma	767	6	0.02	2
S50	Hypoxia, birth asphyxia and other respiratory			0.02	_
	conditions	768-770	159	0.52	40
051	Other conditions estate the the contest to the	(760-766.)	02	0.07	
<b>S</b> 51	Other conditions originating in the perinatal period	{771-779}	83	0.27	21
S52	Signs, symptoms, and ill-defined conditions	780-799	155	0.51	39
S53	All other diseases	Residual	1,668	5.45	418
S54-56	Accidents and adverse effects	E800-E949	1,442	4.71	361
S54	Motor vehicle traffic accidents	E810-E819	769	2.51	193
S55	Accidental falls	E880-E888	309	1.01	77
S56	All other accidents and adverse effects	(d)	364	1.19	91
S57	Suicide	E950-E959	461	1.51	115
S58	Homicide	E960-E969	79	0.26	20
S59	All other external causes	E970-E999	íí	0.04	3
	Total all causes		30,611	100.00	7,666

<sup>(</sup>a) No deaths were recorded in the following categories in 1982: S7. Smallpox (050); S8. Measles (055); S9. Malaria (084); S23. Nutritional marasmus (261); S45. Abortion (630-639).
(b) 020-032,034,035,039-049,051-054,056-083,085-139.
(c) 140-150,152,155-161,163-171,175,179,181-184,186-203.
(d) 800-807,820-879,890-949.

## MAIN CAUSES OF DEATH IN AGE GROUPS, VICTORIA, 1982

		Deaths from specified cause				
	Age group and cause of death	In age	group	At al	l ages	
		Number	Per cent	Number	Per cen	
	Under 1 year					
S49-51	Certain conditions originating in the perinatal					
	period	248	38.7	248	100.0	
S48	Congenital anomalies	224	34.9	296	75.7	
S52	Signs, symptoms, and ill-defined conditions	109	17.0	155	70.3	
S54	Motor vehicle traffic accidents	10	1.6	769	1.3	
S1-10	Infectious and parasitic diseases	9	1.4	159	5.7	
	1-4 years					
S56	All other accidents	36	33.0	364	9.9	
S54	Motor vehicle traffic accidents	18	16.5	769	2.3	
S48	Congenital anomalies	13	11.9	296	4.4	
S11-20	Malignant neoplasms	10	9.2	6,939	0.1	
S36-39	Diseases of the respiratory system	10	9.2	2,549	0.4	
	5-14 years					
S54	Motor vehicle traffic accidents	56	28.9	769	7.3	
S56	All other accidents	34	17.5	364	9.3	
S11-20	Malignant neoplasms	31	16.0	6,939	0.4	
S48	Congenital anomalies	15	7.7	296	5.1	
S36-39	Diseases of the respiratory system	9	4.6	2,549	0.4	
	15-24 years					
S54	Motor vehicle traffic accidents	269	48.6	769	35.0	
S57	Suicide and self-inflicted injury	68	12.3	461	14.8	
S11-20	Malignant neoplasms	54	9.7	6,939	0.8	
S56	All other accidents	50	9.0	364	13.7	
S36-39	Diseases of the respiratory system	13	2.3	2,549	0.5	

MAIN CAUSES OF DEATH IN AGE GROUPS, VICTORIA, 1982 - continued

Name   Per cent   Pe				Deaths from s	specified cause	es
25-34 years   S54   Motor vehicle traffic accidents   117   21.5   769   15.2		Age group and cause of death	In ag	e group	At	all ages
S54   Motor vehicle traffic accidents   117   21.5   769   15.2			Number	Per cent	Number	Per cent (a)
S57   Suicide and self-inflicted injury   103   19.0   461   22.3		25-34 years				
S11-20   Malignant neoplasms	S54	Motor vehicle traffic accidents	117	21.5	769	15.2
S11-20	S57	Suicide and self-inflicted injury	103	19.0	461	22.3
S58   Homicide   28   5.2   79   35.4	S11-20		85	15.7	6,939	1.2
35-44 years   S11-20   Malignant neoplasms   216   31.1   6,939   3.1	S56		44	8.1	364	12.1
S11-20   Malignant neoplasms   216   31.1   6.939   3.1	S58	Homicide	28	5.2	79	35.4
S11-20   Malignant neoplasms   216   31.1   6.939   3.1		35-44 years				
S30-31   Ischaemic heart disease   93   13.4   8,284   1.1	S11-20		216	31.1	6.939	3.1
S57         Suicide and self-inflicted injury         68         9.8         461         14.8           S54         Motor vehicle traffic accidents         55         7.9         769         7.2           S56         All other accidents         47         6.8         364         12.9           45.54 years           S11-20         Malignant neoplasms         725         38.0         6,939         10.4           S30-31         Ischaemic heart disease         464         24.3         8,284         5.6           S33         Cerebrovascular disease         102         5.3         3,594         2.8           S42         Chronic liver disease and cirrhosis         85         4.5         342         24.9           S57         Suicide and self-inflicted injury         80         4.2         461         17.4           55-64 years           S11-20         Malignant neoplasms         1,560         35.9         6,939         22.5           S30-31         Ischaemic heart disease         1,301         29.9         8,284         15.7           S33         Cerebrovascular disease         295         6.8         3,594         8.2           S30-31         Is	S30-31		93	13.4		1.1
S54   Motor vehicle traffic accidents   S55   7.9   769   7.2     S56   All other accidents   47   6.8   364   12.9	S57	Suicide and self-inflicted injury	68	9.8	461	14.8
45-54 years         S11-20       Malignant neoplasms       725       38.0       6,939       10.4         S30-31       Ischaemic heart disease       464       24.3       8,284       5.6         S33       Cerebrovascular disease       102       5.3       3,594       2.8         S42       Chronic liver disease and cirrhosis       85       4.5       342       24.9         S57       Suicide and self-inflicted injury       80       4.2       461       17.4         55-64 years         S11-20       Malignant neoplasms       1,560       35.9       6,939       22.5         S30-31       Ischaemic heart disease       295       6.8       3,594       8.2         S36-39       Diseases of the respiratory system       275       6.3       2,549       10.8         S42       Chronic liver disease and cirrhosis       119       2.7       342       34.8         65-74 years         S30-31       Ischaemic heart disease       2,356       32.3       8,284       28.4         S11-20       Malignant neoplasms       2,065       28.3       6,939       29.8         S36-39       Diseases of the respiratory system <td< td=""><td>S54</td><td></td><td>55</td><td>7.9</td><td>769</td><td>7.2</td></td<>	S54		55	7.9	769	7.2
S11-20   Malignant neoplasms   725   38.0   6,939   10.4					364	12.9
S11-20   Malignant neoplasms   725   38.0   6,939   10.4		45-54 years				
S30-31   Ischaemic heart disease   464   24.3   8,284   5.6   S33   Cerebrovascular disease   102   5.3   3,594   2.8   S42   Chronic liver disease and cirrhosis   85   4.5   342   24.9   S57   Suicide and self-inflicted injury   80   4.2   461   17.4	S11-20		725	38.0	6.939	10.4
S33         Cerebrovascular disease         102         5.3         3,594         2.8           S42         Chronic liver disease and cirrhosis         85         4.5         342         24.9           S57         Suicide and self-inflicted injury         80         4.2         461         17.4           55-64 years           S11-20         Malignant neoplasms         1,560         35.9         6,939         22.5           S30-31         Ischaemic heart disease         1,301         29.9         8,284         15.7           S33         Cerebrovascular disease         295         6.8         3,594         8.2           S36-39         Diseases of the respiratory system         275         6.3         2,549         10.8           65-74 years           S30-31         Ischaemic heart disease         2,356         32.3         8,284         28.4           S11-20         Malignant neoplasms         2,065         28.3         6,939         29.8           S36-39         Diseases of the respiratory system         660         9.0         2,549         25.9           S30-31         Ischaemic heart disease         227         3.1         1,638         13.9			464	24.3		5.6
S42         Chronic liver disease and cirrhosis         85         4.5         342         24.9           S57         Suicide and self-inflicted injury         80         4.2         461         17.4           55-64 years           S11-20         Malignant neoplasms         1,560         35.9         6,939         22.5           S30-31         Ischaemic heart disease         1,301         29.9         8,284         15.7           S32         Cerebrovascular disease         295         6.8         3,594         8.2           S36-39         Diseases of the respiratory system         275         6.3         2,549         10.8           S42         Chronic liver disease and cirrhosis         119         2.7         342         34.8           65-74 years           S30-31         Ischaemic heart disease         2,356         32.3         8,284         28.4           S11-20         Malignant neoplasms         2,065         28.3         6,939         29.8           S33         Cerebrovascular disease         747         10.2         3,594         20.8           S36-39         Diseases of the respiratory system         660         9.0         2,549         25.9 <t< td=""><td></td><td></td><td>102</td><td>5.3</td><td></td><td></td></t<>			102	5.3		
S57   Suicide and self-inflicted injury   80   4.2   461   17.4						
S11-20       Malignant neoplasms       1,560       35.9       6,939       22.5         S30-31       Ischaemic heart disease       1,301       29.9       8,284       15.7         S33       Cerebrovascular disease       295       6.8       3,594       8.2         S36-39       Diseases of the respiratory system       275       6.3       2,549       10.8         S42       Chronic liver disease and cirrhosis       119       2.7       342       34.8         65-74 years         S30-31       Ischaemic heart disease       2,356       32.3       8,284       28.4         S11-20       Malignant neoplasms       2,065       28.3       6,939       29.8         S33       Cerebrovascular disease       747       10.2       3,594       20.8         S36-39       Diseases of the respiratory system       660       9.0       2,549       25.9         S30-31       Ischaemic heart disease       227       3.1       1,638       13.9         75 years and over         S30-31       Ischaemic heart disease       4,047       28.3       8,284       48.9         S30-31       Ischaemic heart disease       2,399       16.8       3,594						
S11-20       Malignant neoplasms       1,560       35.9       6,939       22.5         S30-31       Ischaemic heart disease       1,301       29.9       8,284       15.7         S33       Cerebrovascular disease       295       6.8       3,594       8.2         S36-39       Diseases of the respiratory system       275       6.3       2,549       10.8         S42       Chronic liver disease and cirrhosis       119       2.7       342       34.8         65-74 years         S30-31       Ischaemic heart disease       2,356       32.3       8,284       28.4         S11-20       Malignant neoplasms       2,065       28.3       6,939       29.8         S33       Cerebrovascular disease       747       10.2       3,594       20.8         S36-39       Diseases of the respiratory system       660       9.0       2,549       25.9         S30-31       Ischaemic heart disease       227       3.1       1,638       13.9         75 years and over         S30-31       Ischaemic heart disease       4,047       28.3       8,284       48.9         S30-31       Ischaemic heart disease       2,399       16.8       3,594		55-64 years				
S30-31         Ischaemic heart disease         1,301         29.9         8,284         15.7           S33         Cerebrovascular disease         295         6.8         3,594         8.2           S36-39         Diseases of the respiratory system         275         6.3         2,549         10.8           S42         Chronic liver disease and cirrhosis         119         2.7         342         34.8           65-74 years           S30-31         Ischaemic heart disease         2,356         32.3         8,284         28.4           S11-20         Malignant neoplasms         2,065         28.3         6,939         29.8           S33         Cerebrovascular disease         747         10.2         3,594         20.8           S36-39         Diseases of the respiratory system         660         9.0         2,549         25.9           S32         Other forms of heart disease         227         3.1         1,638         13.9           75 years and over           S30-31         Ischaemic heart disease         4,047         28.3         8,284         48.9           S33         Cerebrovascular disease         2,399         16.8         3,594         66.8	S11-20		1.560	35.9	6.939	22.5
S33         Cerebrovascular disease         295         6.8         3,594         8.2           S36-39         Diseases of the respiratory system         275         6.3         2,549         10.8           S42         Chronic liver disease and cirrhosis         119         2.7         342         34.8           65-74 years           S30-31         Ischaemic heart disease         2,356         32.3         8,284         28.4           S11-20         Malignant neoplasms         2,065         28.3         6,939         29.8           S33         Cerebrovascular disease         747         10.2         3,594         20.8           S36-39         Diseases of the respiratory system         660         9.0         2,549         25.9           S32         Other forms of heart disease         227         3.1         1,638         13.9           75 years and over           S30-31         Ischaemic heart disease         4,047         28.3         8,284         48.9           S33         Cerebrovascular disease         2,399         16.8         3,594         66.8           S11-20         Malignant neoplasms         2,191         15.3         6,939         31.6						
S36-39         Diseases of the respiratory system         275         6.3         2,549         10.8           65-74 years           S30-31         Ischaemic heart disease         2,356         32.3         8,284         28.4           S11-20         Malignant neoplasms         2,065         28.3         6,939         29.8           S33         Cerebrovascular disease         747         10.2         3,594         20.8           S36-39         Diseases of the respiratory system         660         9.0         2,549         25.9           S32         Other forms of heart disease         227         3.1         1,638         13.9           75 years and over           S30-31         Ischaemic heart disease         4,047         28.3         8,284         48.9           S33         Cerebrovascular disease         2,399         16.8         3,594         66.8           S11-20         Malignant neoplasms         2,191         15.3         6,939         31.6           S36-39         Diseases of the respiratory system         1,463         10.2         2,549         57.4		Cerebrovascular disease		6.8		8.2
S42         Chronic liver disease and cirrhosis         119         2.7         342         34.8           65-74 years           S30-31         Ischaemic heart disease         2,356         32.3         8,284         28.4           S11-20         Malignant neoplasms         2,065         28.3         6,939         29.8           S33         Cerebrovascular disease         747         10.2         3,594         20.8           S36-39         Diseases of the respiratory system         660         9.0         2,549         25.9           S32         Other forms of heart disease         227         3.1         1,638         13.9           75 years and over           S30-31         Ischaemic heart disease         4,047         28.3         8,284         48.9           S33         Cerebrovascular disease         2,399         16.8         3,594         66.8           S11-20         Malignant neoplasms         2,191         15.3         6,939         31.6           S36-39         Diseases of the respiratory system         1,463         10.2         2,549         57.4						
S30-31       Ischaemic heart disease       2,356       32.3       8,284       28.4         S11-20       Malignant neoplasms       2,065       28.3       6,939       29.8         S33       Cerebrovascular disease       747       10.2       3,594       20.8         S36-39       Diseases of the respiratory system       660       9.0       2,549       25.9         S32       Other forms of heart disease       227       3.1       1,638       13.9         75 years and over         S30-31       Ischaemic heart disease       4,047       28.3       8,284       48.9         S33       Cerebrovascular disease       2,399       16.8       3,594       66.8         S11-20       Malignant neoplasms       2,191       15.3       6,939       31.6         S36-39       Diseases of the respiratory system       1,463       10.2       2,549       57.4						
S30-31       Ischaemic heart disease       2,356       32.3       8,284       28.4         S11-20       Malignant neoplasms       2,065       28.3       6,939       29.8         S33       Cerebrovascular disease       747       10.2       3,594       20.8         S36-39       Diseases of the respiratory system       660       9.0       2,549       25.9         S32       Other forms of heart disease       227       3.1       1,638       13.9         75 years and over         S30-31       Ischaemic heart disease       4,047       28.3       8,284       48.9         S33       Cerebrovascular disease       2,399       16.8       3,594       66.8         S11-20       Malignant neoplasms       2,191       15.3       6,939       31.6         S36-39       Diseases of the respiratory system       1,463       10.2       2,549       57.4		65-74 years				
S11-20   Malignant neoplasms   2,065   28.3   6,939   29.8     S33   Cerebrovascular disease   747   10.2   3,594   20.8     S36-39   Diseases of the respiratory system   660   9.0   2,549   25.9     S32   Other forms of heart disease   227   3.1   1,638   13.9     T5 years and over     S30-31   Ischaemic heart disease   4,047   28.3   8,284   48.9     S33   Cerebrovascular disease   2,399   16.8   3,594   66.8     S11-20   Malignant neoplasms   2,191   15.3   6,939   31.6     S36-39   Diseases of the respiratory system   1,463   10.2   2,549   57.4	S30-31		2.356	32.3	8.284	28.4
S33         Cerebrovascular disease         747         10.2         3,594         20.8           S36-39         Diseases of the respiratory system         660         9.0         2,549         25.9           S32         Other forms of heart disease         227         3.1         1,638         13.9           75 years and over           S30-31         Ischaemic heart disease         4,047         28.3         8,284         48.9           S33         Cerebrovascular disease         2,399         16.8         3,594         66.8           S11-20         Malignant neoplasms         2,191         15.3         6,939         31.6           S36-39         Diseases of the respiratory system         1,463         10.2         2,549         57.4						29.8
S36-39       Diseases of the respiratory system       660       9.0       2,549       25.9         S32       Other forms of heart disease       227       3.1       1,638       13.9         75 years and over         S30-31       Ischaemic heart disease       4,047       28.3       8,284       48.9         S33       Cerebrovascular disease       2,399       16.8       3,594       66.8         S11-20       Malignant neoplasms       2,191       15.3       6,939       31.6         S36-39       Diseases of the respiratory system       1,463       10.2       2,549       57.4						
S32     Other forms of heart disease     227     3.1     1,638     13.9       75 years and over       S30-31     Ischaemic heart disease     4,047     28.3     8,284     48.9       S33     Cerebrovascular disease     2,399     16.8     3,594     66.8       S11-20     Malignant neoplasms     2,191     15.3     6,939     31.6       S36-39     Diseases of the respiratory system     1,463     10.2     2,549     57.4						
S30-31       Ischaemic heart disease       4,047       28.3       8,284       48.9         S33       Cerebrovascular disease       2,399       16.8       3,594       66.8         S11-20       Malignant neoplasms       2,191       15.3       6,939       31.6         S36-39       Diseases of the respiratory system       1,463       10.2       2,549       57.4						
S30-31       Ischaemic heart disease       4,047       28.3       8,284       48.9         S33       Cerebrovascular disease       2,399       16.8       3,594       66.8         S11-20       Malignant neoplasms       2,191       15.3       6,939       31.6         S36-39       Diseases of the respiratory system       1,463       10.2       2,549       57.4		75 years and over				
S33         Cerebrovascular disease         2,399         16.8         3,594         66.8           S11-20         Malignant neoplasms         2,191         15.3         6,939         31.6           S36-39         Diseases of the respiratory system         1,463         10.2         2,549         57.4	S30-31		4,047	28.3	8,284	48.9
S11-20       Malignant neoplasms       2,191       15.3       6,939       31.6         S36-39       Diseases of the respiratory system       1,463       10.2       2,549       57.4						
S36-39 Diseases of the respiratory system 1,463 10.2 2,549 57.4						

<sup>(</sup>a) Deaths in this age group, from the stated cause expressed as a percentage of all deaths at all ages from that cause.

## Diseases of the heart

During 1982, there were 10,346 deaths ascribed to diseases of the heart including 124 due to rheumatic heart disease, 300 to hypertensive heart disease, 5,698 to acute myocardial infarction, 2,586 to other ischaemic heart disease, 58 to pulmonary heart disease, and 1,580 to other forms of heart disease. Deaths in 1982 from this cause are shown in the following table:

DEATHS FROM HEART DISEASE, VICTORIA, 1982

Cause of death (a)	Males	Females	Total
Rheumatic heart disease (391,393-398) Hypertensive heart disease (402,404) Acute myocardial infarction (410) Other ischaemic heart disease (411-414) Pulmonary heart disease (415-416) Other forms of heart disease (420-429)	50 125 3,321 1,468 21 675	74 175 2,377 1,118 37 905	124 300 5,698 2,586 58 1,580
Total	5,660	4,686	10,346

<sup>(</sup>a) Figures in parentheses are ICD9 category code numbers.

## Malignant neoplasms

Since the introduction of the Ninth Revision of the International Classification of Diseases (ICD9) in 1979, deaths classified as malignant neoplasms do not include deaths from polycythaemia vera and myelofibrosis. Deaths from malignant neoplasms in 1982 numbered 6,939. Deaths in 1982 from these diseases are shown in the following table.

Deaths from malignant neoplasms are prominent at most age periods, but, as the table 'Main causes of deaths in age groups' on pages 649-50 shows, they characteristically increase with age, reaching a maximum number in the two oldest age groups. Ninety-four per cent of the deaths from malignant neoplasms in 1982 were at ages 45 years and over.

DEATHS FROM MALIGNANT NEOPLASMS, VICTORIA, 1982

Site of disease (a)	Males	Females	Total
Lip, oral cavity and pharynx (140-149)	102	33	135
Oesophagus (150)	93	62	155
Stomach (151)	252	160	412
Intestine, except rectum (152,153)	375	403	778
Rectum, rectosigmoid junction and anus (154)	162	141	303
Trachea, bronchus, and lung (162)	1,108	287	1,395
Breast (174,175)	8	598	606
Cervix uteri (180)	_	97	97
Body of uterus and unspecified parts of uterus (179,182)	_	66	66
Ovary and other uterine adnexa (183)	_	166	166
Prostate (185)	377	_	377
Bladder (188)	145	45	190
Other and unspecified genito-urinary organs (181,184,186,187,189)	84	64	148
Brain and other unspecified parts of nervous system (191,192)	108	95	203
Leukaemia (204-208)	145	122	267
Other neoplasms of lymphatic and haematopoietic system (200-203)	216	171	387
All other and unspecified sites	704	550	1,254
Total	3,879	3,060	6,939

<sup>(</sup>a) Figures in parentheses are ICD9 category code numbers.

#### Cerebrovascular disease

In 1982, 1,403 male and 2,191 female deaths were ascribed to cerebrovascular disease. Deaths from this disease are shown in the following table:

## DEATHS FROM CEREBROVASCULAR DISEASE, VICTORIA, 1982

Cause of death (a)	Males	Females	Total
Subarachnoid haemorrhage (430) Cerebral haemorrhage (431,432) Cerebral occlusion (433-434) Acute but ill-defined cerebrovascular disease(436) Other and ill-defined cerebrovascular disease, including late effects (437,438)	54 210 270 755	109 327 405 1,135	163 537 675 1,890
Total	1,403	2,191	3,594

<sup>(</sup>a) Figures in parentheses are ICD9 category code numbers.

#### Diseases of the respiratory system

In 1982, deaths from diseases of the respiratory system numbered 2,549. Of these deaths, 22 were due to acute respiratory infections, 603 to pneumonia, 155 to influenza, 725 to bronchitis, emphysema, and asthma, 879 to chronic airways obstruction not elsewhere classified, and 165 to other diseases.

## Diseases of the digestive system

In 1982, there were 595 male and 473 female deaths from diseases of the digestive system. Deaths from causes in this group in 1982 were: 212 from ulcers of the stomach and duodenum; 10 from appendicitis; 31 from hernia of abdominal cavity; 95 from non-infective enteritis and colitis; 342 from chronic liver disease and cirrhosis; and 378 from other diseases.

#### Diabetes mellitus

During 1982, diabetes was responsible from 220 male and 302 female deaths.

## Diseases of the genito-urinary system

In 1982, there were 322 deaths attributed to diseases of the genito-urinary system. Nephritis, nephrotic syndrome, and nephrosis were responsible for 189 deaths, infections of the kidney for 41, calculi of the urinary system for 8, hyperplasia of prostate for 24, and other diseases of the genito-urinary system for 60.

#### **Tuberculosis**

The number of deaths ascribed to tuberculosis during 1982 was 29. Deaths from tuberculosis of the respiratory system numbered 27.

## Deaths from external causes

External causes of death such as accidents, poisonings, and violence, including homicide and suicide, accounted for 7 per cent of all deaths registered in 1982. However, these causes were responsible for 62 per cent of the deaths of persons aged 1 to 34 years.

The table 'Main causes of death in age groups' on pages 649-50 shows that external causes (cause groups S54-57) predominate in the various age groups after the first year of life to middle age, but become progressively less prominent in the older age groups. In 1982, 70 per cent of all deaths from external causes were male.

## Transport accidents

In 1982, registration of deaths from all transport accidents numbered 833 compared with 775 in 1981, 926 in 1980, 1,011 in 1979 and 956 in 1978. During 1982, deaths connected with transport represented 42 per cent of the total deaths from accidents. Of the 833 deaths, 785 involved motor vehicles.

## Injury undetermined whether accidentally or purposely inflicted

In many cases it is not possible to determine whether death from an external cause was accidentally or purposely inflicted, i.e. whether the death was due to accident, suicide, or homicide. The Ninth Revision has a separate category to include cases where the mode of infliction was undetermined. Deaths allocated to these categories in 1982 totalled 10.

## Suicide and self-inflicted injury

In 1982, deaths from suicide or wilfully self-inflicted injury numbered 325 males and 136 females. Of the 325 male deaths in 1982, 125 were connected with firearms and explosives, and 64 from hanging, strangulation and suffocation. Poisoning by solid or liquid substances accounted for 65 of the 136 female deaths.

## Homicide

The number of deaths registered in 1982 ascribed to homicide was 79 (58 males and 21 females).

DEATHS FROM HOMICIDE, (a), VICTORIA

Year	Males	Females	Total
1977	38	27	65
1978	27	22	49
1979	37	22	59
1980	51	31	82
1981	21	20	41
1982	58	21	79

<sup>(</sup>a) Deaths from injuries inflicted by another person with intent to injure or kill by any means.

NOTE. Deaths from criminal abortion are excluded from this category and

included with deaths from maternal causes

Further references: Industrial hygiene, Victorian Year Book 1964, pp. 254-5; Food standards and pure food control, 1964, p. 258; Communicable disease, 1964, pp. 258-60; Control of poisons and deleterious substances, 1965, p. 245; Interdepartmental Committee on Pesticides, 1965, pp. 245-6; Epidemics, 1967, pp. 501-6; Poisons Information Centre, 1968, pp. 523-4, 1969, pp. 524-3; Public health engineering, 1969, pp. 520-1; Drug and poison control, 1970, pp. 529-30; Environment protection, 1972, pp. 477-8; Community care centres, 1974, pp. 529-30; Pre-school audiology services, 1977, p. 785; Child maltreatment, 1977, pp. 788-9; Childhood accident research, 1977, p. 789; Family planning services, 1977, pp. 789-90; National audiological services, 1977, pp. 790-1; Occupational health, 1977, p. 791; Youth services, 1982, pp. 619-22; Community Health Program, 1977, pp. 793-5; Aboriginal health care, 1977, p. 795; Red Cross Blood Transfusion Service, 1977, p. 798; Pharmaceutical services in Victoria, 1977, pp. 788-801; Environmental health services in Victoria, 1977, pp. 801-8; Community health services in Victoria, 1979, pp. 622-3; Survey of handicapped persons, 1983, pp. 613-15; Medical research, 1984, p. 578; Causes of death, 1984, pp. 564-8

## MEDICAL RESEARCH Commonwealth Government

National Health and Medical Research Council

The National Health and Medical Research Council, established in 1937, is required by its constitution to advise the Commonwealth Government and the States on matters of public health legislation and administration and on any other matters relating to health, medical and dental care, and medical research. It is also required to advise the Commonwealth Government and the States on the merits of reputed cures or methods of treatment that are, from time to time, brought forward for recognition.

During 1984, the National Health and Medical Research Council provided awards and grants totalling in excess of \$43 m. This represents a significant proportion of the total funds specifically spent on medical research in Australia.

Commonwealth Serum Laboratories Commission

The Commonwealth Serum Laboratories were established in 1916 as a central Australian institute to produce the nation's requirements of vaccines and antitoxins, previously imported from overseas. Located at Parkville, Melbourne, on an eleven hectare site granted to it in 1918 by the Commonwealth Government, the Laboratories are Australia's leading centre for the production and supply of biological products for human and veterinary use.

Originally under the control of the Quarantine Service, the Laboratories became a division of the Commonwealth Department of Health in 1921, and remained under its control until the Commonwealth Serum Laboratories Act 1961 established the Commonwealth Serum Laboratories Commission. From an original staff numbering thirty, the organisation now employs more than 1,000 persons. An amendment to the Act in 1980 empowered the laboratories to produce and sell pharmaceutical products of a non-biological nature.

The Laboratories' standards of research and product quality have earned international recognition. In 1983 CSL was designated as a WHO Collaborating Centre for Serology and Production and Quality Control of Vaccines. This designation complements CSL's longstanding national status as an Influenza Reference Centre and as a Blood Group Reference Centre.

A notable research project of national and international significance, successfully undertaken by the Laboratories' scientists, was the development of a method of producing a sub-unit influenza vaccine without harmful side effects, which could be made available to everybody.

Many important overseas discoveries in medicine, biology, and biochemistry have been adopted by the Laboratories; for example, they have been producing insulin since 1922 and commenced penicillin manufacture in 1943, while poliomyelitis vaccine was manufactured from 1956 until the trend towards oral vaccine resulted in production ceasing a few years later.

The Laboratories pioneered the processing of human blood products in 1925, and became the blood group reference centre for Australia. Methods developed in the 1920s for treating blood donations from patients who had recovered from certain diseases were adapted during the Second World War to produce blood products on a large scale for the defence forces. For decades, blood donated to the Red Cross and not used immediately as whole blood in transfusions has been processed to recover and separate the individual blood fractions; these are used to control such diseases as infectious hepatitis, measles, rubella, tetanus, haemophilia, and other blood deficiencies. The outdated blood also yields large supplies of plasma.

In veterinary science, the Laboratories have been continually involved in research into animal and poultry diseases, and have developed vaccines and toxoids for active immunisation against clostridial infections, brucellosis, erysipelas, strangles, canine distemper, hepatitis, and many other diseases. The model farm maintained on a 618 hectare field station at Woodend runs many hyper-immunised Percheron-type draught horses to produce a basic serum required for antitoxins and antivenoms.

The Laboratories are also active in the field of the manufacture and distribution of products of importance in diagnostic procedures used for human and veterinary health care, as well as in fundamental research being conducted in various institutions throughout Australia and in some overseas countries.

Further references: Victorian Year Book 1971, pp. 519-21; 1974, pp. 540-1; 1975, pp. 793-4; 1977, pp. 809-10

#### Victorian Government

Health Commission of Victoria

Information of research activities within the Health Commission of Victoria is set out on pages 692-3 of the *Victorian Year Book* 1978.

## Institute of Mental Health Research and Postgraduate Training

The Mental Health Research Institute was established in 1956 and renamed the Institute of Mental Health Research and Post-graduate Training in 1970. In 1980, under the Mental Health Division, the Institute reverted to a purely research role under the Assistant Director, Education and Research. The Director of the Mental Health Research Institute supervises research activities in the Institute under the immediate direction of the Chief Psychiatrist, Education and Research, who also takes a divisional research responsibility and directs divisional education and training programmes with the assistance of a Director of Post-graduate Psychiatry Training and a Director of Child and Adolescent Psychiatry Training. The Director of Post-graduate Psychiatry Training organises the five year training programme for Divisional medical officers, leading to fellowship of the Royal Australian and New Zealand College of Psychiatrists.

The Mental Health Research Council conducts a forum monthly to examine research proposals and the Executive decides on the acceptability of projects and any modifications needed after each forum. Consideration is given to research projects in the Division and some research projects from outside the Division which relate to divisional facilities or patients. The Council Executive considers mental retardation projects only in an advisory capacity on request from the Mental Retardation Division.

The Institute is adjacent to the Parkville Psychiatric Unit, which fulfils a clinical training role for medical officers preparing for the Diploma of Psychological Medicine or the Membership of the Royal Australian and New Zealand College of Psychiatrists. Attached to the Institute is the central library and the Charles Brothers Museum.

The Institute's epidemiological research has gained world wide recognition, and its computerised, cumulative patients' register, in operation since 1961, permits collation of all illness episodes in a particular patient, thus assisting in the evaluation of patient care.

Further reference: Victorian Year Book 1977, pp. 811-12

## Anti-Cancer Council

The Anti-Cancer Council of Victoria was constituted by an Act of the Victorian Parliament in 1936 and entrusted with the responsibility of co-ordinating in Victoria 'all activities in relation to research and investigations with respect to cancer and allied conditions, and with respect to the causation, prevention and treatment thereof'.

The Council supports a substantial programme of cancer research in university departments, research institutes, and hospitals in Victoria. As part of its research programme, the Council endows a full-time research fellow in basic research in leukaemia. Much of this work has been accorded international recognition. The Council also conducts an education programme to inform persons about early warning signs of cancer, to urge persons to avoid known cancer hazards, and to encourage those who have such symptoms to seek early diagnosis and treatment.

The Council provides lectures, films, literature and specialised library services, and undertakes preventative educational programmes on the hazards of smoking. Materials are distributed widely in primary schools. The Council publishes *Victorian Cancer News*, which is issued four times each year, has a circulation of 180,000, and is a useful aid in cancer education.

The Council's welfare service aims at reducing and alleviating the many social and personal consequences of cancer and at the same time ensuring that maximum use can be made of the available treatment facilities. The Welfare Fund supplements existing statutory allowances — many cancer families are not aware of what is available and only need the relevant information to be able to utilise statutory and other community resources. With a minimum of delay, social welfare workers and other health organisations in the community can obtain grants for cancer patients and their families whose financial stability is at risk.

The Victorian Cancer Registry, established in 1940, is a data bank of clinical details on cancer patients. Originally it registered full information on the patients from only ten large Melbourne metropolitan hospitals and followed up these patients annually, thus providing a picture of the course of the disease and the results of treatment. More recently, in response to the increasing awareness of the need to document each case of cancer occurring in a defined geographical area, in order to study the epidemiology of the disease, the Registry has been expanding its activities to measure cancer incidence for Victoria. Complete incidence data were sought for the first time during 1982 when cancer became a notifiable disease.

#### BIBLIOGRAPHY

## ANTI-CANCER COUNCIL, EXPENDITURE, VICTORIA (\$)

Particulars	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
Research (a)	846,535	1,088,132	1,195,833	1,301,816	1,431,114	2,129,881
Education	339,673	329,612	394,851	488,007	586,329	(b)978,270
Patient aid	147,142	166,135	173,693	198,749	218,766	238,516
Other	542,773	634,977	692,191	748,733	899,374	1,082,727
Total expenditure	1,876,123	2,218,856	2,456,568	2,737,305	3,135,583	4,429,394

## State Health Laboratory

The State Health Laboratory's activities embrace scientific testing, food standards administration, and consulting services. Over 3,000 samples are examined each year in the laboratory, covering foods, waters, drugs, and an extensive range of miscellaneous substances and articles of public health concern. Work includes checking of fluoridated water supplies, pesticide residue surveys, analysis of waters used in renal dialysis machines for public hospitals, mercury content of fish, penicillin residues in milk, and aflatoxin contamination of peanuts. Senior staff answer about 1,500 inquiries each year, from industry and the public, concerned with the Food and Drug Standards Regulations and various aspects of public health science.

Further references: Alfred Hospital, Victorian Year Book 1963, pp. 265-6, 1965, pp. 277-8; St Vincent's School of Medical Research, 1962, pp. 279-80; Medical research at the Royal Women's Hospital, 1965, pp. 273-4; Epidemiological Research Unit, Fairfield Hospital, 1962, pp. 277-90; Nedical research at the Royal Women's Trospital, 1905, pp. 273-90; Nedical research Unit, Fairfield Hospital, 1962, pp. 277-9, 1969, pp. 549-50; Asthma Foundation of Victoria, 1969, p. 550; Baker Medical Research Institute, 1976, pp. 698-9, 1977, pp. 813-4; Walter and Eliza Hall Institute of Medical Research, 1972, pp. 502-4, 1975, pp. 788-9; National Heart Foundation of Australia, 1976, p. 699; Howard Florey Institute of Experimental Physiology and Medicine, 1977, pp. 812-13; Royal Children's Hospital Research Foundation, 1977, pp. 816-7; St Vincent's Hospital, 1977, pp. 818; Royal Melbourne Hospital, 1977, pp. 817-18; Mayfield Centre, 1980, pp. 629-30; Medical Research 1934 to 1984, 1984, pp. 578-9

#### Universities

A comprehensive list of projects carried out by departments and teaching hospitals, indicating the range of medical research at Victoria's universities, can be found on pages 819-27 of the Victorian Year Book 1977.

Further references: Medical research at the University of Melbourne, Victorian Year Book 1964, pp. 292-4; Medical research at Monash University, 1966, pp. 257-9

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