Australian Bureau of Statistics

4102.0

Australian Social Trends
2005




100 years of STATISTICS

EMBARGO: 11.30 AM (CANBERRA TIME) TUES 12 JUL 2005

Australian Social Trends 2005

Susan Linacre
Acting Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

CATALOGUE NO. 4102.0

The Australian Bureau of Statistics has catalogued this publication as follows:

Australian social trends / Australian Bureau of Statistics. — 1994- . — Canberra : Australian Bureau of Statistics, 1994- . — v. : ill.; 30 cm.
Annual
Catalogue no. 4102.0
ISSN: 1321–1781

1. Social indicators — Australia — Statistics — Periodicals.
2. Australia — Social conditions — Statistics — Periodicals.
I. Australian Bureau of Statistics.

319.4

Front cover picture credits:

The image of a soldier with the contents of parcels is reproduced courtesy of the Australian War Memorial. The photograph of car bogged in sand at Port Germein, 1933 is reproduced by courtesy of the State Library of South Australia (SLSA: B 61812). Images of mother and child and older man talking on a mobile phone are reproduced by permission of Arthur Mostead Photography.

Contents

Page

Preface

Australian Social Trends 2005 is the 12th edition of an annual series that presents information on contemporary social issues and areas of public policy concern. By drawing on a wide range of ABS statistics, and statistics from other official sources, *Australian Social Trends* describes aspects of Australian society, and how these are changing over time. It is designed to assist and encourage informed decision-making, and to be of value to a wide audience including those engaged in research, journalism, marketing, teaching and social policy, as well as anyone interested in how we live today and how we've changed over recent decades.

The material presented in *Australian Social Trends 2005* is organised into nine chapters. As in previous editions, each of the first seven chapters represents a major area of social concern (i.e. population, family and community, health, education and training, work, economic resources, and housing), with an eighth chapter covering other areas of concern (e.g. crime and justice, culture and leisure, and the environment). The ninth chapter provides international comparisons for a number of these areas. *Australian Social Trends* also contains an introduction which is designed to further explain the rationale behind the publication and describe its main aims and features.

The opportunity has been taken to present some articles which expand and update analysis of topics examined in previous editions using the most recently available data. For example, in this edition, such articles cover fertility trends, female and male earnings, labour force characteristics of people with a disability and housing for older people. There are also articles on new topics of interest such as grandparents who are the guardians of their grandchildren, nursing workers, social and sporting participation of Aboriginal and Torres Strait Islander peoples, and household water use and conservation. The number of articles listed in the cumulative index now comes to over 350, published across all 12 editions.

The national and state summary tables which present key social indicators in each of the seven major areas of social concern have been updated, as have the tables comparing Australia with major OECD countries, our closest neighbours, and our trading partners. This edition also contains, for the first time, national and state summary indicators for the eighth chapter on other areas of social concern.

I would like to thank the people throughout the ABS who compiled, wrote and edited *Australian Social Trends 2005*, and John Spierings from the Dusseldorp Skills Forum who authored an article for the Education and training chapter. I would also like to thank reviewers from a range of commonwealth agencies and departments who gave their time and expertise, and various organisations that assisted in other ways by providing data and advice, including the Australian Institute of Health and Welfare and the Commonwealth Department of Family and Community Services.

The ABS welcomes readers' suggestions on how the publication could be improved. To convey your views or to ask for more information, please contact the Director of Social Analysis and Reporting at the address below.

Susan Linacre
Acting Australian Statistician

Australian Bureau of Statistics
PO Box 10
Belconnen ACT 2616
June 2005

Introduction

ABS framework for social statistics

The broad framework ABS uses to develop and organise its social statistics program was published in *Measuring Wellbeing: Frameworks for Australian Social Statistics* (ABS cat. no. 4160.0) in 2001. This framework describes the scope of social statistics and the linkages both within this field of statistics and with economic statistics. It also describes commonly used definitions, classifications and counting rules and, where relevant, is consistent with national accounting standards. Its systematic approach supports the identification and analysis of data needs and helps to ensure that a comprehensive and well balanced array of data items are collected across the social statistics program. It also facilitates integration across the social and economic fields, particularly in areas such as economic resources and work.

The concept of wellbeing is central to the framework. This multifaceted concept recognises a range of fundamental human needs and aspirations, each of which can be linked to an area of social concern. These needs and aspirations are the focus of government social policy and service delivery, and are reflected in many of the structures of government.

...key dimensions

A number of key areas of social concern form one dimension of the framework. The areas identified are: population; health; family and community; education and training; work; economic resources; housing; crime and justice; and culture and leisure. Each of these areas has its own more detailed framework, or set of frameworks, and is explored through a series of questions:

- How does this area relate to the wellbeing of both individuals and society?
- What are the key social issues that need to be informed in this area?
- What groups are at risk of disadvantage?
- What are the social and economic transactions that affect individual wellbeing?
- What detailed frameworks relate to this area?
- What definitions, classifications and units of measurement will result in effective social indicators for the area?
- What data sources relate to this area?

	Areas of social concern							
Selected population groups	Family and community	Health	Education and training	Work	Economic resources	Housing	Crime and justice	Culture and leisure
Unemployed people			✓	✓	✓	✓	✓	
Retirees					✓			
Aboriginal and Torres Strait Islander peoples	✓	✓	✓	✓	✓	✓	✓	✓
Lone parents	✓		✓	✓	✓			✓
Children	✓	✓						
Migrants	✓		✓	✓				✓
Older people	✓	✓			✓	✓		
People with low income		✓	✓	✓	✓	✓	✓	✓
People with a disability	✓	✓		✓		✓		
Crime victims		✓					✓	

Another dimension of the framework focuses on a variety of population groups which are of special interest to the community and to governments. These groups include, for example, older people, children, youth, families with children, the unemployed, lone parents, people with disabilities, carers, recipients of various government benefits, low income earners, Aboriginal and Torres Strait Islander peoples, and people whose language background is other than English.

These two basic dimensions of the framework are brought together in the form of a matrix showing areas of social concern by population groups. The diagram on the previous page illustrates this matrix, showing how each area of concern can be related to selected population groups and how different areas of concern can be interconnected. The scope of social statistics in Australia is broadly defined by reference to this matrix and the relationship of its elements to various aspects of human wellbeing, both at the level of the individual and for society as a whole. The ABS aims to provide information about the elements of this matrix over time through its work program activities.

...application of the framework in Australian Social Trends

AST is structured according to the framework's areas of concern. It draws on a wide range of data, sourced both from ABS and other agencies, to present a contemporary picture of Australian society. For each area of concern it provides a set of national and state/territory indicators which describe how key aspects of wellbeing in that area have been changing over time and how circumstances differ between states/territories. It also provides comparisons with other countries.

Aims of Australian Social Trends

AST provides an overview of some key social trends in the various areas of social concern and brings together information from across the different areas to address complex social issues. AST aims to:

- inform decision-making, research and discussion on social conditions in Australia, social issues of current and ongoing concern, population groups of interest, and changes in these over time, by drawing together up-to-date social data and analysis from both ABS and other sources, and incorporating readily understood commentary about the statistics
- support the monitoring and review of progress towards social goals, changes in social conditions, and levels of population wellbeing, by presenting a comprehensive set of social indicators on a regular basis.

Each year, the selection of topics for the articles aims to address the current or perennial social issues which may be informed using recent data, and to provide answers to key social questions across the range of areas of concern. The suite of articles changes each year, with some topics refreshed as new data become available. The aim of this approach is for each edition to remain responsive to contemporary concerns, while accumulating a more comprehensive picture of Australian social conditions across editions. To enhance this objective, articles often include cross references to other relevant articles in the current edition, and in previous editions.

AST aims to increase the accessibility of information on important social issues and so a key aspect of the publication is its readability. Information is deliberately presented in non-technical language that can be readily understood by the general reader. Statistics are organised to illustrate specific issues, and to highlight the meaning behind the data and the main patterns and exceptions. As far as possible, technical terms are defined separately from the flow of the main story, but are included within each article, so each article can stand alone.

In keeping with these aims, AST articles focus strongly on people and social issues. Each article aims to tell a story, providing a sense of the social and historical context in which a particular issue is embedded, moving from the general to the specific, and using statistics to bring light to the issue. Articles aim to balance 'what' analysis (relating the relevant statistical facts surrounding the issue, e.g. number, characteristics, change over time, sex, age and other differences), with 'why' analysis (providing context and explanation through highlighting

relevant social changes and events and the chronologies of these). For example, each article may examine current circumstances, how circumstances have changed over time, how different groups of people have been affected, and how various factors may be linked to observed trends.

Social indicators and progress

AST complements the biennial ABS publication, *Measures of Australia's Progress* (MAP) (cat. no. 1370.0), and the annual electronic publication, *Measures of Australia's Progress: Summary Indicators* (cat. no. 1383.0.55.001). MAP presents a suite of indicators for reporting on economic, social and environmental progress and considers the interrelationships between these aspects of life. Three headline dimensions are used to discuss progress in the wellbeing of individuals: health; education and training; and work. Three further headline dimensions are used to measure progress in the way we live together as a society: family, community and social cohesion; crime; and democracy, governance and citizenship. Headline indicators in the economy and economic resources domain include financial hardship and housing, while the national income and wealth dimensions include information on the distribution of economic resources across households. In addition, MAP presents a number of supplementary indicators. However, the presentation and discussion of any suite of indicators cannot fully reveal the richness of Australian society, such as how Australians live together and how different areas of our lives are intertwined. Through presenting a more detailed set of social indicators, and profiling the diverse aspects of society in short articles, AST extends both the breadth and depth of the social investigation presented in MAP.

Features of Australian Social Trends

Structure

Seven core areas of social concern form the chapters of each edition: population, family and community, health, education and training, work, economic resources, and housing. An additional chapter covers other areas of social concern or interest, such as culture and leisure, transport, crime and justice, and the environment. Occasionally an AST edition will focus on a theme. Past themes have included a regional issues theme (2003) and the wellbeing of older Australians (1999).

Chapters

Summary tables — The summary tables at the beginning of each chapter are a fundamental element of AST. They present a range of statistics that summarise the key aspects of each area. They show at a glance changes that have taken place at a national level over a decade, and differences across states and territories for the most recent year.

Articles — Each chapter contains several articles, each 3–6 pages long. The articles focus on specific social issues or population subgroups. They are designed to stand alone, while complementing one another in terms of content. Most articles contain references to other AST articles that provide more background or in-depth discussion of a topic. Endnotes at the end of each article direct readers to further Australian and international references on specific issues.

Sources and definitions — The main data sources used in an article, and definitions of key terms used, generally appear on the first page of the article, in the upper right hand corner. Data sources and definitions for the summary tables are provided directly following these tables.

Other features

International comparisons — A set of international summary tables covering the areas of population, health, education and work are located towards the end of the publication. These tables enable the reader to consider Australia's international standing in relation to various key social indicators.

Cumulative topic list — This index lists all articles, from all AST editions, under topic subheadings.

AST seminars — The dissemination of AST includes seminars held in most states and territories. These are based on articles from the most recent edition supported by related statistics, with a state or territory focus where feasible. For information contact the client liaison area in ABS Regional Offices.

Access — All editions of AST can be accessed via the ABS web site, from the home page or through Australia Now. AusStats subscribers can access PDF versions of each edition and Excel spreadsheet versions of the summary tables. Hard copies of the publication are available from ABS state and territory offices. For more information, see page ix of this edition.

General information

Inquiries about these statistics

General inquiries about the content and interpretation of statistics in this publication should be addressed to:

Director
Social Analysis and Reporting Section
ABS
PO Box 10
Belconnen ACT 2616

Telephone Canberra (02) 6252 7187

Inquiries about the availability of more recent data from the ABS should be directed to the National Information and Referral Service on 1300 135 070.

ABS publications and services

A complete list of ABS publications produced in Canberra and each of the Regional Offices is contained in the ABS *Catalogue of Publications and Products* (cat. no. 1101.0), which is available from any ABS office.

In many cases, the ABS can also provide information which is available on request or which is historical or compiled from a variety of sources. Information of this kind may be obtained through the Information Consultancy Service. This information may be made available in one or more of the following forms: consultancy reports, microfiche, floppy disk, magnetic tape, computer printout or photocopy. Charges are generally made for such information. Inquiries may be made by contacting Information Services in your nearest ABS office (see p. 211).

Abbreviations

The following abbreviations have been used in this publication.

Australia, States and territories of Australia

Aust.	Australia
NSW	New South Wales
Vic.	Victoria
Qld	Queensland
SA	South Australia
WA	Western Australia
Tas.	Tasmania
NT	Northern Territory
ACT	Australian Capital Territory

Other abbreviations

ABS	Australian Bureau of Statistics
ACE	Adult and Community Education
ACER	Australian Council for Educational Research
AIHW	Australian Institute of Health and Welfare
ALP	Australian Labor Party
ANZSIC	Australian and New Zealand Standard Industry Classification
ASCCSS	Australian Standard Classification of Countries for Social Statistics
ASCED	Australian Standard Classification of Education
ASCO	Australian Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
ATO	Australian Taxation Office
ATSIC	Aboriginal and Torres Strait Islander Commission
AST	Australian Social Trends
CDEP	Community Development Employment Projects scheme
CPI	Consumer Price Index
COAG	Council of Australian Governments
COTA	Council of the Ageing
CRA	Commonwealth Rent Assistance
CSTDA	Commonwealth State/ Territory Disability Agreement
DDA	Disability Discrimination Act 1992
EEBTUM	Employee Earnings, Benefits and Trade Union Membership Survey
EEH	Survey of Employee Earnings and Hours
ERP	Estimated resident population
FACS	Department of Family and Community Services
FTE	Full-time equivalent
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GL	Gigalitre
GSS	General Social Survey
GST	Goods and Service Tax
HECS	Higher Education Contribution Scheme
HES	Household Expenditure Survey
ICD–10	International Classification of Diseases – 10th revision
ICD–9	International Classification of Diseases – 9th revision
ICF	International Classification of Functioning, Disability and Health
ISCED	International Standard Classification of Education
kL	Kilolitre
LFS	Labour Force Survey
MAP	Measures of Australia's Progress
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
ML	Megalitre
MODL	Migration Occupations in Demand List
NATSIS	National Aboriginal and Torres Strait Islander Survey 1995
NATSISS	National Aboriginal and Torres Strait Islander Social Survey 2002
NHS	National Health Survey
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assesment
PPP	Purchasing Power Parities
SACC	Standard Australian Classification of Countries
SAR	Special Administrative Region of China

Other abbreviations continued

SBS	Special Broadcasting Service
SD	Statistical Division
SDAC	Survey of Disability, Ageing and Carers
SEIFA	Socio-Economic Indexes for Areas
SIH	Survey of Income and Housing
SLA	Statistical Local Area
SSD	Statistical Subdivision
TAFE	Technical and Further Education
TIMSS	Trends in Mathematics and Science Study
TFR	Total fertility rate
UK	United Kingdom
UNICEF	United Nations International Childrens Emergency Fund
USA	United States of America
USSR	Union of Soviet Socialist Republics
VET	Vocational Education and Training
WHO	World Health Organisation

Symbols

The following symbols and usages mean:

billion	1,000 million
n.a.	not available
n.e.c.	not elsewhere classified
n.f.d.	not further defined
n.p.	not published
n.y.a.	not yet available
no.	number
p	preliminary — figures or series subject to revision
r	figures or series revised since previous edition
'000	thousand
'000m	thousand million
$	dollar
$m	million dollars
$b	billion dollars
$US	American dollar
%	per cent
*	subject to high sampling variability
**	data suppressed due to unacceptably high sampling variability
. .	not applicable
—	nil or rounded to zero (including null cells)

Other usages

Figures have been rounded. Therefore discrepancies may occur between the sums of the component items and totals.

Unless otherwise stated in table and graph footnotes, 'not known' variable categories (e.g. 'not stated', 'inadequately described' and 'not recorded') have been excluded from all numerators and denominators prior to the calculation of percentages and other rates. However, numerical population totals for variables containing 'not known' categories include these categories in the total.

Each chapter contains a national summary table which provides, where possible, ten years of data for a particular indicator. These time series are designed to give a long-term overview and readers should be cautious when interpreting small year to year variations, as some may not be statistically significant.

Unless otherwise stated, all data from the Census of Population and Housing are based on the location of people on census night, i.e. their place of enumeration.

Unless otherwise stated, all data from the Census of Population and Housing exclude overseas visitors.

Population

Population: national summary(a)

COMPOSITION	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1 Total population	'000	17 855	18 072	18 311	18 518	18 711	18 926	19 153	19 413	19 641	r19 873	p20 111
2 Male population	'000	8 888	8 994	9 108	9 203	9 295	9 397	9 505	9 631	9 753	r9 873	p9 995
3 Female population	'000	8 967	9 078	9 203	9 314	9 417	9 529	9 648	9 783	9 888	r9 999	p10 117
4 Indigenous population(b)	'000	r395.3	r405.0	r414.4	r423.4	r432.2	r441.1	r499.9	r458.5	r466.9	r475.4	484.0
5 Born overseas(c)	%	22.9	23.0	23.3	23.3	r23.2	r23.1	r23.0	23.1	23.2	23.4	n.y.a.
6 Born in United Kingdom	%	6.9(d)	6.8(d)	r6.4	r6.2	r6.1	r6.0	r5.9	r5.8	5.7	5.7	n.y.a.
7 Born in Europe	%	13.5 (e)	13.3(e)	13.2	r13.0	r12.8	r12.5	r12.3	r12.0	11.9	11.7	n.y.a.
8 Born in East, Central or Southern Asia	%	4.7(f)	4.9(f)	5.1	r5.3	5.3	r5.3	r5.4	5.5	5.7	5.8	n.y.a.
9 Population living in capital cities	%	63.5	63.5	63.6	63.6	63.7	63.7	64.0	63.7	63.8	63.8	p63.8
10 Population aged 0–14 years	%	21.6	21.5	21.4	21.2	r21.0	r20.9	r20.7	r20.5	20.3	20.0	p19.8
11 Population aged 15–64	%	66.6	66.6	66.6	66.7	r66.7	r66.8	r66.9	r66.9	67.0	67.2	p67.3
12 Population aged 65 and over	%	11.8	11.9	12.0	12.1	12.2	12.3	r12.4	r12.5	12.7	12.8	p13.0
13 Population aged 80 and over	%	2.5	2.6	2.6	2.7	r2.8	2.8	2.9	r3.1	3.2	3.3	p3.4
14 Median age of total population	years	33.4	33.7	34.0	34.4	34.8	35.1	35.4	35.7	36.0	r36.2	p36.4
15 Median age of Indigenous population(b)	years	20.4	20.6	20.1	20.1	20.1	20.2	20.2	r20.5	r20.6	r20.7	20.8
16 Sex ratio of population aged 0–64	ratio	102.6	102.5	102.4	r102.2	r102.0	r101.8	r101.7	101.5	101.7	r101.8	p101.7
17 Sex ratio of population aged 65 and over	ratio	76.3	76.7	77.1	77.5	77.9	r78.4	r78.7	r79.2	79.8	80.4	p81.0

POPULATION GROWTH	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004p
18 Total population growth	'000	187.6	217.0	239.0	r206.9	r193.7	r214.6	r227.5	259.9	227.7	r231.7	238.7
19 Births(g)	'000	258.3	258.2	250.4	253.7	249.1	250.0	249.3	247.5	247.4	r247.4	254.6
20 Deaths(g)	'000	123.5	126.2	126.4	127.3	129.3	r128.3	128.4	128.9	130.3	r132.2	133.6
21 Natural increase	'000	134.8	132.0	124.0	126.4	119.9	121.7	120.9	118.6	117.2	115.2	121.0
22 Net overseas migration	'000	46.5	80.1	104.1	87.1	79.2	96.5	107.3	135.7	110.6	r116.5	117.6
23 Population growth rate	%	1.06	1.22	1.32	1.13	1.05	1.15	1.20	1.36	1.17	r1.18	1.20
24 Net overseas migration to total growth	%	24.8	36.9	43.6	r42.1	r40.9	r45.0	r47.1	52.2	r48.5	r50.3	49.3

MIGRATION	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
25 Total settler arrivals(h)	'000	69.8	87.4	99.1	85.8	77.3	84.1	92.3	107.4	88.9	93.9	111.6
26 Skilled settler arrivals	%	18.3	23.1	20.2	23.0	33.6	33.2	35.1	33.3	40.5	41.0	n.y.a.
27 Family settler arrivals	%	48.1	42.4	46.9	42.6	27.3	25.6	21.6	18.8	26.3	29.9	n.y.a.
28 Humanitarian settler arrivals	%	16.3	15.6	13.9	11.5	11.4	10.4	7.9	7.1	7.6	10.2	n.y.a.

PROJECTIONS — SERIES B	Units	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2101
29 Total population	'000	20 533	21 524	22 464	23 368	24 202	24 916	25 478	25 892	26 194	26 422	26 356
30 Population aged 0–14 years	%	19.2	17.8	16.7	16.1	15.7	15.4	15.0	14.6	14.2	14.0	13.8
31 Population aged 15–64	%	67.5	67.5	66.4	64.9	63.1	61.6	60.5	59.8	59.5	58.9	57.2
32 Population aged 65 and over	%	13.3	14.7	16.9	19.0	21.2	23.0	24.5	25.6	26.3	27.1	28.9
33 Population aged 80 and over	%	3.6	4.1	4.4	4.9	5.7	7.0	8.1	9.1	9.8	10.4	11.6
34 Median age of total population	years	37.0	38.7	40.1	41.2	42.5	43.6	44.7	45.6	46.3	46.8	47.5
35 Population living in capital cities	%	63.9	64.1	64.3	64.5	64.8	65.1	65.5	65.8	66.2	66.6	n.y.a

(a) Australia includes other territories.
(b) Based on 2001 census data. From 2002, figures are low series projections.
(c) Includes country of birth not stated.
(d) Prior to 1996 data was based on the ASCCSS classification and grouped United Kingdom and Ireland together.
(e) Prior to 1996 data was based on the ASCCSS classification and grouped the former USSR with Europe.
(f) Prior to 1996 data was based on the ASCCSS classification and did not include central Asia.
(g) Year of occurrence basis.
(h) Total settler arrivals includes special eligibility and non-program migration in addition to family, skilled and humanitarian migration.

Reference periods: Data for indicators 1–17 and 29–35 are at 30 June.
Data for indicators 18–28 are for the financial year ending 30 June.

Population: state summary

COMPOSITION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.(a)
1 Total population	'000	2004p	6 731	4 973	3 882	1 534	1 982	482	200	324	20 111
2 Male population	'000	2004p	3 347	2 453	1 938	760	992	238	105	160	9 995
3 Female population	'000	2004p	3 385	2 520	1 944	774	990	244	95	164	10 117
4 Indigenous population(b)	'000	2004	141.5	29.7	134.0	27.1	69.7	18.1	59.5	4.2	484.0
5 Born overseas(c)(d)	%	2001	24.8	24.6	18.0	21.2	28.5	r10.8	r16.1	r22.9	23.1
6 Born in United Kingdom(c)	%	2001	r4.6	r4.7	r5.3	r8.9	r11.6	r5.0	r3.9	r5.8	r5.8
7 Born in Europe(c)	%	2001	r10.7	13.7	r8.7	16.0	r17.4	r7.7	r7.4	r12.4	12.0
8 Born in East, Central or Southern Asia(c)	%	2001	r7.4	6.3	2.9	2.9	5.4	1.1	r4.4	5.8	5.5
9 Population living in capital cities	%	2004p	62.9	72.4	45.7	73.3	73.5	41.9	54.8	99.9	63.8
10 Population aged 0–14 years	%	2004p	19.7	19.3	20.6	18.6	20.2	20.1	25.3	19.5	19.8
11 Population aged 15–64	%	2004p	66.8	67.4	67.5	66.3	68.2	65.6	70.3	71.2	67.3
12 Population aged 65 and over	%	2004p	13.5	13.3	12.0	15.0	11.6	14.3	4.4	9.3	13.0
13 Population aged 80 and over	%	2004p	3.6	3.5	3.0	4.2	2.9	3.7	0.7	2.3	3.4
14 Median age of total population	years	2004p	36.6	36.5	35.7	38.5	35.8	38.4	30.6	34.1	36.4
15 Median age of Indigenous population(b)(e)	years	2004	20.4	21.3	20.3	21.2	21.0	20.0	22.4	20.8	20.8
16 Sex ratio of population aged 0–64	ratio	2004p	102.1	100.5	101.8	102.1	102.8	100.5	110.8	99.8	101.7
17 Sex ratio of population aged 65 and over	ratio	2004p	80.3	79.1	85.2	78.0	82.8	81.0	114.7	80.6	81.0
POPULATION GROWTH	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
18 Total population growth	'000	2003-04p	49.2	61.4	81.0	7.9	32.3	4.8	1.4	0.7	238.7
19 Births	'000	2003-04p	87.0	62.3	48.8	17.5	25.2	5.8	3.7	4.2	254.6
20 Deaths	'000	2003-04p	46.6	33.2	24.2	11.8	11.4	4.0	0.9	1.4	133.6
21 Natural increase	'000	2003-04p	40.4	29.1	24.6	5.7	13.8	1.7	2.9	2.8	121.0
22 Net overseas migration	'000	2003-04p	39.3	34.6	19.7	5.5	17.1	0.6	0.6	0.2	117.6
23 Net interstate migration	'000	2003-04p	-30.4	-2.3	36.7	-3.2	1.3	2.5	-2.1	-2.4	. .
24 Population growth rate	%	2003-04p	0.7	1.3	2.1	0.5	1.6	1.0	0.7	0.2	1.2
25 Net interstate migration rate	%	2003-04p	-0.5	—	1.0	-0.2	0.1	0.5	-1.1	-0.7	. .
PROJECTIONS — SERIES B	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
26 Total population	'000	2051	8 356	6 200	6 430	1 476	2 875	387	307	390	26 422
27 Population aged 0–14 years	%	2051	14.2	13.6	14.3	12.9	14.1	13.3	20.4	14.3	14.0
28 Population aged 15–64	%	2051	59.0	59.1	58.9	55.9	59.1	52.9	67.5	62.2	58.9
29 Population aged 65 and over	%	2051	26.9	27.3	26.8	31.1	26.9	33.8	12.1	23.5	27.1
30 Population aged 80 and over	%	2051	10.2	10.7	10.0	13.0	10.4	14.1	2.9	9.2	10.4
31 Median age of total population	years	2051	46.7	46.9	46.8	50.0	46.8	52.4	35.8	43.5	46.8
32 Population living in capital cities	%	2051	67.6	77.3	46.9	76.9	77.8	45.5	64.9	n.a.	66.6

(a) Includes other territories.
(b) Based on 2001 census data. From 2002, figures are low series projections.
(c) State and territory data only available in census years.
(d) Includes country of birth not stated.
(e) Population projections.

Reference periods: Data for indicators 1–17 and 26–32 are at 30 June.
Data for indicators 18–26 are for the financial year ending 30 June.

Population: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
Australian Demographic Statistics (ABS cat. no. 3101.0).	1–3, 18–24	1–3, 18–25
Department of Immigration, Multicultural and Indigenous Affairs: *Immigration Update.*	25–28	–
Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Population (ABS cat. no. 3238.0).	4, 15	4, 15
Migration, Australia (ABS cat. no. 3412.0).	5–8	5–8
Population by Age and Sex, Australian States and Territories (ABS cat. no. 3201.0).	9–14, 16–17	9–14, 16–17
Population Projections (ABS cat. no. 3222.0).	29–35	26–32

Population: definitions

Births

live births occurring in that year. A live birth is the delivery of a child irrespective of the duration of pregnancy who, after being born, breathes or shows any evidence of life such as a heartbeat.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Deaths

based on the year in which the death occurred. Death is the permanent disappearance of all evidence of life after birth has taken place. The definition excludes deaths prior to live birth. Estimates may differ from estimates given in the Health chapter of this publication, which are based on the year in which the death was registered.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

East, Central and Southern Asia

including the countries of North-East, South-East and Southern and Central Asia. Countries are classified according to the *Standard Australian Classification of Countries (SACC), 1998* (ABS cat. no. 1269.0).

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Europe

including the United Kingdom and Ireland.

Reference: *Standard Australian Classification of Countries (SACC), 1998* (ABS cat. no. 1269.0).

Family settler arrivals

migrants who have been sponsored by a relative who is an Australian citizen, or permanent resident of Australia, under the family stream of the migration program.

Reference: *Immigration Update, June Quarter* ***2001,*** Department of Immigration and Multicultural and Indigenous Affairs.

Humanitarian settler arrivals

comprise: those who arrive under the refugee program (which provides protection for people who have fled their country because of persecution); those who arrive under the special humanitarian programs (those suffering persecution within their own country or who have left their country because of significant discrimination amounting to gross violation of human rights); and those who arrive under the special assistance category (groups determined by the Minister to be of special concern to Australia and in real need, but who do not come under the traditional humanitarian categories. It includes those internally and externally displaced people who have close family links in Australia).

Reference: *Immigration Update, June Quarter 2001*, Department of Immigration and Multicultural and Indigenous Affairs.

Indigenous population

people who identify, or were identified by another household member, as Aboriginal or Torres Strait Islander origin. Data referring to the size of the Indigenous population are experimental estimates in that the standard approach to population estimation is not possible because satisfactory data on births, deaths and migration are not generally available. Furthermore, there is significant intercensal volatility in census counts of the Indigenous population, due in part to changes in the propensity of persons to be identified as being of Aboriginal or Torres Strait Islander origin.

Reference: *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians* (ABS cat. no. 3238.0).

Long-term arrivals and departures

long-term arrivals comprise overseas visitors who intend to stay in Australia for one year or more (but not permanently) and Australian residents returning after an absence of one year or more overseas. Long-term departures comprise Australian residents who intend to stay abroad for one year or more (but not permanently), and overseas visitors departing who stayed one year or more.

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Median age

for any distribution the median value is that which divides the relevant population into two equal parts, half falling below the value, and half exceeding it. Thus, the median age is the age at which half the population is older and half is younger.

Reference: *Population by Age and Sex, Australian States and Territories* (ABS cat. no. 3201.0).

Natural increase

the excess of births over deaths during the year.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Net interstate migration

the difference between the number of persons who have changed their place of usual residence by moving into a given state or territory and the number who have changed their place of usual residence by moving out of that state or territory during a specified time period. The difference can be either positive or negative. Net interstate migration rate expresses this as a proportion (per cent) of the population at the beginning of the year.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Population: definitions continued

Net overseas migration

is net permanent and long-term overseas migration, adjusted for changed in traveller duration, intention and multiple movement error.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Permanent arrivals

comprise of travellers who hold migrant visas, New Zealand citizens who indicate an intention to settle, and those who are otherwise eligible to settle.

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Permanent departures

are Australian residents (including former settlers) who on departure state that they are departing permanently.

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Population

estimated resident population (ERP). ERP is the official measure of the population of Australia based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Population growth

is the sum of natural increase and net overseas migration. For states and territories , population growth also includes net interstate migration. After the census, intercensal population growth also includes an allowance for intercensal discrepancy. Prior to 1996, differences between growth and the sum of natural increase and net overseas migration arise from retrospective adjustments to population estimates (which are made after each census) to compensate for intercensal discrepancy. Population growth rate expresses the increase as a proportion (per cent) of the population at the beginning of the year.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Population projections

ABS population projections take the base year population for each sex by single years of age and advance it year by year by applying assumptions about future mortality and migration. Assumed age-specific fertility rates are applied to the female populations of childbearing ages to provide the estimates of new births for each year. The ABS produces several series of population projections based on different combinations of assumptions about mortality, fertility and migration. The assumptions underlying Series B most closely reflect prevailing trends and comprise: declining rates of mortality; the total fertility rate for Australia falling to 1.6 by 2011, and then remaining constant; low levels of overseas migration (annual net gain of 100,000 from 2005–2006); and medium levels of interstate migration. The base year for these projections is 2002.

Reference: *Population Projections, Australia, 2002 to 2101* (ABS cat. no. 3222.0).

Sex ratio

the number of males per 100 females.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Skilled settler arrivals

the skill stream component of the migration program is designed to contribute to Australia's economic growth. Settlers under this program meet a demand in Australia for their particular occupational skills, outstanding talents or business skills.

Reference: *Immigration Update, June Quarter 2001*, Department of Immigration and Multicultural and Indigenous Affairs.

Total settler arrivals

comprised largely of those who arrived under the Migration and Humanitarian programs and those who are not required to seek a visa before travelling (mostly New Zealand citizens). These programs include the following categories: the family stream; the skilled stream; special eligibility migrants; refugees; special humanitarian and special assistance migrants.

Reference: *Immigration Update, June Quarter 2001*, Department of Immigration and Multicultural and Indigenous Affairs.

Future living arrangements

POPULATION PROJECTIONS

The number of people living alone is projected to increase from 1.8 million in 2001 to between 2.8 million (Series I) and 3.7 million (Series III) in 2026 – an increase of between 57% and 105%.

Families provide emotional, physical and financial care and support to their members and are often the basis on which government assistance is determined and administered. Australians have traditionally experienced three main living arrangements over a lifecycle: living with parents, living with a partner (for some of this period with children) and living alone in old age if that partner died. Now and into the future, living arrangements throughout a lifecycle may also include living alone or in a group household before perhaps forming a long-term partnership, or living as a lone parent or alone after divorce or separation. These changes in living arrangements and family characteristics are the outcome of various demographic and social trends, such as declining fertility, increased rates of divorce and longer life expectancy.

Current interest in family is reflected in policy aiming to support and strengthen families and to lower the incidence of family breakdown.[1] Future changes in family and household composition will have implications in a number of areas including housing, income support, accommodation provision and aged care, as well as health and family services.

Past trends

Although the proportion declined over the period, the majority of Australians were living as part of a couple family with children at the time of the 1986 and 2001 censuses (60% of Australians in 1986 compared with 52% in 2001). Conversely, the proportion of people living in one-parent families increased from 9% to 12%. The proportion of people living as partners in couple families without children

Household and family projections

This article is based on ABS population projections spanning the period 2001 to 2026. The base population for the projections is the estimated resident population at 30 June 2001.

The ABS produces three main series (A, B and C) of population projections based on assumptions about future fertility, mortality and migration. The ABS uses the projected population size, age structure and geographic distribution from Series B as the basis for projections of households, families and living arrangements in Australia.

The projections are not intended as predictions or forecasts, but are illustrations of growth and change in the numbers of households and families which would occur if the assumptions about future trends in living arrangements prevail over the projection period from 2001 to 2026.

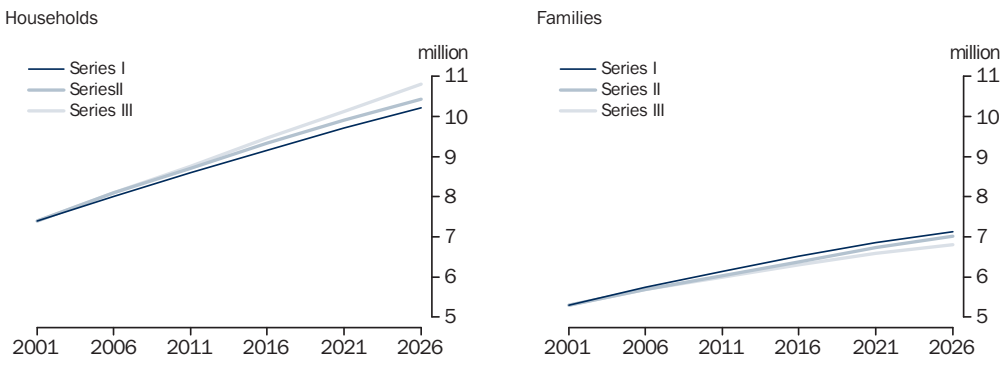
Trends in the propensities of people to belong to different living arrangement types were observed over the last four censuses between 1986 and 2001. Three different assumptions were made about the future rate of change in these propensities. Based on these different assumptions, three projection series for households and families have been produced.

Assumptions used

Series I	No change in living arrangement propensities from 2001
Series II	The linear trend observed from 1986 to 2001 continues at the full rate to 2006, half the rate to 2011, one quarter of the rate to 2016 then remains constant through to 2026
Series III	Continuation of 1986 to 2001 rate of change in living arrangement propensities through to 2026

Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

Household and family projections



Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

increased from 17% in 1986 to 20% in 2001. This trend is partly due to the deferment of childbearing and the ageing of the population with the subsequent increase in the number of 'empty nesters'. The proportion of people living alone has increased from 7% of the population in 1986 to 9% in 2001. The proportion of people living in a group household showed little change between 1986 and 2001 (around 3% of the population).

Series I, II and III

The ABS uses trends in the proportions of people in different living arrangements over the last four censuses to develop projections of households and families. These trends are projected forward and applied to the projected population (Series B) to produce numbers of households and families to 2026 (Series I, II and III). In Series I, it is assumed that the proportion of people in specific living arrangements (such as one-parent families) will remain constant from 2001 to 2026. Series III assumes that the rate of change seen between 1986 and 2001 will continue through to 2026. Series II assumes the rate of change in living arrangement propensities will be greater than Series I but not as great as Series III.

Household projections

In 2001, Australia had 7.4 million households with an average size of 2.6 persons per household. In 2026 Australia is projected to have between 10.2 and 10.8 million households (Series I and Series III respectively) with a decrease in average household size to between 2.2 and 2.3 persons per household.

Most of the change from 2001 to 2026 is projected to be in the numbers of people living alone and the numbers of family households. As living in a group household tends to be a temporary arrangement, these households are expected to account for a small proportion of the population (between 3% and 4%). Also, with current government policy encouraging people to live in their own homes as they age[2], the proportion of people living in non-private dwellings is also projected to remain low (between 1% and 2%).

Household and family types

Lone person household is a household formed by a person who makes provision for his or her food and other essentials for living without combining with any other person to form part of a multi-person household.

Group household consists of two or more unrelated people where all people are aged 15 years and over. There are no reported couple relationships, parent-child relationships or other blood relationships in these households.

Family households are households which contain one or more families.

Families refer to related individuals usually resident in the same household. There are three main types, listed below.

Couple family with children are based on two persons who are in a registered or de facto marriage and who are usually resident in the same household. The family must include one or more children, of any age, usually resident in the same household.

Couple family without children are based on two persons who are in a registered or de facto marriage and who are usually resident in the same household and have no children usually resident in the same household

One-parent families are based on a lone parent who has no spouse or partner resident in the household but who forms a parent-child relationship with at least one child, of any age, usually resident in the household.

Families can also include other related individuals such as grandparents, cousins, nieces or nephews.

Lone person households

The number of people living alone is projected to increase from 1.8 million in 2001 to between 2.8 million (Series I) and 3.7 million (Series III) in 2026 – an increase of between 57% and 105%. This large projected increase is related to rapid population growth in older age groups, delayed marriage and increase in divorce and separation.

In all three series, women account for more than half of the number of people living alone (between 54% in Series III and 59% in Series I). This reflects the greater number of women than men in older age groups as a result of

Types of households

		2026		
	2001	Series I	Series II	Series III
Household type	'000	'000	'000	'000
Family households	5 269.0	7 030.1	6 920.0	6 714.9
Group households	293.2	345.7	371.5	403.6
Lone person households	1 805.3	2 842.0	3 149.4	3 693.0
Total number of households	**7 367.5**	**10 217.9**	**10 440.9**	**10 811.5**

Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

People living in lone person households

		2026		
	2001	Series I	Series II	Series III
Living arrangement	'000	'000	'000	'000
Male lone person aged under 65 years	630.8	766.8	908.6	1 188.6
Male lone person aged 65 years and over	188.6	397.3	440.1	505.1
Female lone person aged under 65 years	498.9	641.5	750.3	973.0
Female lone person aged 65 years and over	487.0	1 036.4	1 050.3	1 026.3
Total number of people in lone person households	**1 805.3**	**2 842.0**	**3 149.4**	**3 693.0**
	%	%	%	%
Proportion of all Australians in lone person households	9.3	11.7	13.0	15.3

Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

womens' longer life expectancy. While women are more likely to live alone in old age, men have a tendency to live alone in younger age groups. The effects of separation and divorce, where men are less likely to be the resident parent (see *Australian Social Trends 2003*, Changing families, pp.35–39) contributes to the numbers of younger men who live alone. In 2001, men and women aged 65 and over comprised 37% of lone person households. This proportion is expected to increase to between 41% (Series III) and 50% (Series I).

Family households

Between 2001 and 2026 the number of family households is projected to increase more slowly (by between 27% and 33%) than the number of households (by 39% to 47%). The difference is related to faster growth in lone person households. The number of families in Australia is projected to increase from 5.3 million in 2001 to between 6.8 and 7.1 million in 2026 (using Series III and Series I respectively). However, there are substantial differences by family type across the three projection series.

...couple families

Between 2001 and 2026 the number of couple families with children is projected to increase only slowly in Series I and Series II but to decrease in Series III. This reflects the assumption in Series III that we will continue to move away from this family type at the same rate of change as we have from 1986 to 2001, more quickly than in Series I and II. Conversely, couples without children are projected to increase quite rapidly from 1.9 million in 2001 to between 2.9 and 3.3 million in 2026. This increase in couple only families is in part related to the movement of

Types of families

		2026		
	2001	Series I	Series II	Series III
Family type	'000	'000	'000	'000
Couple families with children of any age	2 491.5	2 976.3	2 610.3	2 010.4
With at least one child under 15 years	1 733.1	2 070.3	1 815.6	1 398.4
With children 15 years and over only	758.5	906.1	794.6	612.0
Couple families without children	1 917.6	2 948.6	3 108.1	3 312.0
One-parent families	838.2	1 082.3	1 192.3	1 369.3
With at least one child under 15 years	483.2	624.0	687.4	789.4
With children 15 years and over only	354.9	458.3	504.9	579.8
Other families	98.7	126.3	111.2	122.2
Total number of families	**5 346.0**	**7 133.5**	**7 021.8**	**6 813.9**

Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

People living in couple families

	2001	2026		
		Series I	Series II	Series III
Living arrangement	'000	'000	'000	'000
Couple family with children				
Husband, wife or partner	4 983.1	5 952.7	5 220.5	4 020.8
Child aged 0–14 years	3 232.1	3 075.2	2 909.1	2 534.3
Child aged 15 years or over	1 770.5	1 832.7	1 871.9	1 885.3
Other related individual	102.1	162.5	113.3	66.1
Couple family without children				
Husband, wife or partner	3 835.2	5 897.2	6 216.2	6 623.9
Other related individual	59.4	93.3	77.6	67.3
Total number of people in couple families	**13 982.4**	**17 013.6**	**16 408.6**	**15 197.7**
	%	%	%	%
Proportion of all Australians in couple families with children	52.0	45.5	41.8	35.1
Proportion of all Australians in couple families without children	20.1	24.8	26.0	27.6

Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

the 'baby boom' cohort into the older age groups where their children are likely to have left home.

The proportion of Australians living in a couple family with children is projected to decrease from 52% in 2001 to between 35% (Series III) and 46% (Series I) by 2026. Conversely, the proportion of Australians living as couples without children is projected to increase from 20% in 2001 to between 25% (Series I) and 28% (Series III) by 2026. The proportion of people living in one-parent families (12% in 2001) is projected to decrease slightly in Series I (10%), to stay the same in Series II (12%), but to increase in Series III (15%).

These projections are not only a reflection of the ageing population but also of couples having no children or smaller families, resulting in people spending more time living in couple only families both before and after they have children. An increase in marital break up and one-parent families also results in a decline in couple families with children.

People living in one-parent families

	2001	2026		
		Series I	Series II	Series III
Living arrangement	'000	'000	'000	'000
One-parent family				
Female lone parent	698.4	894.1	989.6	1 146.1
Male lone parent	139.8	188.2	202.7	223.2
Child aged 0–14 years	744.5	707.1	875.1	1 252.3
Child aged 15–24 years	367.7	374.2	429.8	534.6
Child aged 25 years or over	232.2	270.3	300.5	343.5
Other related individual	62.0	89.7	93.6	100.3
Total number of people in one-parent families	**2 244.5**	**2 523.6**	**2 891.3**	**3 600.0**
	%	%	%	%
Proportion of all Australians in one-parent families	11.6	10.4	11.9	14.9

Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

Households in states and territories

		2026		
	2001	Series I	Series II	Series III
State or territory	'000	'000	'000	'000
New South Wales	2 454.7	3 258.0	3 310.3	3 390.7
Victoria	1 817.2	2 446.9	2 490.4	2 565.0
Queensland	1 382.8	2 254.5	2 319.6	2 431.1
South Australia	613.0	716.3	736.9	771.5
Western Australia	724.2	1 079.6	1 108.3	1 158.2
Tasmania	191.6	214.8	222.8	235.8
Northern Territory	62.8	88.9	90.1	91.2
Australian Capital Territory	120.3	157.7	161.3	166.7
Australia	**7 367.5**	**10 217.9**	**10 440.9**	**10 811.5**

Source: Household and Family Projections, Australia, 2001 to 2026 (ABS cat. no. 3236.0).

...one-parent families

One-parent families are projected to increase by between 29% and 63% from 838,000 families in 2001 to between 1.1 million (Series I) and 1.4 million (Series III) in 2026. In 2001, the number of female one-parent families was around five times that of male one-parent families and this relativity is projected to continue.

In 2001, over half of one-parent families were lone parents living with at least one child aged less than 15 years (58%). Other one-parent families included those with older dependent children (i.e. those aged 15–24 and still in full-time education) or much older children living with their aged parent. In 2001, the lone parent in 13% of one-parent families was aged 65 years or over and many in this group would be older parents living with their adult children.

In 2001, there were 2.2 million people in Australia living in one-parent families. This is projected to increase to between 2.5 million and 3.6 million people by 2026, an increase from 11% to 15% of the population. The number of female lone parents is projected to increase from 698,000 in 2001 to between 894,000 and 1.1 million in 2026 – an increase of between 28% and 64%.

...children

The number of children aged 0–14 years in Australia is projected to decrease slightly (from around 4.0 million in 2001 to 3.8 million in 2026 using Series B projections).

The number of children aged 0–14 years living in two-parent families is projected to decrease in all three series (from 3.2 million in 2001 to between 2.5 million and 3.1 million in 2026). In 2001, there were 745,000 children aged 0–14 in one-parent families. In Series I this number is projected to decline to around 707,000, while in Series II and III the number is projected to increase to between 875,000 and 1.3 million respectively.

State/territory projections

The states and territories which are projected to experience high population growth between 2001 and 2026 are also projected to have faster household growth. Queensland is projected to have the fastest household growth from 1.4 million households in 2001 to between 2.3 and 2.4 million households in 2026 (an increase of between 63% and 76%). Western Australia is projected to experience the second highest household growth in Australia increasing from 724,000 households in 2001 to between 1.1 and 1.2 million households in 2026 (an increase of between 49% and 60%).

Tasmania's household growth is projected to be the slowest of all states and territories from 192,000 in 2001 to between 215,000 and 236,000 (an increase of between 12% and 23%), reflecting the longer-term population decline projected for the state.

Endnotes

1 Department of Family and Community Services <http://www.facs.gov.au/internet/FaCSInternet.nsf/whatfacsdoes/families-nav.htm>, accessed 23 November 2004.

2 Department of Health and Ageing, <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/Help+to+stay+at+home-1>, accessed 6 June 2005.

Social circumstances of Aboriginal and Torres Strait Islander peoples

POPULATION CHARACTERISTICS

Between 1994 and 2002, the proportion of Aboriginal and Torres Strait Islander adults in mainstream employment rose from 30% to 36%.

Since 1994 there have been a number of improvements in the social circumstances of Aboriginal and Torres Strait Islander peoples. These include gains in educational attainment, improvements in employment (with associated reductions in unemployment), and increases in home ownership. Nevertheless, Indigenous Australians remain disadvantaged across a range of areas of social concern when compared with non-Indigenous Australians. In addition, many Indigenous peoples living in remote areas have limited access to services and mainstream labour markets.

The Indigenous population

The Aboriginal and Torres Strait Islander population of Australia was estimated at 458,500 people at 30 June 2001 and projected to have grown to between 492,700 (low series) and 525,000 (high series) by mid 2005. In 2001, Indigenous peoples represented 2.4% of the total Australian population of 19.4 million. Among Indigenous people, 90% identified their Indigenous origin as Aboriginal, 6% identified as Torres Strait Islander and 4% identified as both Aboriginal and Torres Strait Islander. The Indigenous population is relatively young, with a median age of 20.5 years compared to 36.1 years for the non-Indigenous population.

National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

The 2002 NATSISS is the second national social survey of Indigenous Australians conducted by the ABS, building on the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS). It is a multi-dimensional social survey of Australia's Indigenous population aged 15 years and over. The NATSISS was designed to enable analysis of interrelationships between social circumstances and outcomes.

This article uses data from the 2002 NATSISS together with other data collections to examine health, education, work and housing issues. The population is generally confined to persons aged 18 years and over to enable comparisons with the non-Indigneous population using data from the ABS 2002 General Social Survey (GSS). Social participation and law and justice issues relating to Indigenous peoples are covered in other articles in this publication.

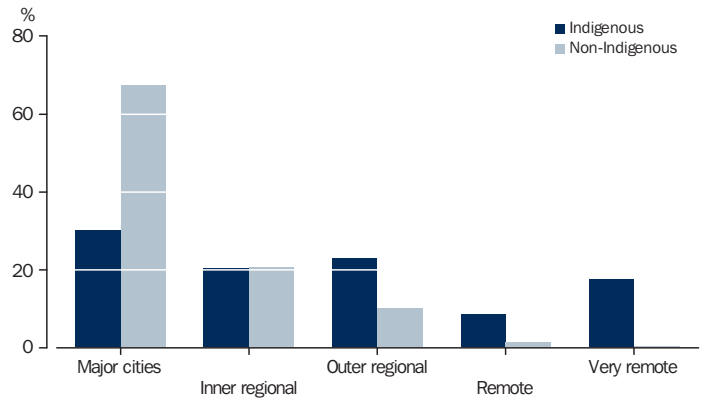
General Social Survey (GSS)

The 2002 GSS is a multi-topic social survey of Australia's population aged 18 years and over. Like the NATSISS it collected data across a range of social dimensions. While some respondents were Indigenous, this article only includes GSS data related to the non-Indigenous population.

Indigenous status

Indigenous people are those people who identified themselves as having 'Aboriginal origin only', 'Torres Strait Islander origin only' or 'Both Aboriginal and Torres Strait Islander origin'.

Population by Remoteness Areas(a) — 2001



(a) Estimated resident population, all persons.

Source: Experimental estimates of the Aboriginal and Torres Strait Islander population (ABS cat. no. 3238.0).

...remoteness

In 2001, 30% of the Indigenous population lived in Major Cities, about 44% in regional areas and 26% in remote areas. By comparison, approximately two-thirds (67%) of the non-Indigenous population lived in Major Cities and only 2% in remote areas. As a consequence, the proportion of the total population that were Indigenous varied from 1% in Major Cities to 24% in remote areas (45% in the Very Remote component).

...states and territories

The states with the largest Indigenous populations were New South Wales (29% of the total Indigenous population) and Queensland (28%). Queensland had the largest Torres Strait Islander population (59% of the total Torres Strait Islander population), including 14% living in the Torres Strait area. The other states with large Indigenous

Remoteness areas

The ABS Remoteness classification is based on road distance to different sized urban centres, where the population size is considered to govern the range and type of services available. In this article *remote areas* include the Remoteness categories Remote Australia and Very Remote Australia, while *non-remote areas* include Major Cities of Australia, Inner Regional Australia and Outer Regional Australia. For further information see *Statistical Geography: Volume 1 - Australia Standard Geographical Classification (ASGC), 2001* (ABS cat. no. 1216.0).

Population projections

Population projections are not predictions or forecasts. They are an assessment of what would happen, in future years, to a population given a set of assumptions about future trends in fertility, mortality and migration.[1]

Age standardisation

Some results in this article have been adjusted to account for differences in the age structures of the Indigenous and non-Indigenous populations, and to allow for meaningful comparisons between the 2002 NATSISS and 2002 GSS. As health and labour force characteristics are influenced by age, data on these topics have been age-standardised wherever comparisons are made between the Indigenous and non-Indigenous populations. Note that age-standardised estimates are to be used for comparison purposes only, and do not themselves represent any real population parameters.

populations were Western Australia (14% of the total Indigenous population) and the Northern Territory (12%).

Indigenous peoples comprise about 30% of the Northern Territory population but less than 4% of the total population in each of the other states and territories. Four-fifths (81%) of the Indigenous population living in the Northern Territory lived in the Remote and Very Remote areas of the Northern Territory.

Health and disability

Health concerns among the Indigenous population include high rates of diabetes, heart disease and respiratory conditions.[2] The health of people in remote communities is affected by their isolation and limited access to health services as well as factors relevant to the Indigenous population as a whole (see *Australian Social Trends 2003*, Services in remote Aboriginal and Torres Strait Islander communities, pp. 55–59).

In 2002, 38% of Indigenous people reported that they had a disability or long-term health condition, with little difference between people living in remote and non-remote areas. Among Indigenous peoples aged 15–49 years in 2002, those with a disability or long-term health condition reported lower levels of participation in sport, school completion to at least Year 10 or mainstream employment (non-CDEP employment – see p. 15) than those without a disability or long-term health condition. They reported higher levels of financial stress and contact with the criminal justice system (as either victims or offenders), and greater difficulty with transport[3] (see *Australian Social Trends 2005,* Aboriginal and Torres Strait Islander persons: contact with the law, pp. 187–191).

...self-assessed health

In 2002, 42% of Indigenous people aged 18 years and over reported their health as Excellent/Very good, 33% as Good, and 25% as Fair/Poor. While the proportion of people

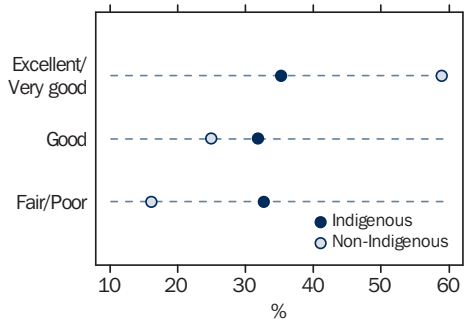
Health characteristics of Indigenous persons(a) — 1994 and 2002

	1994	2002		
	Total	Remote	Non-Remote	Total
	%	%	%	%
Has a disability or long-term health condition	..	37.8	38.3	38.1
Self-assessed health status				
Excellent/Very good	43.2	42.3	41.8	41.9
Good	37.6	35.6	31.7	32.8
Fair/Poor	19.1	21.5	26.5	25.1
All Indigenous persons	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000
All Indigenous persons	**190.8**	**69.3**	**182.1**	**251.4**

(a) Aged 18 years and over.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Self asssessed health status(a) — 2002



(a) Age standardised rates for persons aged 18 years and over.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey and ABS 2002 General Social Survey.

who reported Excellent/Very good health was similar in remote and non-remote areas, those living in non-remote areas were more likely to rate their health as Fair/Poor (27% compared with 22%). The pattern of self-assessed health in 2002 was similar to that reported in 1994.

After taking into account the different age structures of the Indigenous and non-Indigenous populations, Indigenous adults were one-and-a-half times more likely than non-Indigenous people to have a disability or long-term health condition. They were nearly twice as likely to report their health as Fair/Poor.

Education

Education is generally considered to be a key factor in improving outcomes for Indigenous peoples[4]. However, a range of issues affect participation in education, including access to educational institutions, health, financial constraints and community expectations.

In 2002, Indigenous people who had completed school to at least Year 10, reported higher levels of mainstream employment, higher income and greater use of information technology, compared with those who had not done so.[3]

The proportion of Indigenous people aged 18 years and over who had a non-school qualification increased from 19% to 29% between 1994 and 2002. Over this period, the proportion who reported a certificate or diploma increased from 12% to 24% and the proportion with a bachelor degree or higher qualification rose from 1% to 4%. Despite these gains in educational attainment, Indigenous adults were still less likely than non-Indigenous adults to have a non-school qualification in 2002 (29% compared to 50%).

Work and income

Income gained through employment is vital to the wellbeing of many working age Australians and their families, contributing to their financial independence and security. Factors contributing to the labour force participation of Aboriginal and Torres Strait Islander peoples include their level of educational attainment and the limited range

Educational attendance and attainment by Indigenous status(a) — 1994 and 2002

	Indigenous				*Non-Indigenous*
	1994	*2002*			*2002*
	Total	*Remote*	*Non-remote*	*Total*	*Total*
	%	%	%	%	%
Attending post-school institution aged 18–24(b)	..	6.9	26.3	20.9	45.4
Has a non-school qualification	18.6	19.1	33.1	29.2	50.3
Does not have a non-school qualification: highest level of schooling					
Completed Year 12	6.8	9.2	11.1	10.5	15.3
Completed Year 10/11	27.3	26.7	26.7	26.7	18.5
Completed Year 9 or below(c)	46.1	45.1	29.1	33.5	15.9
All persons	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000
All persons	**190.0**	**69.1**	**180.9**	**249.9**	**18 119.2**

(a) Persons aged 18 years and over who were not attending school.
(b) Comprises University or other tertiary institution, TAFE, technical or business college and industry skills centre.
(c) Includes persons who never attended school.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey and ABS 2002 General Social Survey.

Labour force status of Indigenous persons(a) — 1994 and 2002

	1994	2002		
	Total	Remote	Non-remote	Total
	%	%	%	%
Employed				
Mainstream	29.9	20.6	42.0	36.1
CDEP(b)	8.6	34.3	4.7	12.8
Total	**38.5**	**54.9**	**46.6**	**48.9**
Labour force participation rate	55.0	60.5	61.6	61.3
Unemployment rate	30.0	9.2	24.3	20.2

(a) Persons aged 18 years or over.
(b) Compared with CDEP administrative records held by the then ATSIC (24,100 participants overall), CDEP was underreported in the 1994 National Aboriginal and Torres Strait Islander Survey (17,000 participants overall).

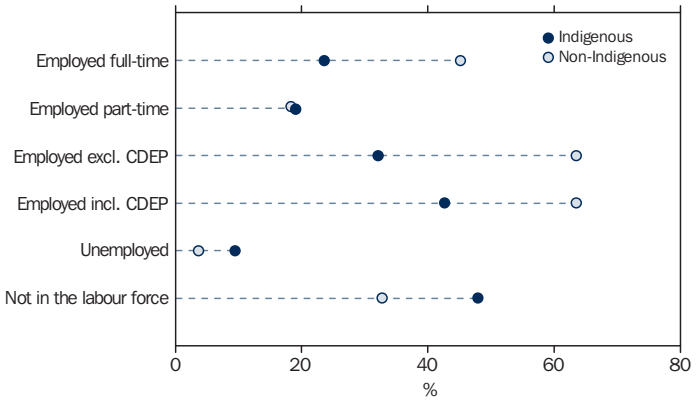
Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

of employment opportunities in remote areas (see *Australian Social Trends 2004*, Aboriginal and Torres Strait Islander peoples in the labour force, pp. 118–123).

In 2002, 36% of Indigenous people aged 18 years and over were in mainstream employment and an additional 13% were participants in CDEP. In non-remote areas there was a higher proportion of people in mainstream employment than there was in remote areas; and most CDEP participation was located in remote areas.

Between 1994 and 2002, the proportion of Indigenous people aged 18 years and over in mainstream employment rose from 30% to 36%, and the unemployment rate for this age group fell from 30% to 20%. The fall in Indigenous unemployment was consistent with the general decline in national unemployment over this period.

Labour force status(a) — 2002



(a) Age standardised rates for persons aged 18 years and over.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey and ABS 2002 General Social Survey.

Community Development Employment Projects (CDEP)

In recognition of the limited employment opportunities in remote areas, the Community Development Employment Projects (CDEP) scheme was established and has since extended into some non-remote areas. By providing Indigenous community organisations with funds to pay participants working on community projects, the scheme provides jobs and training for people who agree to forego an unemployment allowance.

Between 1994 and 2002, administrative records held by the then Aboriginal and Torres Strait Islander Commission indicated that the number of participants in CDEP rose from 24,100 to 34,200. While the estimate of CDEP participation in the 2002 NATSISS (34,200) closely reflected the corresponding administrative records, CDEP participation was underreported in the 1994 NATSIS (16,800).[5]

According to the 2002 NATSISS, around 70% of all CDEP participants worked 24 hours or less per week and almost half reported low incomes (that is, their equivalised gross household income was in the second or third deciles). Indigenous people on CDEP were more than twice as likely as those in mainstream employment to either report working part-time or to have low incomes.[3]

In this article, *mainstream employment* refers to non-CDEP jobs.

In 2002, compared with Indigenous people who were unemployed, not in the labour force or participants in CDEP, those in mainstream employment reported higher incomes, less financial stress and lower levels of involvement with the criminal justice system (as either victims or offenders).[3]

Indigenous people continue to experience lower levels of employment and higher levels of unemployment than non-Indigenous people. In 2002, after adjusting for the different age structures of the Indigenous and non-Indigenous populations, Indigenous adults were half as likely as non-Indigenous adults to be in mainstream employment and more than twice as likely to be unemployed.

...income

In 2002, the mean equivalised gross household income of Indigenous people aged 18 years and over was $394 per week, with a higher level reported in non-remote areas ($407 per week) than in remote areas ($354 per week). The real mean equivalised gross household income of Indigenous people rose between 1994 and 2002 from $374 to $394 per week (after adjusting for increases in the cost of living using the Consumer Price Index). In 2002, the mean equivalised gross household income of Indigenous adults was equal to 59% of that of non-Indigenous adults.

...financial stress

In 2002, 54% of Indigenous people aged 18 years and over reported that they would be unable to raise $2,000 within a week in a time of crisis. This measure of financial stress was reported by a greater proportion of people in remote areas (73%) than in non-remote areas (47%). Overall, Indigenous adults were almost four times more likely than non-Indigenous adults to report this measure of financial stress.

Housing

Housing satisfies many fundamental personal and social needs, providing shelter, security, privacy, living space and necessary household facilities. The relationship between adequate housing and the general health and wellbeing of the Indigenous population has been a focus of concern, underlying a range of government policies and programs.[6]

In 2002, the majority (70%) of Indigenous people aged 18 years and over were living in rented dwellings. The proportion renting was lower in non-remote areas (64%) than it was in remote areas (85%). In remote areas almost four out of five renters were living in accommodation provided by Indigenous Housing Organisations or in other community housing.

Overall, about a quarter (27%) of Indigenous people were living in dwellings that were either fully owned or being purchased. The proportion of people in dwellings that were being purchased rose from 11% in 1994 to 17% in 2002.

...dwelling problems

The adequacy of dwellings and household facilities may vary with geographical location. In 2002, Indigenous people in remote areas were more likely than those in non-remote areas to live in dwellings with major structural problems (58% compared with 33%) and less likely to have had repairs and maintenance carried out in the previous year (52% compared with 67%).

Equivalised household income

Gross income comprises income from employment and investments, pensions and similar transfers from government, private institutions and other households.

Equivalised gross household income is a standardised income measure, adjusted for the different income needs of households of different size and composition. It takes into account the greater income needs of larger households and the economies of scale achieved when people live together. For a lone-person household, it is equal to gross household income. For a household comprising more than one person, it indicates the gross household income that would need to be received by a lone-person household to achieve the same economic wellbeing as the household comprising more than one person.

Income quintiles and deciles are the groupings that result from ranking all people in the population in ascending order according to their equivalised gross household income, and then dividing the population into five equal groups, each comprising 20% of the population (quintiles) or ten equal groups, each comprising 10% of the population (deciles). Previous analysis has shown that households in the lowest income decile tend to have expenditure patterns more in common with higher income households than with other households at the bottom of the income distribution. Accordingly, to assist analysis of the circumstances of Indigenous people on low incomes, the proportion of Indigenous people who fall within the income boundaries of the second and third deciles (i.e. derived from the 20% of people in the total population with household incomes between the bottom 10% and the bottom 30% of incomes) is presented in this article as an alternative to the lowest income quintile. See also *Household Income and Income Distribution, Australia 2002–03* (ABS cat. no. 6523.0).

Income and financial stress by Indigenous status(a) — 1994 and 2002

	Indigenous				*Non-Indigenous*
	1994	*2002*			*2002*
	Total	*Remote*	*Non-remote*	*Total*	*Total*
	%	%	%	%	%
Equivalised gross household income – second and third deciles	..	47.5	34.1	37.5	19.8
Unable to raise $2,000 within a week for something important	..	72.7	47.3	54.3	13.6
	$	$	$	$	$
Mean equivalised gross household income ($)	374	354	407	394	665

a) Persons aged 18 years or over.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey and ABS 2002 General Social Survey.

Tenure and landlord type by Indigenous status(a) — 1994 and 2002

	Indigenous				Non-Indigenous
	1994	2002			2002
	Total	Remote	Non-remote	Total	Total
	%	%	%	%	%
Owner without a mortgage	10.9	4.0	12.4	10.0	38.5
Owner with a mortgage	10.6	4.6	21.0	16.5	34.6
Renter					
State or Territory Housing Authority	33.3	12.6	24.4	21.2	3.8
Indigenous Housing Organisation/Community housing	18.7	64.3	9.3	24.5	0.6
Total renters	71.5	85.3	63.7	69.6	24.3
Total (b)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

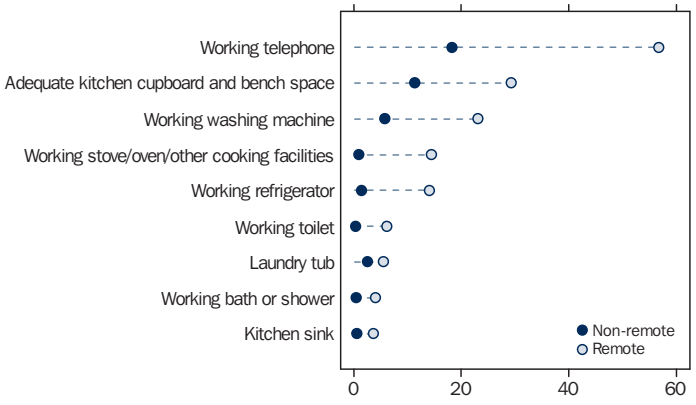
(a) Persons aged 18 years or over. (b) Total includes some categories which are not shown separately.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey and ABS 2002 General Social Survey.

...household facilities

Access to many household facilities tends to be taken for granted. Generally, across the total Indigenous population, the level of access to most household facilities is very high. There are, however, certain facilities that are not as readily available to Indigenous people, particularly those living in remote areas. In 2002, almost one in seven Indigenous people (14%) in remote areas lived in dwellings that did not have a working refrigerator, and the same proportion of people did not have a working stove, oven or other cooking facility. A higher proportion of Indigenous peoples in remote areas than in non-remote areas were living in dwellings that had sewerage facilities that did not work (6% compared with 0.5%). Nationally, 11% of the Indigenous population aged 18 years and over lived in dwellings without a working washing machine (23% in remote areas) and 29% lived in dwellings that did not have a working telephone (57% in remote areas).

People without household facilities(a) — 2002



(a) Persons aged 18 years and over.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Endnotes

1 Australian Bureau of Statistics 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians,* cat. no. 3238.0, ABS, Canberra.

2 Australian Bureau of Statistics 2003, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples,* cat. no. 4704.0, ABS, Canberra.

3 Australian Bureau of Statistics 2004, *National Aboriginal and Torres Strait Islander Social Survey, 2002,* cat. no. 4714.0, ABS, Canberra.

4 Senate Employment, Workplace Relations and Education Committee 2002, *Katu Kalpa– Report on the inquiry into the effectiveness of education and training programs for Indigenous Australians*, <http://www.aph.gov.au/senate/committee/eet_ctte/completed_inquiries/1999-02/indiged/report/contents.htm>, accessed 15 June 2005.

5 Australian Bureau of Statistics 1994, *National Aboriginal and Torres Strait Islander Survey – detailed findings, 1994,* cat. no. 4190.0, ABS, Canberra.

6 Department of Family and Community Services 2001, *Building a better future: Indigenous housing to 2010*, <http://www.facs.gov.au/internet/facsinternet.nsf/indigenous/indigenous_housing_2010.htm>, accessed 15 July 2005.

People in their 20s: then and now

POPULATION DISTRIBUTION

In 2001, 16% of people in their 20s were partners in a couple with children, compared with at least 40% of people in this age group in 1976.

More than ever before, the ages of 20 to 29 years are a time of transition. While people legally reach adulthood at 18 years, the years which follow are, increasingly, a time of growing independence. This article compares Australians in their 20s at the start of the new millennium with those who were in the same age group in the mid-1970s and focuses on changes in their demographic characteristics, living arrangements, family life, and participation in education and work. These two groups experienced their 20s 25 years apart, and in many ways their characteristics reflect the different social environments and trends of their times. Most social change occurs slowly, over a period of years or decades. Considering the impacts of such changes on the characteristics of particular population groups can highlight how the nature and needs of society have changed over time.

Demographic characteristics

In 2001, there were 2.6 million Australians aged 20–29 years, accounting for 14% of the population. In comparison, the 2.2 million people in this age group in 1976 made up 17% of the total Australian population. The lower proportion of people in this age group in 2001 reflects population ageing over the period, as fertility continued to decline and the large generation of people born between 1946 and 1965 (known as the baby boomers), continued to age.

The main source countries for Australia's immigration intake varied greatly over the latter half of the 20th century, and our national identity also evolved alongside changing social trends and values. The differing composition of the population in their 20s in 2001 and 1976 reflects this. In 2001, 19% of people aged 20–29 years had been born overseas. The main birthplaces for this group were Asia (42%), Oceania (18% – predominantly from New Zealand) and the United Kingdom and Ireland (14%). In comparison, a larger proportion of people in their 20s in 1976 had been born overseas (22%), in keeping with larger migrant intakes in the 1960s and 1970s than in the 1980s and 1990s. In 1976, 40% of people in their 20s who had been born overseas were born in European countries other than the United Kingdom and Ireland. This reflects the large numbers of displaced people from these countries who resettled in Australia in the two decades following the Second World War (see *Australian Social Trends 2001*, Coming to Australia, pp. 16–20).

There was a shift in the religious affiliations of people in their 20s over the 25-year period between 1976 and 2001, consistent with both the secularisation of our society generally and our increasingly multicultural community. The proportion of people aged 20–29 years

Comparing age groups over time

The data presented in this article are mainly drawn from the 1976 and 2001 Censuses of Population and Housing. Overseas visitors have been excluded from the data.

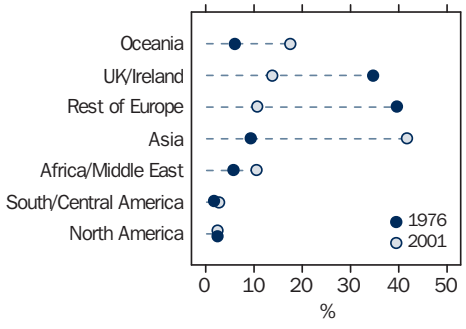
Some definitions and classifications have changed between 1976 and 2001. These changes have been adjusted for in the analysis to enable comparison over time, unless otherwise stated.

Persons aged 20–29 years: selected indicators

	1976	*2001*
	%	%
As a proportion of the total population	16.5	13.6
Female	49.8	49.9
Living in a capital city	66.2	68.7
Born overseas	22.4	19.4
No religious affiliation	14.5	23.2
	'000	'000
Persons aged 20–29 years	**2 191.3**	**2 560.0**

Source: ABS 1976 and 2001 Censuses of Population and Housing.

Persons aged 20–29 years who were born overseas: country of birth



Source: ABS 1976 and 2001 Censuses of Population and Housing.

with no religious affiliation in 2001 (23%) was higher than in 1976 (14%), with people in this age group being the least likely of all age groups to report a religious affiliation (for more information see *Australian Social Trends 2004*, Religious affiliation and activity, pp. 181–184). That said, in 2001, the majority of people in this age group regarded themselves as Christian (67%). This compared with 84% of people aged 20–29 years in 1976. Conversely, higher proportions of people in their 20s in 2001 reported an affiliation with Buddhism, Hindu, and Islam than in 1976.

Living arrangements and family life

Since the late 1970s there has been an increasing delay in the ages at which young people reach a range of milestones in the life cycle. This delay is very evident when comparing the living arrangements of people in their 20s in 2001 with those in the same age group 25 years earlier. In 2001, the most common living arrangement for people in their 20s was to be living in the parental home – 30% of people in this age group were living with at least one parent. In contrast, 21% of people in this age group were living with at least one parent in 1976. Conversely, while 16% of people aged 20–29 years were partners in couples with children in 2001, 40% of people in this age group were partners in couples with children in 1976, and this was the most common living arrangement for this age group at that time. In both 2001 and 1976, 21% of people in their 20s were living as partners in couples without children, and in both years, 8% of people in this age group were living alone. A higher proportion of people in their 20s in 2001 were living in group households (12% compared with 1%), suggesting a shift towards transitional living arrangements after leaving home but before forming partnerships.

The trend towards marrying later in life (and specifically towards entering a registered marriage) occurred among all ages within the 20–29 year age range. In 2001, nearly all 20

Persons aged 20–29 years: selected living arrangements(a)

	1976	2001
	%	%
Living with parent(s)(b)	20.7	29.9
Partner in a couple family without children	20.8	20.7
Partner in a couple family with children	39.6	16.2
Lone parent	1.7	4.0
Group household member	1.4	12.4
Lone person	7.9	7.6

(a) Data on living arrangements is not strictly comparable from 1976 to 2001 due to a change in the definition of child.

(b) and not living with a partner and/or child of their own.

Source: ABS 1976 and 2001 Censuses of Population and Housing.

Changing generations

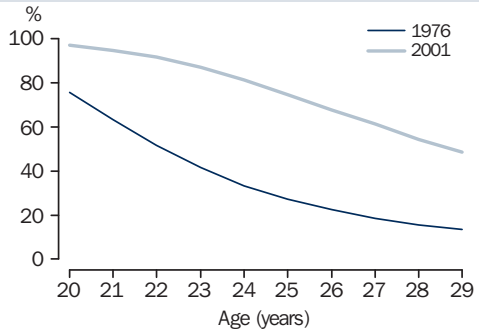
People in their 20s in 1976, were born between 1946–47 and 1955–56, and are among the older members of the baby boom. They grew up over the 1950s and 1960s. Many of their parents were born around the time of the Great Depression, and experienced the Second World War as young adults.

In the 25 years to 1976... 1953: the Korean War ends... 1956: free mass program of polio vaccinations starts, television is first broadcast in Australia, the Melbourne Olympic Games take place... 1958: QANTAS international services commence... 1959: Australia's population reaches 10 million... 1962: The first Aboriginal and Torres Strait Islander person votes under new electoral laws... 1964: The Beatles tour Australia, National Service is reintroduced... 1965: Australia joins war in Vietnam... 1967: Ronald Ryan is the last man to hang in Australia... 1971: Australia's combat role in Vietnam ends... 1972: the Australian Labor Party wins its first victory in 23 years... 1973: the Sydney Opera House opens... 1975: the Family Law Court is established and 12 months separation becomes the sole grounds for divorce... the Governor General sacks Gough Whitlam and dissolves Parliament, the Liberal National Coalition wins the Federal Election.[2]

People in their 20s in 2001, were born between 1971–72 and 1980–81, and form part of that generation often referred to as Generation X. In many cases, their parents were among the earlier baby boomers, i.e. the group of people in their 20s in 1976.

In the 25 years to 2001... 1976: the first boat people from Vietnam arrive on Australia's northern shores... 1977: Special Broadcasting Service (SBS) is established... 1979: the Full Bench of the Arbitration Commission grants maternity leave to women in private industry... 1981: the first death in Australia attributed to HIV/AIDS occurs... 1983: the ALP wins the federal election under Bob Hawke... 1984: Medicare is launched... 1986: the House of Representatives has its first woman speaker... 1987: Australia's population passes 16 million... 1988: Australia celebrates its Bicentenary, New Parliament House is opened... 1991: the Industrial Relations Commission approves Enterprise Bargaining... 1993: the Native Title Act is passed... 1996: John Howard becomes Prime Minister after a Liberal Coalition victory in the Federal Election... 1997: One Nation Party forms with Pauline Hanson as its leader... 1999: Australians vote 'no' to referendum on whether Australia should become a republic...2000: the Sydney Olympic Games are held.[2]

Persons aged 20–29 years: proportion never married

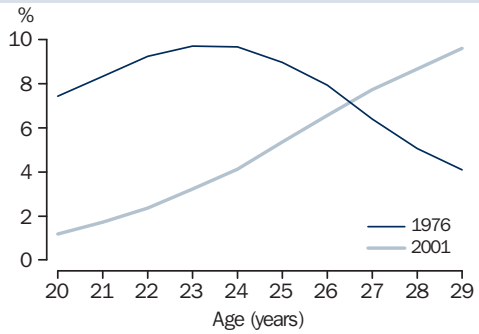


Source: ABS 1976 and 2001 Censuses of Population and Housing.

year olds had never been married (97%), with the proportion of people never married decreasing with each successive year of age. Almost half (49%) of 29 year olds in 2001 had never been married. In comparison, 76% of 20 years olds and 13% of 29 years olds in 1976 had never been married. In keeping with this, the median age at first marriage was 29 years for men and 27 years for women in 2001, compared with 24 and 21 years respectively in 1976.[1] This is partly related to young people being more likely to be studying in 2001 than in 1976 and therefore not in an economic position to marry, but also reflects the trend towards de facto partnerships rather than registered marriages.

The changes in living arrangements described above, as well as changing attitudes towards women and increased access to birth control, post-school education and a greater variety of paid work, had a particular impact on the role of women in their 20s between 1976 and 2001. A woman's 20s are physiologically her prime childbearing years and in 1976, 90% of first births within current relationships were to women aged under 30 years (13% to women aged under 20 years). However, (following on from the lower likelihood of people in their 20s to be partnered or married) women in their 20s in 2001 were less likely to become mothers for the first time than in 1976, instead delaying having children to older ages (or not having children at all). Around half (51%) of first births within current relationships in 2001 were to women in their 20s, compared with 77% in 1976. And in 2001, most of these births were to women in their late 20s, while in 1976 most first births within current relationships were to women between the ages of 22 and 24 years. In 2001, 48% of first births within a current relationship were to women aged 30 years and over, compared with 10% in 1976. (For more information on the trend since the 1970s for women to have children later in life see *Australian Social Trends 2001*, Older mothers, pp. 55–58).

First births(a): age of mother



(a) Within the current relationship.

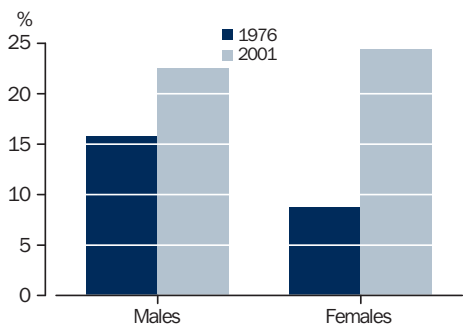
Source: Births, Australia (ABS cat.no. 3301.0).

Participation in education

Over the 1980s, there was a steady increase in the proportion of students completing school, and while this levelled out over the 1990s, school retention rates remained at higher levels than in the preceding decades (see also *Australian Social Trends 2001*, Trends in completing school, pp. 99–102). Further, young people have become more likely to participate in post-school education and to obtain qualifications than in the past (for more information see *Australian Social Trends 2005*, Multiple qualification holders, pp. 99–101).

Consistent with this, people in their 20s (and in particular those in their early 20s) in 2001 were more likely to be attending an educational institution than those in the same age group in 1976 (23% compared with 12%). Throughout the 20th century, women's

Proportion of persons aged 20–29 years attending educational institutions



Source: ABS 1976 and 2001 Censuses of Population and Housing.

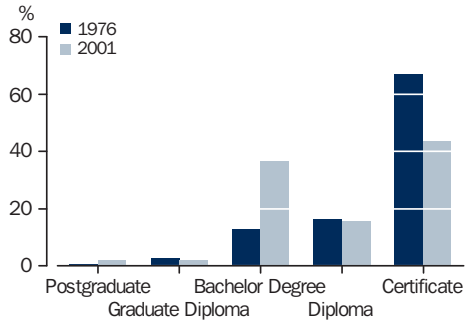
participation in post-school education was lower than men's. However, in 2001, 24% of women aged 20–29 years were attending an educational institution compared with 23% of men in this age group. In 1976, the proportion of women aged 20–29 years attending an educational institution was almost half that of men in the same age group (9% and 16% respectively).

The increased likelihood in 2001, compared with 1976, to be participating in education, occurred for both men and women and for all ages between 20 and 29 years. However, the differences were greatest for people in their early 20s, decreasing with each successive year of age. This suggests that, although there has been an increase in the propensity to return to study in later life, young people going directly onto study after leaving school, or after taking a relatively short break, account for much of the increase in educational participation since the mid-1970s.

Following on from this, more people in their 20s in 2001 had obtained a non-school qualification, than in 1976 (45% compared with 31%). Further, over the 25-year period, the type of qualifications gained changed, reflecting a shift towards higher education and away from vocation education. In 2001, of people in their 20s with a qualification, 36% indicated their highest qualification was a bachelor degree compared with 13% in 1976. And while a certificate was still the most common highest educational qualification obtained among people in their 20s in 2001 (44%), the proportion of people in this age group who indicated this was their highest qualification in 1976 was much higher (67%).

Much of the growth in the proportion of people with Bachelor degrees is related to the increase in the proportion of women in their 20s who held such qualifications. In 2001,

Persons aged 20–29 years with a non-school qualification: highest level of qualification



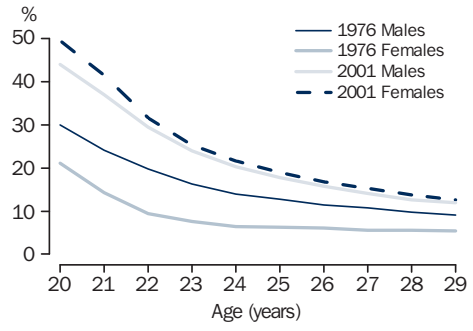
Source: ABS 1976 and 2001 Censuses of Population and Housing.

43% of women aged 20–29 years with non-school qualifications indicated their highest qualification was a Bachelor degree, compared with 12% in 1976. For men in their 20s, the corresponding proportions were 30% and 14% respectively. Further, the proportion of women aged 20–29 years who held non-school qualifications was 45% in 2001 compared with 24% in 1976. For men in the same age group, 45% held a non-school qualification in 2001 and 38% did so in 1976.

Working life

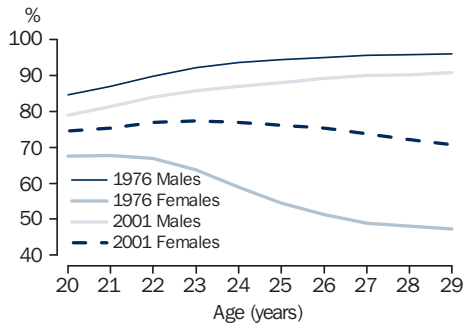
Over the latter half of the 20th century, people's participation and experiences in the labour force changed, along with the nature of paid work itself. Many of these changes are evident in the differing levels of participation for people in their 20s in 2001 and 1976. The labour force participation for people aged 20–29 years in 2001 was higher than in 1976 (81% and 75% respectively). However, this increase was driven entirely by increased participation for women in this age group

Attendance at an educational institution



Source: ABS 1976 and 2001 Censuses of Population and Housing.

Persons aged 20–29 years: labour force participation rates



Source: ABS 1976 and 2001 Censuses of Population and Housing.

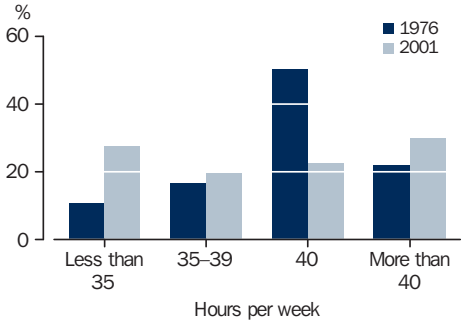
over the period (75% in 2001 compared with 57% in 1976). This reflects increasing opportunities for women to participate in a greater variety of paid work, in some cases while studying or raising children, and to delay having children throughout most of their 20s (for more information see *Australian Social Trends 2003,* Changes in labour force participation across generations, pp. 134–138). In contrast, participation for men in their 20s was lower in 2001 (87%) than in 1976 (92%), largely reflecting increased participation in education beyond school for people in this age group over the 1980s and 1990s.

For men in their 20s, the reduced likelihood to be participating in the labour force in 2001 compared with 1976 was fairly constant across all ages in this age range, although the difference was largest for men in their early to mid 20s – the ages when educational participation was also highest. For women in their 20s a different picture emerges. The higher participation rates for women in 2001 compared with 1976 are most marked from the age of 23 years onwards. This is consistent with delayed fertility among women in their 20s and a greater propensity to continue to work while raising children in 2001, while women in their 20s in 1976 were more likely to have children and to leave the labour force completely while raising them.

Labour force participation rates in 2001 and 1976 were the most similar for women in their early 20s (within 10 percentage points of one another, compared with differences of over 20 percentage points for women in their late 20s). However, the reasons for and nature of their participation differed. In 2001, women in their early 20s were more likely to be working part-time while studying before moving into full-time work. Those in the same age group in 1976 were more likely to be working full-time before having children in their mid-20s.

In addition to changes in labour force participation over the last three decades of the 20th century, there were changes to the nature of paid work itself, most particularly in relation to the number of hours worked each week and the availability of part-time jobs. Because they were more likely to be participating in education (particularly in their early 20s) or to be combining work and family responsibilities (mainly women in their late 20s), people in their 20s in 2001 were more likely to be working part-time than those in this age group 25 years earlier. This is reflected in average hours worked per week. In 2001, 28% of employed people aged 20–29 years worked less than 35 hours per week on average. In 1976, 11% of employed people in this age group worked less than 35 hours per week.

Employed persons aged 20–29 years: average hours worked



Source: ABS 1976 and 2001 Censuses of Population and Housing.

In addition, employed people in their 20s in 2001 were less likely to work an average of 40 hours per week than their counterparts in 1976 (22% compared with 52%), reflecting a shift away from standard working hours over the period. However, they were more likely to work longer hours on average – 28% of employed people in their 20s worked more than 40 hours a week in 2001, compared with 22% in this age group in 1976 (for more information see *Australian Social Trends 2003*, Longer working hours, pp. 119–123).

Endnotes

1 Australian Bureau of Statistics, Marriages collection, ABS, Canberra.

2 ABC Online <www.abc.net.au/archives/ timeline/1950s. Htm><www.abc. net.au/archives/timeline/ 1960s.htm> <www.abc.net.au/archives/ timeline /1970s.htm<www.abc.net.au/ archives /timeline/1980s.htm><www. Abc.Net .au/archives/timeline/1990s. Htm><www. abc. net.au/archives/timeline/2000s.htm> accessed 27 April 2005.

Recent fertility trends

POPULATION GROWTH

In 1993, babies born to women aged 30 years or older accounted for 41% of the total fertility rate. By 2003, this proportion had risen to 51%.

Australia's total fertility rate dropped below replacement level in 1976. It has remained below replacement level and declined further over the period since then. This means that the average number of babies born to a woman throughout her reproductive life would not be enough to replace herself and her partner under current age-specific fertility rates. A natural consequence of declining fertility is population ageing. Population ageing effectively amounts to a growing proportion of older people and a declining proportion of children in the population. Of specific concern is the rising demand for and cost of services for older people, such as income support, housing and health care, and the implications for the size and composition of the labour force that will be needed to support such expenditure.

Fertility in Australia

Fertility refers to the actual number of live births in a population relative to its size (as distinct from the physical ability to reproduce), and is generally measured by the total fertility rate (TFR). Between 1993 and 1998, Australia experienced a slow decline in TFR from 1.86 to 1.76 babies per woman of reproductive age. For the 6 years from 1998 to 2003, fertility rates were relatively stable, varying between 1.73 and 1.76 babies per woman. In 2003 there were almost 5 million women of childbearing age in Australia. Of these women, about 5% gave birth in 2003. This proportion is down from 5.5% having babies in 1993.

Measures of fertility

The data in this article come from the ABS Births collection (ABS cat. no. 3301.0).

Registration of births is the responsibility of state and territory Registrars of Births, Deaths and Marriages. Data are provided from information on a form completed by the parents of the child.

Fertility is defined as the number of live births in a population relative to its size.

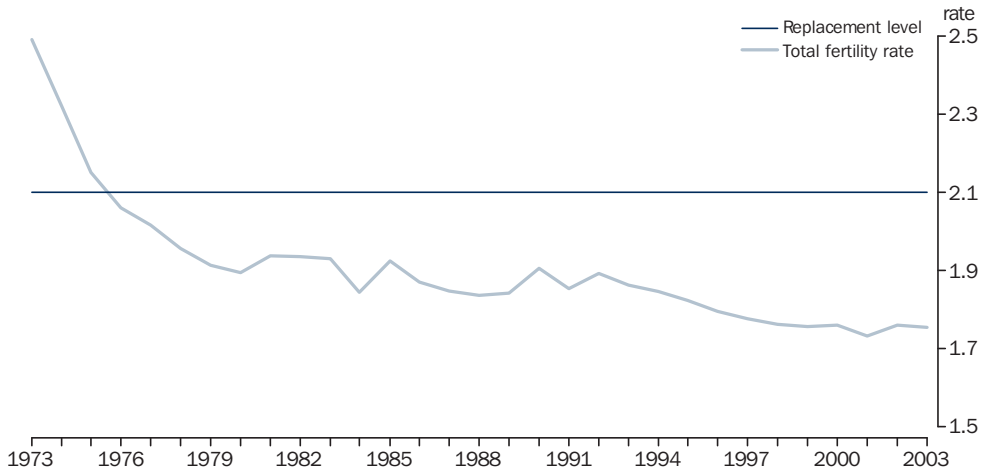
Age-specific fertility rates are the number of live births in a year to mothers at each age per 1,000 of the female population of the same age.

The *total fertility rate* (TFR) for any given year is the sum of the age specific fertility rates for that year. It is a hypothetical measure which represents the number of babies one woman would give birth to during her lifetime if she experienced the current age specific fertility rates at each age of her reproductive life.

Replacement level fertility is the value of the total fertility rate which is sufficient to replace the mother and her partner, taking into account those women who do not survive through reproductive ages. At current levels of mortality, replacement level is a total fertility rate of around 2.1.

The current low level of fertility in Australia is related to the fact that partnering is occurring at later ages than in the past, therefore reducing opportunities to have children and limiting the likelihood of larger families (see *Australian Social Trends 2002*, Fertility futures, pp. 12–16).

Total fertility rate — 1973–2003



Source: Births, Australia, 2003 (ABS cat. no. 3301.0).

Delaying childbirth and the age of mothers

The age at which women begin childbearing is a major determinant of lifetime family size. Delayed childbearing reduces overall fertility in several ways. Firstly, it reduces the period during which a woman can have children. Secondly, women who start having children later in life tend to have fewer children during their childbearing years than those women who start earlier in life.[1] Finally, women also face the increased risk of childlessness due to delaying childbirth.[2]

There has been a trend towards women delaying births in Australia, which can be seen in changes in the median age of all mothers. The median age of all mothers who gave birth in 1993 was 28.9 years, rising to 29.5 years in 1998 and 30.5 years in 2003.

Over the past ten years, falls in fertility rates for younger age groups (15–29 years) have not been fully offset by increases in fertility for older age groups (30–49 years).[3,4,5] In 2003, 51% of the TFR was contributed by mothers aged 30 years or over, an increase from 41% in 1993. This gradual shift in fertility towards older ages is a key factor contributing to the decline in Australia's TFR.

Total fertility rate

In Australia, a woman's reproductive years, or childbearing life, is generally considered to begin at age 15 and end when she turns 50. This span of 35 years is when a woman is considered most likely to have children.

TFR is an annual measure of fertility calculated from the number of births in a year and the estimated female population in their reproductive years at 30 June in that year. TFR is a synthetic measure which only applies to a hypothetical birth cohort of women. Compared with alternative measures, TFR is a timely and easy way to estimate the current fertility rate. It is useful for making assumptions about future fertility, which are used in calculating population projections. It can also be used to compare populations over time or between groups.

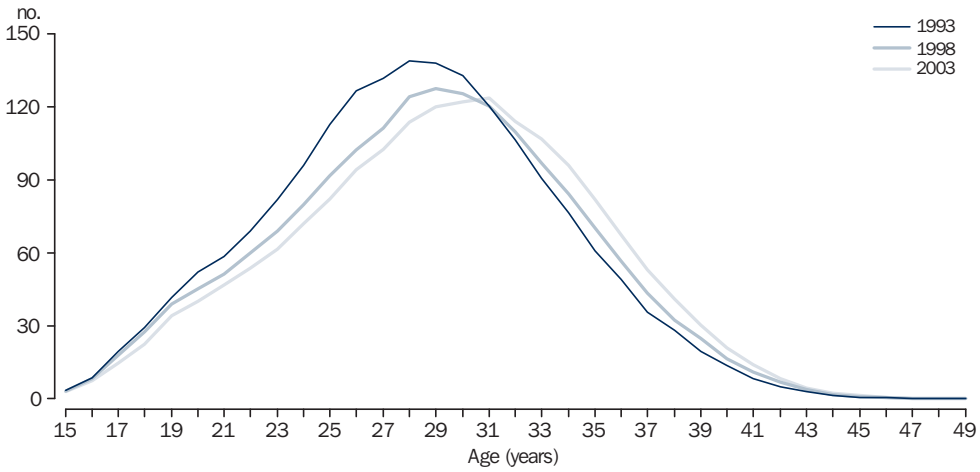
The TFR can be affected by distortions that arise from short-term influences, notably changes in the timing of births.[6,7] It is argued that if successive groups of women delay childbearing until later in life then TFR is artificially lowered. Delaying childbirth creates a time lag before any intended children are actually born. The frequency of these intended births actually occurring is lower in these later age groups, as fertility generally declines with increasing age. Therefore, the increasing age of motherhood generally signifies a reduction in the total number of babies born per woman. This is what Australia has been experiencing from the mid-1970s to the present.

...25–29 year age group

Between 1993 and 1998, 25–29 year old women had the highest fertility rate of all age groups. In 2000, this age group slipped to become the second most fertile age group after 30–34 year olds and remained there in 2003.

Fertility of the 25–29 year age group has steadily decreased over the past decade, recording a 26% drop in fertility rate between 1993 and 2003. In 1993, women in this age group had 129.8 births per 1,000 women, falling to 102.9 births in 2003. In 1993, 25–29 year olds accounted for 35% of the TFR, dropping to 32% in 1998 and 29% in 2003.

Age specific fertility rates(a) — selected years



(a) Births per 1,000 women.

Source: Births, Australia, 2003 (ABS cat. no. 3310.0).

...30–34 year age group

Fertility for the 30–34 year age group has slowly but steadily increased in the past decade. After overtaking 25–29 year olds as the peak fertility age group in 2000, women in the 30–34 age group experienced the highest fertility rate of all age groups.

In 2003, there were 112.5 births for every 1,000 women aged 30–34 years. This is an increase of 7% from 105.4 births per 1,000 women in 1993, and the highest it has been since 1964. Births to women in the 30–34 year age group contributed 28% of the TFR in 1993, 31% in 1998 and almost one-third of Australia's TFR in 2003.

...35–39 year age group

From the 1960s, fertility for the 35–39 year age group fell at a steady rate until 1980. From that year onward the fertility rate gradually increased to reach 38.9 births per 1,000 women in 1993 and recorded a high of 54.3 births per 1,000 women in 2003. This age group saw a 40% rise in fertility rate over the ten years from 1993 to 2003.

Women aged 35–39 years contributed 10% of the TFR in 1993, 13% in 1998 and 16% in 2003. In 2003, this contribution was equal to the contribution of 20–24 year olds.

Family size

An important driver of low fertility is the fall in the proportion of women having three or more children.[1] Australia's TFR in 2000 entailed one-quarter of all women having 3 or more children.[8] Research has estimated that if all the women who had three or more children in 2000 had two children instead, the TFR would have fallen to 1.3.[5,8]

As most children are born to women under the age of 40, the number of children already born to a woman in her 40s usually indicates the total number of children she will ever have. The proportion of women aged 40–44 years with three or more children declined from over half (55%) in 1981 to about 38% in both 1996 and 2001.

The proportion of women with three or more children has also dropped across all age groups since 1981. For example in both 1986 and 1992, around 38% of women in the 35–39 year age group had three or more children. This proportion dropped to 33% in 1996 and 32% in 2001.

Fertility and Indigenous women

The current TFR for Aboriginal and Torres Strait Islander (Indigenous) women is 2.15, which is higher than the TFR for all women in Australia (1.75). Indigenous fertility rates in the past five years have remained stable, hovering just above replacement level. In 2003, the median age of Indigenous mothers was 24.6 years, which is six years younger than for all mothers. The median age of Indigenous mothers has remained at around this level for the past six years.

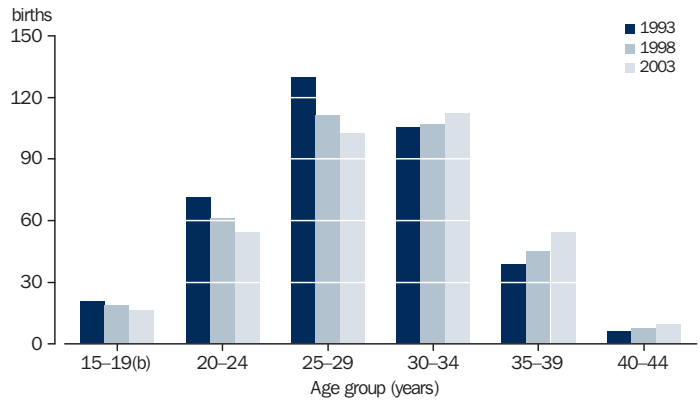
Indigenous women tend to have children earlier than all women. The most fertile age group for Indigenous women in both 1998 and 2003 was the 20–24 year age group. In comparison, the most fertile age groups for all women in 1998 was 25–29 years and in 2003 was 30–34 years.

The tendency of Indigenous women to have children at younger ages than all women contributes to the relatively high fertility of Indigenous women. In 2003, almost three-quarters of the TFR for Indigenous women was accounted for by women under 30 years of age, compared to half of the TFR for all women.

Indigenous women tend to have a lower rate of childlessness than all women and also tend to have more children than all women. ABS 1996 Census of Population and Housing data show that 8% of Indigenous women aged 45 years were childless, compared to 11% of all women. The data also show 60% of Indigenous women aged 30 years or over had had three or more children, compared to 41% of all women. In fact, four out of every ten Indigenous women aged 30 years or over had had four or more children in 1996.

In addition to births to Indigenous mothers, births to non-Indigenous mothers where the father is Indigenous contributes to Indigenous population growth. These births accounted for 27% of all Indigenous births in 2003.

Grouped age specific fertility rates(a) — selected years



(a) Births per 1,000 women.
(b) Includes births to mothers aged less than 15 years.

Source: Births, Australia, 2003 (ABS cat. no. 3301.0).

Women without children

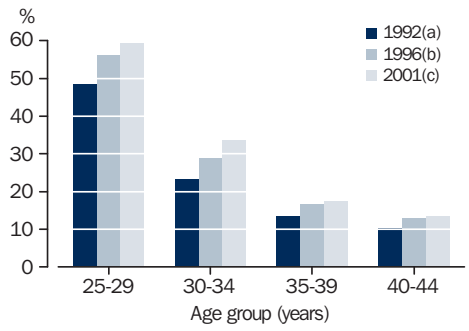
Another driver of low fertility is the number of women having no children. A recent Australian survey on fertility decisions found that 8% of surveyed women without children definitely did not want children. Reasons given for preferring not to have children included lifestyle choices, financial reasons, career and employment, health, lack of partners, fragility of relationships and dislike of children.[9]

The proportion of women aged under 30 years that do not have children has increased over the past ten years as women delay childbearing. For instance, of women aged 25–29 years in 1992, 49% did not have a child compared with 59% of women of the same age in 2001.[10] Most births now occur to mothers aged 30 years and over. In 2003, over half (51%) of the TFR was attributed to mothers aged 30 years and over.[11] For women aged 40–44 years who are nearing the end of their fertility, a greater proportion had not had children in 2001 (13%) compared with women of the same age in 1992 (10%).

...lifetime childlessness

The continued delaying of births may result in lifetime childlessness for some women (see *Australian Social Trends 2002*, Trends in childlessness, pp. 37–40). Lifetime childlessness is the proportion of women who have reached the end of their childbearing years and have not had any children. Of all women aged 45–49 years at the time of the ABS 1996 Census, 11% had never had a child.

Proportion of women without children — selected years



(a) ABS 1992 Survey of Families in Australia.
(b) ABS 1996 Census of Population and Housing.
(c) ABS 2001 National Health Survey.

Source: Births, Australia, 2001 (ABS cat. no. 3310.0).

International comparison of fertility

Fertility levels vary considerably between countries. In general, developed countries have lower TFRs than developing countries. Below replacement level fertility is common in most developed nations.

While Australia's TFR for 2003 of 1.75 is well below the world's average, it is mid-ranked compared with other nations in the more-developed category.

Total fertility rates of selected countries — 1990–95 and 2000–2005

	Total fertility rate	
Selected countries	1990–1995	2000–2005
Hong Kong (SAR of China)	1.2	1.0
Italy	1.3	1.2
Japan	1.5	1.3
Canada	1.7	1.5
United Kingdom	1.8	1.6
Australia	**1.9**	**1.7**
France	1.7	1.9
New Zealand	2.1	2.0
United States of America	2.1	2.1
Viet Nam	3.3	2.3
Indonesia	3.0	2.4
Papua New Guinea	5.1	4.1
More-developed regions	1.7	1.6
Less-developed regions	3.4	2.9
Least-developed regions	5.8	5.0
World	**3.0**	**2.7**

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: the 2004 Revisions*, <http://esa.un.org/unpp>.

Lifetime childlessness among women younger than 45–49 years (i.e. those who had not yet reached the end of their reproductive years) can only be estimated. In 2000, it was estimated that 24% of women who had not yet completed their fertility would remain childless for life if fertility rates for 2000 remained constant into the future.[8]

Fertility in the future

One of the most dramatic consequences of fertility decline is population ageing, which is already occurring in Australia. This is the inevitable result of sustained low fertility accompanied by increasing life expectancy.

Population projections show that the difference between a middle level fertility scenario in the future (TFR=1.6) and a low level scenario (TFR=1.3)[5,8] equates to about one-third of Australian women having one child less.[7]

Small differences in fertility levels over the next 50 years could produce very different population outcomes. A change of 0.1 either way in the total fertility rate would result in Australia's population being almost 1.0 million larger or smaller in 2051 (see *Australian Social Trends 2002*, Fertility futures, pp. 12–16).

Endnotes

1 Barnes, A 2001, *Low fertility: a discussion paper*, FaCS occasional paper no. 2, Department of Family and Community Services, Canberra.

2 Weston, R 2004, 'Having children or not', *Family Matters*, no. 69, pp. 4–9.

3 DeVaus, D 2002, 'Fertility decline in Australia: a demographic context', *Family Matters*, no. 63, pp. 14–21.

4 Kippen, R 2003, *Trends in age– and parity–specific fertility in Australia*, Working paper in Demography no. 91, Australian National University, Canberra.

5 McDonald, P 2000, 'Low fertility in Australia: evidence, causes and policy responses', *People and Place*, vol.8, no.2, pp. 6–21.

6 McNicoll, G 2003, 'Introduction: Australia's population history and prospect', in *The transformation of Australia's population: 1970–2030*, eds Khoo, S. and McDonald, P., UNSW Press, Sydney.

7 McDonald, P 1998, 'Contemporary fertility patterns in Australia: first data from the 1996 Census', *People and Place*, Vol. 6 no. 1, pp. 1–12.

8 Australian Bureau of Statistics 2000, *Births, Australia, 2000*, cat. no. 3301.0, ABS, Canberra.

9 Weston, R, Qu L, Parker, R, Alexander, M 2004, "*Its not for lack of wanting kids ...*": *A report on the Fertility Decision Making Project*,, Report no. 11, Australian Institute of Family Studies, Melbourne.

10 Australian Bureau of Statistics 2001, *Births, Australia, 2001*, cat. no. 3301.0, ABS, Canberra.

11 Australian Bureau of Statistics 2004, *Births, Australia, 2003*, cat. no. 3301.0, ABS, Canberra.

Family and community

Family and community: national summary

LIVING ARRANGEMENTS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1 Total households(a)(b)	'000	6 554	6 668	6 762	6 910	7 015	7 127	7 250	r7 367(c)	n.p.	n.p.	n.p.
2 Lone-person households(a)(b)	%	22.4	22.9	23.0	23.6	23.7	24.1	24.6	r24.5(c)	n.p.	n.p.	n.p.
3 Households with three or more persons(a)(b)	%	45.0	44.7	44.5	43.8	43.2	43.1	42.5	r42.5(c)	n.p.	n.p.	n.p.
4 Total families	'000	4 709	4 791	4 834	4 899	5 027	5 056	5 116	r5 242	r5 355	r5 441	5 528
5 Families with children aged under 15 years	'000	2 041	2 100	2 092	2 130	2 160	2 166	2 172	r2 179	r2 211	r2 191	2 224
6 Couple families	'000	3 998	4 051	4 080	4 090	4 158	4 197	4 265	r4 349	r4 423	r4 526	4 550
7 De facto couple families – of all couple families(d)	%	n.a.	n.a.	10.1	n.a.	n.a.	n.a.	n.a.	12.4	n.a.	n.a.	n.a.
8 Couple-only families – of all couple families	%	51.0	51.1	51.9	51.1	51.8	52.3	52.6	r53.7	r54.1	r55.3	55.3
9 Couple-only families with female partner aged under 40 years – of all couple only families	%	22.7	21.6	21.3	20.9	21.3	21.3	21.5	r21.4	r22.4	r23.0	22.1
10 Couple families with children aged under 15 – of all families with children aged under 15	%	82.8	81.5	81.6	80.0	78.4	78.8	79.1	r78.4	77.0	r78.3	76.9
11 Lone-father families with children aged under 15 – of all families with children aged under 15	%	1.8	1.9	2.0	2.3	2.0	1.9	2.3	2.3	2.7	2.5	2.8
12 Lone-mother families with children aged under 15 – of all families with children aged under 15	%	15.4	16.6	16.3	17.7	19.5	19.3	18.6	19.3	r20.4	19.3	20.3
13 Families with at least one child aged under 5 – of all families with children aged under 15	%	47.8	47.4	r47.7	47.8	46.2	45.0	r46.2	r44.9	r43.9	r44.8	45.1
14 Average family size – persons	no.	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
15 Children aged under 15 living in one-parent families – of all children aged under 15	%	15.3	16.4	16.3	18.0	19.5	19.0	18.2	19.6	r20.6	r19.8	20.8
16 Persons aged 20–24 living with parents – of all persons aged 20–24	%	44.7	45.2	44.5	46.2	48.0	47.2	45.5	r45.6	r45.6	r45.0	46.8
17 Persons aged 25–34 living with parents – of all persons aged 25–34	%	10.5	10.6	10.7	11.5	12.4	11.8	12.3	r12.4	r12.5	r11.6	12.5
18 Persons aged 15–64 who live alone – of all persons aged 15–64	%	7.0	7.4	7.6	7.9	8.0	8.2	r8.5	r8.7	r8.8	r9.0	9.1
19 Persons aged 65 and over who live alone – of all persons aged 65 and over	%	29.4	29.3	29.8	30.7	28.9	29.5	r31.2	r29.4	30.3	30.0	28.6
20 Children aged 0–17 with a natural parent living elsewhere – of all children 0–17	%	n.a.	n.a.	n.a.	21.2	n.a.	n.a.	n.a.	n.a.	n.a.	23.3	n.a.
FAMILIES AND WORK	**Units**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
Couple families with children aged under 15 years												
21 Both parents employed – of all couple families with children aged under 15	%	51.1	56.2	54.5	54.4	55.6	54.9	56.3	r56.8	r57.2	r57.7	57.3
22 Neither parent employed – of all couple families with children aged under 15	%	10.0	8.4	7.9	8.6	8.5	7.9	7.5	7.5	7.2	6.3	6.4
23 One-parent families with children aged under 15, parent employed – of all one-parent families with children aged under 15	%	41.8	43.2	r42.8	42.9	42.1	44.0	47.3	r46.6	r46.3	r46.4	48.0
24 Children aged under 15 living in families where no resident parent is employed – of all children aged under 15(e)	%	n.a.	n.a.	16.2	18.6	17.7	17.8	17.9	17.4	n.a.	16.2	n.y.a.

Family and community: national summary cont.

FAMILY FORMATION	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Registered marriages												
25 Number of marriages	'000	111.2	109.4	106.1	106.7	110.6	114.3	113.4	103.1	105.4	106.4	n.y.a.
26 Crude marriage rate (per 1,000 population)	rate	6.2	6.1	5.8	5.8	5.9	6.0	5.9	5.3	5.4	5.4	n.y.a.
27 Marriages where both partners married for the first time – of all marriages	%	67.5	67.5	66.4	66.6	66.7	66.9	66.6	66.9	66.3	66.4	n.y.a.
28 Median age of males at first marriage	years	27.2	27.3	27.6	27.8	27.9	28.2	28.5	28.7	29.0	29.2	n.y.a.
29 Median age of females at first marriage	years	25.1	25.3	25.7	25.9	26.2	26.4	26.7	26.9	27.1	27.3	n.y.a.
30 Median age at remarriage – divorced males	years	40.9	41.1	41.6	41.8	42.0	42.2	42.7	43.1	43.6	43.6	n.y.a.
31 Median age at remarriage – divorced females	years	37.4	37.6	38.0	38.2	38.4	38.6	39.1	39.5	39.8	40.2	n.y.a.
Divorce												
32 Number of divorces	'000	48.3	49.7	52.5	51.3	51.4	52.6	49.9	55.3	54.0	53.1	n.y.a.
33 Crude divorce rate (per 1,000 population)	rate	2.7	2.8	2.9	2.8	2.7	2.8	2.6	2.9	2.7	2.7	n.y.a.
34 Median duration of marriage until final separation	years	7.6	7.6	7.6	7.7	7.8	7.9	8.2	8.3	8.6	8.7	n.y.a.
35 Divorces involving children aged under 18 years – of all divorces	%	52.4	n.a.	53.6	54.0	53.4	53.9	52.7	51.2	49.7	50.1	n.y.a.
36 Children aged under 18 involved in divorce	'000	47.5	n.a.	52.5	51.7	51.6	53.4	49.6	53.4	50.5	49.9	n.y.a.
Fertility												
37 Births(f)	'000	258.1	256.2	253.8	251.8	249.6	248.9	249.6	246.4	251.0	251.2	n.y.a.
38 Total fertility rate (per female)	rate	1.85	1.83	1.80	1.78	1.76	1.76	1.76	1.73	1.75	1.76	n.y.a.
39 Births to mothers aged under 20 – of all births	%	5.0	4.9	4.9	4.9	4.7	4.7	4.6	4.8	4.6	4.3	n.y.a.
40 Births to mothers aged 35 and over – of all births	%	12.9	13.7	14.6	15.3	16.1	16.8	17.4	17.8	18.4	19.1	n.y.a.
41 Births outside marriage – of all births	%	25.6	26.6	27.4	28.1	28.7	29.2	29.2	30.7	31.3	31.6	n.y.a.
42 Births outside marriage acknowledged by father – of all births outside marriage	%	82.2	83.3	84.2	85.5	87.1	88.2	88.2	87.9	88.0	88.2	n.y.a.
43 Females aged 35 and over giving birth for the first time – of all females aged 35 and over giving birth	%	20.8	20.8	21.2	22.4	23.3	23.7	24.7	25.2	25.6	n.y.a.	n.y.a.
44 Median age of mothers at first birth	years	26.8	26.9	27.1	27.3	27.5	27.6	27.9	28.0	28.0	n.y.a.	n.y.a.

(a) Based on 1996 census data.

(b) Data does not include other territories.

(c) Based on 2001 census data.

(d) Includes same-sex couples. Data only available in census years.

(e) Data for this indicator are derived from the Survey of Income and Housing; results are benchmarked by age for children aged 1–4 years and 5–14 years. These data are not necessarily consistent with data for indicator 15, which are derived from the Labour Force Survey and are not benchmarked for people aged less than 15 years.

(f) Based on registered births.

(g) Components do not add to 100% as some children used both formal and informal care and others used neither.

(h) 'All persons' excludes living in institutions.

(i) Data collected in four quarters of the financial year ending in year shown.

Reference periods: Data for indicators 1–3 are at 30 June.
Data for indicators 4–6 and 8–19, 21–24 are at June.
Data for indicator 7 are at census date.
Data for indicator 20 are at April 1997 & June 2003.
Data for indicators 25–44 are for the calendar year.
Data for indicators 45–50 are at November 1990, June 1993, March 1996, June 1999, June 2002.
Data for indicator 51 are at June 1995, through 4 quarters of 2000, and from March to July 2002.
Data for indicators 52 and 53 are at April-June 1998 and August-November 2003.
Data for indicators 54 are for March 1995, April 1999, and from March to July 2002.
Data on indicator 55 are collected through financial year ending June of the year shown.
Data for indicator 56 are at March 1995, April 1999 and March to July 2002.

Family and community: national summary cont.

CHILD CARE	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
45 Children aged under 3 using formal care – of all children aged under 3(g)	%	n.a.	n.a.	21.6	n.a.	n.a.	22.3	n.a.	n.a.	25.2	n.a.	n.a.
46 Children aged under 3 using informal care – of all children aged under 3(g)	%	n.a.	n.a.	39.3	n.a.	n.a.	43.0	n.a.	n.a.	36.9	n.a.	n.a.
47 Children aged 3–4 using formal care – of all children aged 3–4(g)	%	n.a.	n.a.	59.2	n.a.	n.a.	65.7	n.a.	n.a.	72.8	n.a.	n.a.
48 Children aged 3–4 using informal care – of all children aged 3–4(g)	%	n.a.	n.a.	41.2	n.a.	n.a.	43.2	n.a.	n.a.	36.4	n.a.	n.a.
49 Median weekly hours of care received by children aged under 3 – formal and informal combined	hours	n.a.	n.a.	12	n.a.	n.a.	11	n.a.	n.a.	13	n.a.	n.a.
50 Median weekly hours of care received by children aged 3–4 – formal and informal combined	hours	n.a.	n.a.	14	n.a.	n.a.	14	n.a.	n.a.	16	n.a.	n.a.

COMMUNITY	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
51 Persons aged 18 and over – volunteer rate in previous 12 months	%	n.a.	23.6	n.a.	n.a.	n.a.	n.a.	31.8	n.a.	34.4	n.a.	n.a.
52 Carers for person with a disability – of all persons(h)	%	n.a.	n.a.	n.a.	n.a.	12.6	n.a.	n.a.	n.a.	n.a.	13.0	n.a.
53 Primary carers for person with severe/profound disability – of all persons(h)	%	n.a.	n.a.	n.a.	n.a.	2.4	n.a.	n.a.	n.a.	n.a.	2.4	n.a.
54 Persons aged 18 and over – attendance rate at any sporting event in previous 12 months	%	n.a.	43.3	n.a.	n.a.	n.a.	46.3	n.a.	n.a.	48.2	n.a.	n.a.
55 Persons aged 18 and over – participation rate in organised sport in previous 12 months(i)	%	n.a.	n.a.	n.a.	26.5	28.3	30.3	28.9	n.a.	n.a.	n.a.	n.a.
56 Persons aged 18 and over – attendance rate at live performances in previous 12 months	%	n.a.	45.5	n.a.	n.a.	n.a.	43.3	n.a.	n.a.	46.9	n.a.	n.a.

(a) Based on 1996 census data.

(b) Data does not include other territories.

(c) Based on 2001 census data.

(d) Includes same-sex couples. Data only available in census years.

(e) Data for this indicator are derived from the Survey of Income and Housing; results are benchmarked by age for children aged 1–4 years and 5–14 years. These data are not necessarily consistent with data for indicator 15, which are derived from the Labour Force Survey and are not benchmarked for people aged less than 15 years.

(f) Based on registered births.

(g) Components do not add to 100% as some children used both formal and informal care and others used neither.

(h) 'All persons' excludes living in institutions.

(i) Data collected in four quarters of the financial year ending in year shown.

Reference periods: Data for indicators 1–3 are at 30 June.
Data for indicators 4–6 and 8–19, 21–24 are at June.
Data for indicator 7 are at census date.
Data for indicator 20 are at April 1997 & June 2003.
Data for indicators 25–44 are for the calendar year.
Data for indicators 45–50 are at November 1990, June 1993, March 1996, June 1999, June 2002.
Data for indicator 51 are at June 1995, through 4 quarters of 2000, and from March to July 2002.
Data for indicators 52 and 53 are at April-June 1998 and August-November 2003.
Data for indicators 54 are for March 1995, April 1999, and from March to July 2002.
Data on indicator 55 are collected through financial year ending June of the year shown.
Data for indicator 56 are at March 1995, April 1999 and March to July 2002.

Family and community: state summary

LIVING ARRANGEMENTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1 Total households(a)(b)	'000	2001	2 455	1 817	1 383	613	724	192	63	120	7 367
2 Lone-person households(a)(b)	%	2001	23.9	24.4	23.8	28.0	24.7	27.7	21.3	23.8	24.5
3 Households with three or more persons(a)(b)	%	2001	43.9	43.5	41.6	37.5	42.1	37.6	49.9	43.9	42.5
4 Total families	'000	2004	1 838	1 363	1 082	427	555	138	39	86	5 528
5 Families with children aged under 15 years	'000	2004	741	529	458	162	226	56	18	34	2 224
6 Couple families	'000	2004	1 525	1 120	888	345	459	115	30	70	4 550
7 De facto couple families – of all couple families(c)	%	2001	11.5	11.1	14.0	12.4	14.3	14.3	23.2	14.3	12.4
8 Couple-only families – of all couple families	%	2004	55.2	53.8	55.1	58.9	56.5	57.2	53.2	55.2	55.3
9 Couple-only families with female partner aged under 40 years – of all couple only families	%	2004	21.6	23.2	22.1	21.4	21.7	15.4	34.5	30.8	22.1
10 Couple families with children aged under 15 – of all families with children aged under 15	%	2004	77.6	79.7	74.6	72.5	76.1	76.3	68.8	76.1	76.9
11 Lone-father families with children aged under 15 – of all families with children aged under 15	%	2004	2.8	1.9	3.6	3.3	2.9	2.7	5.7	3.3	2.8
12 Lone-mother families with children aged under 15 – of all families with children aged under 15	%	2004	19.5	18.3	21.8	24.1	21.0	21.0	25.4	20.6	20.3
13 Families with at least one child aged under 5 – of all families with children aged under 15	%	2004	46.4	45.6	43.4	42.9	45.3	42.0	45.6	42.5	45.1
14 Average family size – persons	no.	2004	3.0	3.0	3.0	2.9	3.0	3.0	2.9	3.0	3.0
15 Children aged under 15 living in one-parent families – of all children aged under 15	%	2004	19.9	18.6	22.6	24.0	21.3	21.9	31.9	22.0	20.8
16 Persons aged 20–24 living with parents – of all persons aged 20–24	%	2004	49.0	52.7	38.9	45.4	43.2	43.0	40.1	40.9	46.8
17 Persons aged 25–34 living with parents – of all persons aged 25–34	%	2004	13.7	15.3	9.6	9.6	9.9	11.5	5.2	8.8	12.5
18 Persons aged 15–64 who live alone – of all persons aged 15–64	%	2004	8.8	9.0	8.2	11.3	9.6	10.5	13.5	8.3	9.1
19 Persons aged 65 and over who live alone – of all persons aged 65 and over	%	2004	28.3	26.5	30.2	31.2	28.7	30.1	34.3	29.4	28.6
20 Children aged 0–17 with a natural parent living elsewhere – of all children 0-17	%	2003	22.7	20.5	25.6	27.6	22.4	29.5	22.7	27.7	23.3

FAMILIES AND WORK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Couple families with children aged under 15 years											
21 Both parents employed – of all couple families with children aged under 15	%	2004	57.7	57.2	56.5	59.3	54.1	58.7	71.6	68.3	57.4
22 Neither parent employed – of all couple families with children aged under 15	%	2004	6.7	6.2	6.0	6.8	6.0	8.6	n.a.	4.0	6.3
23 One-parent families with children aged under 15, parent employed – of all one-parent families with children aged under 15	%	2004	42.1	52.5	47.5	52.0	51.3	50.5	59.7	57.7	48.0
24 Children aged under 15 living in families where no resident parent is employed – of all children aged under 15(d)	%	2002-03	16.2	14.7	19.2	12.7	15.7	21.1	*14.4	*13.3	16.2

Family and community: state summary continued

FAMILY FORMATION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Registered marriages											
25 Number of marriages	'000	2003	36.9	25.2	22.3	7.6	9.5	2.6	0.7	1.6	106.4
26 Crude marriage rate (per 1,000 population)	rate	2003	5.5	5.1	5.9	5.0	4.9	5.4	3.6	4.8	5.4
27 Marriages where both partners married for the first time – of all marriages	%	2003	68.1	69.0	63.5	64.1	63.7	61.0	58.5	66.6	66.4
28 Median age of males at first marriage	years	2003	29.1	29.4	29.0	29.1	29.5	29.0	29.8	28.8	29.2
29 Median age of females at first marriage	years	2003	27.1	27.7	27.1	27.1	27.5	27.1	27.3	27.5	27.3
30 Median age at remarriage – divorced males	years	2003	43.2	43.3	43.7	44.7	44.6	44.3	44.6	43.3	43.6
31 Median age at remarriage – divorced females	years	2003	39.5	40.0	40.4	41.3	41.4	41.8	41.1	40.2	40.2
Divorce											
32 Number of divorces	'000	2003	16.3	12.9	10.7	4.2	5.7	1.3	0.5	1.7	53.1
33 Crude divorce rate (per 1,000 population)	rate	2003	2.4	2.6	2.8	2.7	2.9	2.8	2.5	(e)	2.7
34 Median duration of marriage until final separation	years	2003	7.9	8.7	8.8	9.3	9.4	9.8	8.0	9.6	8.7
35 Divorces involving children aged under 18 – of all divorces	%	2003	45.1	52.4	52.0	52.8	51.8	55.2	48.8	54.0	50.1
36 Children aged under 18 involved in divorce	'000	2003	13.4	12.7	10.5	4.1	5.6	1.4	0.5	1.7	49.9
Fertility											
37 Births(f)	'000	2003	86.3	61.1	48.3	17.4	24.3	5.8	3.8	4.1	251.2
38 Total fertility rate (per female)	rate	2003	1.80	1.67	1.78	1.72	1.74	1.89	2.38	1.60	1.76
39 Births to mothers aged under 20 – of all births	%	2003	3.8	2.8	5.9	4.2	5.3	7.2	12.5	2.5	4.3
40 Births to mothers aged 35 and over – of all births	%	2003	19.5	21.2	16.5	20.1	18.2	14.6	15.4	20.0	19.1
41 Births outside marriage – of all births	%	2003	27.8	26.6	37.2	34.9	36.1	46.0	63.9	27.3	31.6
42 Births outside marriage acknowledged by father – of all births outside marriage	%	2003	87.7	92.9	86.6	90.9	89.4	85.3	63.8	92.1	88.2

Family and community: state summary continued

CHILD CARE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(g)	ACT	Aust.
43 Children aged under 3 using formal care – of all children aged under 3(h)	%	2002	21.7	26.3	29.7	22.9	23.2	27.5	39.3	39.7	25.2
44 Children aged under 3 using informal care – of all children aged under 3(h)	%	2002	36.8	30.1	36.6	48.4	45.0	40.4	41.4	38.0	36.9
45 Children aged 3–4 using formal care – of all children aged 3–4(h)	%	2002	75.6	71.3	75.0	68.4	69.1	62.9	54.9	79.7	72.8
46 Children aged 3–4 using informal care – of all children aged 3–4(h)	%	2002	33.7	39.8	31.7	48.0	37.0	38.2	35.1	40.9	36.4
47 Median weekly hours of care received by children aged under 3 – formal and informal combined	hours	2002	15	12	16	8	10	10	n.a.	n.a.	13
48 Median weekly hours of care received by children aged 3–4 – formal and informal combined	hours	2002	16	13	18	12	12	12	n.a.	n.a.	16

COMMUNITY	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(g)	ACT	Aust.
49 Persons aged 18 and over – volunteer rate in the previous 12 months	%	2002	33.4	33.3	35.7	34.7	35.6	37.0	39.5	41.4	34.4
50 Carers for person with a disability – of all persons(i)	%	2003	11.4	14.1	14.3	14.8	12.7	14.8	n.a.	10.8	13.0
51 Primary carers for person with severe/profound disability – of all persons(i)	%	2003	2.3	2.4	3.0	2.5	2.0	3.1	n.a.	1.2	2.4
52 Contact with family or friends living outside the household in last week – of all persons aged 18 and over	%	2002	94.8	95.4	95.4	96.6	96.4	96.5	95.6	98.0	95.4
53 Persons who feel unsafe or very unsafe at home alone after dark – of all persons aged 18 and over	%	2002	7.4	8.6	8.7	9.5	10.5	7.4	10.1	6.5	8.4
54 Could ask for small favours from persons living outside the household – of all persons aged 18 and over	%	2002	92.4	92.2	94.3	95.1	95.3	95.3	94.3	95.4	93.3
55 Persons able to ask for support in time of crisis from persons living outside the household – of all persons aged 18 and over	%	2002	93.2	93.4	94.8	95.3	95.0	96.0	94.1	96.5	94.0
56 Persons aged 18 and over – attendance rate at any sport in previous 12 months	%	2002	43.7	51.6	46.8	51.9	53.5	47.0	56.7	55.7	48.2

(a) Based on 2001 census data.

(b) Australian total does not include other territories.

(c) Includes same-sex couples. Data only available in census years.

(d) Data for this indicator are derived from the Survey of Income and Housing; results are benchmarked by age for children aged 1–4 years and 5–14 years. These data are not necessarily consistent with data for indicator 15, which are derived from the Labour Force Survey and are not benchmarked for people aged less than 15 years.

(e) Based on the location of the Family Court where the divorce is granted and registered. Due to the large number of divorces granted in the Australian Capital Territory to usual residents of another state, the divorce rate for the Australian Capital Territory is not representative of the Australian Capital Territory population.

(f) Based on registered births.

(g) Estimates for the Northern Territory refer to mainly urban areas only.

(h) Components do not add to 100% as some children used both formal and informal care and others used neither.

(i) Excludes persons living in institutions.

Reference periods: Data for indicators 1–6, 8–19, 21–24 and 43–48 are at June 30.
Data for indicator 7 are at census date.
Data for indicator 20 are at June 2003.
Data for indicators 25–42 are for the calendar year.
Data for indicators 50–51 are at August–November 2003.
Data for indicators 49 and 52 –56 are at April–July 2002.

Family and community: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
ABS 2001 Census of Population and Housing.	7	7
ABS Births Collection.	37–44	37–42
ABS Child Care Survey.	45–50	43–48
ABS Family Characteristics Survey.	20	—
Family Characteristics Australia, June 2003 (ABS cat. no. 4442.0).	—	20
ABS Labour Force Survey.	4–6, 8–19, 21–23	4–6, 8–19, 21–23
ABS Surveys of Income and Housing.	24	24
AIHW Perinatal Data Collection 1999.	43–44	—
Australian Demographic Statistics (ABS cat. no. 3101.0).	1–3, 25–26, 32–33, 37–38	1–3, 25–26, 32–33, 37–38
ABS Survey of Disability, Ageing and Carers.	—	52
Disability, Ageing and Carers Australia: Summary of Findings (ABS cat.no. 4430.0).	52–53	50–51
Divorces, Australia 2003 (ABS cat. no. 3307.0.55.001)	32–36	32–36
General Social Survey: Summary Results, Australia 2002 (ABS cat. no. 4159.0).	51	49, 53–56
Marriages, Australia 2003 (ABS cat. no. 3301.0).	25–31	25–31
Participation in Sport and Physical Activities, Australia 2002 (ABS cat. no. 4177.0).	55	—
ABS Survey of Sports Attendance	54	—
ABS Survey of Attendance at Selected Cultural Venues and Events	56	—

Family and community: definitions

Average family size
for any group of families, the total number of family members divided by the number of families in the group.

Births
live births registered in that year. A live birth is the delivery of a child irrespective of the duration of pregnancy who, after being born, breathes or shows any evidence of life such as a heartbeat.
Reference: *Births, Australia* (ABS cat. no. 3301.0).

Births outside marriage
births where the father was not registered as married to the mother at the time of the birth, whether or not the parents were living together at the time of the birth, and whether or not the child may subsequently have been adopted or their father and mother have subsequently been registered as married. Also known as exnuptial births.
Reference: *Births, Australia* (ABS cat. no. 3301.0).

Births outside marriage acknowledged by the father
births outside registered marriage where the father's name is recorded on the birth certificate. Also known as paternity-acknowledged birth.
Reference: *Births, Australia* (ABS cat. no. 3301.0).

Carer
a carer is a person of any age who provides any informal assistance, in terms of help or supervision, to persons with disabilities or long-term conditions, or older persons (i.e.
aged 60 years and over). This assistance has to be ongoing, or likely to be ongoing, for at least six months.

Child aged under 15 years
a related or unrelated person aged under 15 years who forms a parent-child relationship with one person aged 15 years or over resident in the household.
Reference: *Family Characteristics* (ABS cat. no. 4442.0).

Couple family
a family based on two persons who are in a registered or de facto marriage and who are usually resident in the same household. The family may include any number of dependants, non-dependants and other related individuals. It is not necessary for a parent-child relationship to be formed, thus a couple family can consist of a couple without children present in the household.
Reference: *Family Characteristics* (ABS cat. no. 4442.0).

Couple-only family
a couple family with no dependent children or other family members (e.g. non-dependent children) present.

Crude divorce rate
the number of divorces (decrees absolute of dissolution of marriage) granted in the calendar year per 1,000 of the estimated resident population at 30 June of that year.
Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Crude marriage rate
the number of marriages registered in the calendar year per 1,000 of the estimated resident population at 30 June of that year.
Reference: *Marriages, Australia* (ABS cat. no. 3306.055.001).

De facto couple
two people (of the same or opposite sex) who live together in the same household who are not registered as married to each other but reported being either: de facto, partner, common law husband/wife/spouse, lover, boyfriend or girlfriend.
Reference: 2001 Census of Population and Housing.

Family and community: definitions continued

Divorce

decree absolute of dissolution of a registered marriage.

Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Divorces involving children

divorces of couples with unmarried children of the registered marriage who were aged under 18 years at the time of application for divorce. Under the *Family Act 1975*, adopted and ex-nuptial children and children from a former registered marriage may be included (in certain cases). Children who are registered as marriage or aged 18 years and over are not subject to custody and guardianship orders and are excluded.

Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Duration of marriage until separation

the interval measured in complete years between the date of marriage and the date of separation.

Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Employed person

persons aged 15 years and over who either worked during the reference week for pay, profit, commission, payment in kind or without pay for one hour or more in a family business, or who had a job but were not at work. Also includes employers, own account workers or contributing family workers who had a job, business or farm, but were not at work.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Estimated resident population

the official measure of the population of Australia based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months. It excludes overseas residents who are in Australia for less than 12 months.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Family

two or more persons, one of whom is aged 15 years or over, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Feels unsafe at home

Feels very unsafe or unsafe at home alone after dark.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Formal child care

regulated care, away from the child's home. The main types of formal care are: before and after school care; long-day care; family day care; occasional care and preschool.

Reference: *Child Care, Australia* (ABS cat. no. 4402.0).

Has contact with family or friends

has contact with family and friends at least once a week, either face to face or by other means of communication.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Has source of support in time of crisis

the expectation that support would be available in time of crisis from friends, family or organisations. Types of support may include advice on what to do, emotional support, help during an illness or with maintaining family or work responsibilities, or support with money, accommodation or food.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Household

a group of two or more related or unrelated people who usually reside in the same private dwelling, or a person living alone in a private dwelling. Households include group households of unrelated persons, same-sex couple households, single-parent households as well as one-person households. A household usually resides in a private dwelling (including caravans etc. in caravan parks). Persons usually resident in non-private dwellings, such as hotels, motels, boarding houses, jails and hospitals, are not included in household estimates. This definition of a household is consistent with the definition used in the census. The number of households can be either based on count or estimated resident population.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Informal assistance

informal assistance is unpaid help or supervision that is provided to persons with one or more disabilities or persons aged 60 years and over living in households. It includes only assistance that is provided for one or more of the tasks associated with the activities of communication, mobility, self care, health care, paperwork, transport, housework, meal preparation, light property maintenance and cognition or emotion because of a person's disability or age. Informal assistance may be provided by family, friends or neighbours. For the Survey of Disability, Ageing and Carers, any assistance received from family or friends living in the same household was considered to be informal assistance regardless of whether or not the provider was paid.

Informal child care

non-regulated care, arranged by the child's parent/guardian, either in the child's home or elsewhere. It comprises care by: (step) brothers or sisters; grandparents, other relatives including a parent living elsewhere and other (unrelated) people such as friends, neighbours, nannies or babysitters. It may be paid or unpaid.

Reference: *Child Care, Australia* (ABS cat. no. 4402.0).

Is able to ask for small favours

examples of small favours are looking after pets, watering your garden, collecting mail or checking your house while you are away from home, minding a child for a brief period, help with moving or lifting objects, help out when you are sick or injured, or lending equipment.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Lone parent

a person who has no spouse or partner present in the household but who forms a parent-child relationship with at least one dependent or non-dependent child usually resident in the household.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Lone person

a person who makes provision for his/her food and other essentials for living without combining with any other person to form part of a multi-person household. He or she may live in a dwelling on their own or share a dwelling with another individual or household.

Reference: *Australian Labour Market Statistics , Australia* (ABS cat. no. 6105.0).

Median

the value at which half the population falls above and half falls below.

Median age

for any distribution the median value is that which divides the relevant population into two equal parts, half falling below the value, and half exceeding it. Thus, the median age is the age at which half the population is older and half is younger.

Reference: *Population by Age and Sex, Australian States and Territories* (ABS cat. no. 3201.0).

Family and community: definitions continued

Median age of mothers at first birth

the median age of mothers at the end of first confinement. A confinement is a pregnancy which results in at least one live birth: multiple births (e.g. twins) may be involved.

Reference: Australian Institute of Health and Welfare, *Australia's Mothers and Babies (1996).*

Median hours of care

hours of care is defined as the number of hours a child attended child care in the survey reference week. Median hours of care is the number of hours of care per week at which half the children who received formal and/or informal child care fall below the value and half above.

Reference: *Child Care, Australia* (ABS cat. no. 4402.0).

Natural parent

a parent who is related to his or her child(ren) by either birth or adoption.

Reference: *Family Characteristics Australia* (ABS cat. no. 4442.0).

Natural parent living elsewhere

one of a child's natural parents who is not usually resident in the same household as the child.

Reference: *Family Characteristics Australia* (ABS cat. no. 4442.0).

Non-resident parent

persons aged 15 years and over who have one or more natural children aged 0–17 years living elsewhere.

Reference: *Family Characteristics Australia* (ABS cat. no. 4442.0).

One-parent family

a family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the household.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Primary carer

a primary carer is a person who provides the most informal assistance, in terms of help or supervision, to a person with one or more disabilities. The assistance has to be ongoing, or likely to be ongoing, for at least six months and be provided for one or more of the core activities (communication, mobility and self care). In the Survey of Disability, Ageing and Carers, primary carers only include persons aged 15 years and over for whom a personal interview was conducted. Persons aged 15 to 17 years were only interviewed personally if parental permission was granted.

Provides support for other relatives living outside the household

Any of the following types of support provided to relatives such as elderly parents, children aged 25 years and over, grandchildren who live outside the household:

- give money to pay rent and/or other housing costs
- give money to pay bills or meet debt
- provide or pay for food
- provide or pay for clothing
- let them borrow the car
- drive them places
- pay for educational costs or textbooks
- provide pocket money or an allowance
- buy or give them money to buy big cost items such as a car, computer, sound system, etc.

Reference: *General Social Survey, Summary Results,* 2002 (ABS. cat. no. 4159.0).

Registered marriage

formally registered marriage for which the partners hold a marriage certificate.

Reference: *Marriages, Australia* (ABS cat. no. 3306.0.55.001).

Total fertility rate

the sum of age-specific fertility rates (live births at each age of mother per female population of that age). It represents the number of children a female would bear during her lifetime if she experienced current age-specific fertility rates throughout her reproductive life.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Volunteer

a volunteer is someone who willingly gave unpaid help in the form of time, service or skills, through an organisation or group, in the previous 12 months.

Reference: *Voluntary Work* (ABS cat. no. 4441.0).

Volunteer rate

For any group, the volunteer rate is the number of volunteers in that group expressed as a proportion of the total population in that same group.

Reference: *Voluntary Work* (ABS cat. no. 4441.0).

Carers

SERVICES AND ASSISTANCE

Many older people and people with disabilities are assisted with everyday activities by relatives or friends.

Many older people and people with a disability who are living at home receive informal assistance from family, and sometimes from friends and neighbours. In 2003, 2.5 million people (16% of the population aged 15 years and over) provided such care to 2.1 million people. Over the last few decades, a government and community focus on the needs of people with disabilities and older people has highlighted both the contributions of carers and concerns about their wellbeing. In the context of an ageing population, with trends towards later childbearing, smaller family sizes, increased family breakdown and increased labour force participation by women, concern has also focused on whether informal care can keep pace with the greater numbers of older people requiring care.[1,2]

Caring over the lifecycle

Although some care is provided by friends, caring is largely a family role. Of all older people and people with a disability who received informal care in 2003, 92% were assisted by family and 17% by friends. That is, only 8% were helped solely by friends.

In 2003, the likelihood of being a carer increased with age to peak in the age group 55–64 years. More than one in five people of this age were carers (22%). This may reflect the new family ties people form through partnering and having children, and the fact that as people age, so do their close relatives, making them more likely to need care.

In the youngest age group, 15–24 years, women were slightly more likely than men to be carers. There was a more substantial difference between the proportions of women and men who were carers across the age range from 25–64 years (with a higher proportion of women than men as carers in each ten year age group). In the age group 65–74 years men were somewhat more likely than women to be carers. At very old ages (75 years and over) a substantially greater proportion of men than women were carers.

For women, the proportion who were carers peaked at age 55–64 years, whereas for men it continued to increase after these years. The peak for women may represent the age where the need for assistance of elderly parents converges with an increased likelihood of a husband having a disability. In contrast, it is

Carers

Information in this article is based on the ABS 2003 Survey of Disability, Ageing and Carers which collected information on the characteristics of people with disability; people aged 60 years or over; and people who provide assistance to them. The scope of the article is limited to persons living in households.

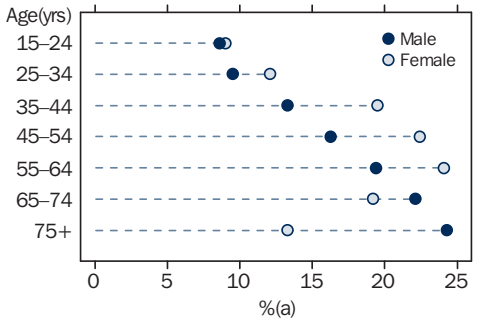
Informal asssistance (or care) in this article comprises unpaid help or supervision by family, friends or neighbours and also paid help provided by family or friends living in the same household. It contrasts to *formal assistance* which comprises paid or unpaid help or supervision provided through an organisation (government or private, including both not for profit and commercial); and other paid help or supervision provided by persons other than family, friends or neighbours.

Carer in this article refers to a person aged 15 years or over who provides ongoing informal help or supervision to persons with disabilities or long term health conditions, or to persons aged 60 years and over. The help provided must have lasted or be expected to last for at least 6 months. Carers who assist someone in another household are identified on the basis that they provide help with 'everyday sorts of activities' without further specification. Carers who assist someone in the same household are identified on the basis that they provide assistance with one or more of these activities: communication, health care, housework, meal preparation, mobility, paperwork, property maintenance, self care and transport.

Primary carer refers to a person aged 15 years or over who provides the majority of the ongoing informal assistance to a person with a disability who has a limitation in one of the core activity areas of self care, communication or mobility.

Person cared for in this article refers to the main recipient of care (some carers assisted more than one person).

Carers — 2003



(a) Carers as a proportion of the population of each age group.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

in their role as husband that men are most likely to become a carer, and older men are more likely than men of other ages to have a wife requiring care. Also, once retired, they are more free to take on care.

In the oldest age range (75 years or over), much caring occurs between partners, but women are more likely than men to outlive their partners. Of men aged 75 years and over living in private households, 69% were living with a wife, while only 34% of women of that age were living with a husband. This contributes to the lower proportion of older women than older men who are carers.

Primary carers

Slightly less than one in five carers (19%) were primary carers (475,000 people). That is, they were the main carer of a person who was limited in carrying out the core everyday activities of mobility, communication or self-care. Both primary carers and the larger group of other carers (close to 2 million) contribute to the wellbeing of older people and people with disabilities. However, because they care for people who otherwise would have difficulty carrying out basic everyday activities, there is particular interest in primary carers: in the contribution they make, their wellbeing, labour force experiences, motivations and the support they receive in caring.

Primary carers were more likely than other carers to be assisting someone who lived in the same household (81% compared with 76%). As with caring as a whole, the likelihood of being a primary carer increased with age to peak at age 55–64 years, where one in twenty people were primary carers. However, rather than then declining, the likelihood of being a primary carer remained at around this level among the older age groups. Consequently, primary carers had a somewhat older age profile than other carers. The median age of primary carers was 52 years, compared with 47 years for other carers.

Primary carers were more likely than other carers to be female (71% compared with 50%) and less likely to be in the labour force (39% compared with 60%). Women not in the labour force were by far the largest single group among primary carers (44%). In contrast, men employed full-time were the largest single group among other carers (25%). Consistent with their lower labour force participation, primary carers had lower personal incomes than other carers (a median gross income of $237 per week compared with $327 per week) and were more likely to have a government pension or allowance as their main source of income (55% compared with 35%).

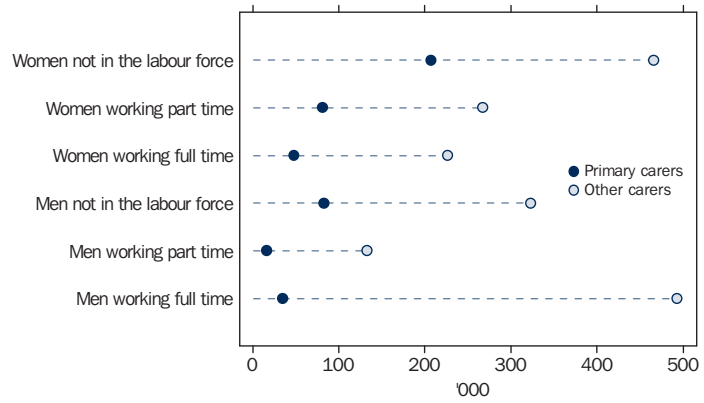
Carer rate(a) — 2003

	Primary		*Non-primary*	
	Male	*Female*	*Male*	*Female*
Age (years)	%	%	%	%
15–24	*0.3	1.0	8.2	8.0
25–34	*0.6	2.4	8.8	9.7
35–44	1.2	4.4	12.1	15.1
45–54	2.4	6.2	13.9	16.2
55–64	2.5	7.6	17.0	16.5
65–74	3.6	5.7	18.5	13.5
75 and over	5.7	4.5	18.5	8.9
Total	1.7	4.3	12.6	12.6
	'000	'000	'000	'000
Total	**136.2**	**338.4**	**982.3**	**998.5**

(a) Carers as a proportion of the population of each age group.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Carers(a) by labour force status and sex — 2003



(a) Excludes carers who were unemployed (3% of all carers).

Source: ABS Survey of Disability, Ageing and Carers.

Primary carers and paid work

People not in the labour force made up 61% of primary carers. A further 21% of primary carers were employed part-time and 17% full-time. The remaining 1% of primary carers were unemployed.

While caring responsibilities may be more likely to be taken up by people who are not in the labour force, some people leave the paid workforce, or change their hours, to accommodate caring. About 90,500 primary

carers were not in the labour force but had been employed just prior to commencing the caring role. Of these, about half (51%) had left this employment in order to commence or increase care.

Caring can also impact on the working lives of employed carers in other ways. Just under one quarter (23%) of the 179,000 employed primary carers had reduced their standard work hours after commencing caring. Some employed primary carers took time off paid work on a more ad hoc basis: 11% took time off at least once a week; and 21% took time off less frequently. One in ten employed primary carers had, at some time, left their paid work for at least three consecutive months due to their caring role. However, 41% of employed primary carers had not taken any of the above actions to reduce paid work in order to care.

Some carers who were not in paid work would have liked to be. Of all primary carers aged under 65 years who were either not in the labour force or unemployed (186,000 people), 36% reported that they would like paid work while continuing in the caring role (66,800 people). The great majority of these wanted part-time work (80%). The most commonly reported barriers to paid work were a lack of alternative care arrangements or disruption to the person cared for (42%), age or loss of skills from being out of the workforce (17%) and difficulty in arranging work hours (16%).

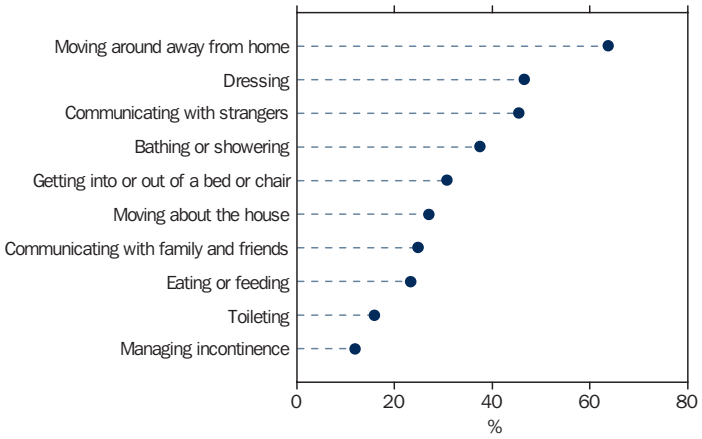
What's involved in caring?

In 2003, 371,000 primary carers lived in the same household as the main person they cared for. In these cases, more specific information is available on the disabling conditions of the people cared for. Most of these primary carers assisted someone with a physical disability (58%), with the remainder caring for people with sensory (11%), intellectual (11%), psychological (9%) or speech (6%) disabilities. The great majority were assisting someone who was either profoundly (58%) or severely (34%) limited in carrying out the core everyday activities of mobility, communication or self care.

Almost three quarters of primary carers usually assisted the person they cared for with at least one mobility activity (74%), while around half assisted with self care (58%) and communication (47%). The specific mobility, communication or self care activity they were most likely to usually assist with was moving around away from home (64%). They were least likely to assist with more fundamental activities, such as toileting, or helping manage incontinence (16% and 12% respectively). Differences such as these are likely to reflect differences in how common various types of limitations are among people being cared for at home. Some carers had a wider range of tasks than others. For example, carers who assisted with the more fundamental activities, such as managing incontinence, were likely to also be assisting with other activities.

Helping people undertake core activities was only one aspect of the work of carers. Most primary carers assisted the person they cared for across a range of other areas of everyday life. Primary carers assisting people aged 15 years and over helped with emotional or cognitive tasks (92%); transport (86%); household tasks (83%); health care (65%); paperwork (61%) and property maintenance (61%). The 12% of primary carers caring for a child under 15 years would have provided the usual care children are given as well as assistance related to their disability.

Core activity activities primary carers usually assisted with — 2003



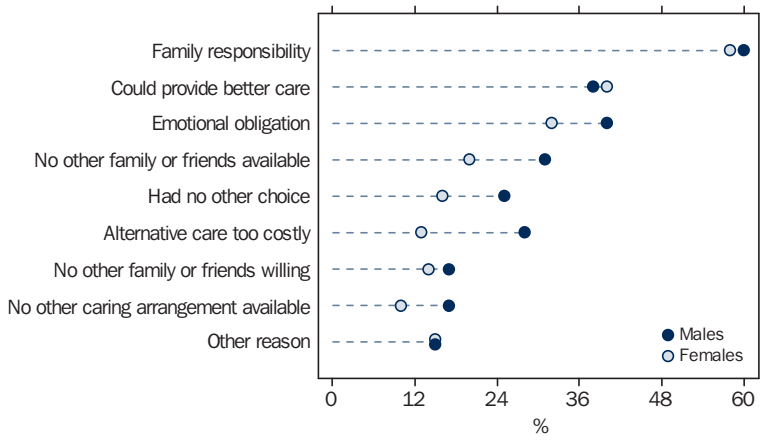
Source: ABS 2003 Survey of Disability, Ageing and Carers.

How much caring and for how long?

Around 40% of primary carers had hours of caring at least equivalent to a traditional full-time paid job: 40 hours or more per week. A further 20% spent from 20 hours to less than 40 hours per week caring; and the remaining 40% spent under 20 hours per week caring.

The definition of primary carer requires that care had lasted or was expected to last at least six months and, in 2003, 96% of carers had been in the role for at least one year. This included 61% who had been carers for five years or more, and 12% who had been carers for 20 years or more.

Primary carers: reasons for caring — 2003



Source: ABS 2003 Survey of Disability, Ageing and Carers.

What motivates carers?

People tend to take on caring because of family bonds and a sense of necessity. Primary carers were almost always a relative of the person they assisted (98%), most commonly their wife (24%), mother (21%), daughter (18%) or husband (17%). The three leading reasons carers gave for taking on care, each given by at least one third of carers, were 'family responsibility' (58%), 'can provide better care' (39%) and 'emotional obligation' (34%). The less common reasons were those that expressed motivation less positively, ranging from 'no other family or friends available' (23%) to 'no other caring arrangement available' (12%).

Similar proportions of male and female carers gave the two leading reasons for taking on care ('family responsibility' and 'could provide better care'). A greater proportion of men than women gave each of the remaining reasons, from 'emotional obligation' to 'no other caring arrangement available' (and men, on average, gave more reasons than women). The greatest proportional difference was observed for 'Alternative care too costly', given by 28% of men and 13% of women.

There were differences in the reasons given according to the relationship to the person cared for. People caring for their parents were the carers most motivated by a sense of family responsibility (75%) or emotional obligation (47%). Spouses (47%) and parents (41%) were more likely than other carers to feel they could provide better care.

Health and wellbeing of carers

In respect of their overall physical and emotional wellbeing, more than two-thirds of primary carers reported no change due to the caring role (69%). However, 31% of primary carers did report that their health and wellbeing had changed (137,000 people).

More than a third of all primary carers frequently felt weary or lacking in energy (36%) or frequently felt worried or depressed (31%) and 15% frequently felt angry or resentful. About 16% of primary carers experienced frequent sleep interruptions which interfered with normal daily activities. Finally, 11% of primary carers (48,700 people) had been diagnosed with a stress related illness as a result of their caring role. These people were more likely than other primary carers to report all of the above negative effects, with frequently feeling worried or depressed the most common effect reported (79%).

People taking on care often have disabilities themselves. Close to 40% of primary carers reported that they had some kind of disability, compared with 21% of people aged 15 years and over who weren't primary carers. The higher rate of disability among primary carers partly reflected their older age profile.

However, in contrast to those they cared for, only 9% of all primary carers had a disability with a profound or severe core activity limitation. Consistent with this, 8% of primary carers were receiving help with core activities, as well as giving it.

...social relationships

Caring has the potential to affect a person's relationships with others, such as their family. Of primary carers who were married and caring for someone other than their partner, 41% reported either that their relationship with their partner was strained or that they and their partner lacked time alone together. However, more commonly, these carers reported that their relationship with their spouse was unaffected (46%) or that they had been brought closer together (13%).

Likewise, of primary carers who had other family members in their household (such as their children), 39% reported either that they had less time to spend with them or that their relationship with them was strained, but 49% reported their relationship was unaffected and 9% that they had been brought closer together.

In respect of relationships outside the family, more than half of primary carers reported no change in their circle of friends due to their caring role (59%), but 37% reported that they had lost touch with or changed their circle of friends due to the caring role.

Finally, in respect of the person cared for, primary carers most commonly reported that their relationship was unaffected (45%), 37% had been brought closer together while 19% reported their relationship was strained.

Support for primary carers

When asked what their main source of assistance in the caring role was, primary carers most often nominated a relative or friend (34%), with a spouse or partner the most commonly named source of support (15%). Some nominated formal support providers (13%). Over half reported that they had no main source of support (53%). However, most of this latter group (44% of all carers) said they did not need assistance.

Having someone who can fill in for them can be of great help to primary carers. Over half of primary carers (55%) had an informal carer who could take their place at times. These were most often the daughter (30%), father (19%) or son (15%) of the person cared for. Just over a third of these fallback carers lived with the person cared for.

Arranging formal respite care for the person cared for allows carers time for other activities. These may include tasks related to caring, such as household shopping, as well as activities related to their own needs. However, not all carers may need or want respite care. In 2003, 87% of primary carers had never used respite care in respect of the person cared for, and 62% of these reported they did not need it. Other reasons for never having used respite care included that the person cared for did not want it (15%) or that the carer themselves did not want it (8%), while 6% had reasons to do with respite care not being available, suitable or affordable.

About 13% of primary carers had ever accessed respite care for the person they were currently caring for. In total, 17% of primary carers said they needed access (or further access) to respite care.

...income support

Taking on care can affect a person's financial situation. One quarter of primary carers reported that the main effect of the caring role on their financial situation had been that they had extra expenses while slightly less than one quarter reported that the main effect was a decrease in their income (23%). Of primary carers whose financial situation was affected in these ways (48%), 62% reported that they found it difficult to meet everyday expenses as a result of the changes to their financial situation.

Carer payments and allowances

Income support targeted at carers was introduced in Australia in 1983, with arrangements for support amended several times since then. In 2005 (as in 2003 when the Survey of Disability, Ageing and Carers was conducted), income support was provided through a Carer payment and income could be supplemented with a Carer allowance.

- *Carer payment* provides an income to people who cannot participate in the workforce because of the demands of their caring role. It is paid at the same rate as the disability pension. The carer payment is income tested and assets tested in regard to both the carer and the person cared for; and eligibility also depends on the disability, and care needs, of the person cared for.
- *Carer allowance* is an income supplement for people looking after adults or children with severe disability. It is not income or assets tested, but eligibility is dependent on the disability, and care needs, of those cared for.

In contrast, some primary carers reported an increase in income as the main effect on their financial situation (4%), while the most common response was that there had been no change in their financial situation (49%).

In 2003, two thirds of primary carers received some kind of Australian government pension, payment or allowance, including 55% of primary carers for whom this was the main income source. The carer payment was the most common type of income support received by primary carers (19%), followed by the Australian aged pension (17%), the parenting payment (10%) and the disability support pension (6%). The carers allowance (an income supplement) was received by 17% of primary carers.

In addition to the 19% of primary carers who were receiving the carer payment, a further 25% had looked into their eligibility for the payment but were not receiving it. In many cases this was because they were not eligible (39%), but it was mostly for other reasons. Of those who had *not* looked into eligibility, the most common reasons given were that they thought they would not be eligible (34%), that they did not think of themselves as a carer (20%), that they had not heard of the payment (13%), or that the payment was not necessary (12%).

Endnotes

1 Australian Institute of Health and Welfare 2004, *Caring in Australia: assisting frail older people and people with a disability,* AIWH Cat. No. AGE 41, AIHW, Canberra.

2 Productivity Commission 2004, *Economic Implications of an Ageing Australia*, Draft Research Report, Productivity Commission, Canberra.

Grandparents raising their grandchildren

FAMILY FUNCTIONING

In 2003, there were 22,500 Australian families in which grandparents were the guardians of their grandchildren (31,100 children aged 0–17 years).

While many grandparents provide temporary child care for grandchildren, some are the guardians of their grandchildren. The reasons grandchildren come to live with their grandparents are varied, but often include trauma of some kind, such as a parent's drug or alcohol abuse, relationship breakdown, mental or physical illness, or death.[1,2] As primary care providers, grandparents assume responsibility for their grandchildren's emotional, structural and financial support.[1]

Grandparents differ from other adults caring for children. They are often retired or planning retirement, and, compared with younger parents, on average have lower financial resources and less physical stamina. They may face difficulties resuming parenting at an older age, difficulties accessing assistance, or legal costs.[2] This situation, combined with their own ageing, can result in unexpected social, financial, and health problems.[3] Questions of how government could better assist grandparents raising grandchildren have begun to be discussed.[1]

Grandparent families

In 2003, there were 22,500 Australian families in which a grandparent, or grandparents, were the guardians of their grandchildren (31,100 children aged 0–17 years).

Data sources and definitions

Data about grandparents caring permanently for grandchildren aged 0–17 years are from the ABS 2003 Family Characteristics Survey.

In this article *grandparent families* are families in which the guardians of children aged 0–17 years are the grandparents of the children; and *other families* are families with children aged 0–17 years excluding grandparent families.

In this article a *guardian* is a person aged 15 years and over who is reported as being the guardian or main carer of any child aged 0–17 years, regardless of the existence of any legal arrangement.

...age

As might be expected, grandparents who were the guardians of grandchildren aged 0–17 years were older than parents in other families raising children of the same age. In 61% of grandparent families, the youngest grandparent was aged 55 years and over, and in 39% of grandparent families the youngest was aged 35–54 years. By comparison, in only 1% of other families was the youngest parent aged 55 years and over. The youngest parent in other families tended to be aged 35–54 years (in 62% of other families), or 15–34 years (37%).

Families with children aged 0–17 years: age-related characteristics — 2003

	Grandparent families(a)		*Other families(b)*	
	Families	*Children in families*	*Families*	*Children in families*
	%	'000	%	'000
Age of younger or lone grandparent/parent				
15–34 years	—	—	36.8	1 646.2
35–54 years	38.7	13.1	62.2	2 938.4
55 years and over	61.3	18.0	0.9	26.3
Age of youngest child				
0–4 years	*14.8	*6.8	38.3	1 843.4
5–11 years	37.4	11.5	35.8	1 841.8
12–14 years	35.8	9.8	13.7	582.3
15–17 years	*12.1	*3.0	12.2	343.5
	'000	'000	'000	'000
Total	**22.5**	**31.1**	**2 487.2**	**4 610.9**

(a) Families in which the grandparent(s) is/are the guardian(s) of children aged 0–17 years.
(b) All other families with children aged 0–17 years.

Source: Family Characteristics, Australia, June 2003 (ABS cat. no. 4442.0); ABS 2003 Family Characteristics Survey.

Children in grandparent families also tended to be older than children in other families. In 73% of grandparent families the youngest child was aged 5–14 years, and in 15% of grandparent families they were aged 4 years or less. By comparison, in 50% of other families with children the youngest child was aged 5–14 years, and in 38% of other families they were aged 4 years or less.

Grandparents in grandparent families tended to have fewer children in their care than did parents in other families with children. While 89% of grandparent families had one or two children in their care, 11% had three or more children. By comparison, 81% of other families had one or two children in their care, and 19% had three or more.

...family type

As people grow older they are more likely to have lost a spouse or partner (see *Australian Social Trends 2005*, Older people with disabilities, pp. 74–78). Almost half (47%) of grandparent families were lone grandparent families, while 21% of other families with children aged 0–17 years were lone parent families. Most lone grandparents (93%) were lone grandmothers caring for grandchildren.

...income and cost of living

The transition to being a grandparent guardian may be sudden, and associated with high initial costs related to accommodating children (e.g. clothes, bedding, school supplies).[1] The ongoing cost of caring for children may not have been planned for and may affect the sustainability of the grandparent's retirement income.

Reflecting the age of grandparents, in 2003, one or both grandparents were employed in only one third (34%) of grandparent families. In keeping with this, around two-thirds (63%) of grandparent families relied on a government pension, benefit or allowance as their main source of income.

That said, most older Australians own their home, so the cost of living for these people is not substantially affected by accommodation costs. For example, in 2002–03, for reference persons aged 55 years or over living in private dwellings, 72% owned their home outright, and for those aged 65 years or over the outright ownership rate was 80%. Thus, for households where the reference person was aged 55 years or over (the age group most relevant to grandparent families), the housing costs were lower than for other households. In 2002–03, housing costs for households where the reference person was aged 55 years or over were, on average, just over one quarter of the housing costs of other households. As a proportion of gross household income, the housing costs of the older households were 6% – less than half the proportion they were for other households.

In addition, where grandparent families share their dwelling with other adults, accommodation and other joint costs may be shared, and additional income may be available to support both grandparents and children. In 2002–03, one third of lone grandparent families (33%) shared their dwelling with one or more other adults (who were usually related to the grandparent), as did one quarter of couple grandparent families (25%).

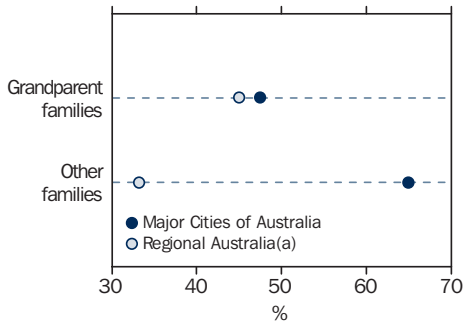
Families with children aged 0–17 years: selected characteristics — 2003

	Grandparent families(a)	*Other families(b)*
	%	%
Labour force status of grandparents/parents		
At least one grandparent/parent employed	33.8	85.0
No grandparent/parent employed	66.2	15.0
Main source of grandparental/parental cash income		
Government pension, benefit or allowance	63.0	19.9
Other	37.0	80.1
	'000	'000
Total families containing children aged 0–17 years	**22.5**	**2 487.2**

(a) Families in which the grandparent(s) is/are the guardian(s) of children aged 0–17 years.
(b) All other families with children aged 0–17 years.

Source: Family Characteristics, Australia, June 2003 (ABS cat. no. 4442.0); ABS 2003 Family Characteristics Survey.

Families with children 0–17 years: area of usual residence — 2003



(a) Includes Inner Regional Australia and Outer Regional Australia, but excludes Remote Australia and Very Remote Australia.

Source: ABS 2003 Family Characteristics Survey.

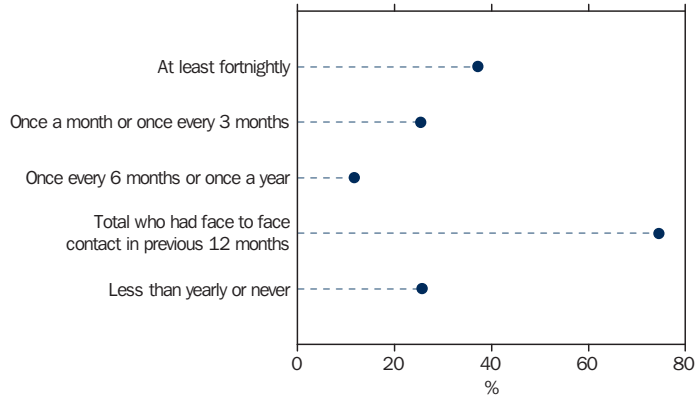
...area of usual residence

Grandparent families tend to live in regional areas, more so than other families. In 2003, a similar proportion of grandparent families lived in the Major Cities of Australia as lived in regional areas of Australia (48% compared with 45%). However, the pattern was different for other families. A substantially greater proportion of other families lived in the Major Cities of Australia (65%) than the proportion that lived in regional areas (33%).

Children's contact with parents

Where children in grandparent families have parents living elsewhere, they may remain in contact with these parents. In 2003, 28,700 children in grandparent families had a natural parent living elsewhere. Three-quarters (75%) of these children had face-to-face contact with a natural parent at least once a year. Over a third (37%) had face to face contact with a parent fortnightly or more frequently; a quarter (25%) had contact monthly or quarterly; and 12% had contact every six months or once a year. However, a quarter (26%) had little or no face to face contact with a parent (i.e. less than once a year or never).

Children(a) in grandparent families: frequency of face-to-face contact with natural parent(s) — 2003



(a) Aged 0–17 years with natural parent(s) living elsewhere.

Source: ABS 2003 Family Characteristics Survey.

Endnotes

1 Council on the Ageing (COTA) National Seniors 2003, *Grandparents Raising Grandchildren* <http://www.facs.gov.au/internet/facsinternet.nsf/VIA/grandparents/$File/GrandparentsRaisingGrandchildrenReport.pdf> accessed 22 June 2005.

2 Parliament of Tasmania Joint Standing Committee on Community Development 2003, *Report on issues relating to custodial Grandparents*, Report no. 2.

3 Pinson-Millburn, N, Fabian, E, Schlossberg, N, and Pyle, M 1996, 'Grandparents raising grandchildren', *Journal of Counseling and Development*, vol. 74, iss. 6, pp. 548–554.

Informal child care provided by grandparents

FAMILY FUNCTIONING

In 2002, almost one in five children aged 0–11 years (19%) had been looked after by grandparents in the survey week, and grandparents provided 31% of the total hours of care provided in that week.

Most parents use some form of child care for their children, most commonly while they are at work but also for other reasons. Care may be formal, regulated care (such as long day care or after school care), or informal care (such as care by family or friends). These different types of care can complement one another. For example, parents might choose one type of care for regular work commitments and another type for more irregular care needs. The mix of care used can depend on a range of factors including the affordability and availability of formal care or the availability of suitable informal carers. In 2002, of the 1.4 million 0–11 year olds who had been in child care in the week prior to interview, almost three-quarters (74%) had been in informal care and less than half (43%) had been in formal care.

Grandparents are the largest providers of informal care. While grandparents may enjoy this caring role, it has the potential to affect aspects of their lives such as their income, health, or access to free time, particularly if they provide large amounts of care. (See also *Australian Social Trends 2005* Grandparents raising their grandchildren, pp. 44–46).

Use of different types of child care

In 2002, almost one in five Australian children aged 0–11 years (19%) had been in the care of grandparents in the week prior to interview (592,000 children). This was equivalent to the proportion who had been in formal child care in the survey week (19% – 597,000 children).

In all, grandparents provided around one-third (31%) of the total hours of child care provided in the survey week. A further 37% was provided by formal care (24% by long day care); and 32% by other informal care (mainly by the child's non-resident parent – 15%). Most children who had been in grandparent care (98%) had been looked after at no cost to parents.

Child care

Data about informal grandparent care are from the ABS 2002 Child Care Survey, which collected data about children aged 0–11 years.

Formal care is regulated child care away from the child's home. It includes before and/or after school care, long day care, family day care and occasional care. In this article, preschool attendance is excluded, and therefore data will differ from that published in *Child Care, Australia, 2002* (ABS cat. no. 4402.0).

Informal care is non-regulated care arranged by a child's parent/guardian, either in the child's home or elsewhere. It comprises care by (step) brothers or sisters, grandparents, other relatives (including a parent living elsewhere), or by unrelated people, e.g. friends, nannies, baby-sitters. It may be paid or unpaid. In this article, *grandparent care* refers to informal care provided by the child's grandparents.

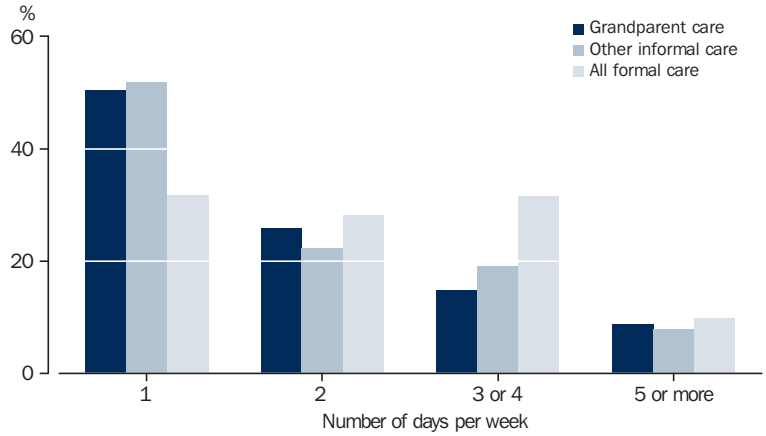
Children aged 0–11 years who had used child care(a): type of care used

	1999		2002		
Type of child care used	'000	%	'000	%	*As a proportion of all children*
Informal care	1 162.1	78.0	1 019.2	73.6	32.9
Care by grandparent	662.7	44.5	591.6	42.7	19.1
Care by brother or sister	74.2	5.0	70.5	5.1	2.3
Care by other relative	222.2	14.9	208.9	15.1	6.7
Care by other person	294.0	19.7	227.2	16.4	7.3
Formal care	538.3	36.1	597.1	43.1	19.3
Before and/or after school care	154.1	10.3	171.0	12.4	5.5
Long day care centre	242.0	16.2	297.0	21.5	9.6
Total who used child care(b)	**1 490.0**	**100.0**	**1 384.1**	**100.0**	**44.6**
Did not use child care	1 633.0		1 716.0		55.4
Total children aged 0–11 years	**3 122.9**		**3 100.0**		**100.0**

(a) In the week prior to interview. Excludes preschool attendance.
(b) Components do not add to totals as more than one type of child care may have been used.

Source: ABS 1999 and 2002 Child Care Surveys.

Children who had used child care(a): days used — 2002



(a) Children aged 0–11 years who used care in the week prior to interview. Excludes preschool attendance. Components do not add to 100% as more than one type of child care may have been used.

Source: ABS 2002 Child Care Survey.

Of all individual types of formal or informal child care, grandparent care was the type of care used by the greatest number of children in the week prior to interview. However, the primary type of care used varied depending on the number of hours the child had been in care in the survey week. Where less than 20 hours of care had been used, grandparent care was the care used by the greatest number of children: 495,700 children compared with 188,400 who had been in long day care (the next most commonly used type of care). When considering larger amounts of care (i.e. 20 hours or more), long day care was used for the greatest number children (108,600). But grandparent care was the second most commonly used type of child care (96,000 children) for this number of hours.

The balance between the use of formal and informal care has changed over time. Use of informal care decreased slightly between 1999 and 2002 (from 78% to 74% of children who had used care in the week prior to interview), as did use of grandparent care (from 45% to 43%). This shift was accompanied by an increase in the use of formal child care (from 36% to 43%) (see *Australian Social Trends 2004*, Formal child care, pp. 57–60).

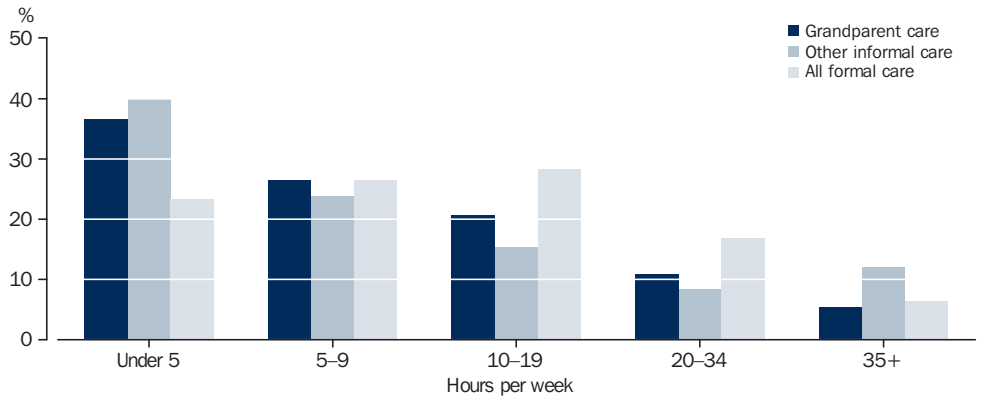
Days and hours care was used

Grandparent child care tended to be used on only one or two days per week, with fewer children cared for by grandparents for three or more days. Most children who had been in grandparent care in the survey week (51%) had been in that care on only one day that week. Around half this proportion had been in grandparent care on two days (26%), and the proportion decreased further for three days (9%), and down to 2% for six days or more. Use of other informal care (i.e. care by siblings, other relatives, or unrelated people such as babysitters) followed a similar pattern.

Formal care was also used by a sizeable proportion of children for 1 day (32%), 2 days (28%), and 3 or 4 days (32%). It was used for 3 or 4 day periods much more than grandparent care (15%) or other informal care (20%). There was minimal use of formal child care for periods of six days or more, as this type of care is generally unavailable on weekends.

Of children who had been in grandparent care in the survey week, most (37%) had been in grandparent care for less than 5 hours. The proportion then decreased steadily for longer amounts of care (e.g. 27% had been in care for 5–9 hours and 5% for 35 hours or more).

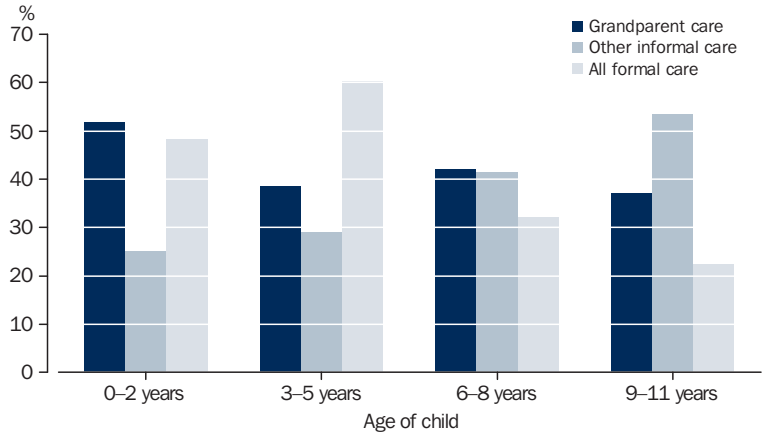
Children who had used child care(a): hours used — 2002



(a) Children aged 0–11 years who used care in the week prior to interview. Excludes preschool attendance. Components do not add to 100% as more than one type of child care may have been used.

Source: ABS 2002 Child Care Survey.

Children aged 0–11 years who used child care(a): age of child — 2002



(a) Excludes preschool attendance. Components do not add to 100% as more than one type of child care may have been used.

Source: ABS 2002 Child Care Survey.

The pattern of use of other informal care was very similar, although the proportion increased slightly for care of 35 hours or more (to 12% of children who had been in this type of care), which reflected larger amounts of care provided by the child's non-resident parent. Compared with other types of care, formal care was used less for under five hours of care (23% of children who had been in formal care), and more for 10–19 hours of care (28%).

Age of children in grandparent care

Grandparent care tended to be used more for very young children than other care types. However, while there was a high use of grandparent care for 0–2 year olds (52% of 0–2 year olds who had been in care had been in grandparent care), use of grandparent care remained fairly high across other child age groups (39% of 3–5 year olds, 42% of 6–8 year olds, and 37% of 9–11 year olds).

By comparison, there was a jump in the use of formal care as children moved past infancy (60% of 3–5 year olds who used care had been in formal child care compared with 48% of 0–2 year olds). Use of formal care dropped back among school aged children (32% of 6–8 year olds and 22% of 9–11 year olds).

There was a different age pattern in regard to other types of informal care. The proportion of children in the care of a sibling, non-resident parent, babysitter or other informal carer increased as the age group of the child increased. One in four (25%) 0–2 year olds used other informal care, increasing to just over half (54%) of 9–11 year olds.

Reasons for using informal care

One of the main reasons parents use child care is to participate in the workforce. In 2002, of the 591,600 children who had been in grandparent care in the week prior to interview, just over one-half (51%) had been in informal care because their parents were either working, looking for work, or attending work related training or study. A further 38% had been in informal care so their parents could socialise, shop, have a break, or attend to other personal or family matters.

Family type and employment

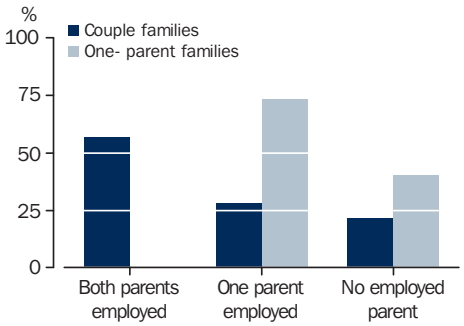
...overall use of child care

Overall, one-parent families make more use of child care than couple families. In 2002, 54% of children in one-parent families had been in some type of child care in the week prior to interview, compared with 42% of children in couple families.

This difference was mainly driven by the high use of child care by one-parent families in which the lone parent was employed. Three-quarters of children in these families (74%) had been in some type of child care in the survey week. This was much higher than the proportion of children in couple families with both parents employed who had been in child care (57%).

One-parent families where the parent was not employed also used child care more than couple families where one or more parent was not employed. Of children in one-parent families where the parent was not employed, 41% had been in child care, compared with 28% of children in couple families with one employed parent and 22% of children in couple families with no employed parent.

Children aged 0–11 years: whether child care used(a) — 2002



(a) In the week prior to interview. Excludes preschool attendance. Components do not add to 100% as more than one type of child care may have been used.

Source: ABS 2002 Child Care Survey.

Children aged 0–11 years: use of child care(a) by type of care and labour force status of parent(s) — 2002

	Used grandparent care	*Used other informal care*	*Used formal care*	*Total number of children*
	%	%	%	'000
Couple families	19.2	11.7	18.3	2 506.1
Both parents employed	27.0	15.2	25.4	1 263.7
One parent employed	11.6	8.2	10.7	1 025.2
No parent employed	8.7	5.0	10.1	185.1
One-parent families	18.8	22.5	23.5	593.9
Parent employed	23.7	33.3	35.4	238.6
Parent not employed	15.5	15.1	15.5	355.3

(a) In the week prior to interview. Excludes preschool attendance. Components do not add to 100% as more than one type of child care may have been used.

Source: ABS 2002 Child Care Survey.

...use of grandparent care

The proportion of children in one-parent families that had been in grandparent care in the week prior to interview (19%) was the same as the proportion of children in couple families that had been in grandparent care (19%). However, in one-parent families, a higher proportion of children than this had been in informal care other than grandparent care (23%) or in formal care (24%). By comparison, in couple families, about the same proportion had been in formal care (18%) as had been in grandparent care, and a lower proportion had been in informal care other than grandparent care (12%).

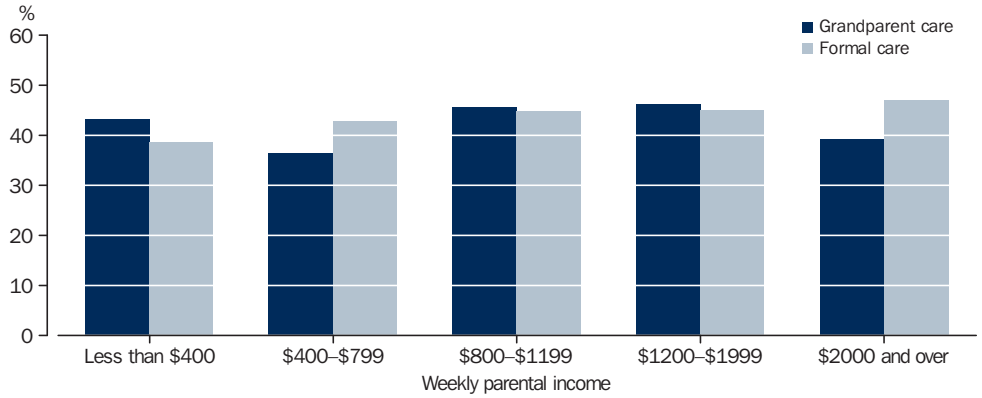
While lone parents who were not employed tended to make the same use of grandparent care as they did of other types of child care, lone parents who *were* employed used grandparent care less than other types of care. Of children in these families, 35% had been in formal care, 33% in other informal care, and 24% in grandparent care.

There is a range of possible reasons one-parent families use formal child care and other informal care more than they use grandparent care. Lone parents may have less access to the grandparents associated with the child's non-resident parent. Lone parents who are employed may also have a greater need for long periods of care, more usually met through formal care. As one-parent families tend to have lower incomes than other family types,[1] they may also receive greater subsidisation of formal care.[2]

Income

Overall, the use of child care tends to be similar for all children, regardless of their parent's income. In 2002, around 45% of

Children who used care(a): weekly parental income — 2002



(a) Children aged 0–11 years who used care in the week prior to interview. Excludes preschool attendance. Components do not add to 100% as more than one type of child care may have been used.

Source: ABS 2002 Child Care Survey.

children in each weekly income range had been in child care in the week prior to interview. This relative uniformity was also evident when comparing use of grandparent care across income ranges. However, there was some difference in the use of grandparent care by parents in the lowest weekly income range when compared with its use by parents in the highest weekly income range.

Of children whose parents' weekly income was less than $400, a higher proportion had been in grandparent care in the week prior to interview (43%), than had been in formal child care (39%). On the other hand, of children whose parents' weekly income was at the highest end of the scale ($2,000 or more), a higher proportion had been in formal care (47%) than had been in grandparent care (39%).

Endnotes

1 Australian Bureau of Statistics, *Household Income and Income Distribution, Australia*, 2002–2003 ABS cat. no. 6523.0

2 For further information on Child Care Benefit, refer to The Family Assistance Office. <http://www.familyassist.gov.au>

Child Care Benefit

The Child Care Benefit, introduced in July 2000, assists parents in paying for approved and registered child care regardless of income. All families are entitled to receive some assistance, with a maximum rate paid to those on low income. This benefit may encourage parents to access formal care services because of the reimbursement offered, often paid directly to the child care service providers.[2]

Cost of child care

The cost of formal child care to the service recipient varies according to hours of use and type of service used. In 2002, the median weekly cost of formal care (excluding preschool) ranged from $9 for care of less than five hours to $105 for care of 45 hours or more a week. Long day care and family day care had the highest median weekly costs to the service recipient, $38 and $21 per week respectively. (See *Australian Social Trends, 2004*, Formal child care, pp. 57–60).

Most children who had been in grandparent care (98%) were looked after at no cost to parents.

Social and sporting activities of Aboriginal and Torres Strait Islander peoples

COMMUNITY FUNCTIONING

In 2002, 90% of Indigenous peoples aged 15 years and over had been involved in at least one social or sporting activity in the previous 3 months.

Social activities, including involvement in sport and exercise, can be more than just a source of enjoyment. For many Australians, these activities provide an opportunity for groups to come together, and for individuals to interact on a social level. Researchers suggest that taking part in social activities may also encourage healthy family environments, build stronger communities, and enhance cultural identity.[1,2] According to the 2002 National Aboriginal and Torres Strait Islander Social Survey, 90% of Indigenous peoples aged 15 years and over had been involved in at least one social or sporting activity in the 3 months prior to interview.

Overall participation

Participation in social and sporting activities was consistently high for Indigenous peoples across all age groups, with overall participation decreasing only gradually with age. For example, Indigenous peoples aged 55 years and over were only slightly less likely to have been involved in an activity in the previous 3 months (81%) than those aged 45–54 years (86%). While young Indigenous adults aged 15–24 years reported they had taken part, on average, in four different types of activities in the last 3 months, those aged 55 years and over had taken part in three on average. There was also little variation in the overall participation rates of Indigenous men and women (91% and 89% respectively).

Participation in at least one social or sporting activity(a) — 2002

	Proportion who had participated in at least one social or sporting activity	*Total Indigenous population*
	%	'000
Age		
15–24 years	94.1	82.7
25–34 years	91.6	71.1
35–44 years	89.8	57.8
45–54 years	86.2	38.4
55 years and over	80.8	32.2
Sex		
Males	90.6	135.2
Females	89.5	147.0
Persons	90.0	282.2

(a) Participation by Indigenous persons aged 15 years and over in the 3 months prior to interview.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Social and sporting activities

This article mainly uses data from the 2002 ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS), which collected data about Indigenous persons aged 15 years and over.

NATSISS data about social and sporting activities refer to activities undertaken in the 3 months prior to interview. Detailed data on type of participation in sport and physical activities, and on participation in cultural activities, refer to activities undertaken in the 12 months prior to interview.

See also *National Aboriginal and Torres Strait Islander Social Survey, 2002* (ABS cat. no. 4714.0).

Although Indigenous peoples who assessed their health as Very Good or Excellent were somewhat more likely to have been involved in a social or sporting activity than those who assessed their health as Poor (94% and 82% respectively), participation rates were high for both groups. Similarly, 86% of Indigenous peoples with a disability or long-term health condition had been involved in at least one activity in the past three months – not much less than those who did not have a disability or long-term health condition (92%).

Opportunities for involvement in social and sporting activities can often be connected with a person's workplace. Again, while participation was high for all Indigenous peoples, those who were employed, including those working for the Community Development Employment Projects scheme (CDEP),[3] had participated in social and sporting activities at a slightly higher rate than those who were unemployed (95% compared with 86%). In keeping with this, 95% of those whose primary source of income was wages or salary or CDEP had participated in at least one activity, compared with 85% of those whose primary source of income was a government pension or allowance.

...major cities and regional areas

In 2001, most Indigenous peoples lived in non-remote areas of Australia (i.e. in Major Cities, Inner Regional areas or Outer Regional areas). Three quarters of the Indigenous population (74%) lived in these areas, while the rest (26%) lived in remote areas (i.e.

Remote Australia and Very Remote Australia). In comparison, only 2% of non-Indigenous peoples lived in remote areas.

In non-remote areas, the most commonly reported activity was going to a cafe, restaurant or bar (64% of Indigenous Australians living in non-remote areas had done this in the previous three months). The next most common activities were: visiting a park, zoo, botanical gardens or theme park (46%), going to a movie, theatre or concert (45%), attending a sporting event as a spectator (also 45%), and involvement in sport or physical activities (36%). Community or special interest group activities and church or religious activities were reported least often (16% and 17% respectively).

A similar proportion of Indigenous men and women living in non-remote areas participated in social activities (90% compared with 89%). There was, however, some difference in the types of activities men and women undertook. Indigenous women living in these areas were more likely than Indigenous men to have visited a library, museum or art gallery (38% compared with 25%), and more likely to report involvement in church or religious activities (20% compared with 14%). On the other hand, more Indigenous men had been actively involved in a sport or physical activity (43%) than Indigenous women (29%). Men were also more likely to have attended a sporting event as a spectator (48% compared with 41% of women living in non-remote areas).

Remoteness

The ABS Remoteness classification splits Australia into six areas according to their relative *remoteness* (based on the road distance to the nearest ABS defined urban centre). The six Remoteness Areas are: Major Cities of Australia; Inner Regional Australia; Outer Regional Australia; Remote Australia; Very Remote Australia; and Migratory. (See *Statistical Geography Volume 1 – Australian Standard Geographical Classification (ASGC), 2001*, ABS cat. no. 1216.0).

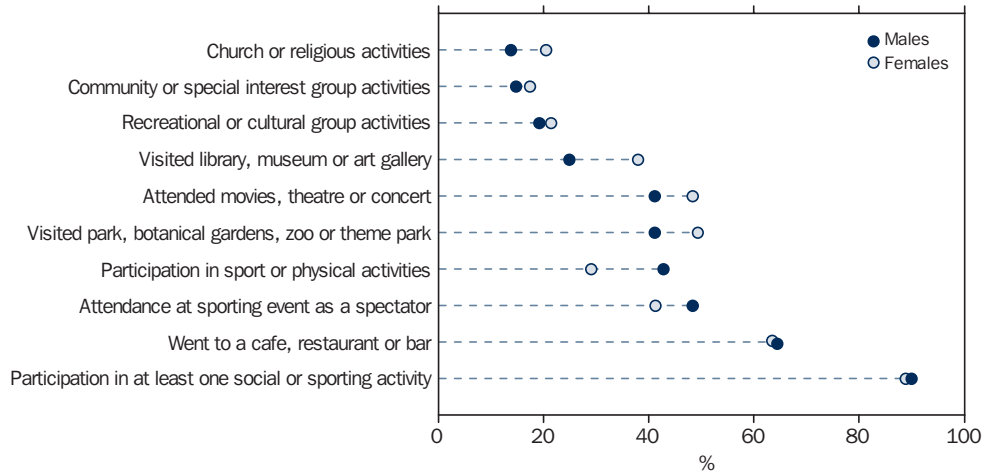
In this article, *remote areas* refers to Remote Australia and Very Remote Australia and *non-remote areas* refers to Major Cities of Australia, Inner Regional Australia and Outer Regional Australia.

There were also some age-related differences in participation. Young Indigenous peoples (aged 15–24 years) living in non-remote areas were three times more likely than those aged 55 years and over to have gone to the movies, the theatre or a concert (61% compared with 21%). Participation in a sport or physical activity was most common among those aged 15–24 years (51%), gradually decreasing with age, to just 15% of older Indigenous peoples.

...remote areas

Sport played a prominent role in the social lives of Indigenous peoples living in remote areas. Attending a sporting event was the most common social or sporting activity (57% had attended in the previous 3 months). People in these areas were least likely to have been to a cafe, restaurant or bar (39%).

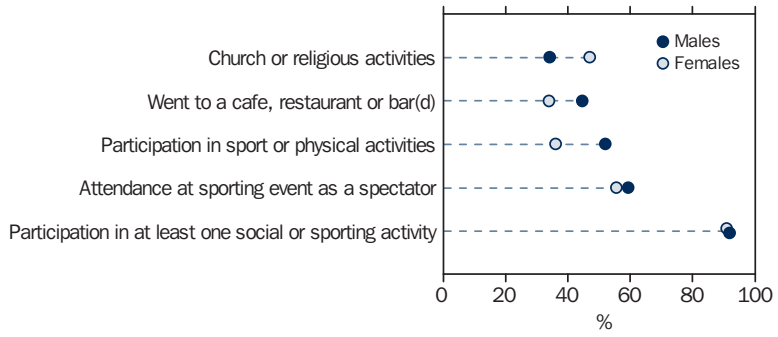
Participation in social and sporting activities in non-remote areas(a)(b) — 2002



(a) Participation by Indigenous persons aged 15 years and over in the 3 months prior to interview.
(b) Major Cities, Inner Regional Australia and Outer Regional Australia. Components do not add to 100% as a person may have participated in more than one activity.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Participation in selected social and sporting activities in remote areas(a)(b)(c) — 2002



(a) Participation by Indigenous persons aged 15 years and over in the 3 months prior to interview.
(b) Remote Australia and Very Remote Australia.
(c) Components do not add to 100% as a person may have participated in more than one activity.
(d) Includes hotels, pubs and canteens.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

As with those living in non-remote areas, Indigenous men and women living in remote areas had similar levels of participation in social and sporting activities (92% and 91% respectively). Indigenous men were more likely to have participated in a sport or physical activity than Indigenous women (52% compared with 36%); but Indigenous women were more involved in church or religious activities (47% compared with 34%).

Around two-thirds of young Indigenous peoples living in remote areas had attended a sporting event (67% of 15–24 year olds), and a similar proportion had participated in sport (66%). Young Indigenous peoples were least likely to have participated in church or religious activities (38%), or to have been to a cafe, restaurant or bar (also 38%). Older Indigenous peoples (aged 55 years and over) were most likely to have participated in church or religious activities (48%), and least likely to have participated in sport or physical activities (19%).

Remote communities

Many Indigenous peoples living in Remote and Very Remote Australia live in discrete communities, referred to in this article as *remote communities*. The National Aboriginal and Torres Strait Islander Social Survey collected data in remote communities in Queensland, South Australia, Western Australia, and the Northern Territory.

The ABS defines a discrete Aboriginal and Torres Strait Islander community as a geographic location, bounded by physical or legal boundaries, and inhabited predominantly by Aboriginal or Torres Strait Islander peoples, with housing and infrastructure managed on a community basis.

See also *Australian Social Trends, 2003*, Services in remote Aboriginal and Torres Strait Islander communities, pp. 55–59.

...remote communities

Indigenous peoples living in remote communities in Queensland, South Australia, Western Australia, and the Northern Territory were asked about their involvement in a range of additional activities, such as fishing and hunting, camping and attending meetings.

Fishing and hunting in a group was a very common activity, reported by over three quarters (82%) of Indigenous peoples living in remote communities. Of the total social and sporting activities asked about, fishing and hunting was by far the most commonly reported activity in these communities. This was true for most age groups. Participation rates for this activity were high for both Indigenous men and Indigenous women in these communities (84% and 81% respectively).

Participation in the other additional activities was also relatively high: 66% had been camping or picnicking in a group and 45% had attended an Aboriginal and Torres Strait Islander Commission (ATSIC), Native Title or other meeting.

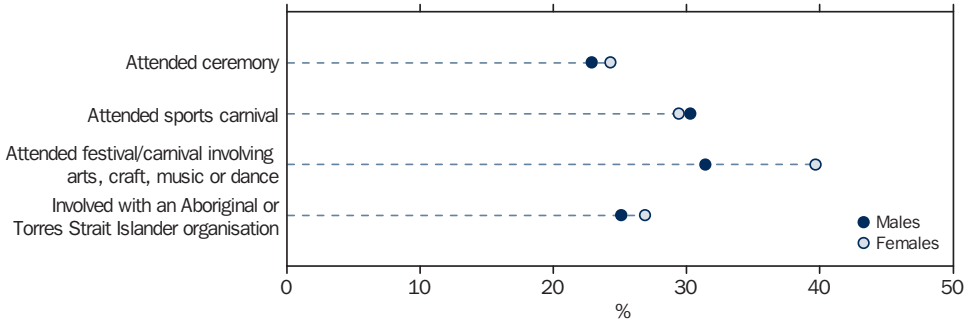
Participation in selected social activities in remote communities(a)(b)(c) — 2002

	Age (%)					*Sex (%)*		
	15–24 years	*25–34 years*	*35–44 years*	*45–54 years*	*55 years and over*	*Males*	*Females*	*Persons*
Fishing or hunting in a group	84.3	84.0	84.4	85.5	66.7	84.0	80.8	82.4
Camping or picnicking in a group	65.5	63.1	66.7	71.2	63.7	65.2	66.0	65.6
Attending an ATSIC, Native Title or other meeting	27.7	44.9	59.1	54.9	51.4	47.5	41.9	44.6

(a) Participation by Indigenous persons aged 15 years and over in the 3 months prior to interview.
(b) Remote communities in Queensland, South Australia, Western Australia, and the Northern Territory.
(c) Components do not add to 100% as a person may have participated in more than one activity.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Participation in selected cultural activities(a) — 2002



(a) Participation by Indigenous persons aged 15 years and over in the 12 months prior to interview. Components do not add to 100% as a person may have participated in more than one activity.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Selected cultural activities

Cultural events such as ceremonies, festivals or carnivals (e.g. involving sports, arts, music or dance) can be integral to building and maintaining social and family networks and community identity. The 2002 National Aboriginal and Torres Strait Islander Social Survey collected data about participation in selected cultural activities, and involvement with Aboriginal or Torres Strait Islander organisations, in the 12 months prior to interview.

Overall, Indigenous women had participated in the selected cultural activities at a somewhat higher rate than Indigenous men (61% and 54% respectively). This mainly reflected women's higher rate of participation in festivals or carnivals involving arts, craft, music or dance (40% compared with 31% of men). Men's and women's rates were similar for participation in ceremonies, sports carnivals and involvement with Aboriginal and Torres Strait Islander organisations.

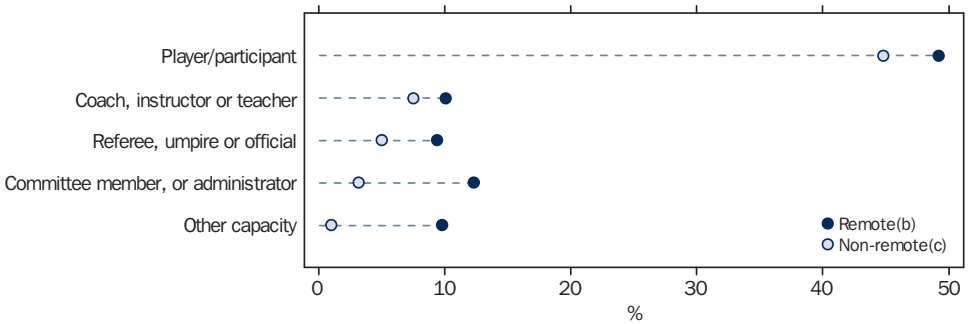
Participation in sport

Although attending a sporting event as a spectator involves interaction between community members, active participation in sporting roles can contribute more directly to community wellbeing.[4] Playing a sport or being physically active also brings a range of health benefits to individuals, including protection against some cancers, a reduction in the risk of diabetes and cardiovascular disease, and improvements in mental health.[5]

Overall, Indigenous peoples living in remote areas had a slightly higher rate of participation in sport over a 12 month period than those in non-remote areas (52% compared with 48%), and men were more likely to have participated than women (57% and 42% respectively).

The most common type of participation in sport was as a player (49% of Indigenous peoples in remote areas, and 45% in non-remote areas). However, many Indigenous peoples took on a role other than

Type of participation in sport by remoteness(a) — 2002



(a) Involvement by Indigenous persons aged 15 years and over in the 12 months prior to interview. Components do not add to 100% as a person may have participated in more than one capacity.
(b) Remote Australia and Very Remote Australia. (c) Major Cities, Inner Regional Australia and Outer Regional Australia.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

that of a player. This was more often the case in remote areas where around 12% of Indigenous peoples had been involved in an administrative capacity, 10% had coached or taught sports, and 9% had been a referee, umpire or other official. By comparison, in non-remote areas, 8% had coached or instructed, 5% had been a referee or umpire, and 3% had been administrators.

Relatively more young Indigenous peoples participated in sport in remote areas than in non-remote areas. Nearly three quarters (73%) of 15–24 year olds living in remote areas had participated in sport compared with around two thirds (65%) of those living in non-remote areas.

Indigenous and non-Indigenous participation in non-remote areas

The ABS 2002 General Social Survey (GSS) collected data from all Australians aged 18 years and over about participation in selected social and sporting activities. The data collected from non-Indigenous people in this survey, who were living in non-remote areas, can be broadly compared with data collected in the ABS 2002 National Aboriginal and Torres Strait Islander Social Survey, about Indigenous peoples living in non-remote areas.

Both Indigenous and non-Indigenous adults living in non-remote areas had high levels of participation in the selected activities (89% and 92% respectively). However, there were differences in participation for some activities. For instance, Indigenous adults were much less likely than non-Indigenous adults to have been to a cafe, restaurant or bar (65% compared with 80%); and were also less likely to have gone to a movie, theatre or concert (42% and 60% respectively), or to have visited a library, museum or art gallery (31% compared with 41%).

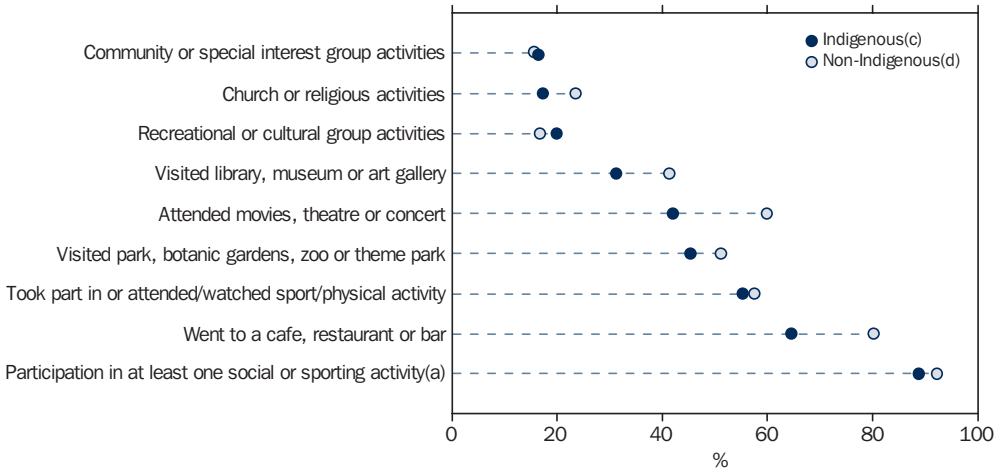
Indigenous adults and non-Indigenous adults had similar participation patterns for other activities. For example, 55% of Indigenous adults living in non-remote areas had taken part in, or watched a sporting event as a spectator, compared with 57% of

ABS General Social Survey

Data allowing some broad comparisons between Indigenous and non-Indigenous people are drawn from two separate sources. The ABS 2002 National Aboriginal and Torres Strait Islander Survey (NATSISS) collected data about a range of issues from Indigenous people aged 15 years and over. The ABS 2002 General Social Survey (GSS) collected very similar data, particularly in relation to participation in social and sporting activities, for non-Indigenous adults aged 18 years and over.

In this article, comparisons are only made between Indigenous and non-Indigenous adults aged 18 years and over living in non-remote areas (i.e. Major Cities of Australia, Inner Regional Australia, or Outer Regional Australia). Comparisons are based on participation in social and sporting activities in the three months prior to interview.

Participation in selected social and sporting activities, adults aged 18 years and over(a) — 2002



(a) Involvement in the 3 months prior to interview by persons aged 18 years or over living in Major Cities, Inner Regional Australia or Outer Regional Australia.
(b) Components do not add to 100% as a person may have participated in more than one of the selected activities.
(c) Data are from the ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.
(d) Data are from the ABS 2002 General Social Survey.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey and ABS 2002 General Social Survey.

non-Indigenous adults in these areas; and 20% of Indigenous adults reported they had participated in recreational or cultural group activities compared with 17% of non-Indigenous adults. There was no difference in the level of participation in community and special interest group activities (both 16%).

There were also some differences between Indigenous adults and non-Indigenous adults living in non-remote areas based on their age. For instance, young Indigenous adults aged 18–24 years were far less likely to have gone to a cafe, restaurant or bar, than young non-Indigenous adults (69% compared with 89%). And just over half (56%) of young Indigenous adults living in non-remote areas had been to a movie, theatre or concert in the previous three months, compared with 82% of young non-Indigenous adults living in these areas.

Endnotes

1 Beneforti, M and Cunningham, J, 2002 *Investigating indicators for measuring the health and social impact of sport and recreation programs in Indigenous communities*, Australian Sports Commission and Cooperative Research Centre for Aboriginal and Tropical Health, Darwin.

2 *Sporting Opportunities for Indigenous People Program*,<http://www.dcita.gov.au/indig/sporting_opportunities/more_about_sporting_opportunities>, accessed 24 September 2004.

3 For more information see the CDEP website <http://www.cdep.com.au>.

4 Townsend, M, Moore, J, and Mahoney, M 2002 'Playing their part: the role of physical activity and sport in sustaining the health and wellbeing of small rural communities', *Rural and Remote Health*, vol. 2, article no. 109, <http://www.regional.org.au/au/rrh/2002/020812_109.htm>, accessed 1 November 2004.

5 Armstrong, T, Bauman, A, and Davies, J 2000, *Physical Activity Patterns of Australian Adults: results of the 1999 National Physical Activity Survey*, AIHW, Canberra.

Health

Health: national summary

HEALTH STATUS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Life expectancy												
1 Life expectancy at birth – males(a)	years	75.0	75.5	75.5	75.6	75.9	76.2	76.6	77.0	77.4	77.8	n.y.a.
2 Life expectancy at birth – females(a)	years	80.9	81.1	81.3	81.3	81.5	81.8	82.0	82.4	82.6	82.8	n.y.a.
3 Life expectancy at age 65 – males(a)	years	15.7	16.0	16.0	16.1	16.3	16.6	16.8	17.2	17.4	17.6	n.y.a.
4 Life expectancy at age 65 – females(a)	years	19.5	19.7	19.8	19.8	20.0	20.2	20.4	20.7	20.8	21.0	n.y.a.
5 Disability-free life expectancy at birth – males	years	n.a.	n.a.	n.a.	n.a.	r57.9	n.a.	n.a.	n.a.	n.a.	59.1	n.y.a.
6 Disability-free life expectancy at birth – females	years	n.a.	n.a.	n.a.	n.a.	r62.0	n.a.	n.a.	n.a.	n.a.	62.2	n.y.a.
7 Males surviving to age 50 years	%	93.8	93.8	93.8	93.8	93.9	93.9	94.0	94.2	94.4	94.7	n.y.a.
8 Females surviving to age 50	%	96.7	96.7	96.8	96.7	96.7	96.7	96.7	96.9	96.9	97.0	n.y.a.
9 Males surviving to age 70	%	72.9	73.7	74.2	74.1	74.7	75.5	76.3	77.3	78.1	78.7	n.y.a.
10 Females surviving to age 70	%	84.5	84.8	85.1	85.0	85.2	85.7	86.1	86.6	86.8	87.1	n.y.a.
11 Males surviving to age 85	%	25.5	27.3	27.4	28.0	28.6	29.9	31.2	32.9	34.0	35.2	n.y.a.
12 Females surviving to age 85	%	45.2	46.5	47.0	47.0	47.8	48.9	50.2	51.6	52.2	53.0	n.y.a.
Mortality(b)												
13 Total number of deaths	'000	126.7	125.1	128.7	129.4	127.2	128.1	128.3	r128.5	133.7	132.3	n.y.a.
14 Standardised death rate (per 1,000 population)	rate	8.1	7.8	7.8	7.6	7.2	7.1	6.8	6.6	6.7	6.4	n.y.a.
15 Infant mortality rate (per 1,000 live births)	rate	5.9	5.7	5.8	5.3	5.0	5.7	5.2	5.3	5.0	4.8	n.y.a.
16 Perinatal mortality rate (per 1,000 live births and fetal deaths combined)	rate	9.1	9.4	10.0	9.2	8.3	8.5	8.3	8.4	8.0	8.0	n.y.a.
Disability(c)(d)												
17 Persons with a disability	%	n.a.	n.a.	n.a.	n.a.	r20.1	n.a.	n.a.	n.a.	n.a.	20.0	n.y.a.
18 Persons with a profound/severe core activity restriction	%	n.a.	n.a.	n.a.	n.a.	r6.4	n.a.	n.a.	n.a.	n.a.	6.3	n.y.a.

CAUSES OF DEATH	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Rates are per 100,000 population(b)												
Leading causes(c)												
19 Cancer	rate	209	205	205	199	196	191	189	189	188	183	n.y.a.
20 Ischaemic heart disease	rate	200	187	182	175	162	153	142	135	130	123	n.y.a.
21 Stroke	rate	86	82	80	75	71	69	66	63	62	59	n.y.a.
Selected cancers(c)												
22 Lung cancer – males	rate	67	64	63	59	59	57	55	54	53	49	n.y.a.
23 Lung cancer – females	rate	21	22	22	22	21	21	22	23	24	22	n.y.a.
24 Breast cancer – females	rate	31	29	29	28	27	25	25	25	25	25	n.y.a.
25 Prostate cancer – males	rate	43	41	42	37	37	35	36	35	35	34	n.y.a.
26 Skin cancer	rate	8	8	8	7	7	7	7	8	7	7	n.y.a.
Heart disease and diabetes(c)												
27 Ischaemic heart disease – males	rate	262	248	240	229	214	202	185	176	170	161	n.y.a.
28 Ischaemic heart disease – females	rate	152	141	136	132	122	115	108	102	98	93	n.y.a.
29 Diabetes mellitus	rate	18	17	18	18	16	16	16	16	17	16	n.y.a.
Motor vehicle accidents												
30 Motor vehicle traffic accident(c)	rate	11	11	11	9	9	9	9	9	8	8	n.y.a.
31 Males aged 15–24 years	rate	31	33	32	28	27	27	28	27	24	23	n.y.a.
32 Females aged 15–24	rate	10	11	8	10	9	9	10	7	8	7	n.y.a.
Suicide												
33 Suicide(c)	rate	13	13	13	15	14	13	12	13	12	11	n.y.a.
34 Males(c)	rate	21	21	22	24	23	22	20	20	19	18	n.y.a.
35 Females(c)	rate	5	6	5	6	6	5	5	5	5	5	n.y.a.
36 Males aged 15–24 years	rate	27	25	26	31	27	23	20	20	19	18	n.y.a.
37 Females aged 15–24	rate	4	6	4	7	6	6	6	5	4	4	n.y.a.
Drug induced(c)												
38 Drug induced	rate	6	6	6	7	9	9	8	5	5	5	n.y.a.
39 Males	rate	7	9	8	10	12	13	11	7	6	6	n.y.a.
40 Females	rate	4	4	4	4	5	5	5	4	4	3	n.y.a.

Health: national summary continued

RISK FACTORS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Immunisation status(e)												
41 Fully immunised children aged 12–15 months	%	n.a.	n.a.	n.a.	n.a.	78.6	86.1	88.4	91.5	90.2	91.0	91.2
42 Fully immunised children aged 24–27 months	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	81.7	86.6	88.1	91.6	91.7
43 Fully immunised children aged 72–75 months	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	80.6	83.7	83.6
Drinking and smoking(f)												
44 Risky/high-risk drinkers – of males aged 18 years and over	%	n.a.	10.3	n.a.	n.a.	n.a.	n.a.	n.a.	13.2	n.a.	n.a.	n.a.
45 Risky/high-risk drinkers – of females aged 18 and over	%	n.a.	6.1	n.a.	n.a.	n.a.	n.a.	n.a.	8.5	n.a.	n.a.	n.a.
46 Current smokers – of males aged 18 and over	%	n.a.	28.5	n.a.	n.a.	n.a.	n.a.	n.a.	27.3	n.a.	n.a.	n.a.
47 Current smokers – of females aged 18 and over	%	n.a.	21.8	n.a.	n.a.	n.a.	n.a.	n.a.	21.4	n.a.	n.a.	n.a.
Diet and exercise(f)												
48 Overweight/obese adults – of males aged 18 years and over	%	n.a.	49.0	n.a.	n.a.	n.a.	n.a.	n.a.	54.4	n.a.	n.a.	n.a.
49 Overweight/obese adults – of females aged 18 and over	%	n.a.	32.5	n.a.	n.a.	n.a.	n.a.	n.a.	38.2	n.a.	n.a.	n.a.
50 Adults with low usual intake of fruit – of males aged 18 and over	%	n.a.	53.2	n.a.	n.a.	n.a.	n.a.	n.a.	53.5	n.a.	n.a.	n.a.
51 Adults with low usual intake of fruit – of females aged 18 and over	%	n.a.	44.7	n.a.	n.a.	n.a.	n.a.	n.a.	41.9	n.a.	n.a.	n.a.
52 Adults who are physically inactive – of males aged 18 and over	%	n.a.	35.0	n.a.	n.a.	n.a.	n.a.	n.a.	30.9	n.a.	n.a.	n.a.
53 Adults who are physically inactive – of females aged 18 and over	%	n.a.	35.2	n.a.	n.a.	n.a.	n.a.	n.a.	32.0	n.a.	n.a.	n.a.
High blood pressure(f)												
54 Hypertension – of males aged 18 years and over	%	n.a.	13.9	n.a.	n.a.	n.a.	n.a.	n.a.	12.8	n.a.	n.a.	n.a.
55 Hypertension – of females aged 18 and over	%	n.a.	r14.5	n.a.	n.a.	n.a.	n.a.	n.a.	13.9	n.a.	n.a.	n.a.

SERVICES	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
56 Hospital separations (per 1,000 population)(c)	rate	267	279	291	296	304	309	312	r320	r328	334	n.y.a.
57 Hospital beds (per 1,000 population)	rate	4.2	4.5	4.6	4.4	4.3	4.2	4.1	4.1	4.0	4.0	n.y.a.
58 Average length of stay in hospital	days	4.6	4.3	4.3	4.2	4.1	3.9	3.8	3.7	3.6	3.5	n.y.a.
59 Doctors (per 100,000 population)	no.	n.a.	n.a.	241	n.a.	n.a.	n.a.	n.a.	248	n.a.	n.a.	n.a.
60 Residential aged care places (per 1,000 population aged 70 and over)	rate	92.6	92.2	90.6	89.2	87.1	85.6	83.6	82.2	81.6	82.8	n.y.a
Medicare usage												
Average Medicare services processed(g)												
61 Per person	no.	r10.1	r10.4	r10.7	r10.7	r10.8	r10.9	r10.9	r11.0	r11.2	11.1	11.3
62 Per male	no.	r8.1	r8.3	r8.6	r8.7	r8.8	r8.9	r8.9	r9.0	r9.2	r9.1	9.3
63 Per female	no.	r12.1	r12.5	r12.8	r12.8	r12.8	r12.9	r13.0	r13.0	r13.3	r13.2	13.2
64 Proportion of Medicare services used by persons aged 65 and over	%	22.0	22.5	23.0	23.6	24.2	24.6	25.3	25.8	r26.4	27.4	28.3

EXPENDITURE	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
65 Persons with private health insurance	%	37.2	34.9	33.6	31.9	30.6	30.6	43.0	44.9	44.3	43.5	42.9
66 Total health expenditure (current prices) per person per year (1999–2000 reference year)	$	2 082	2 183	2 313	r2 459	r2 593	r2 748	r2 910	r3 186	r3 395	r3 652	n.y.a.
67 Total health expenditure (current prices) as a proportion of GDP	%	8.3	8.3	8.4	8.5	8.6	8.7	r8.9	r9.2	9.3	9.5	n.y.a.

(a) For 1994–1996 data, expectation of life was based on annual life tables (statistical models used to represent mortality of a population; for more information, see *Deaths, Australia*, (cat. no. 3302.0)). From 1997, expectation of life has data for three years ending in the year shown in the table heading.
(b) Based on deaths registered during the year.
(c) Rates are age-standardised to the Australian population at 30 June 2001.
(d) Differences indicated between 1998 and 2003 are not statistically significant.
(e) As a proportion of all children in that age group on the Australian Childhood Immunisation Register.
(f) Age-standardised to the 2001 National Health Survey benchmark population.
(g) Average number of services processed per Australian resident.

Reference periods: Data for indicators 1–12 are calculated using data for the three years ending in the year shown in the table heading from 1997 onwards.
Data for indicators 13–16 and 19–40 are for the calendar year.
Data for indicators 17–18 are according to the reference period for the survey of Disability, Ageing and Carers.
Data for indicators 41–43 are at 31 December for 2003 and 2004 and at 30 June for 1998–2002.
Data for indicators 44–55 are according to the reference period for the National Health Survey.
Data for indicators 56, 58, 61–64 and 66–67 are for the financial year ending 30 June.
Data for indicators 57 and 60 is the average of monthly figures over the financial year ending June 30.
Data for indicator 59 is at Census night.
Data for indicator 65 are at the June quarter of each year.

Health: state summary

	HEALTH STATUS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Life expectancy											
1	Life expectancy at birth – males	years	2001–03	77.7	78.2	77.6	77.7	78.1	76.6	72.0	79.2	77.8
2	Life expectancy at birth – females	years	2001–03	82.9	83.1	82.8	82.7	83.0	81.4	77.3	83.8	82.8
3	Males surviving to age 50 years	%	2001–03	94.8	95.2	94.3	94.6	94.7	94.4	88.0	95.6	94.7
4	Females surviving to age 50	%	2001–03	97.2	97.3	96.9	96.8	96.9	96.7	92.8	97.8	97.0
5	Males surviving to age 70	%	2001–03	78.5	79.7	78.2	78.8	79.7	76.3	66.3	82.2	78.7
6	Females surviving to age 70	%	2001–03	87.0	87.7	87.1	87.0	87.5	84.5	76.3	89.1	87.1
7	Males surviving to age 85	%	2001–03	34.9	35.9	35.5	34.4	36.2	31.0	24.9	39.2	35.2
8	Females surviving to age 85	%	2001–03	52.9	53.8	53.0	52.9	53.9	47.8	38.2	55.5	53.0
	Mortality(a)											
9	Total number of deaths	'000	2003	46.1	32.9	23.5	12.2	11.3	4.0	0.9	1.4	132.3
10	Standardised death rate (per 1,000 population)	rate	2003	6.4	6.3	6.4	6.6	6.2	7.4	9.0	5.8	6.4
11	Infant mortality rate (per 1,000 live births)	rate	2003	4.6	5.1	4.8	3.7	4.1	7.0	8.4	5.8	4.8
12	Perinatal mortality rate (per 1,000 live births and fetal deaths combined)	rate	2003	6.8	8.8	7.8	8.3	8.2	11.9	15.2	9.4	8.0
	Morbidity and disability prevalence											
13	Cancer(b)	%	2001	1.4	1.3	1.7	1.2	1.2	1.0	n.a.	1.7	1.4
14	Ischaemic and other heart disease(b)	%	2001	1.6	2.1	2.5	1.8	1.5	2.2	n.a.	2.2	1.9
15	Diabetes(b)	%	2001	2.9	3.1	2.8	2.9	2.7	2.1	n.a.	3.1	2.9
16	Asthma(b)	%	2001	11.1	12.1	12.0	12.6	10.5	11.7	n.a.	12.3	11.6
17	Injury(b)	%	2001	3.7	3.4	4.2	3.3	2.8	4.8	n.a.	4.4	3.7
18	High/very high levels of psychological distress – aged 18 and over(b)	%	2001	12.9	12.9	11.8	14.2	11.1	13.9	n.a.	9.2	12.6
19	Arthritis(b)	%	2001	13.9	12.9	14.1	12.9	13.5	18.7	n.a.	11.8	13.6
20	Persons with a disability(c)(d)	%	2003	17.7	19.9	22.5	22.6	21.4	22.6	n.p.	15.8	20.0
21	Persons with a profound/severe core activity restriction(c)(d)	%	2003	5.4	6.5	7.6	6.5	6.2	7.4	n.p.	5.0	6.3

	CAUSES OF DEATH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Rates are per 100,000 population(a)(e)											
	Leading causes(d)											
22	Cancer	rate	2001–03	183	191	188	188	184	211	195	173	187
23	Ischaemic heart disease	rate	2001–03	128	122	142	134	116	144	147	107	129
24	Stroke	rate	2001–03	66	56	64	60	52	63	54	57	61
	Selected cancers(d)											
25	Lung cancer – males	rate	2001–03	51	51	54	49	55	60	59	38	52
26	Lung cancer – females	rate	2001–03	22	23	23	21	23	32	28	17	23
27	Breast cancer – females	rate	2001–03	24	26	24	28	25	23	20	22	25
28	Prostate cancer – males	rate	2001–03	34	37	36	35	28	43	30	34	35
29	Skin cancer	rate	2001–03	8	6	9	6	7	7	5	7	7
	Heart disease and diabetes(d)											
30	Ischaemic heart disease – males	rate	2001–03	167	161	182	181	151	181	172	143	168
31	Ischaemic heart disease – females	rate	2001–03	96	92	110	99	88	113	114	79	97
32	Diabetes mellitus	rate	2001–03	13	20	15	15	17	23	47	15	16
	Motor vehicle accidents											
33	Motor vehicle traffic accident(d)	rate	2001–03	8	8	9	10	9	9	23	4	8
34	Males aged 15–24	rate	2001–03	22	23	27	28	31	21	49	9	25
35	Females aged 15–24	rate	2001–03	6	6	9	9	10	8	32	5	8
	Suicide											
36	Suicide(d)	rate	2001–03	11	11	14	12	13	15	24	11	12
37	Males(d)	rate	2001–03	17	17	22	21	20	24	41	17	19
38	Females(d)	rate	2001–03	4	5	5	5	6	6	6	4	5
39	Males aged 15–24	rate	2001–03	15	15	24	23	26	16	62	15	19
40	Females aged 15–24	rate	2001–03	3	4	5	4	5	3	11	8	4
	Drug induced(d)											
41	Drug induced	rate	2001–03	5	5	4	5	5	5	5	6	5
42	Males	rate	2001–03	7	7	6	6	5	5	7	7	6
43	Females	rate	2001–03	3	4	3	4	4	5	2	5	4

Health: state summary continued

	RISK FACTORS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Immunisation status(f)											
44	Fully immunised children aged 12–15 months	%	2004	90.7	91.3	91.4	91.0	91.7	93.0	89.7	92.8	91.2
45	Fully immunised children aged 24–27 months	%	2004	91.1	92.6	91.6	93.3	89.8	92.9	93.8	92.0	91.7
46	Fully immunised children aged 72–75 months	%	2004	83.7	85.7	81.6	84.3	80.6	83.4	86.7	87.2	83.6
	Drinking and smoking(b)											
47	Risky/high-risk drinkers – of males aged 18 and over	%	2001	13.1	10.9	15.8	14.0	13.9	12.8	n.a.	14.1	13.2
48	Risky/high-risk drinkers – of females aged 18 and over	%	2001	8.6	7.7	8.1	8.0	11.1	7.0	n.a.	9.3	8.5
49	Current smokers – of males aged 18 and over	%	2001	27.2	27.7	30.5	28.2	24.8	25.0	n.a.	20.9	27.3
50	Current smokers – of females aged 18 and over	%	2001	21.3	20.6	20.7	21.4	21.5	23.7	n.a.	19.0	21.4
	Diet and exercise(b)											
51	Overweight/obese adults – of males aged 18 and over	%	2001	54.5	54.4	55.8	51.9	55.0	54.2	n.a.	51.9	54.4
52	Overweight/obese adults – of females aged 18 and over	%	2001	37.6	37.9	41.3	38.1	36.2	36.6	n.a.	32.6	38.2
53	Adults with low usual intake of fruit – of males aged 18 and over	%	2001	53.9	54.2	50.3	62.2	50.1	56.2	n.a.	50.6	53.5
54	Adults with low usual intake of fruit – of females aged 18 and over	%	2001	43.8	39.7	39.6	43.4	40.8	43.8	n.a.	40.9	41.9
55	Adults who are physically inactive – of males aged 18 and over	%	2001	32.8	28.2	31.2	31.7	28.8	31.9	n.a.	24.0	30.9
56	Adults who are physically inactive – of females aged 18 and over	%	2001	36.1	28.8	33.0	32.4	28.1	32.0	n.a.	24.2	32.0
	High blood pressure(b)											
57	Hypertension – of males aged 18 and over	%	2001	12.7	11.9	11.8	12.6	12.9	16.0	n.a.	16.2	12.8
58	Hypertension – of females aged 18 and over	%	2001	14.3	14.2	15.6	14.0	13.1	16.0	n.a.	12.0	13.9

	SERVICES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
59	Hospital separations (per 1,000 population)(d)	rate	2002–03	294	362	352	356	344	n.p.	n.p.	n.p.	334
60	Hospital beds (per 1,000 population)	rate	2002–03	3.8	3.8	4.2	5.2	3.7	n.a.	n.a.	n.a.	4.0
61	Average length of stay in hospital	days	2002–03	3.8	3.4	3.4	3.7	3.4	n.p.	n.p.	n.p.	3.5
62	Doctors (per 100,000 population)	rate	2001	251	252	234	276	232	235	253	287	248
63	Residential aged care places (per 1,000 population aged 70 and over)	no.	2003	81.6	80.9	85.7	87.6	82.7	84.1	105.4	74.5	82.8
	Medicare usage											
	Average Medicare services processed(h)											
64	Per person	no.	2003–04	12.0	11.3	10.9	11.3	10.1	10.4	6.3	9.1	11.3
65	Per male	no.	2003–04	10.1	9.3	9.0	9.3	8.1	8.4	4.8	7.1	9.3
66	Per female	no.	2003–04	14.0	13.3	12.9	13.2	12.2	12.3	7.9	11.0	13.2
67	Proportion of Medicare services used by persons aged 65 and over	%	2003–04	28.6	29.3	27.0	31.3	26.0	29.6	10.8	21.9	28.3

	EXPENDITURE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
68	Persons with private health insurance	%	2004	44.2	42.2	40.1	43.9	31.8	45.6	42.1	(g)	42.9

(a) Based on deaths registered during the year.
(b) Rates are age standardised to the 2001 National Health Survey benchmark population.
(c) Disability estimates for Northern Territory relate to mainly urban areas only.
(d) Rates are age-standardised to the 2001 Australian population as at June 30.
(e) Rates are calculated using the average of three years of data divided by the population of the middle year.
(f) As a proportion of all children in that age group on the Australian Childhood Immunisation Register.
(g) The Australian Capital Territory is included in New South Wales.
(h) Average number of services processed per Australian resident.

Reference periods: Data for indicators 1–8 are calculated using the average of three years of data.
Data for indicators 9–11 are for the calendar year.
Data for indicators 13-19 are according to the reference period for the most recent National Health Survey.
Data for indicators 20–21 are according to the reference period for the Survey of Disability, Ageing and Carers.
Data for indicators 22–43 are calculated using the average of three years of deaths data, divided by the population of the middle year.
Data for indicators 44–46 are at 31 December.
Data for indicators 47–58 are according to the reference period for the most recent National Health Survey.
Data for indicators 59, 61 and 64–67 are for the financial year ending June.
Data for indicators 60 and 63 is the average of monthly figures over the financial year ending June 30.
Data for indicator 62 as at Census night.
Data for indicator 68 are for the June quarter.

Health: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
ABS 1995 National Health Survey; ABS 2001 National Health Survey.	44–47, 52–55	—
ABS 1995 National Nutrition Survey; ABS 2001 National Health Survey.	48–51	—
ABS 1998 and 2003 Survey of Disability, Ageing and Carers.	5–6	—
ABS 1996 and 2001 Census of Population and Housing and *Australian Demographic Statistics, September Quarter* 1996 and 2001 (ABS cat. no. 3101.0).	59	62
ABS 2001 National Health Survey.	—	13–19, 47–58
ABS Causes of Death Collection 1994–2003.	19–40	22–43
Australian Childhood Immunisation Register <http://www.hic.gov.au/providers/health statistics/statistical reporting/acir.htm>.	41–43	44–46
Australian Institute of Health and Welfare (AIHW), *Australian Hospital Statistics*, (AIHW cat. no. HSE-32).	56–58	59–61
AIHW, *Health Expenditure Australia*, (AIHW cat. no. HWE-24).	66–67	—
AIHW, *Residential Aged Care in Australia: A Statistical Overview,* (AIHW cat. no. AGE- 38).	60	63
Causes of Deaths, Australia, *1999, 2003* (ABS cat. no. 3303.0).	16	12
Deaths, Australia, 1999, 2003 (ABS cat. no. 3302.0).	1–4, 7–15	1–11
Disability, Ageing and Carers, Australia: Summary of Findings, 2003 (ABS cat. no. 4430.0).	17–18	20–21
Department of Health and Ageing, *2005* <http://www.health.gov.au/internet/WCMS/publishing.nst/content/med.stat _sep04_tables _c/$file/tablesclb.pdf> last accessed 2/2/2005.	61–64	64–67
Private Health Insurance Administration Council Annual Report.	65	68

Health: definitions

Arthritis (prevalence)
based on people reporting arthritis as a long-term condition (lasting or expecting to last six months or more), including osteoarthritis, rheumatoid arthritis, other arthritis and arthritis type unknown.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Asthma (prevalence)
based on people reporting having asthma. Asthma was assumed to be a long-term condition (lasting or expecting to last six months or more).
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Average length of stay in hospital
the total number of occupied bed days in both public and private hospitals divided by the total number of separations.
Reference: *Australian Hospital Statistics, 2000–01,* Australian Institute of Health and Welfare (AIHW).

Average Medicare services processed
average number of services processed per Australian resident per year.
Reference: Health Insurance Commission, *Financial Statements and Statistical Tables, 2001–02.*

Breast cancer deaths
deaths where malignant neoplasm of the breast is identified as the underlying cause (ICD-9 codes 174–175 up to 1996, ICD-10 code C50 from 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Cancer (prevalence)
based on people reporting a malignant neoplasm (cancer). Cancer was assumed to be a long-term condition (lasting or expecting to last six months or more).
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Cancer deaths
deaths where malignant neoplasms are identified as the underlying cause (ICD-9 codes 140–208 up to 1996, ICD-10 codes C00–C97 from 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Causes of death
underlying causes of death are classified to the International Classification of Diseases 9th and 10th Revision (ICD-9 up to and including 1996, and ICD-10 for 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Current smokers
persons aged 18 years and over who reported being current smokers. Smoking included manufactured (packet) cigarettes, roll-your-own cigarettes, cigars or pipes per day. Smoking excludes chewing tobacco and smoking of non-tobacco products.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Health: definitions continued

Deaths
based on the year in which the death was registered. Death is the permanent disappearance of all evidence of life after birth has taken place. For the purposes of the Deaths and Causes of Death collections conducted by the ABS, a death refers to any death which occurs in, or en route to Australia and is registered with a state or territory Registry of Births, Deaths or Marriages.
Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Diabetes (prevalence)
based on people reporting diabetes as a long-term condition (lasting or expecting to last six months or more). Diabetes Mellitus Type I and II were assumed to be long-term conditions.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Diabetes mellitus deaths
deaths where diabetes mellitus was identified as the underlying cause (ICD-9 code 250 up to 1996; ICD-10 codes E10–E14 for 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Disability
is an umbrella term for impairments, activity limitations and participation restrictions. Disability (as collected) is the presence of a limitation, restriction or impairment due to a physical, emotional or nervous condition which had lasted or was likely to last six months or more.
Reference: *International Classification of Functioning, Disability and Health 2001*, World Health Organisation and *Disability, Ageing and Carers, Australia, 2003: Summary of Findings* (ABS cat. no. 4430.0).

Disability-free life expectancy
the average number of years at birth a person might expect to live free of disability.
Reference: *Australian Health Trends, 2000,* AIHW.

Doctors per 100,000 population
the number of practising general and specialist medical practitioners per 100,000 estimated resident population on Census night of that year.
Reference: 2001 Census of Population and Housing, (ABS cat. no. 2008.0).

Drug induced deaths
any death directly caused by an acute episode of poisoning or toxicity to drugs, including deaths from accidental overdoses, suicide and assault, and any death from an acute condition caused by habitual drug use. The term 'drug' refers to substances classified as drugs that may be used for medicinal or therapeutic purposes and those that produce a psychoactive effect excluding alcohol, tobacco and volatile solvents (e.g. petrol).
Reference: *Information paper: Drug-Induced Deaths – A Guide to ABS Causes of Death Data* (ABS cat. no. 4809.0.55.001).

Fetal death
the delivery of a child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) which did not, at any time after delivery, breathe or show any other evidence of life such as a heartbeat.
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Fully immunised children
children recorded as having received all the required vaccinations scheduled for their age, or who are following a prescribed catch-up schedule, as a proportion of all children on the Australian Childhood Immunisation Register. The required vaccinations are based on the Australian Standard Vaccination Schedule funded vaccines recommended under the National Immunisation Program.
Reference: Australian Childhood Immunisation Register.

Health expenditure
expenditure on health goods and services, health-related services and health-related investment. Health goods expenditure includes expenditure on pharmaceuticals, aids and appliances; health services expenditure includes expenditure on clinical interventions, health-related services expenditure includes expenditure on public health, research and administration, and health-related investment includes expenditure on capital formation. Health expenditure does not include: expenditure that may have a health related outcome but which is undertaken outside the health sector, (such as expenditure on building safe transport systems or the education of health professionals); expenditure on personal activities not directly related to maintaining or improving personal health; and expenditure that does not have health as the main area of expected national benefit.
Reference: *Health and Welfare Expenditure Series, Number 17: Health Expenditure Australia 2001–2002,* AIHW.

Hospital beds (per 1,000 population)
the total number of beds in all hospitals providing acute care services per 1,000 population averaged over each month of the financial year. Hospitals providing acute care services are those in which the treatment typically require short durations of stay.
Reference: *Australian Hospital Statistics, 2000–01,* AIHW.

Hospital separations (per 1,000 population)
the total number of separations in all hospitals (public and private) providing acute care services per 1,000 estimated resident population at 31 December of the reference year. A separation is an episode of care which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay ending in a change of status (for example from acute care to rehabilitation). The inclusion of status changes has been progressively introduced since 1995–96. Hospitals providing acute care services are those in which the treatments typically require short durations of stay.
Reference: *Australian Hospital Statistics, 2001–2002,* AIHW.

Hypertension (prevalence)
based on people reporting hypertension (high blood pressure) as a long-term condition (lasting or expecting to last six months or more). People are considered hypertensive if they are on tablets for high blood pressure and/or their systolic blood pressure is 160 mmHg or greater and/or their diastolic blood pressure is 95 mmHg or greater.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Infant mortality rate
the number of deaths of children under one year of age in one calendar year per 1,000 live births in the same calendar year.
Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Injury (prevalence)
based on people reporting injury as a long-term condition (lasting or expecting to last six months or more), including fractures, dislocations, sprains, wounds, bruising, crushing, burns, poisoning and surgical complications.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Ischaemic and other heart disease (prevalence)
based on people reporting ischaemic or other heart disease as a long-term condition (lasting or expecting to last six months or more), including heart attack, angina and other heart disease. Heart attack and rheumatic heart disease were assumed to be long-term conditions.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Health: definitions continued

Ischaemic heart disease deaths
deaths where coronary heart diseases, including heart attack (acute myocardial infarction, coronary occlusion) and angina (angina pectoris), are identified as the underlying cause (ICD-9 codes 410–414 up to 1996; ICD-10 codes I20–I25 for 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Life expectancy
refers to the average number of additional years a person of a given age and sex might expect to live if the age specific death rate of the given period continues throughout his / her life time.
Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Live birth
the delivery of a child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) who after being born, breathed or showed any other evidence of life such as a heartbeat.
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Low usual intake of fruit
includes persons who reported usually eating one serve or less of fruit (excluding drinks and beverages) each day and persons who do not eat fruit. Fruit includes fresh, dried, frozen and tinned. A serve of fruit is approximately 150 grams of fresh fruit or 50 grams of dried fruit.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Lung cancer deaths
deaths where malignant neoplasm of the trachea, bronchus and lung are identified as the underlying cause (ICD-9 code 162 up to 1996; ICD-10 codes C33–C34 for 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Medicare services
Medicare is Australia's universal health insurance scheme. Services include access to free treatment as a public (Medicare) patient in a public hospital, and free or subsidised treatment by medical practitioners including general practitioners, specialists, participating optometrists or dentists (specified services only).
Reference: Health Insurance Commission.

Motor vehicle traffic accident deaths
deaths where motor traffic accidents are identified as the underlying cause (ICD-9 codes E810–E819 up to 1996; ICD-10 relevant codes selected from V01–V89 for 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Neonatal deaths
deaths of any child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) who was born alive (as defined under live birth) and who died within 28 days of birth.
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Overweight or obese adults
overweight is defined by a body mass index (BMI) greater than or equal to 25 and less than 30, while obesity is defined by a BMI greater than or equal to 30. BMI is body weight in kilograms divided by the square of height in metres.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Perinatal mortality rate
the annual number of fetal and neonatal deaths per 1,000 live births and fetal deaths combined (where birthweight was at least 400 grams).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Persons with private health insurance
proportion of the total population with private health insurance.
Reference: *Private Health Insurance Administration Council (PHIAC) Annual Report 2001–02, PHIAC, Canberra.*

Physically inactive
includes persons who reported that within the two-week reference period they did not undertake any deliberate exercise activities, including walking, for sport, recreation or fitness and persons who exercised at a very low level based on the frequency, duration and intensity of their reported exercise.
Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Private health insurance
provides cover against all or part of hospital theatre and accommodation costs in either a public or private hospital, medical costs in hospital, and costs associated with a range of services, not covered under Medicare including private dental services, optical, chiropractic, home nursing, ambulance, natural therapies and other ancillary services.
Reference: Private Health Insurance Administration Council, *Insure? Not Sure?* <http://www.phiac.gov.au/insurenotsure/pdf/insure.pdf>, accessed 03 April 2003.

Profound/severe core activity restriction
the person: is unable to do, or needs help with, a core activity task (communication, mobility or self-care); or, has difficulty understanding or being understood by family or friends; or can communicate more easily using sign language or other non-spoken forms of communication.
Reference: *Disability, Ageing and Carers, Australia: Summary of findings* (ABS cat. no. 4430.0).

Prostate cancer deaths
deaths where malignant neoplasm of the prostate gland is identified as the underlying cause (ICD-9 code 185 up to 1996; ICD-10 code C61 for 1997 and onwards).
Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Psychological distress
derived from the Kessler 10 Scale (K10). This is a scale of non-specific psychological distress based on 10 questions about negative emotional states in the four weeks prior to interview. The K10 is scored from 10 to 50, with high scores indicating a high level of distress, and low scores indicating a low level of distress. Scores are grouped as follows:
- Low (10–15)
- Moderate (16–21)
- High (22–29)
- Very High (30–50).

Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Residential aged care places (per 1,000 population aged 70 years and over)
the number of beds which are provided for long-term nursing care to chronically ill, frail or disabled persons, and beds provided for people who are unable to live wholly independently but do not require nursing care, per 1,000 of the population aged 70 years and over, averaged over each month of the financial year.
Reference: *Residential Aged Care in Australia 2000–01: A statistical overview*, (AIHW cat. no. AGE-22).

Health: definitions continued

Risky/high-risk drinkers

males aged 18 years and over who reported drinking more than 50 ml and up to and including 75 ml of absolute alcohol (risky) or more than 75 ml (high-risk) on average per day, and females aged 18 years and over who reported drinking more than 25 ml and up to and including 50 ml of absolute alcohol (risky) and more than 50 ml (high-risk) on average per day.

Reference: *National Health Survey: Summary of Results, 2001* (ABS cat. no. 4364.0).

Skin cancer deaths

deaths where malignant neoplasm of the skin, including both melanoma and non-melanocytic skin cancer is identified as the underlying cause (ICD-9 codes 172–173 up to 1996; ICD-10 codes C43–C44 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Standardised rates

these enable the comparison of rates between populations with differing age structures by relating them to a standard population. These rates are the overall rates that would have prevailed in the standard population if it had experienced at each age the rates of the population being studied. Mortality and Medicare usage rates use the 2001 Australian population as the standard population. All other standardised rates use the Australian population of the year that the survey was last collected.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Stroke deaths

deaths where cerebrovascular disease (causing a blockage (embolism) or rupture (haemorrhage) of blood vessels within or leading to the brain) is identified as the underlying cause (ICD-9 codes 430–438 up to 1996; ICD-10 codes I60–I69 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Suicide deaths

deaths where suicide is identified as the underlying cause (ICD-9 codes E950–E959 up to 1996; ICD-10 codes X60–X84 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Survival to 50, 70 and 85 years

the probability of survival to specific ages represents the proportion of survivors from birth to that age in a life table. Estimates are based on Life Tables calculated by the Australian Bureau of Statistics. For 1992 to 1996 data, expectation of life has been based on annual life tables. From 1997 onwards, expectation of life has been calculated using data for the three years ending in the year shown in the table heading. In accordance with this, from 1992 to 1996 the probability of survival is based on life tables calculated using annual life tables. From 1997 onwards, the probability of survival is based on life tables calculated using three years of data ending in the year shown in the table heading.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Total number of deaths

Based on the year in which the death was registered. Estimates may differ from estimates given in the Population chapter of this publication, which are based on the year in which the death occurred.

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Colorectal cancer

MORTALITY AND MORBIDITY

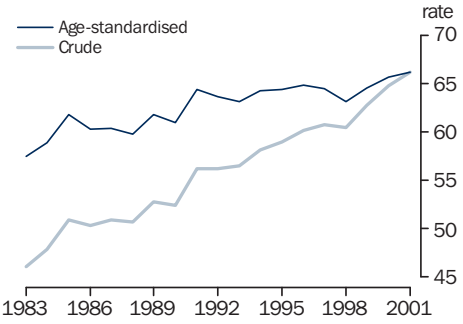
Close to 90% of people diagnosed with colorectal cancer at the earliest stage are alive five years later (if other causes of death are excluded). However, most cases are detected at a later stage.

Cancer is a National Health Priority Area. These areas are highlighted by health ministers for the attention of policy makers and the public as they add significantly to the burden of disease in Australia, but also have the potential for significant health gains. Colorectal cancer is one of eight cancers prioritised within the National Health Priority Framework. It is the most commonly occurring cancer in Australia (excluding non-melanomic skin cancer for which data are not available), and the second most common cancer-related cause of death, responsible for 4,447 deaths in 2003.

Colorectal cancer has features which set it apart from most other cancers. Most cases are thought to originate in benign lesions (adenomas), which can be detected and removed. Once a cancer develops it remains localised for a relatively long period, with a high proportion of people surviving five years after diagnosis if their cancer is detected and treated at this early stage. However, most cases are detected at a later stage and so, overall, close to 60% of people diagnosed with the disease survive five years (if other causes of death are excluded).[1]

Colorectal cancer is therefore a focus of policy interest because of the possibility that the mortality rate could be reduced through screening programs to detect adenomas and cancers. Further, there have been moves to reduce mortality and improve the quality of life of colorectal cancer patients by encouraging best practice by clinicians. Finally, because some risk factors for this cancer are reasonably well understood, there is potential for preventing the disease.

Colorectal cancer incidence rates(a)



(a) Rate per 100,000 population.

Source: Australian Institute of Health and Welfare Interactive cancer data cubes.

Data sources and definitions

Information in this article on the incidence of colorectal cancer are drawn from data held by the National Cancer Statistics Clearinghouse, at the Australian Institute of Health and Welfare (AIHW). Survival information is reproduced from research by the Cancer Monitoring Unit of the AIHW, based on incidence data and other data. Mortality data are from the ABS Causes of Death collection. Data on diet, weight, exercise habits and smoking were collected in ABS National Health Surveys.

Cancer (malignant neoplasm) is a group of diseases consisting of the uncontrolled growth of cells capable of spreading to other parts of the body, replacing normal tissue (Codes C00–C97 of the International Classification of Diseases and Related Health Problems, 10th revision (ICD-10)).

Colorectal cancer is cancer that originates in the inner wall of the colon or rectum (Codes C18–C21 of ICD-10).

Crude incidence rate of colorectal cancer is the number of new cases reported to Australian cancer registries in a year, per 100,000 population.

Age-specific incidence rate of colorectal cancer is the number of new cases affecting people of a specific age group, reported to Australian cancer registries in a year, per 100,000 population in that age group.

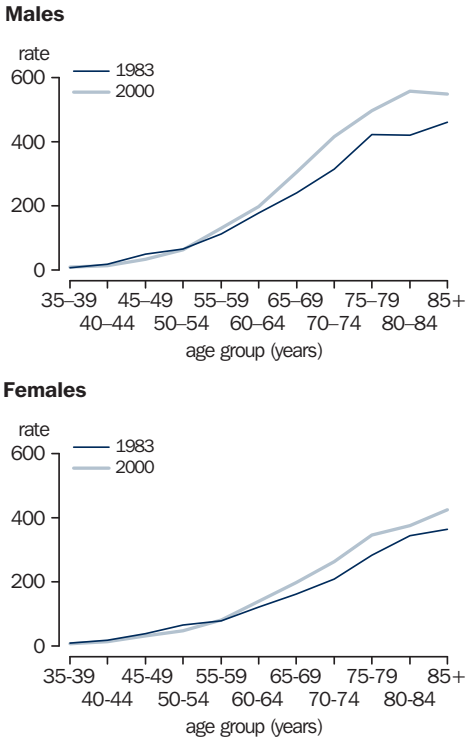
Age-standardised incidence rate of colorectal cancer is the incidence rate which would have prevailed in a particular year if the population had had the same age structure as the 2001 Australian population. Age-standardising enables comparison of rates between populations with different age structures.

Risk of developing colorectal cancer before the age of 75 years approximates the risk of developing colorectal cancer before this age, assuming that the risk remains at 2002 levels throughout life.

New cases

There were 12,844 new cases of colorectal cancer in 2001, up from 7,093 in 1983. The crude incidence rate of colorectal cancer increased from 46 new cases per 100,000 people in 1983 to 66 new cases per 100,000 in 2001, an increase of 43% (on average, the rate increased by 2% per year). Colorectal cancer is strongly age-related and a large part of this increase in the crude rate was due to the ageing of the population. That is, the age profile of the Australian population changed over the period, so that a larger proportion of the population fell in the older age range, where colorectal cancer is more common.

Age-specific incidence rates(a), colorectal cancer



(a) Rate per 100,000 population.

Source: Australian Institute of Health and Welfare Interactive cancer data cubes.

However, not all of the increase in the incidence of colorectal cancer was due to the ageing of the population. When adjusted to remove the effect of an ageing population, there was an increase of 15% in the incidence rate between 1983 and 2001. This increase stems mostly from increases in incidence that occurred among people aged 55 years and over, while incidence decreased slightly among people aged 40–54 years. Improved detection, due to medical advances or to better public awareness, could account for some of these increases in age-specific incidence rates of colorectal cancer among older people. Such effects have been observed for prostate and cervical cancer (see *Australian Social Trends 2004*, 'Cancer Trends' pp. 72–76).

In 2001, the risk of developing colorectal cancer before the age of 75 years was 1 in 17 for males and 1 in 26 for females.[2] At younger ages, colorectal cancer is rare, and about equally as common in males and females. Incidence rises sharply and progressively from the middle years, and rates for men exceed rates for women across the older age groups. This difference was further accentuated between 1983 and 2001 because there was a greater rate of increase in the age-specific incidence rates for older men than for older women. In 1983, the age-standardised incidence rate of colorectal cancer for males was 35% higher than the equivalent rate for females and in 2001 this difference had increased to 43%.

Mortality and survival

Deaths from colorectal cancer are deaths where the underlying cause of death, listed on the medical certificate of cause of death, is colorectal cancer (Codes C18–C21 of ICD-10).

Age-standardised death rate is the death rate which would have prevailed in a particular year if the population had had the same age structure as the 2001 Australian population.

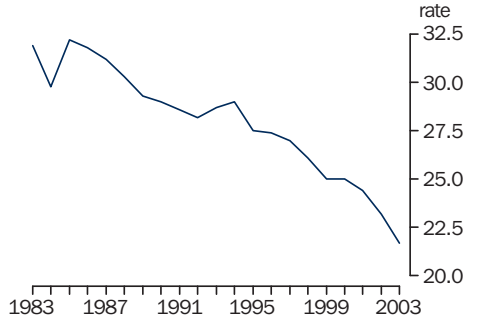
In cancer statistics, *survival* refers to periods of time lived after diagnosis. *Five year relative survival proportions* represent the proportion of all people diagnosed with colorectal cancer in a particular period who would survive at least five years after diagnosis if other causes of death are excluded.

A five year period is widely used in cancer survival measures, although some people who survive five years will subsequently die of the disease. For example, in one Australian study, relative survival proportions for people diagnosed with colorectal cancer were 51% after five years, decreasing to 49% after ten years.[6] Survival should not be confused with cure, which in cancer statistics generally refers to people who have survived sufficient time after diagnosis that their chance of dying of the disease is estimated to be the same as that of people in the general population who have not been diagnosed with the disease.

Mortality

In 2003, 4,447 people died from colorectal cancer: 2,419 males and 2,028 females. After adjusting for the ageing of the population, the death rate from colorectal cancer decreased between 1983 and 2003. The age-standardised death rate was 32.0 deaths

Death rate(a), colorectal cancer



(a) Age-standardised rate per 100,000 population.

Source: Causes of death, 2003 (ABS cat. no. 3303.0).

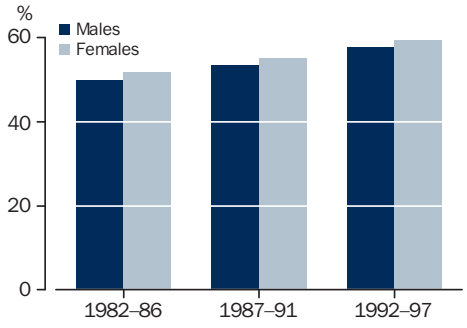
per 100,000 population in 1983 and slowly declined to 21.7 deaths per 100,000 in 2002. This downward trend contrasts with the increase in the age-standardised incidence rate between 1983 and 2001. These differing trends in incidence rates and death rates are consistent with increased survival.

Survival

More than half of people diagnosed with colorectal cancer are likely to be alive five years after diagnosis. The relative five year survival proportion from colorectal cancer has increased over the last two decades, for both sexes. For males diagnosed over the period 1982–1986 it was 50% but for those diagnosed 1992–1997 it was 58%. For females the increase in relative five year survival proportions was from 52% in 1982–1986 to 59% in 1992–1997.[1]

Factors which could have impacted on survival data include improved surgical outcomes, an increase in early detection or in detection itself, and the use of adjuvent chemotherapy for stage C and some stage B cancers. Such changes can influence statistics in a number of ways. For example, a trend to earlier diagnosis can of itself add to the average time between diagnosis and death of those who ultimately die from the disease, as well as having an effect through enabling life extending or life saving treatment for others. Improved detection can mean that some cancers are diagnosed in elderly people that previously would have gone undiagnosed.

Crude five-year relative survival proportions(a) for colorectal cancer



(a) Proportion who would have survived at least five years after diagnosis if other causes of death were excluded.

Source: Australian Institute of Health and Welfare (AIHW) and the Australasian Association of Cancer Registries (AACR) 2003, *Cancer in Australia 2000* AIHW cat. no. CAN 18. Canberra: AIHW (Cancer series no. 23).

Survival by stage at diagnosis

The stage colorectal cancer has reached before diagnosis is a strong factor affecting likelihood of survival. In Australia and the United States, five year relative survival proportions are around 90% for people whose colorectal cancer is detected while still localised within the bowel wall.[3, 4, 5] As people with such early stage colorectal cancer often have few symptoms, most people are diagnosed at one of the later stages. For example, in a South Australian study, people whose colorectal cancer was diagnosed at the earliest stage had a five year case survival of 88%, but only 15% of the patients in the study were diagnosed at this early stage.

Variation in surviving colorectal cancer five years, by stage of disease – an example from South Australia(a)

	%
Stage A: cancer has not penetrated all the layers of the wall of the colon or rectum	88
Stage B: cancer has penetrated all the layers of the wall of the colon or rectum	70
Stage C: cancer has penetrated into or through the wall and cancer cells are found in nearby lymph nodes	43
Stage D: secondary cancers are found and/or cancer cells are found in distant lymph nodes	7

(a) Based on patients treated in four South Australian teaching hospitals 1980–1995, whose stage was known (2,906 people). The Kaplan-Meier method was used to estimate five year case survival. The Australian Clinico-Pathological Staging System was used.

Source: South Australian Cancer Registry.[3]

Screening programs

Screening programs for colorectal cancer, aimed at people at average risk, could potentially save lives. However, this outcome depends on having a screening method that is sufficiently accurate, cost effective and which people are prepared to undergo. In 2002, the Australian Government commenced a pilot screening program aimed at people aged 55–74 years, based on testing stool samples for blood,[6] and in the 2005–06 Budget allocated funds over three years to phase in a national bowel cancer screening program. Some trials suggest that colorectal cancer mortality might be reduced by 15–30% through such a program.[1]

Optimising treatment

One part of an Australian colorectal cancer control strategy has been the development of a set of guidelines for the prevention, diagnosis and treatment of colorectal cancer,

International comparison

In the late 1990s Australia ranked fifth for males and second for females in the incidence of colorectal cancer, out of 173 countries for which information was available. Australia's ranking for mortality from colorectal cancer was somewhat lower than for incidence, fifteenth for males and seventeenth for females.

	Incidence(a)		Mortality(b)	
	Male	Female	Male	Female
Australia	47.4	35.9	18.7	13.3
Canada	42.2	30.6	16.1	11.7
France	40.8	25.9	18.2	11.8
Germany	45.5	33.1	19.9	15.7
Japan	49.3	26.5	17.3	11.1
New Zealand	53.0	42.2	23.2	18.6
United Kingdom	39.2	26.5	17.5	12.4
United States	44.6	33.1	15.2	11.6
More developed regions	40.0	26.6	17.7	12.3
Less developed regions	10.2	7.7	6.2	4.7

(a) Number of new cases per 100,000 population, age-standardised to the world population.
(b) Number of deaths per 100,000 population, age-standardised to the world population.

Source: International Agency for Research on Cancer, World Health Organisation.[8]

produced in consultation with experts and professional bodies.[7] The guidelines aim to consolidate advances in knowledge across the medical profession, and inform patients. In 2000, the guidelines were used as a basis for a national survey of clinicians.[9] Feedback was provided to clinicians on how their practice compared with the guidelines. The survey report also contributed to the discussion of cancer control, by examining general issues regarding delivery of care.[9]

Risk factors

Besides age, genetics and behaviour affect a person's risk of developing colorectal cancer. Around one quarter of people diagnosed with colorectal cancer either have an identifiable genetic syndrome which carries a risk of colorectal cancer, or, more commonly, have a first degree relative (i.e. mother, father, sister, brother) who has had the disease.[4] The level of risk of people with a family history of colorectal cancer depends on the combination of relatives who had the disease, at what age, and whether a genetic condition is identified.[7] The NHMRC recommends screening using colonoscopies for people at moderately increased risk or potentially high risk due to their family history.[7] These people make up about 2% of the population.[7]

Around three quarters of people who develop colorectal cancer do not have genetic or medical risk factors.[1] The world wide pattern of incidence of colorectal cancer has led to a focus on behavioural risk factors, particularly diet. Colorectal cancer is more common among people in more developed regions of the world, whose diets differ in a number of respects from those of people in other regions. Although the epidemiological pattern is strong, other types of research investigating specific links between diet and colorectal cancer have had mixed findings.[10]

In Australia, the National Health and Medical Research Council (NHMRC) recommend that a healthy adult diet should include plenty of vegetables, legumes, fruit and cereals (preferably wholegrain), and also lean meat or its alternatives, milk and dairy foods or their alternatives, and only a moderate amount of fat and alcohol. The NHMRC guidelines in respect of vegetables and cereal include protection against colorectal cancer as part of their scientific rationale.[11]

Information on diet and some other behaviour that can affect health were collected in the 2001 ABS National Health Survey. In 2001, about 30% of the population reported that they usually ate four or more serves of vegetables a day (putting them close to the intake recommended by the NHMRC) while 53% met the NHMRC recommendation of at least two serves of fruit per day. Among those who did not meet this intake were 23% of the population who averaged 1 serve or less of vegetables per day and 6% of the population who said they never ate fruit.

A sedentary lifestyle, overweight and obesity, smoking and high levels of alcohol consumption are also suspected risk factors for colorectal cancer.[7, 12] The Cancer Council of Australia endorses the NHMRC healthy eating guidelines as a broad approach to protecting against cancers in general. It also advocates that people do not smoke, that they avoid or limit alcohol intake, and that they exercise and maintain a healthy weight.[12] Information on these health risk factors was collected in the 1989–90 and 2001 National Health Surveys.

In 2001, close to one third (32%) of people in Australia reported that they were physically inactive in their leisure time (i.e., they did not undertake deliberate exercise, or did so at a very low level, during the survey reference period). Although this was a decrease from 38% in 1989–90, the decrease related mainly to an increase in the proportion who exercised at a low level, rather than to any great increase in the proportion who exercised at a moderate or high level, considered to be more beneficial. This may be partly why 46% of the population were overweight or obese in 2001, up from 38% in 1989–90 (as assessed by Body Mass Index

calculated from self-reported height and weight information). (All data are age standardised).

In 2001, 24% of the population were current smokers, down from 28% in 1989–90, mainly due to people quitting smoking. There was little change in respect of risky alcohol consumption: people who consumed alcohol at risky or high risk levels made up about 11% of the population in both 1989–90 and 2001 (for more information see *Australian Social Trends 2003* 'Health risk factors' pp. 74–78).

Endnotes

1 Australian Institute of Health and Welfare (AIHW) and the Australasian Association of Cancer Registries (AACR) 2003, *Cancer in Australia 2000* AIHW Cat. No. CAN 18. AIHW, Canberra (Cancer series no. 23).

2 Australian Institute of Health and Welfare (AIHW) and the Australasian Association of Cancer Registries (AACR) 2004, *Cancer in Australia 2001* AIHW Cat. No. CAN 23. AIHW, Canberra (Cancer series no. 28).

3 South Australian Cancer Registry 1997, *Epidemiology of Cancer in South Australia. Incidence, Mortality and Survival 1977 to 1996. Incidence and Mortality, 1996*. Openbook Publishers, Adelaide.

4 McLeish J A, Thursfield V J and G G Giles 2002, 'Survival from colorectal cancer in Victoria: 10-year follow up from the 1987 management survey' *ANZ Journal of Surgery* vol. 72 (5) pp. 352–354

5 Ries LAG et al (eds) *SEER Cancer Statistics Review 1975–2001,* Bethesda Md: National Cancer Institute. <http://seer.cancer.gov/csr /1975–2001/, 2004> accessed 16 Nov 2004.

6 Australian Government. Department of Health and Ageing, *Bowel cancer pilot screening program*<http://www.cancerscreening.gov.au/ colorectal/bcaust/program.htm>accessed 15 October 2004.

7 National Health and Medical Research Council (NHMRC) 1999, *Guidelines for the prevention, early detection and management of colorectal cancer.* NHMRC, Canberra.

8 Ferlay J et al (2004) GLOBOCAN 2002: Cancer incidence, mortality and prevalence worldwide IARC CancerBase No. 5 version 2.0, IARC*Press*, Lyon, <http://www-dep.iarc.fr/>, accessed 29 Mar 2005.

9 Clinical Governance Unit 2002, *The National Colorectal Cancer Care Survey; Australian clinical practice in 2000.* National Cancer Control Initiative, Melbourne.

10 The American Institute for Cancer Research and the World Cancer Research Fund (1997) *Food, nutrition and the prevention of cancer: a global perspective.* World Cancer Fund, London.

11 National Health and Medical Research Council 2003, *Dietary Guidelines for Australian Adults*. Ausinfo, Canberra.

12 The Cancer Council of Australia 2004, *National Cancer Prevention Policy 2004–06*. The Cancer Council Australia, Sydney.

Older people with disabilities

HEALTH STATUS

In 2003, over half of Australians aged 65 years and over (56%) had a disability.

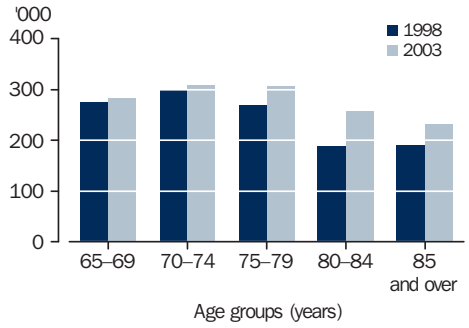
People aged 65 years and over are more likely to have disabilities than younger people, and the likelihood of acquiring a disability increases with age. Severity of disability also increases as people get older. Consequently, as people age they tend to need greater assistance with health-related and day to day activities, and greater access to health and community services. With increasing numbers of people living to older ages, and the prospect of the baby boomer cohorts reaching older ages, questions of how best to meet the needs of greater numbers of older people with disabilities are becoming more acute.

In recent years, older people have increasingly been supported to remain living in the wider community, and wherever possible in their own homes, through the provision of appropriate services.[1] Therefore, the focus is not only on the supply of cared accommodation, but on the supply of suitable community based facilities and services, and of informal carers (see *Australian Social Trends* 2005, Carers, pp 39–43).

Trends in disability

The prevalence of disability among older people did not change significantly between 1998 and 2003. A little more than half of older people had a disability in both years (54% and 56% respectively). However, largely due to an increase in the total number of older people in Australia over the period, (from 2.3 million to 2.5 million), as well as ageing in this group, older people with disabilities increased in number by 28%, from 1.2 million to 1.4 million.

Persons aged 65 years and over with disabilities



Source: ABS 1998 and 2003 Surveys of Disability, Ageing and Carers (ABS cat. no. 4430.0).

Older people with disabilities

The ABS collects data on the characteristics of older people and people with disability in surveys of disability, ageing and carers. Information from the most recent survey (2003) is published in *Disability, Ageing and Carers: Summary of Findings, 2003* (ABS cat. no. 4430.0).

Older people in this article are those aged 65 years and over.

Disability as defined in the ABS 2003 Survey of Disability Ageing and Carers refers to a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months. This definition is consistent with the International Classification of Functioning, Disability and Health, which defines disability as an umbrella term for impairments, activity limitations and participation restrictions.

Core-activity limitation refers to a limitation in the core-activities of self care, communication or mobility. Levels of severity of these limitations are: profound, severe, moderate, mild.

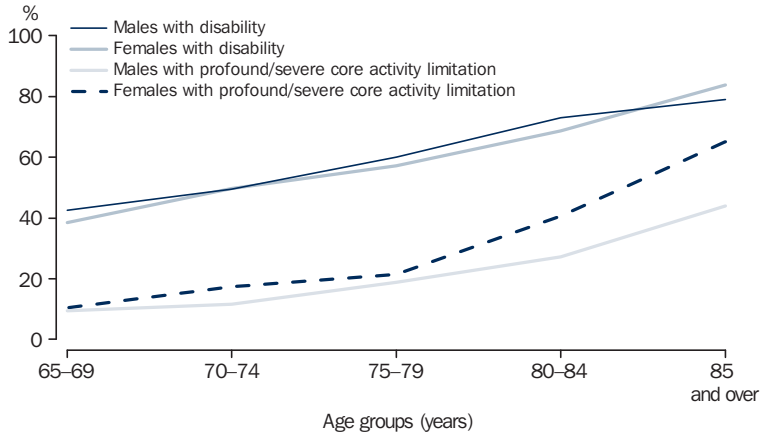
People with a *profound core-activity limitation* always need help or supervision with self care, communication or mobility, or are unable to perform these tasks themselves. People with *severe core-activity limitations* sometimes need help with self care, communication or mobility, have difficulty understanding or being understood by friends or family, or can communicate more easily using sign language or other non-spoken forms of communication.

The greatest increases in the number of older people with disabilities (and of older people as a whole) were recorded for the those in the range over 74 years. The rate of disability was similar for men and women in both 1998 (54% in each case) and 2003 (55% and 56% respectively). However, as more women than men live to older ages, the number of older women with disabilities was 28% higher than that of older men with disabilities, in both 1998 and 2003.

...profound or severe limitation

Older people with a disability varied in the type and severity of the limitations or impairments they had. In 2003, 22% of all older people had a profound or severe core activity limitation. That is, they were limited in everyday activities (e.g. walking or dressing), or sometimes needed help to do these things, or had difficulty communicating. Of people aged 65–69 years, 10% had a profound or severe core activity limitation, increasing to 20% of those aged 75–79 years and 58% of those aged 85 years and over.

Older people with disabilities and older people with profound/severe core-activity limitations — 2003



Source: ABS 2003 Survey of Disability, Ageing and Carers.

The proportion of older people with profound or severe core activity limitation remained about the same in 1998 and 2003 (21% and 22% respectively). Mostly resulting from the total increase in the number of older people, older people with a profound or severe core activity limitation increased in number between 1998 and 2003 from 481,000 to 562,000.

In contrast to the similar overall rates of disability reported for older men and older women, older women were more likely than older men to have a profound or severe core-activity limitation. In 1998 and 2003, this was observed for all five year age groups of older people, with the greatest differences between the rates observed for the oldest age groups. In 1998, 16% of older men and 25% of older women had a profound or severe core activity limitation, increasing to 17% and 27% respectively in 2003.

Living arrangements

In both 1998 and 2003, most older people with disability live in private dwellings, either with other people or alone. As people age, their living arrangements may change to suit their circumstances. This is often as a result of illness or disability, or of a transition in their life, such as the death of a spouse. People with disabilities aged 85 years and over are less likely than people aged 65–74 years to be living with a partner or other family member, and more likely to be living alone or in cared accommodation.

Because men have a shorter life expectancy than women, and are on average somewhat older than the women they marry, older men are more likely than older women to live in family situations, particularly with partners. In 2003, this pattern was observed for older people with disabilities and for older people as a whole.

In 2003, most of the 1.4 million older people with disabilities (83%) lived in a private dwelling such as a house, a flat or a home unit. About one in ten older people with disabilities lived in cared accommodation

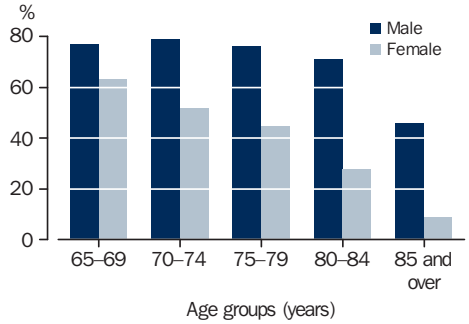
Living arrangements of older people with disabilities — 1998 and 2003

	1998		*2003*	
Arrangement	*With profound/ severe core activity limitation*	*Total (all with reported disability)*	*With profound/ severe core activity limitation*	*Total (all with reported disability)*
	%	%	%	%
Households	67.8	86.8	72.6	88.5
Private dwelling	65.8	84.6	68.0	82.8
With other people	45.5	57.3	48.8	57.3
Alone	20.3	27.4	19.2	25.6
Other non-private dwelling(a)	2.0	2.1	4.6	5.7
Cared accommodation	32.2	13.2	27.4	11.5
Total	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000
Total (no.)	**481.2**	**1 225.2**	**561.7**	**1 391.5**

(a) Includes: hotels for the homeless, hotels, motels, educational and religious institutions, construction camps, boarding houses, staff quarters, guest houses, short stay caravan parks, youth camps and camping grounds, and self-care units in a retirement village which may have cared accomodation on-site.

Source: ABS 1998 and 2003 Surveys of Disability, Ageing and Carers.

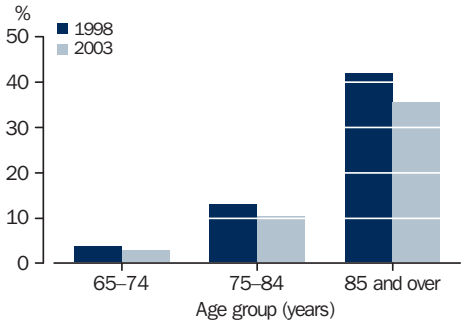
Older people with disabilities(a) living with a partner — 2003(a)



(a) As a proportion of all people of that age with a disability living in private dwellings.

Source: ABS 1998 and 2003 Surveys of Disability, Ageing and Carers.

Older people with disabilities living in cared accommodation — 1998 and 2003(a)



(a) As a proportion of all people of that age with a disability.

Source: ABS 1998 and 2003 Surveys of Disability, Ageing and Carers.

such as nursing homes and aged cared hostels (12%). The remaining 6% lived in non-private dwellings other than cared accommodation, such as retirement villages staff quarters, religious institutions, or boarding houses.

There were differences in living arrangements of older people with disabilities by age. The proportion living in cared accommodation, or living alone in a private dwelling, was higher at older ages. In 2003, 3% of people with disabilities aged 65–74 years lived in cared accommodation, compared with 10% of people aged 75–84 years and 37% of people aged 85 years and over.

Between 1998 and 2003 there was an increase in the proportion of older people with disabilities living in non-private dwellings other than cared accommodation, from 2% to 6%. This may relate to increases in the availability of community care or older people choosing age-specific housing such as units in retirement villages which provide some care on-site. The increase was accompanied by decreases both in the proportion living in private dwellings (from 85% to 83%) and in cared accommodation (from 13% to 11% respectively).

...cared accommodation

Changes in the use of cared accommodation are of particular interest. The decrease in the proportion of older people with disabilities living in cared accommodation occurred across all age groups of older people. The decrease among those aged 85 years and over was from 42% in 1998 to 37% in 2003. These decreases in the proportion of older people with disabilities living in cared accommodation were essentially offset by the increase in the older population over the period. Nevertheless there was a small decrease in the absolute number of older people with disabilities living in cared accommodation, from 162,000 to 159,000.

In both 1998 and 2003, almost all older people with a disability who were in cared accommodation had a profound or severe core activity limitation (96% and 97% respectively). This is consistent with the fact that entry to cared accommodation involves a disability assessment. However, the majority of older people with profound or severe core activity limitations lived in households (73% in 2003), rather than in cared accommodation. The proportion who did live in cared accommodation decreased from 32% to 27% between 1998 and 2003.

Assistance for those living at home

Older people with disabilities living at home often need help with tasks such as property maintenance or housework and with managing their health conditions. They may also need help or supervision in carrying out core everyday activities, such as making meals, or moving about in the home. In 2003, 69% of older people with disabilities who were living in households reported needing assistance in at least one such area.

The activities they most commonly reported needing assistance with were property maintenance (47%), health care (39%), transport (36%), housework (36%) and mobility (28%). Need for assistance with self care (17%), meal preparation (14%) and paperwork (14%) was somewhat less common. About 12% of all older people with disabilities needed assistance with emotion or cognition (for example, with maintaining relationships or interacting with others,

Assistance needed by older people with disabilities living in households(a) — 2003

	With profound/ severe core activity limitation	All with reported disability			
		65–74 years	75–84 years	85 years and over	Total
	%	%	%	%	%
Self care	51.0	13.7	17.4	27.4	16.9
Mobility	83.5	18.7	31.0	50.7	27.6
Communication	9.3	2.5	2.6	*6.7	3.1
Health care	70.4	29.1	43.5	57.9	38.5
Transport	73.4	24.7	40.4	66.9	36.2
Paperwork	31.8	7.6	15.9	28.7	13.6
Housework	69.2	25.8	40.3	56.9	35.5
Property maintenance	71.5	38.3	51.0	65.7	46.8
Meal preparation	36.0	7.2	15.2	32.1	13.5
Cognition and emotion	26.3	10.0	11.8	17.8	11.7
At least one of the above activities	99.6	60.4	73.3	86.4	68.8
	'000	'000	'000	'000	'000
Total(a)	**407.7**	**576.6**	**507.4**	**148.2**	**1 232.2**

(a) All older people with disabilities except those living in cared accommodation.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

coping with feelings or thinking through problems). Relatively few older people with disabilities needed assistance with communication (3%).

The need for assistance increased with age. For example, in 2003, 29% of people with disabilities aged 65–74 years needed assistance with health care, increasing to 58% of those aged 85 years and over. Similarly, 25% of people with disabilities aged 65–74 years needed assistance with transport, increasing to 67% of those aged 85 years and over.

Between 1998 and 2003, the proportion of older people with disabilities who needed assistance with tasks or activities increased for self care (from 15% to 17%), health care (from 36% to 39%) and for mobility (from 26% to 28%). For other activities, the need for assistance remained about the same. (No comparison was possible for the need for assistance with emotion or cognition which was covered for the first time in 2003.)

Almost all people with profound or severe core activity limitations needed assistance in at least one of the core activity areas (99.6%). A large majority needed assistance with mobility (84%), over half needed assistance with self care (51%) and 9% with communication. They were also very likely to need assistance with other tasks of daily life, most commonly with transport (73%), property maintenance (72%), health care (70%) and housework (69%), but also with meal preparation (36%) and paperwork (32%). More than one quarter (26%) needed assistance with emotion or cognition.

Between 1998 and 2003 the largest increases in the need for assistance of older people with a profound or severe core activity limitation were observed for self care (from 48% to 51%), health care (from 67% to 70%) and transport (from 71% to 73%). The largest decrease observed was in their need for assistance with property maintenance (from 77% to 72%). Need for assistance with other activities remained stable.

Whether needs met(a) — 2003

	With profound/ severe core activity limitation	All with reported disability			
		65–74 years	75–84 years	85 years and over	Total
	%	%	%	%	%
Needed assistance	99.6	60.4	73.2	86.4	68.8
Fully met	56.1	38.9	44.7	53.4	43.0
Partly met	42.3	18.0	25.9	32.2	23.0
Not met at all	1.2	3.5	2.6	0.8	2.8
Assistance not needed	0.5	39.7	26.7	13.6	31.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000
Total(a)	**407.7**	**576.6**	**507.4**	**148.2**	**1 232.2**

(a) Need for assistance of older people living in households i.e. excludes those living in cared accommodation.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

...were needs met?

In 2003, the 69% of older people with disabilities who reported needing assistance comprised 43% whose needs were fully met, 23% whose needs were partly met and 3% whose needs were not met at all.

People with profound and severe core activity limitations tended to need and receive more assistance than other older people with disabilities. Almost all of this group reported needing assistance (99.6%), comprising 56% whose needs were fully met, 43% whose needs were partly met and 1% whose needs were not met at all.

As the need for assistance increased with age, so did the proportion of all older people with disabilities who received assistance. Around 57% of people aged 65–74 years both needed and received assistance (i.e. reported that their needs were either fully or partly met) increasing to 71% of people aged 75–84 years and 86% of those aged 85 years and over.

A lower proportion of people aged 85 years and over and needing assistance reported that their needs were not met at all (0.8%) than was the case for the two younger age groups (4% for 65–74 year olds and 3% for 75–84 year olds). Similarly, just over 1% of people with profound or severe core activity limitation who needed assistance reported that their needs were not met at all, compared with 3% of all people with reported disability who needed assistance.

Between 1998 and 2003 the proportion of people aged 65 years and over with a disability who needed assistance and whose needs were either fully or partly met remained stable. The proportion of older people with disabilities who needed assistance and whose needs were fully met was slightly higher in 2003 than in 1998 (by about two percentage points), with a decrease in the proportion whose needs were partly met. Similar small changes were observed in respect of older people with profound or severe core-activity limitations whose needs were fully or partly met.

Endnotes

1 Australian Institute of Health and Welfare 2001 *Australia's Welfare 2001* Canberra: AIHW.

Children's accidents and injuries

The number of injury deaths of children aged 1–14 years declined over the past two decades, from 553 deaths in 1983 to 231 in 2003.

Children are much less likely to have long-term health conditions than adults, and infant and child death rates are generally declining and are at their lowest in a century. In 2003, 20% of the Australian population was aged 0–14 years (around 4 million children), while child deaths accounted for 1.3% of all deaths registered in that year (see *Australian Social Trends, 2003*, Infant mortality, pp. 91–94). But this does not fully reflect the range of issues affecting children's health. High rates of preventable injuries among children relative to other age groups are of concern to health professionals, the community and governments. In 2004, the Australian government identified children aged 0–14 as a priority injury issue.[1]

Injury deaths

Most child deaths are of infants aged less than one year (68% of deaths of 0–14 year olds in 2003), and are related to perinatal and congenital factors. However, once the infancy period has passed, injury deaths (e.g. from transport accidents, drownings, or assaults) emerge as the leading cause of death for children. Over the five year period 1999–2003, 41% of deaths of children aged 1–14 years (i.e. excluding infants) were injury deaths (1,260 children). By comparison, injuries caused around 6% of deaths of people aged 15 years and over. The next most common cause of death of children of this age – malignant neoplasms, or cancer – caused less than half the number of child deaths over the same period (537 children). Over the last two decades, the number of child deaths due to injury declined substantially (from 553 in 1983 to 231 in 2003), while the number of cancer deaths declined at a slower rate, from 150 to 93.

Boys are more likely than girls to experience and die as a result of an injury. While half of all children are boys (at 30 June 2001, 51% of 1–14 year olds were boys), nearly two-thirds of injury deaths for this age group between 1999 and 2003 were boys (62%). This difference between girls and boys in relation to injury and deaths exists regardless of the child's age, and across all OECD countries.[2] It may relate to differences in behaviour, in the type of activities boys and girls engage in, and in the ways in which boys and girls are socialised from a young age.[3]

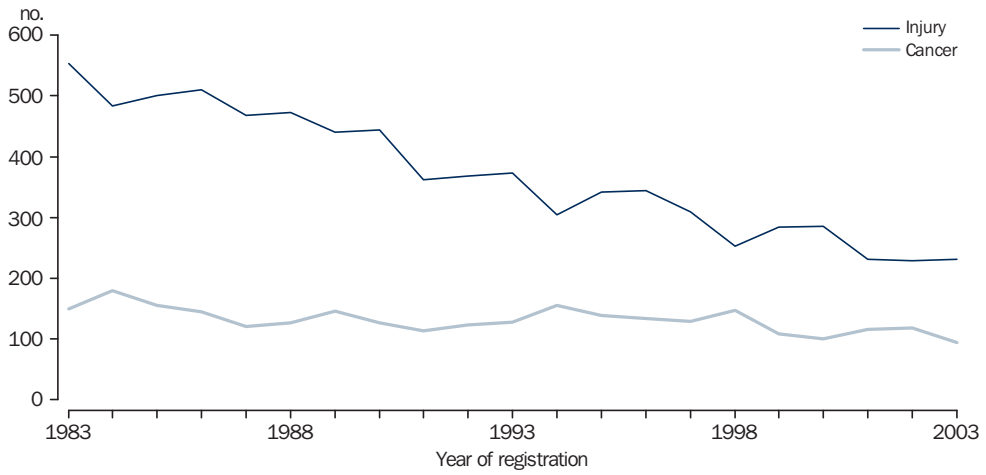
Injury deaths

Data on injury deaths are from the ABS Causes of Death Collection.

An *injury* is a trauma, poisoning, or other condition of rapid onset to which factors and circumstances external to the person contributed significantly. External causes of injury may be physical, chemical or psychological. Injuries may be unintentional, e.g. as a result of transport accidents, sports injuries or poisonings, or may be intentional, e.g. those resulting from assault.

Injury deaths are deaths where the underlying cause was classified to 'External Causes of Morbidity and Mortality (V01-Y98)' in the International Classification of Diseases (ICD-10).

Leading causes of death for children aged 1–14 years(a)



(a) Underlying cause of death data for 1983–1996 were coded to ICD-9 while data for 1997 onward were coded to ICD-10.

Source: ABS Causes of Death Collection.

...transport accidents

When infant deaths are included, there were 1,473 child injury deaths between 1999 and 2003. Children who had died from injuries were more likely to have died in transport accidents, than in any other way: 587 children aged 0–14 years (40%) died this way between 1999 and 2003. This was about twice as many as died from accidental drowning, the next most common cause of child injury death.

Boys were consistently more likely to have died in transport accidents than girls across all child age groups. The difference was greater among 10–14 year olds (150 boys compared with 77 girls) than among 1–4 year olds or 5–9 year olds.

In most deaths that were the result of a transport accident, the child was either the occupant of a motor vehicle (44% of deaths) or a pedestrian (35%). The remaining deaths were in accidents where the child was a pedal cyclist (5%) or motorcycle rider (4%), or were other transport accidents (12%). Children were much more likely than adults to have been a pedestrian in the accident (16% of people aged over 15 years).

The overall decline in injury deaths between 1983 and 2003 was partly driven by a decline in transport accident deaths. Many factors can contribute to such a decline, including accident prevention strategies (e.g. speed limit initiatives), improved car safety, improved emergency and medical response, or fewer children travelling on foot.[2]

...accidental drowning

Accidental drowning accounted for 19% of all child injury deaths between 1999 and 2003 (286 children). (See also *Australian Social Trends 2000*, Accidental drowning, pp. 69–72). Other accidental threats to breathing, such as suffocation or choking, accounted for 11% (163 children). The difference between boys and girls was marked in relation to accidental drowning for nearly all child age groups. More than twice as many boys as girls drowned over the period (193 boys; 93 girls).

Children aged less than five years are most vulnerable to drowning: 80% of child drowning deaths were of children aged under 5 years (229 children). Most of these were 1–4 year olds, who are more mobile than infants but are still developing motor skills and not of an age to judge hazards. The death rate from accidental drowning for 1–4 year olds (3.9 per 100,000) was higher than for all age groupings for both children and adults.

The events leading to drowning were also different for young children – who tended to drown following a fall into water, while older children were more likely to have drowned once already in water. For example, most children aged less than 5 years who drowned in a swimming pool fell into the pool (78%).

The most common location of infant drowning was in the bath (62% of children aged less than 1 year). Drowning deaths of older children (aged 1–14 years) most

Injury deaths, children aged 0–14 years — 1999–2003

	Age (years)				*Total child deaths 0–14 years*		*Proportion that were males*
	Under 1	*1–4*	*5–9*	*10–14*			
	no.	no.	no.	no.	no.	%	%
Transport accidents	17	182	161	227	587	39.9	59.8
Accidental drowning	29	200	35	22	286	19.4	67.5
Other accidental threats to breathing(a)	88	45	12	18	163	11.1	62.6
Assault	39	44	30	15	128	8.7	54.7
Exposure to mechanical forces(b)	10	25	13	16	64	4.3	68.8
Intentional self-harm	0	0	n.p.	n.p.	56	3.8	58.9
Smoke, fire, flames	7	21	14	8	50	3.4	58.0
Falls	3	12	11	7	33	2.2	48.5
Accidental poisoning	3	10	n.p.	n.p.	25	1.7	52.0
Other injury deaths	17	22	19	23	81	5.5	55.6
All injury deaths	**213**	**561**	**299**	**400**	**1 473**	**100.0**	**60.8**

(a) Includes accidental suffocation, strangulation, and hanging as well as selected other separate causes.
(b) Includes animate mechanical forces and inanimate mechanical forces.

Source: ABS Causes of Death Collection.

commonly occurred in a swimming pool (42%), or a body of natural water such as a lake, river, stream or the open sea (24%).

...other types of injury death

Assault accounted for 9% of child deaths (128 children) between 1999 and 2003. Young children were more likely to have died from assault than older children. Two thirds (65%) of child deaths from assault were of children aged less than 5 years (83 children). More boys than girls died from assault between 1999 and 2003 (70 compared with 58). (See also *Australian Social Trends 2003*, Child protection, pp. 50–54).

Other types of injury death each individually accounted for less than 5% of child deaths over the five year period. This included 64 children who died in accidents resulting from exposure to mechanical forces, and 50 who died in fires. A further 4% of children who died from injuries, died through intentional self-harm (56 children), most of whom were aged 13 or 14 years.

Recent injuries

While fatal outcomes are rare, the ABS 2001 National Health Survey found that many more Australian children than adults had recently been injured. In 2001, 18% of children aged 0–14 years had received an injury in the previous four weeks for which some action had been taken. This proportion declined with age (ranging from 17% of 15–24 year olds to 6% of people aged 65 years and over).

While this included injuries needing minor first aid (e.g. applying a bandaid), it extended to more serious events that required medical advice or hospitalisation. Injuries are the main reason children are hospitalised. In 2002–03, there were 68,000 hospitalisations of children aged 0–14 years for injury.

Consistent with mortality patterns, boys are more likely to be injured than girls (19% of boys had recently been injured in 2001, compared with 16% of girls). Boys were also hospitalised for injury more often than girls. In 2002–03, there were 42,600 hospitalisations for injuries of boys, and 25,400 of girls. Boys aged 10–14 years had the highest rate of hospitalisation among all boys. In contrast, hospitalisation for injury for girls peaked among girls aged 1–4 years. Thus, the difference between boys and girls was most marked among 10–14 year olds – boys this age had more than twice as many hospitalisations for injury as girls in 2002–03 (16,600 and 7,300 respectively).

The average length of stay in hospital of injured children is generally lower than that of adults who have been injured. In 2002-03, the average length of stay in hospital was 1.7 days for 1–4 year olds and 5–9 year olds, and 1.9 days for 10–14 year olds. Average length of stay for injury then increased with age (e.g. it was 5.8 days for 65–69 year olds). However, the average length of stay in hospital for infants aged less than one year was higher than for other children: 2.4 days.

Recent injuries

Recent injury data are from the ABS 2001 National Health Survey (see also *National Health Survey: Injuries*, ABS cat. no. 4384.0). A *recent injury* is an accident, harmful incident, exposure to harmful factors, or other incident, occurring in the 4 weeks prior to interview and resulting in an injury, and in one or more of the following actions being taken:

- consulting a health professional
- seeking medical advice
- receiving medical treatment
- reducing usual activities
- other treatment, e.g. taking medications, using a bandage, band aid, heat pack or ice pack

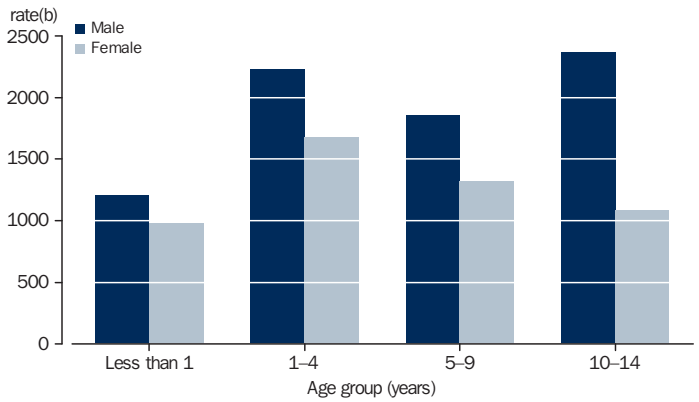
Although people could report a large number of such events, detailed data were only reported for the three most recent events.

Hospitalisations

Hospitalisation data were accessed from the Australian Institute of Health and Welfare's (AIHW) National Hospital Morbidity Database.

Hospitalisations refer to hospital separations, which are episodes of care in hospital. A separation can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of type of care (e.g. from acute to rehabilitation). Out-patient treatment at a casualty or emergency department is not included in hospital separations.

Hospital separations for injury(a) — 2002–03



(a) Includes poisoning and certain other consequences of external causes.
(b) Rate per 100,000 population, using estimated resident population as at December 2002.

Source: Australian Institute of Health and Welfare, National Hospital Morbidity Database.

...activity and location when injured

Physical activity is considered crucial to development in children, and Australian children are generally physically active. For example, the ABS 2003 Survey of Children's Participation in Selected Culture and Leisure Activities shows two thirds (67%) of school aged children (5–14 years) had participated in organised sport or dancing (outside of school) in the past 12 months. Similarly, 66% of children this age had undertaken the active leisure activities of bike riding, skateboarding or rollerblading in the previous two weeks.

In 2001, 498,000 children aged 5–14 years reported being injured recently. The most common activities these children had been undertaking at the time of injury were leisure activities (e.g. playing non-organised sport or games, reading, watching videos), and organised sports. In 2001, half of all recent injuries for children this age (51%) occurred during leisure activities, and around a third (27%) while children were playing sports. A further 17% occurred while attending school.[4]

The most common locations at which 5–14 year olds received injuries were outside their own or someone else's home (32%), at school (30%), at a sports facility (20%), or inside their own or someone else's home (16%).

At a broader level, international studies have suggested that the likelihood of a child being injured or dying from injury may be associated with a range of socioeconomic factors, such as poverty, poor housing, single parenthood, low maternal education, low maternal age at birth, and parental alcohol or drug abuse.[2] Demographic factors may also influence injury rates. Children living in regional and remote areas of Australia are more likely to die from injury than those living in major cities.[5] This could be because children in different areas have different socioeconomic characteristics, are exposed to different hazards, or have different access to various health services.[5]

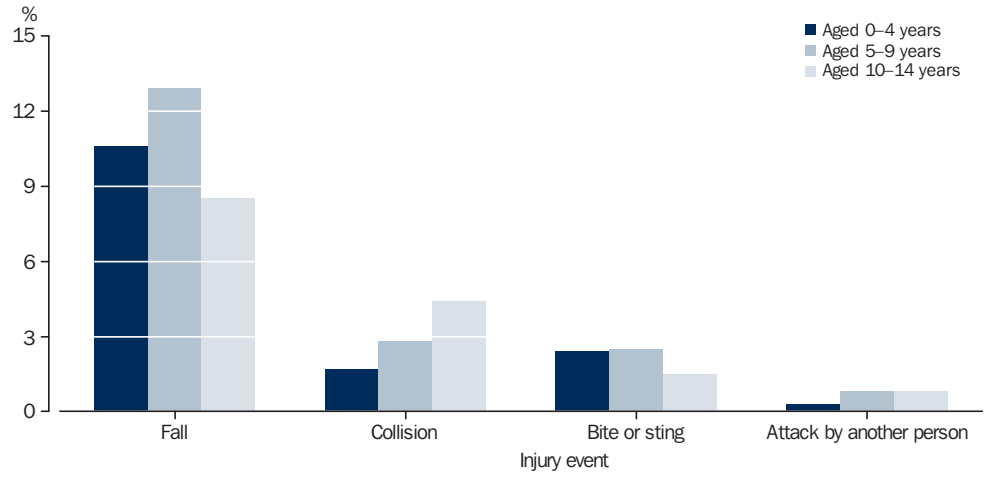
...events leading to injury

In 2001, 11% of all children aged 0–14 years were injured in a fall, 3% in a collision (hitting something or being hit by something), 2% by a bite or sting, and 0.6% in an attack by another person. Patterns in the types of injuries children receive tend to vary substantially in relation to the age of the child and their stage of development. That is, as children begin to learn the particular physical and cognitive skills associated with a given stage of development, they become more vulnerable to the physical risks associated with that stage, until they master those skills.[7]

Falls caused the greatest proportion of recent injuries for children (61%). Of children injured in falls, most were injured in a low fall of one metre or less (93%), rather than a high fall from more than 1 metre (7%), and most were engaged in sporting or leisure activities at the time (75%).

Collisions were the next most common cause of recent injury for children (17%). Boys were more likely to be injured this way than girls (20% of recently injured boys, and 13% of girls in 2001). As with falls, sports and leisure activities were the most common activities being undertaken at the time of the collision. Of children injured in collisions, 41% were

Events leading to recent injury(a) — 2001



(a) As a proportion of the total population in that age group.

Source: ABS 2001 National Health Survey.

participating in leisure activities (38% of boys and 46% of girls), and 34% were involved in sports (37% of boys and 29% of girls).

Of children recently injured, 12% were injured by a bite or sting (including bites from animals such as dogs and snakes, and some insects and spider bites). Children were more likely than any other age group to have been injured this way. Half (51%) of children who were bitten or stung were outside their own or someone else's home at the time.

In 2001, around 25,000 children had been injured in an attack by another person in the four weeks prior to interview – accounting for 4% of recent child injuries. Children were more likely than adults to have experienced injury from attack in the previous four weeks (0.8% of children aged 5–14 years compared with 0.2% of people aged 15 years and over). Most 5–14 year olds recently injured in an attack, had been at school at the time (72%).[5] Boys in this age group had been injured in an attack by another person at three times the rate of girls (1.2% and 0.4% respectively). (See also *Australian Social Trends*, 2003, Child protection, pp.50–54).

How do child injuries affect lives?

In 2001, of those with a recent injury, school aged children (5–14 year olds) had taken time off work or study at twice the rate of people aged 15 years and over (2.9% and 1.7% respectively). However, while children are injured at higher rates than other age groups, they are much less likely to receive injuries that lead to long term health conditions or disability. In 2003, 0.2% of 0–14 year olds had a disability that was the result of an injury, and the proportion increased with age (from 1.3% of 15–24 year olds to 6.4% of people aged over 85 years). However, where children are seriously injured the resulting physical, cognitive or psychological disabilities can seriously affect not only the child's quality of life but that of their family.[3] Families are often also profoundly affected by the death of a child through injury.[2]

The 2001 UNICEF report, *Child deaths by injury in rich nations* notes that "children's judgement of potential dangers and of their own physical ability is developed through pushing the boundaries of their experience, developing their own sense of risk and danger, and taking progressive responsibility for their own lives."[2] This report also notes that children's activities may be becoming increasingly curtailed in response to concern about accidents and other threats.[2] For example, concern about transport accidents may lead to fewer children cycling, walking or otherwise being active.

Child safety and injury prevention

By its nature, injury prevention can involve many different levels of community, business and government operation, covering such areas as research, policy, public education, legislation, manufacturing practice, and environmental and road system modification. For example, selected injury prevention measures mentioned in the 2001 UNICEF report, *Child deaths by injury in rich nations*, include reducing:

- traffic deaths through legislative change, safer car design, wearing of cycle helmets
- fire deaths through smoke alarms, flame resistant nightwear, electrical safety standards
- poisoning and ingestion deaths through use of childproof packaging of pharmaceuticals and safety standards for toys and games
- falling deaths through safety glass, stair gates, window bars, and playground safety standards
- drowning deaths through learn to swim campaigns and fencing swimming pools

In Australia, there are a range of community organisations and government initiatives with a focus on child safety, for example: KidSafe (The Child Accident Prevention Foundation of Australia); FarmSafe Australia; the federal government's Strategic Injury Prevention Partnership initiative; and the Australian Injury Prevention Network.

The KidSafe NSW website provides guidelines for four focus areas: home, playground, road, and water safety; and for ten common injury areas: car passenger; pedestrian; drowning; house fires; falls; nursery furniture; scalds; poisoning; bicycles; and in-line skates and skateboards.[8]

Endnotes

1 Department of Health and Ageing 2004, *Draft National Injury Prevention Plan: 2004 Onwards Priorities for 2004* <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pubhlth-strateg-injury-consult_plan.htm>, accessed 16 June 2005.

2 United Nations Children's Fund 2001, *A League Table of Child Deaths by Injury in Rich Nations*,Innocenti Report Card, Issue no.2, UNICEF Innocenti Research Centre, Florence.

3 Australian Institute of Health and Welfare 2002, *Australia's children: their health and wellbeing 2002,* AIHW, Canberra.

4 Clapperton, A, Cassell, E, Wallace, A 2003, 'Injury to children aged 5–15 years at school', *Hazard*, edition no. 53, pp.1–16.

5 Australian Institute of Health and Welfare 2003, *Rural, Regional and Remote Health: A study on mortality*, Rural Health Series No.2, AIHW, Canberra.

6 Moller, J Kreisfeld, R 1997, 'Progress and current issues in child injury prevention', *Australian Injury Prevention Bulletin*, no. 15, AIHW, National Injury Surveillance Unit, Adelaide.

7 ABS2003 Survey of Disability Ageing and Carers.

8 Kidsafe NSW, Inc. <http://kidsafensw.org>, accessed 9 March 2005.

Education and training

Education and training: national summary

	PARTICIPANTS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1	School students(a)	'000	3 099	3 109	3 143	3 172	3 199	3 227	3 247	3 268	3 302	3 319	3332
2	Students in government schools(a)	%	71.5	71.0	70.7	70.3	70.0	69.7	69.2	68.8	68.4	67.9	67.5
3	Females – of all Year 11 and 12 students(a)	%	51.4	51.8	51.8	51.8	52.0	52.1	52.1	51.8	51.5	51.4	51.6
4	Year 7/8 to Year 12 apparent retention rate – males(b)	%	69.6	66.7	65.9	66.2	65.9	66.4	66.1	68.1	69.8	70.3	70.4
5	Year 7/8 to Year 12 apparent retention rate – females(b)	%	79.9	77.9	77.0	77.8	77.7	78.5	78.7	79.1	80.7	80.7	81.2
6	Year 7/8 to Year 12 apparent retention rate – Indigenous(b)	%	32.5	30.6	29.2	30.9	32.1	34.7	36.4	35.7	38.0	39.1	39.5
7	Year 7/8 to Year 12 apparent retention rate – non-Indigenous(b)	%	76.5	73.2	72.4	72.9	72.7	73.2	73.3	74.5	76.3	76.5	76.8
8	Education participation – of all aged 15–19(c)	%	72.9	73.9	74.0	77.4	76.9	77.8	77.6	77.4	77.3	77.5	76.2
9	Education participation – of all aged 20–24(c)	%	26.6	28.0	31.5	31.0	32.1	34.4	34.4	34.8	37.2	37.5	37.7
10	Vocational Education and Training (VET) students(d)(e)(f)	'000	r1117	r1 269	r1 341	r 1 449	r1 510	r1 615	r1 708	r1 679	r1 683	r1 718	n.y.a
11	Apprentices and trainees(g)	'000	131.0	r138.9	r157.2	r172.0	r193.0	r251.0	r271.3	r310.0	r351.8	r405.3	395.6
12	Females – of all VET students(d)(e)(f)	%	r44.8	r46.2	r46.5	r46.3	47.3	48.7	49.0	48.5	48.1	48.6	n.y.a.
13	Higher education students(h)	'000	585.4	604.2	634.1	658.8	671.9	686.3	695.5	r842.2	r896.6	930.0	n.y.a.
14	Females – of all higher education students(h)	%	53.5	53.9	54.3	54.4	54.7	55.0	55.2	54.4	54.4	54.4	n.y.a.
15	Overseas students – of all higher education students(h)(i)	%	6.9	7.6	8.4	9.6	10.7	12.1	13.7	18.7	20.6	22.6	n.y.a.

	EDUCATION OUTCOMES	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	With non-school educational qualifications of all persons aged 15–64 years(j)												
16	Of all aged 15–64(k)(l)	%	39.0	41.0	42.3	40.4	41.9	43.7	43.8	47.2	48.2	49.1	50.9
17	Bachelor degree or above	%	11.5	11.9	12.8	13.6	14.3	15.4	15.7	17.0	17.8	18.1	18.9
18	Advanced diploma and diploma or below	%	27.5	29.1	29.4	26.8	27.6	28.3	28.1	29.1	29.8	30.2	31.3
19	Females – of all with non-school educational qualifications	%	44.1	43.9	44.1	44.6	45.1	45.2	45.8	46.9	46.8	46.5	47.6
	With non-school educational qualifications of all persons aged 25–64(j)												
20	Of all aged 25–64(k)(l)	%	44.1	46.4	47.7	45.5	47.3	49.3	49.5	53.3	54.4	55.3	57.5
21	Bachelor degree or above	%	13.4	13.8	14.8	15.6	16.6	17.7	18.1	19.7	20.4	20.9	21.9
22	Advanced diploma and diploma or below	%	30.8	32.6	32.9	29.9	30.7	31.7	31.4	32.3	33.2	33.4	34.7
23	Higher education students completing courses	'000	138.7	141.0	145.3	155.3	161.7	164.4	170.9	187.0	r200.7	215.1	n.y.a.
	Without non-school educational qualifications of all persons aged 15–64(j)												
24	Of all aged 15–64(k)	%	61.0	59.0	57.7	59.6	58.1	56.3	56.2	52.8	51.8	50.9	49.1
25	Did not complete Year 12(m)	%	37.7	36.1	34.8	36.3	34.2	32.7	32.0	36.1	34.9	33.8	32.3
	Reading – proportion of Year 5 students reaching national benchmarks(n)												
26	Males	%	n.a.	n.a.	n.a.	n.a.	n.a.	83.4(k)	85.2	87.8	n.y.a.	n.y.a.	n.y.a.
27	Females	%	n.a.	n.a.	n.a.	n.a.	n.a.	88.4(k)	89.6	92	n.y.a.	n.y.a.	n.y.a.
	Numeracy – proportion of Year 5 students reaching national benchmarks												
28	Males	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	89.4	89.5	n.y.a.	n.y.a.	n.y.a.
29	Females	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	89.8	89.8	n.y.a.	n.y.a.	n.y.a.

Education and training: national summary cont.

	LABOUR MARKET OUTCOMES	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Unemployment rate (aged 15–64)												
30	With non-school educational qualifications(j)(k)(l)	%	6.1	5.5	5.3	5.4	5.0	4.6	4.4	4.6	4.2	4.3	3.8
31	Bachelor degree or above	%	4.7	3.6	3.8	3.5	3.1	3.0	3.0	2.8	2.7	3.1	3.0
32	Advanced diploma and diploma or below	%	6.7	6.3	6.0	6.5	6.0	5.5	5.2	5.7	5.1	5.0	4.3
33	Without non-school educational qualifications(k)	%	13.0	11.1	11.3	11.6	10.9	10.3	9.1	9.6	9.1	8.6	8.0
34	Completed Year 12(m)	%	11.0	9.9	10.0	8.9	8.6	7.7	7.2	7.5	7.0	6.4	6.6
35	Did not complete Year 12(m)	%	13.9	11.7	12.0	13.0	12.2	11.8	10.3	10.8	10.3	10.0	9.0

	FINANCIAL RESOURCES	Units	1994	1995	1996	1997	1998	1999(o)	2000	2001	2002	2003	2004
	Government expenses on education(p)												
36	Proportion of GDP(o)	%	4.7	4.6	4.5	4.5	4.4	5.2	5.1	5.2	5.3	5.4	n.y.a.
37	Primary and secondary(o)	$'000m	12.2	12.5	13.0	13.9	14.7	17.3	18.2	19.5	21.3	23.3	n.y.a.
38	Tertiary(o)	$'000m	7.1	7.6	7.6	8.1	8.0	11.7	12.1	12.8	13.6	15.1	n.y.a.

	HUMAN RESOURCES	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	FTE Student/teaching staff ratio												
39	All schools (q)	ratio	15.5	15.4	15.4	15.3	15.3	15.0	14.9	14.7	14.7	14.5	14.3
40	Government schools (q)	ratio	15.4	15.4	15.4	15.3	15.3	14.9	14.9	14.7	14.8	14.6	14.5
41	Primary schools (q)	ratio	18.5	18.2	18.1	17.9	17.9	17.3	17.3	17.0	16.9	16.6	16.4
42	Secondary schools (q)	ratio	12.6	12.7	12.8	12.8	12.8	12.7	12.6	12.5	12.5	12.4	12.3
43	Higher education	ratio	14.7	15.1	15.9	17.3	18.0	18.0	18.3	18.7	19.5	n.y.a.	20.1
	Female teachers/academic staff												
44	Of all primary school teachers	%	74.7	76.1	76.2	76.9	77.5	78.0	78.3	78.7	79.1	79.1	79.4
45	Of all secondary school teachers	%	51.3	52.3	52.6	53.1	53.5	54.1	54.4	54.9	55.1	55.3	55.6
46	Of all higher education academic staff(s)	%	32.8	33.5	34.1	34.4	35.1	35.5	36.3	37.5	38.1	38.7	39.5

	PROVIDERS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
47	Schools	no.	9 679	9 648	9 630	9 609	9 587	9 590	9 609	r9 515	r9 612	9 607	9 615
48	Government schools – of all schools	%	74.0	73.8	73.6	73.2	73.0	72.7	72.6	r72.3	r72.3	72.1	72.2

(a) Refers to full-time students only.

(b) Refers to the number of full-time students in Year 12 divided by the number of full-time students in the first year of secondary school (Year 7 in NSW, the ACT, Vic. and Tas.; Year 8 in Qld, SA, the NT and WA) when the Year 12 cohort began secondary school. Care should be taken in interpreting apparent retention rates as they do not account for students repeating a year or migrating into or out of the relevant school student population.

(c) Data for 1994 refer to courses leading to recognised qualifications only.

(d) Data since 1994 has been revised by the National Centre for Vocational Education Research to account for changes in scope.

(e) Community education providers were included in the collection from 1995, private providers were included from 1996, and VET in schools was included from 1997 to 2001.

(f) In 2003 Queensland introduced a unique student identifier for all students covered by the collection which creates an apparent reduction in overall student numbers when compared with previous annual collections.

(g) Data since 1995 has been revised following a major review of the estimation method. Under the new method, data will not be finalised for eight quarters after initial estimation.

(h) The scope of the data in 2002 is different to that used for reporting students in previous publications in the Selected Higher Education Statistics series. 2001 data has been recalculated by the Department of Education, Science and Training to align with the change in scope. Refer to *Students 2002: Selected Higher Education Statistics* for more detail.

(i) Prior to 1996, New Zealand students were counted as being overseas students.

(j) There have been three major breaks in the series between 1994 and 2004. The breaks listed below are considered to have impacted on the comparability of data relating to qualifications. In 1994 qualifications of nurses were treated separately, in 1997 prompt cards were no longer used and computer assisted coding methodology was adopted, resulting in changes in the relative distribution within vocational education qualifications, and in 2001, the Australian Bureau of Statistics Classification of Qualifications (ABSCQ) was replaced by the Australian Standard Classification of Education (ASCED) (ABS cat. no. 1272.0).

(k) Estimates refer to recognised qualifications only.

(l) Includes persons who have a qualification where the level can not be determined.

(m) Includes persons who are still at school.

(n) In 1999, data do not include a number of Queensland students, who were formally exempted from testing.

(o) Series break due to the introduction of Accrual Accounting in the 1998–99 financial year. Data for the 1998–99 financial year onwards are not comparable with the cash-based estimates in previous financial years.

(p) Prior to 1998–99, this indicator refers to cash outlays on education including capital outlays. From 1998–99 onwards, when accrual accounting was implemented in Government Finance Statistics (GFS), this indicator refers to Operating Expenses and does not include a capital component.

(q) FTE student/teaching staff ratios are calculated by dividing the number of FTE students by the number of FTE teaching staff. Student/teaching staff ratios should not be used as a measure of class size. They do not take account of teacher aides and other non-teaching staff who may also assist in the delivery of school education.

(s) Data cover full-time and fractional full-time staff but exclude casual academic staff.

Reference periods: Data for indicators 1–7, 39–42, 44–45 and 47–48 are at August, except for 1992–1994 (July).
Data for indicators 8–9, 16–22, 24–25 and 30–35 are at May.
Data for indicators 10–12 are at 30 June.
Data for indicators 13–15, 23, 43 and 46 are at 31 August from 2002 and 31 March prior to 2002.
Data for indicators 26–29 are at August.
Data for indicators 36–38 are for the financial year ending 30 June.

Education and training: state summary

	PARTICIPANTS(a)	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
1	School students(b)	'000	2004	1 107	822	639	249	336	82	37	60	3 332
2	Students in government schools(b)	%	2004	67.2	65.2	70.2	66.7	68.4	73.8	76.5	59.9	67.5
3	Females – of all Year 11 and 12 students(b)	%	2004	52.1	52.0	51.1	51.8	50.8	52.6	50.5	49.2	51.6
4	Year 7/8 to Year 12 apparent retention rate – males(c)	%	2004	66.2	74.4	77.0	61.2	67.9	64.2	54.9	89.6	70.4
5	Year 7/8 to Year 12 apparent retention rate – females(c)	%	2004	76.2	88.2	85.7	75.1	77.5	82.0	63.1	87.3	81.2
6	Education participation – of all aged 15–19	%	2004	78.0	83.0	70.7	69.7	70.3	73.4	55.8	82.6	76.2
7	Education participation – of all aged 20–24	%	2004	39.1	43.8	32.3	31.8	33.4	30.2	*25.0	44.1	37.7
8	Vocational Education and Training (VET) students(d)(e)	'000	2003	588.4	511.2	297.6	112.7	130.4	35.8	19.9	21.8	1 717.8
9	Apprentices and trainees	'000	2004	122.2	120.4	71.5	32.7	26.1	13.9	2.8	5.9	395.6
10	Females – of all VET students(d)(e)	%	2003	50.0	49.0	45.2	50.0	47.8	43.9	48.2	51.8	48.6
11	Higher education students(f)(g)	'000	2003	300.2	236.8	175.7	63.0	92.6	16.5	6.3	26.7	930.0
12	Females – of all higher education students(f)(g)	%	2003	54.0	53.6	54.3	56.1	56.0	50.1	65.8	50.6	54.4
13	Overseas students – of all higher education students(f)(g)	%	2003	22.0	25.5	21.2	23.4	25.2	12.5	4.5	18.8	22.6
	EDUCATION OUTCOMES	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT(a)*	*ACT*	*Aust.*
	With non-school educational qualifications of all persons aged 15–64 years											
14	Of all aged 15–64(h)(i)	%	2004	53.4	50.3	48.7	48.6	49.9	44.4	51.8	57.8	50.9
15	Bachelor degree or above	%	2004	20.1	21.0	16.0	15.8	16.8	13.9	18.3	30.3	18.9
16	Advanced diploma and diploma or below	%	2004	32.5	28.7	32.1	32.1	32.4	29.6	32.1	27.1	31.3
17	Females – all with non-school educational qualifications	%	2004	47.9	48.0	47.1	46.7	47.0	46.7	44.4	49.8	47.6
	With non-school educational qualifications of all persons aged 25–64											
18	Of all aged 25–64(h)(i)	%	2004	60.9	56.6	54.9	54.2	55.9	49.2	57.3	67.5	57.5
19	Bachelor degree or above	%	2004	23.4	24.4	18.3	18.4	19.4	15.8	20.4	36.3	21.9
20	Advanced diploma and diploma or below	%	2004	36.4	31.5	35.9	35.1	35.5	32.4	35.3	30.8	34.7
21	Higher education students completing courses(j)(f)	'000	2003	70.5	56.0	37.2	15.5	21.6	3.7	1.0	6.8	215.1
	Without non-school educational qualifications											
22	Of all aged 15–64(h)(i)	%	2004	46.6	49.7	51.3	51.4	50.1	55.6	48.2	42.2	49.1
23	Did not complete Year 12(k)	%	2004	29.9	32.4	34.2	36.3	32.9	44.1	34.6	20.7	32.3
	Reading – proportion of Year 5 students reaching national benchmarks											
24	Males	%	2001	90.5	88.7	80.1	86.5	93.2	92.2	71.0	92.9	87.8
25	Females	%	2001	93.5	93.1	86.3	91.6	95.9	96.6	72.2	96.4	92.0
	Numeracy – proportion of Year 5 students reaching national benchmarks											
26	Males	%	2001	91.5	94.4	82.2	85.6	89.7	91.2	69.2	92.2	89.5
27	Females	%	2001	91.8	94.9	81.9	86.2	90.3	92.2	68.3	94.0	89.8

Education and training: state summary continued

	LABOUR MARKET OUTCOMES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	Unemployment rate (aged 15–64)											
28	With non-school educational qualifications(h)(i)	%	2004	3.7	4.1	3.7	4.3	3.5	4.0	*1.9	2.0	3.8
29	Bachelor degree or above	%	2004	3.0	2.9	3.0	2.7	3.4	*4.7	**	*1.7	3.0
30	Advanced diploma and diploma or below	%	2004	4.2	5.0	4.2	5.2	3.6	3.7	**	*2.3	4.3
31	Without non-school educational qualifications(h)	%	2004	8.5	7.5	8.2	8.6	7.4	8.5	7.8	6.4	8.0
32	Completed Year 12(k)	%	2004	6.8	5.8	7.8	5.5	6.0	*5.9	**	6.5	6.6
33	Did not complete Year 12(k)	%	2004	9.6	8.6	8.4	10.2	8.3	9.3	*9.2	*6.3	9.0

	HUMAN RESOURCES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	FTE Student/teaching staff ratio											
34	All schools (l)	ratio	2004	14.6	14.0	14.4	14.6	14.3	14.5	12.8	13.7	14.3
35	Government schools (l)	ratio	2004	14.8	14.2	14.4	14.6	14.3	14.6	12.6	13.0	14.5
36	Primary schools (l)	ratio	2004	17.1	16.3	15.7	16.5	16.4	16.2	14.2	15.4	16.4
37	Secondary schools (l)	ratio	2004	12.3	12.0	12.8	12.3	12.0	12.9	10.6	12.2	12.3
38	Higher education(f)(g)	ratio	2003	20.0	19.9	22.1	18.4	19.8	19.0	20.9	16.9	20.1
	Female teachers/academic staff											
39	Of all primary school teachers	%	2004	80.1	80.1	78.2	77.0	79.4	78.6	82.0	83.2	79.4
40	Of all secondary school teachers	%	2004	55.3	57.3	56.5	49.9	53.4	54.7	60.1	60.3	55.6
41	Of all higher education academic staff(g)(m)	%	2004	38.0	42.6	38.3	40.2	38.9	36.3	50.4	32.3	39.5

	PROVIDERS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
42	Schools	no.	2004	3 097	2 308	1 733	809	1 064	280	185	139	9 615
43	Government schools – of all schools	%	2004	70.8	70.1	74.1	75.3	72.8	76.4	81.1	69.1	72.2

(a) Estimates for Northern Territory refer to mainly urban areas only for indicators 6–7, 14–20, 22–23 and 28–33.

(b) Refers to full-time students only.

(c) Refers to the number of full-time students in Year 12 divided by the number of full-time students in the first year of secondary school (Year 7 in NSW, the ACT, Vic. and Tas.; Year 8 in Qld, SA, the NT and WA) when the Year 12 cohort began secondary school. Care should be taken in interpreting apparent retention rates as they do not account for students repeating a year or migrating into or out of the relevant school student population.

(d) Excludes VET in schools and students who were granted credit transfer for all of their 2003 enrolment activity.

(e) In 2003 Queensland introduced a unique student identifier for all students covered by the collection which creates an apparent reduction in overall student numbers when compared with previous annual collections.

(f) State and territory totals exclude students of the Australian Catholic University which has campuses in more than one state or territory.

(g) Australian total includes multi-state universities.

(h) Estimates refer to recognised qualifications only.

(i) Includes persons who have a qualification where the level can not be determined.

(j) Excludes VET in schools.

(k) Includes persons who are still at school.

(l) FTE student/teaching staff ratios are calculated by dividing the number of FTE students by the number of FTE teaching staff. Student/teaching staff ratios should not be used as a measure of class size. They do not take account of teacher aides and other non-teaching staff who may also assist in the delivery of school education.

(m) Data cover full-time and fractional full-time staff but exclude casual academic staff.

Reference periods: Data for indicators 6–7, 14–20, 22–23 and 28–33 are at May.
Data for indicators 8–10 are at 30 June.
Data for all other indicators are at August.

Education and training: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
ABS Survey of Education and Work.	8–9, 19–22, 25	6–7, 17–20, 23, 28–33
Department of Education, Science and Training, *Selected Higher Education Statistics.*	43	38
Department of Education, Science and Training, *Staff: Selected Higher Education Statistics*.	46	41
Department of Education, Science and Training, *Students: Selected Higher Education Statistics.*	13–15	11–13
Department of Education, Science and Training, *Students (First half year): Selected Higher Education Statistics.*	23	21
Education and Work, Australia (ABS cat. no. 6227.0).	16–18, 24, 30–35	14–16, 22
Government Finance Statistics, Education, Australia – Electronic delivery (ABS cat. no. 5518.0.55.001).	36–38	—
Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), *National Report on Schooling in Australia*.	26–29	24–27
National Centre for Vocational Education Research, *Apprentices and Trainees*.	11	9
National Centre for Vocational Education Research, Australian Vocational Education and Training Statistics, *Students and Courses: In detail.*	10, 12	8, 10
National School Statistics Collection.	—	4–5
Schools, Australia (ABS cat. no. 4221.0).	1–7, 39–42, 44–45, 47–48	1–3, 34–37, 39–40, 42–43

Education and training: definitions

Academic staff
those appointed wholly or principally to undertake a teaching-only function or a research-only function or a teaching-and-research function in an educational institution, or those appointed by an educational institution to be responsible for such people.

Reference: Department of Education, Science and Training, *Staff: Selected Higher Education Statistics.*

Advanced diploma and diploma or below
includes qualifications at the Advanced Diploma Level, Associate Degree Level, Diploma Level, Certificate IV Level, Certificate III Level, Certificate II Level, or Certificate I Level.

Reference: *Australian Standard Classification of Education (ASCED)* (ABS cat. no. 1272.0).

Apprentices and trainees
persons undertaking vocational training through contract of training arrangements. Contracts of training are legal agreements entered into by employers and trainees who are engaged in employment-based training.

Reference: National Centre for Vocational Education Research, *Australian Apprentice and Trainee Statistics.*

Bachelor degree or above
includes qualifications at the Bachelor Degree Level (including Honours), Graduate Certificate Level, Graduate Diploma Level, Master Degree Level or Doctorate Degree Level.

Reference: *Australian Standard Classification of Education (ASCED)* (ABS cat. no. 1272.0).

Education participation
all persons enrolled for a course of study in the survey month at any institution whose primary role is education. Included are schools, higher education establishments, Technical and Further Education colleges (TAFEs) and any other educational institutions.

Reference: *Education and Work, Australia* (ABS cat. no. 6227.0).

Full-time equivalent (FTE)
a measure of the total level of staff resources used. The FTE of a full-time staff member is equal to 1.0. The calculation of FTE for part-time staff is based on the proportion of time worked compared with that worked by full-time staff performing similar duties. Casual staff are excluded.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

FTE student/teaching staff ratios
are calculated by dividing the number of FTE students by the number of FTE teaching staff. Student/teaching staff ratios should not be used as a measure of class size. They do not take account of teacher aides and other non-teaching staff who may also assist in the delivery of school education.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

GDP (gross domestic product)
total market value of goods and services produced in Australia within a given period after deducting the cost of goods used up in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation).

Reference: *Government Finance Statistics, Education, Australia* – Electronic delivery (ABS cat. no. 5518.0.55.001).

Government expenses on education
total government final expenditure on education services and facilities; government transfer payments paid for the purpose of facilitating education but not intended to be spent directly on educational services (such as personal benefit payments to students and advances to persons for the Higher Education Contribution Scheme (HECS)); and other miscellaneous expenditure on education by government.

Reference: *Government Finance Statistics, Education, Australia* – Electronic delivery (ABS cat. no. 5518.0.55.001).

Government school
one administered by the Department of Education under the Director-General of Education (or equivalent) in each state or territory.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Education and training: definitions continued

Higher education student
a person who has been admitted to a higher education institution and who is enrolled (either full-time, part-time or externally) in a higher education award course, an enabling course or a non-award course to be undertaken in the semester used as the reference period. State totals are the number of students enrolled at all higher education institutions within a particular state or territory.

Reference: Department of Education, Science and Training, *Students: Selected Higher Education Statistics 2002*.

Higher education student/teaching staff ratios
the number of students, measured by the full-time equivalent (FTE) student unit for all students attending a higher education institution in Australia (excluding the FTE study load of work experience students), divided by the FTE of teaching staff (staff whose function was teaching only or teaching and research) in an Academic Organisational Unit, which includes full-time, fractional full-time, and casual staff.

Reference: *Education and Training Indicators, Australia, 2002* (ABS cat. no. 4230.0).

Non-government school
any school not administered by a Department of Education, but including special schools administered by government authorities other than the state and territory education departments.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Non-school educational qualification
an award for attainment as a result of formal learning from an accredited non-school institution. From 2001, with the implementation of the *Australian Standard Classification of Education (ASCED)* (ABS cat. no. 1262.0), non-school qualifications are awarded for educational attainments other than those of pre-primary, primary or secondary education. This includes qualifications at the Post Graduate Degree Level, Master Degree Level, Graduate Diploma and Graduate Certificate Level, Bachelor Degree Level, Advanced Diploma and Diploma Level, and Certificates I, II, III and IV Levels. Non-school qualifications may be attained concurrently with school qualifications.
Prior to 2001, educational qualifications were classified according to the *ABS Classification of Qualifications (ABSCQ)* (ABS cat. no. 1262.0). The level of attainment included higher degrees, postgraduate diplomas, bachelor degrees, undergraduate and associate diplomas, and skilled and basic vocational qualifications.

Reference: *Education and Work, Australia* (ABS cat. no. 6227.0).

Numeracy — national benchmarks
the numeracy benchmarks describe nationally agreed minimum acceptable standards for numeracy at particular school year levels. They represent the minimum acceptable standard of numeracy without which a student will have difficulty making sufficient progress at school.

Reference: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling,* 2000.

Overseas higher education student
a higher education student who is not an Australian citizen, is not a New Zealand citizen and does not have Permanent Residence status.

Reference: Department of Education, Science and Training, *Students: Selected Higher Education Statistics*.

Primary education
full-time education which typically commences around age five years and lasts for seven to eight years. It does not include sessional education such as preschool education.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Reading — national benchmarks
the reading benchmarks describe nationally agreed minimum acceptable standards for literacy at particular school year levels. They represent the minimum acceptable standard of literacy without which a student will have difficulty making sufficient progress at school.

Reference: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling in Australia,* 2000.

School
an educational institution which provides primary or secondary education on a full-time daily basis, or the provision of primary or secondary distance education.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

School student
a person who is enrolled in a school and active in a course of study, other than preschool or Technical and Further Education (TAFE) courses.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Secondary education
education which typically commences after completion of primary education, at around age 12 years, and lasts for five or six years.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Tertiary education
formal education beyond secondary education, including higher education, vocational education and training, or other specialist post-secondary education or training. Also called post-secondary education or further education.

Reference: *Education and Training Indicators, Australia* (ABS cat. no. 4230.0)

Unemployment rate (of persons aged 15 years and over)
for any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Vocational Education and Training (VET) student
a person for whom there is a full-time or part-time vocational stream enrolment in a TAFE college or agricultural college or state-recognised Adult and Community Education (ACE) provider, or a publicly-funded vocational course enrolment in a registered private training organisation during the reference year. Persons enrolled in non-vocational courses given by TAFE and ACE are excluded.

Reference: National Centre for Vocational Education Research, *Australian Vocational Education and Training Statistics: Students and Outcomes*.

Year 7/8 to 12 apparent retention rate
the percentage of full-time students of a given cohort group who continue from the first year of secondary schooling (Year 7 in New South Wales, the Australian Capital Territory, Victoria and Tasmania; Year 8 in Queensland, South Australia, the Northern Territory and Western Australia) to Year 12. Care should be taken in interpreting apparent retention rates as they do not account for students repeating a year or migrating into or out of the relevant school student population.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Young people at risk in the transition from education to work

EDUCATION AND WORK

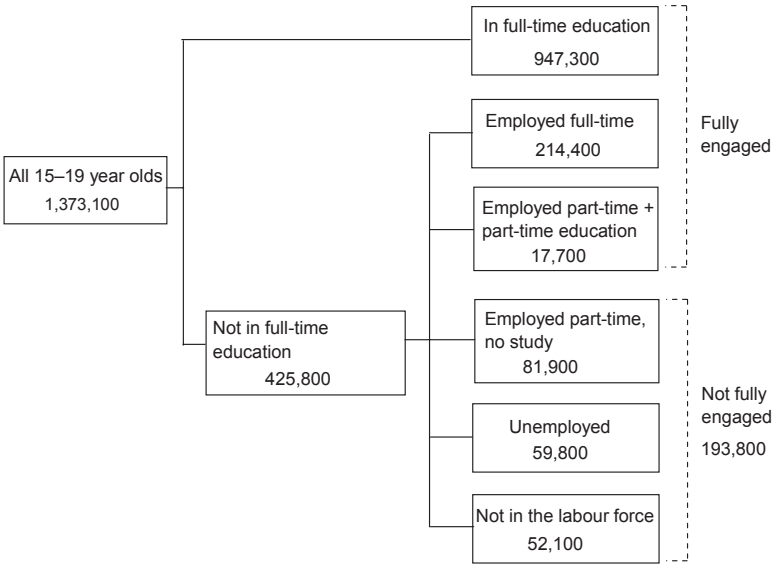
Contributed by Dr John Spierings, Dusseldorp Skills Forum.

In 2004, 14% of young people aged 15–19 years (193,800 young people) were not engaged in full-time education or full-time employment, or in a combination of part-time education and part-time employment.

For young people, the decisions made during the transition from school to continued study or full-time employment can have long-term implications. These can be for the young people themselves and their community, as well as for industry and governments, with significant health, welfare, and national productivity implications. During this period of transition, continued participation in formal skill development, learning and employment can be particularly important. In competitive national and international labour markets there are premiums on skills derived from continued formal learning. For example, among OECD countries, male labour force participants aged 25–64 years with educational qualifications below upper secondary education are around 1.5 times as likely to be unemployed as those who have completed upper secondary education.[1]

For such reasons, most OECD and European Union economies are attempting to maximise the productive economic participation of their young people, either through skills development or work. In Australia, governments have developed new post-compulsory education and training arrangements to strengthen the attractiveness of schooling, offer equivalent vocational pathways in non-school settings, and ensure an increasing proportion of teenagers remain connected to learning or work.[2]

Young people aged 15–19 years: engagement in education and the labour force — 2004



Source: ABS May 2004 Survey of Education and Work.

Data sources and definitions

Data on engagement in education and employment are from ABS annual May Surveys of Education and Work, 1984–2004. In this article, *young people* are aged 15–24 years; *teenagers* are aged 15–19 years; and *young adults* are aged 20–24 years. *School leavers* refers to 15–19 year olds who had left school in the previous year.

Young people *fully engaged* are those who, in the survey reference week, were in full-time work or in full-time education, or in part-time work combined with part-time education. Those *not fully engaged* are those who, in that week, were:[3]

- not studying or working (and therefore either unemployed or not in the labour force); or
- studying part-time and not working (therefore unemployed or not in the labour force); or
- not studying but in part-time work.

Employed persons are those who, during the reference week, worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm; or worked without pay in a family business; or had a job but were not at work. Those *employed full-time* are those who usually worked 35 hours or more (in all jobs), and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week. Those *employed part-time* usually worked less than 35 hours a week (in all jobs), and either did so during the reference week, or were not at work during the reference week.

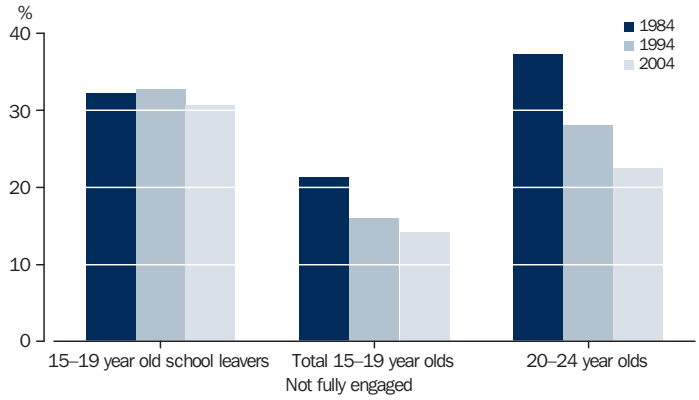
Unemployed persons are those who were not employed during the survey week, but were available for work and actively looking for work.

The *labour force* consists of persons who were employed or unemployed, as defined, during the survey reference week. Those *not in the labour force* are persons who were not in the categories employed or unemployed, as defined.

Engagement in learning and work

Many young people are fully engaged in either education or employment. That is, they are in full-time education (school or further education); in full-time employment; or in part-time education combined with part-time work. While some young people not fully engaged in these activities may be taking a 'gap year' between studies, travelling, or raising children, etc., the notion of not being fully engaged can also indicate vulnerability in the youth population.[3] Those who are not fully engaged may be at risk of becoming long term unemployed, underemployed, or marginally attached to the labour force; or may lack skill formation that can assist them over the long-term in the labour market.

Young people not fully engaged in education or employment



Source: ABS May 2004 Survey of Education and Work.

...teenagers

In 2004, most teenagers (15–19 year olds) (86%) were fully engaged. Most were in full-time education (69%) – mainly in school. Around one in six teenagers (16%) were in full-time employment. Only 1.3% of teenagers (17,700) were both working part-time and studying part-time.

A relatively small proportion were not fully engaged (14%). A higher proportion were employed part-time and not studying (6%) than the proportion who were unemployed (4%) or not in the labour force (4%).

...teenage school leavers

Looking only at the engagement of all teenagers can understate the proportion who are at risk in the transition from education to work, as many teenagers are still at school and yet to enter a transition (51% in 2004). So it is important to separately consider teenagers who have recently left school. In 2004, the proportion of school leavers who were not fully engaged was more than double the proportion of all teenagers (31% compared with 14% of all teenagers). However, a higher proportion of 15–19 year old school leavers than all teenagers were in full-time work (25%), and a considerable proportion were in full-time study (42%).

...young adults

The rate of full engagement varies across different age groups within the youth population, so it is also important to consider young adults (aged 20–24 years), given that transition experiences often stretch into this age group. Compared with school leavers, a lower proportion of young adults were not fully engaged (23%). As might be expected, participation in full-time work was highest for this age group – half of young adults (49%) were in full-time employment in 2004. Around a quarter (26%) were in full-time education (mainly in higher education: 22%).

Trends in engagement

...not fully engaged

Over the last two decades there was little change in the proportion of school leavers not fully engaged (32% in 1984, 33% in 1994 and 31% in 2004). In contrast, among all teenagers, there was a substantial fall in the proportion not fully engaged from 21% in 1984 to 16% in 1994, and slight drop again to

Young people: Participation in education and the labour force — 1984, 1994 and 2004

	15–19 year old school leavers			*Total 15–19 year olds*			*20–24 year olds*		
	1984	*1994*	*2004*	*1984*	*1994*	*2004*	*1984*	*1994*	*2004*
	%	%	%	%	%	%	%	%	%
In full-time education	25.7	38.7	42.1	49.0	66.0	69.0	8.6	17.0	26.2
Not in full-time education	74.3	61.3	57.9	51.0	34.0	31.0	91.4	83.0	73.8
Employed full-time	39.4	26.7	24.5	28.0	17.0	15.6	51.5	53.5	48.5
Employed part-time and in part-time study	2.7	1.7	2.8	1.7	1.0	1.3	2.6	1.3	2.7
Not fully engaged	32.3	32.8	30.6	21.3	16.0	14.1	37.3	28.1	22.5
Employed part-time, no study	10.7	10.0	13.9	7.9	4.8	6.0	14.8	8.8	9.1
Unemployed	16.9	17.5	10.2	9.6	7.9	4.4	10.3	10.3	5.0
Not in the labour force	4.6	5.3	6.5	3.7	3.3	3.8	12.2	9.0	8.4
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Total	**253.4**	**276.3**	**287.6**	**1 269.8**	**1 271.2**	**1 373.1**	**1 319.8**	**1 427.4**	**1 387.8**

Source: ABS May 2004 Survey of Education and Work.

14% in 2004. Among young adults there was also a substantial decrease in the proportion not fully engaged, from 37% in 1984, to 28% in 1994 and to 22% in 2004.

At the same time as the overall proportion of young people not fully engaged declined, there was a change in the balance of activities being undertaken by this group between 1994 and 2004. While the threat of unemployment eased, the not-fully-engaged population was increasingly represented by those working part-time and not studying, and those not participating in the labour market at all.

Between 1994 and 2004, unemployment declined substantially. Unemployment among school leavers fell from 18% to 10%; among all teenagers, from nearly 8% to 4%; and among young adults from 10% to 5%.

While the proportion of school leavers who were working part-time and not studying full-time increased (from 10% to 14%), the proportion of all teenagers working part-time and not studying full-time remained stable (5% and 6%); as did the proportion of young adults in this situation (around 9%). Similarly, the proportion of young people who were not in the labour force and not studying full-time remained steady.

...fully engaged

There has also been a shift in the kinds of activities undertaken by young people who *are* fully engaged. In particular, there has been a rising level of participation in full-time education in correspondence with a diminishing proportion of young people in full-time work. For school leavers, four out of ten (42%) had gone on to full-time study in 2004 compared with one in four (26%) in 1984. Nearly 70% of teenagers were in full-time education in 2004, compared with half (49%) in 1984; as were 26% of young adults: up from less than 9% in 1984.

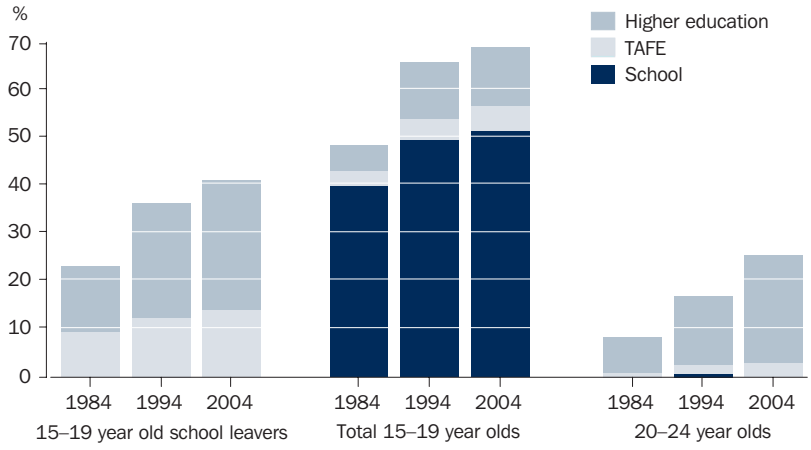
Participation in full-time education is reflected in both rising levels of school retention and increasing participation in further education. Just over half (51%) of all teenagers were in school in 2004 compared with 40% in 1984. For school leavers, participation in TAFE increased from 10% to 14%, and higher education participation increased from 13% to 27%. There was a particularly marked increase in young adult participation in higher education, from 7% in 1984 to 23% in 2004.

...part-time employment

Part-time employment among young people not in full-time education has increasingly become more common in the transition from school to work and/or continued study. The ratio of teenagers employed part-time and not studying to those employed full-time and not studying rose from 0.37 in 1984 to 0.58 in 2004. This increase was more prominent for school leavers (from 0.36 to 0.86).

Among young people not studying full-time, full-time employment levels dropped steadily over the period. This was most pronounced among school leavers (from 39% to 25%) and teenagers (28% to 16%); but also evident for young adults (52% to 49%).

Young people in full-time education(a) — 1984–2004



(a) Excludes institutions other than Higher education, TAFE or school.

Source: ABS May 2004 Survey of Education and Work.

Young people not fully engaged

Levels of full-time engagement among young people differ depending on characteristics such as their sex, area of residence and educational background.

Young women tend to be not fully engaged more than young men, particularly just after leaving school and in young adulthood (27% of women aged 20–24 years compared with 18% of men that age in 2004). This may partly be explained by the high proportion of young women who are not studying and not in the labour force whose main activity is undertaking home work and/or caring for children. In September 2004, 77% of women aged 15–24 years were in this situation, compared with 10% of young men that age who were not in the labour force.[4]

Overall, a greater proportion of young people aged 15–24 years living outside Australia's capital cities were not fully engaged compared with their metropolitan counterparts. In 2004, 16% of teenagers living outside capital cities were not fully engaged, compared with 13% of teenagers living in capital cities. The proportion of teenage school leavers living outside capital cities that were not fully engaged was 1.3 times that of school leavers living in capital cities.

And nearly three in ten young adults outside capital cities were not fully engaged (28%), compared with 20% of those living in capital cities. Such differences present policy challenges in terms of providing opportunities for both teenage school leavers living outside capital cities, and for young adults in their early 20s who want to remain in, or return to, these parts of Australia.

Educational attainment is also a substantial influence in the transition experiences of young people. Whether considering teenage school leavers or young adults, Year 12 completers were substantially more likely to be fully engaged than those who left school before Year 12.

Further, the proportion of young people not fully engaged increased with lower levels of school completion. While 24% of school leavers who had completed Year 12 were not fully engaged, the proportion was higher among those who had completed Year 11 or 10 (42% and 39% respectively). This pattern was less evident among all 15–19 year olds as 51% of this group had not completed school.

While 16% of young adults who had completed Year 12 were not fully engaged, a third (33%) of those who had completed to Year 11 were not fully engaged, increasing steadily to 65% of those who had completed school up to Year 8 or below.

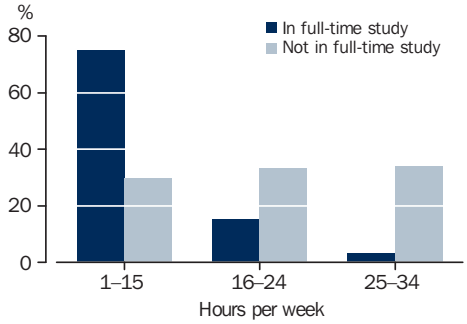
Selected characteristics of young people: proportion who were not fully engaged(a) — 2004

	15–19 year old school leavers	*Total 15–19 year olds*	*20–24 year olds*
Not fully engaged	%(a)	%(a)	%(a)
Sex			
Male	28.5	13.2	17.7
Female	32.8	15.1	27.4
Area of residence			
Capital city	27.4	12.9	19.8
Balance of state/territory	36.8	16.0	28.3
Highest year of school completed			
Year 12	24.0	19.4	16.4
Year 11	41.7	9.7	32.9
Year 10	38.5	14.7	39.5
Year 9	72.0	8.3	49.8
Year 8 or below	90.8	24.8	65.2
Total aged 15–24 years who were not fully engaged	**30.6**	**14.1**	**22.5**

(a) Proportion of all people in that population and with the selected characteristic that were not fully engaged.

Source: ABS May 2004 Survey of Education and Work.

15–19 year olds in part-time employment: working hours — 2004



Source: ABS August 2004 Labour Force Survey.

To what extent are young people vulnerable?

Several measures other than the unemployment rate indicate underutilisation of the youth labour force, and can highlight the extent to which young people may be at risk in the transition from school to further education or full-time work. For example, young people who are employed part-time may be underemployed (i.e. they may want more hours of work). Those that are unemployed may be long-term unemployed. And those that are not in the labour force may be marginally attached to the labour force, and may be discouraged jobseekers. The ABS Monthly Labour Force Survey provides information on the proportions of young people in these situations.

...underemployment

In August 2004, of all teenagers, 36% were working part-time and studying full-time. Of these, most worked 1–15 hours a week (75%), and 3% worked 25–34 hours a week. By contrast, among the 23% of teenagers who worked part-time and were *not* in full-time study, working hours were more evenly spread, with around one third working 1–15 hours a week (30%), one third working 16–24 hours (34%), and one third 25–34 hours per week (34%).

Relatively few teenagers working part-time and in full-time study wanted and were available for more hours of work (20%). This compares with 58% of those working part-time and not in full-time study who wanted more hours of work and were available to work more hours. This suggests that, in August 2004, there was considerable underemployment among young part-time workers who were not studying full-time.

The Monthly Labour Force Survey

Data about underemployment and long-term unemployment are from the ABS August 2004 Labour Force Survey (LFS). Data about marginal attachment are from the September 2004 supplementary survey to the LFS, Persons Not in the Labour Force. Data on the not fully engaged population are not available from these surveys as they do not collect information on part-time study.

Underemployed workers are employed persons who worked less than 35 hours during the reference week, who wanted to work additional hours and were available to work additional hours within four weeks.

Long term unemployed are persons unemployed for a period of 52 weeks or more.

Persons *marginally attached to the labour force* are those who were not in the labour force in the survey reference week, who wanted to work and:

- were actively looking for work but not available to start work in the reference week; or
- were not actively looking for work but were available to start work within four weeks.

Discouraged jobseekers are persons with a marginal attachment to the labour force who wanted to work and were available to start within four weeks, but whose main reason for not actively looking for work was that they believed they would not find a job for any of the following reasons:

- considered too young or too old by employers
- lacked necessary schooling, training, skills or experience
- language or ethnic background
- no jobs in their locality or line of work
- no jobs available at all

Young people aged 15–19 years who were not in full-time employment — 2004

	In full-time education	Not in full-time education	Total aged 15–19 years
	%	%	%
Part-time workers			
Would prefer to work more hours and available	19.7	58.4	27.8
Would prefer to work more hours but not available	3.2	1.0	2.8
Preferred not to work more hours	77.1	40.5	69.5
Total	**100.0**	**100.0**	**100.0**

Source: ABS August 2004 Labour Force Survey.

Young people aged 15–19 years who were not in full-time employment — 2004

	In full-time education	Not in full-time education	Total aged 15–19 years
	%	%	%
Unemployed(a)			
Unemployed less than 1 year	93.3	86.7	90.7
Unemployed 1 year or more	6.7	13.3	9.3
Total	**100.0**	**100.0**	**100.0**
Not in the labour force(b)			
Marginally attached	28.5	49.3	30.1
Not marginally attached	71.5	50.7	69.9
Total	**100.0**	**100.0**	**100.0**

(a) *Source:* ABS August 2004 Labour Force Survey.
(b) *Source:* ABS September 2004 Persons Not in the Labour Force Survey.

...long term unemployment

Unemployment tends to be shorter in duration for young people than it does for people aged 25 years and over. Nevertheless, in August 2004, 9% of unemployed teenagers were long-term unemployed, that is, they had been unemployed for more than a year. The proportion of unemployed teenagers who were not in full-time study, and who were long-term unemployed was 13%. This was considerably higher than the proportion of unemployed teenagers who were in full-time study, and were long-term unemployed (7%).

...marginal attachment

While some young people who are not fully engaged can be considered vulnerable, others may be in these circumstances by choice. For example, young people may not be in the labour force for many reasons – they may be travelling, caring for children, or have a disability, etc. However, in September 2004, half (49%) of all teenagers who were not in full-time study and not in the labour force maintained a marginal attachment to the labour force. That is, they wanted to work but were either not available to start work; or not actively seeking work.

In September 2004, within this marginally attached group, around 9,000 young people aged 15–24 years were discouraged jobseekers. That is, they had stopped looking for work for reasons associated with the labour market. For example, because they thought employers would consider them too young, they lacked the necessary training, skills or experience, or no jobs were available in their locality or line of work.

In conclusion

Educational attainment is a significant influence in the transition experiences of school leavers. Continued participation in formal skill development and learning, through education and/or work, also makes an important contribution to labour force participation beyond the immediate transition from school.

Endnotes

1 Organisation for Ecomonic Co-operation and Development 2004, *Education at a Glance: OECD Indicators*, OECD, Paris.

2 Stepping Forward <http://www.mceetya.edu.au/stepping_forward.htm>, accessed 15 June 2005.

3 This broad definition derives from the Australian Government's Committee on Employment Opportunities convened in the early 1990s. This was a taskforce on which the Working Nation proposals were developed and which looked at the risk profile of people most likely to become long-term unemployed. This committee defined young people in these activity states as being most vulnerable to the risk of long-term unemployment.

However, while analysis of these three categories may allow examination of the current risk profile of young people, there are relatively few tools available to actually track the extent to which this risk is realised by individuals over time.

See also Dusseldorp Skills Forum, *How young people are faring, Key indicators 2004*, Monash University - ACER, Centre for the Economics of Education and Training, 2004.

4 Australian Bureau of Statistics 2004, *Persons Not in the Labour Force, Australia,* cat. no. 6220.0, ABS, Canberra.

Multiple qualification holders

EDUCATIONAL ATTAINMENT

In 2001, 2.3 million people aged 15–64 years held more than one non-school qualification.

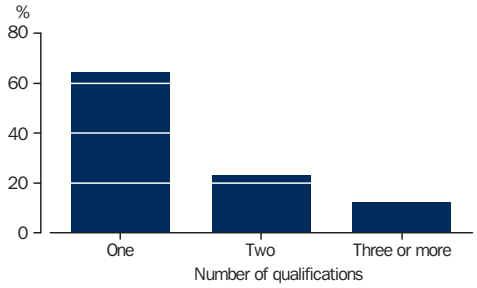
In addition to the personal satisfaction people can gain from acquiring new skills and knowledge, obtaining a qualification can increase the chance of gaining paid work and of working in a preferred job. A qualification can provide a pathway to career progression, or a change in work, or can update skills required in an increasingly technological workforce. In recent years, there has been an increasing focus on lifelong learning with people taking different pathways at different times of their lives in order to obtain or upgrade their workplace and life skills, and their qualifications.[1]

Not all qualifications are gained by young people straight after leaving school and many people achieve more than one qualification over the course of their adult lives. This article focuses on multiple qualification holders, that is people aged 15–64 years, with two or more non-school qualifications.

More than one non-school qualification

In 2001, just over half (51%) of 15–64 year olds held a non-school qualification – almost 6.6 million Australians. Of these, more than a third (2.3 million people) held more than one non-school qualification. Many of these multiple qualification holders (65%) had two non-school qualifications, and 810,000 (35%) had three or more. While the proportion of people with non-school qualifications who had more than one such qualification was similar in 1997 and 2001, the number of people with two or more non-school qualifications increased by over 449,000 people.

Persons aged 15–64 years with non-school qualifications: number of qualifications — 2001



Source: ABS 2001 Survey of Education and Training.

Non-school qualifications

The data in this article come from the ABS 2001 Survey of Education and Training, which collected information on the educational attainment of people aged 15–64 years.

Multiple qualification holders are people aged 15–64 years with two or more non-school qualifications.

*Non-school qualification*s are awarded for educational attainments other than those of pre-primary, primary, or secondary education. They may be obtained concurrently with school qualifications.

Level of qualification is a ranking of qualifications according to the quality and quantity of learning involved in obtaining those qualifications. It is categorised according to the 'Level of education' classification in the Australian Standard Classification of Education (ASCED).

Field of study is the subject matter taught in the course of study leading to the award of a particular qualification. It is categorised according to the 'Field of education' classification in the Australian Standard Classification of Education (ASCED).

Consistent with the longer time they had had in their adult lives to undertake more courses of study, 45–64 year olds were the most likely of all age groups to hold multiple qualifications (40% of people in this age group had non-school qualifications having multiple qualifications). At the other end of the age spectrum, many young people have not had the time to complete more than one non-school qualification. Despite this, in 2001, 181,000 people aged 15–24 years had two or more non-school qualifications. They represented 23% of people with non-school qualifications in this age group.

In 2001, 37% of multiple qualification holders had highest and second highest qualifications that were at the same level, while 61% held them in the same field.

Levels of multiple qualifications

The proportion of people with multiple non-school qualifications increased with the level of their highest qualification. In 2001, people aged 15–64 years with Postgraduate degrees were the most likely to have two or more non-school qualifications (96%), while those with Certificates I/II were the least likely (17%). This reflects both the hierarchical nature of the level of qualification classification and the academic requirement

Multiple qualification holders(a): whether highest and second highest qualifications at same level and in same field — 2001

	%
Both at same level(b)	36.6
Both in same field(c)	60.7
	'000
Multiple qualification holders(d)	**2 322.9**
	%
As a proportion of all people with non-school qualifications	35.3

(a) Persons aged 15–64 years with two or more non-school qualifications.
(b) People whose level of qualifications were not determined were excluded prior to the calculation of percentages.
(c) People whose field of qualification was not determined, and those with qualifications in Mixed fields were excluded prior to the calculation of percentages.
(d) Includes people whose level of qualifications were not determined, those whose field of qualification was not determined, and those with qualifications in Mixed fields.

Source: ABS 2001 Survey of Education and Training.

for people to have an undergraduate qualification in order to undertake postgraduate study. That said, not all qualifications are gained according to a hierarchy, with some people gaining vocational educational and training qualifications after gaining a Bachelor degree or higher.

In 2001, almost 1.5 million multiple qualification holders held their highest and second highest non-school qualifications at different levels. Of those in this group whose highest qualification was a Postgraduate degree, 97% had a second qualification that was a Bachelor degree or higher. For those whose highest qualification was a Graduate diploma or certificate, 81% had a Bachelor degree or higher. For those whose highest qualification was a Bachelor degree or higher, 34% had a second qualification at the level of Advanced diploma or diploma level or below. This represented 397,000 people with vocational educational and training qualifications who also held higher education qualifications.

Fields of multiple qualifications

In 2001, the highest qualifications of people with two or more non-school qualifications were distributed across fields of study in similar proportions to the highest qualification of all people with qualifications. However, people were slightly more likely to have two or more non-school qualifications if their highest non-school qualification was in one of the following fields: Education, Society and culture, Health, and to a lesser extent Natural and physical sciences.

Multiple qualification holders(a): level of qualifications — 2001

	Level of highest non-school qualification					
Level of second highest non-school qualification	*Postgraduate degree*	*Graduate diploma/ Graduate certificate*	*Bachelor degree*	*Advanced diploma/ Diploma*	*Certificate III/IV*	*Certificate I/II(b)*
	%	%	%	%	%	%
Postgraduate degree	16.6	..	..	..	..	..
Graduate diploma/Graduate certificate	19.5	12.8	..	..	..	..
Bachelor degree	60.5	67.7	38.5	..	..	..
Advanced diploma/Diploma	2.1	13.8	39.8	29.3	..	..
Certificate III/IV	1.0	4.0	11.2	41.6	44.8	..
Certificate I/II(b)	0.2	1.6	10.4	29.0	55.2	100.0
Total(c)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000
Total(d)	**291.9**	**388.0**	**522.4**	**351.3**	**466.1**	**249.4**

(a) People aged 15–64 years with two or more non-school qualifications.
(b) Includes certificate not further defined.
(c) People whose level of second highest qualification was not determined were excluded prior to the calculation of percentages.
(d) Includes people whose level of second highest qualification was not determined.

Source: ABS 2001 Survey of Education and Training.

Multiple qualification holders(a): fields of qualifications — 2001

	Persons(b)	*Second highest qualification in same field*	*Most common field of second highest qualification other than same field*	
Field of highest qualification	'000	% of persons	Field	% of persons
Natural and physical sciences	90.4	59.1	Education	6.6
Information technology	80.4	42.0	Management and commerce	18.6
Engineering and related technology	393.9	73.3	Management and commerce	8.6
Architecture and building	98.7	63.7	Engineering and related technology	16.0
Agriculture, environmental and related fields	57.8	46.6	Management and commerce	17.5
Health	287.3	72.2	Management and commerce	7.6
Education	292.5	45.8	Society and culture	17.3
Management and commerce	473.5	63.2	Engineering and related technology	9.2
Society and culture	345.5	55.9	Management and commerce	13.6
Creative arts	91.0	55.6	Management and commerce	14.0
Food, hospitality and personal services	85.8	50.1	Management and commerce	20.2
All multiple qualification holders(c)	**2 322.9**	**60.7**	**Management and commerce**	**21.6**

(a) People aged 15–64 years with two or more non-school qualifications.
(b) Includes people whose field of second highest qualification was not determined, and those whose second highest qualifications were in Mixed fields.
(c) Includes people whose field of highest qualification was not determined, and those whose highest qualifications were in Mixed fields.

Source: ABS 2001 Survey of Education and Training.

For people with two or more non-school qualifications, 61% had their second highest non-school qualification in the same field as their highest. This proportion varied across fields of study, from 42% for Information technology to 73% for Engineering and related technologies.

For multiple qualification holders who held their second highest qualification in a different field to their highest, 22% held their second highest qualification in the field of Management and commerce. Across fields of study, Management and commerce was the most common field of second highest qualification for seven of the 10 broad fields of study considered (other than Management and commerce itself). For those whose highest non-school qualification was in the field of Education, their second qualification was most likely, after Education, to be in the field of Society and culture (17%). Engineering and related technology was the next most common field of study (16%) for people whose highest non-school qualification was in Architecture and building.

For each field of study of highest non-school qualification, there were people whose second highest qualification was in each of the other fields of study. However, overall 82% of people had their second highest non-school qualification in either the same field as their highest or in Management and commerce.

Endnotes

1 Australian Bureau of Statistics, 2004, *Information Paper: Measuring Learning in Australia – Plan to Improve the Quality, Coverage and Use of Education and Training Statistics*, cat. no. 4231.0, ABS, Canberra.

School students' mathematics and science literacy

EDUCATIONAL ATTAINMENT

Australian students have high levels of mathematical and scientific literacy. In 2003, their average scores placed them among the top third of 41 countries.

Mathematical and scientific literacy is fundamental to the effective functioning of a knowledge-based society. Mathematics and science skills are part of a broader skill set that can assist young people in further education, participation in home and life activities and obtaining employment. Mathematics and science skills are important in enabling Australians to function effectively in a flexible, often technical, labour force that can respond to changing workplace demands.

One key goal of schooling is for students to be numerate and able to read, write and spell.[1] Higher achievers in literacy and numeracy in Year 9 are more likely to stay at school until Year 12, have a higher tertiary entrance performance and be employed and earning more when they leave school.[2]

However, literacy in areas such as science and information technology, as well as mathematics, is becoming more important for functioning in our technical world. Mathematics and science have been identified among the eight key learning areas for Australian school students.[1]

Concepts and data

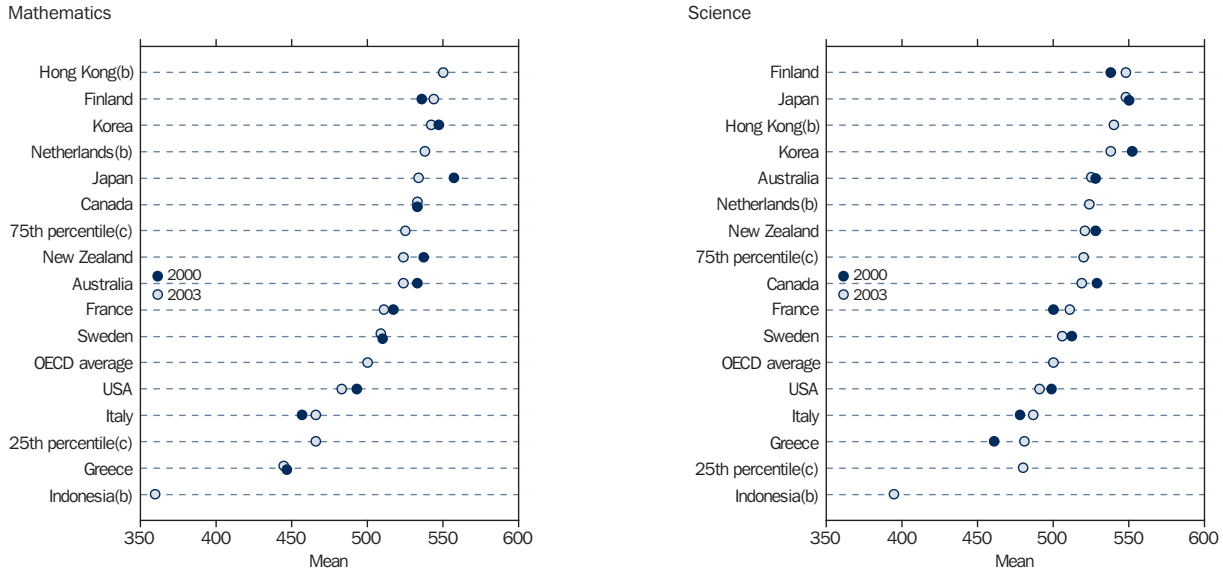
This article will explore mathematical and scientific literacy for 15 year old school students using data from the Programme for International Student Assessment (PISA) surveys. In 2003, 12,600 15 year old Australian students from 321 government and non-government schools participated in the survey. The Australian Council for Educational Research (ACER) was responsible for conducting and disseminating the Australian results.

Mathematical literacy (also termed numeracy) is an individual's capacity to identify and understand the role that mathematics plays in the world, to make well-founded judgements and to use and engage with mathematics in ways that meet the needs of that individual's life as a constructive, concerned and reflective citizen.[3]

Scientific literacy is an individual's capacity to use scientific knowledge, to identify questions and to draw evidence-based conclusions in order to understand and help make decisions about the natural world and the changes made to it through human activity.[3]

Proficiency levels for mathematical literacy represent assessed performance on groups of tasks of ascending difficulty, with level 6 as the highest level of proficiency and 'below level 1' the lowest. Levels 1 and below represent items with relatively low difficulty while levels 4 and above reflect items with moderate through to high difficulty.

Selected countries: PISA mean mathematics and science literacy scores(a)



(a) Of 15 year old school students as assessed by PISA. Mathematical literacy in 2000 tested two areas while 2003 tested four areas. Ranked by 2003 mean scores.
(b) Did not participate in PISA 2000.
(c) Percentiles are based on average scores for all countries.

Source: Thomson, S et al 2004, *Facing the Future: A focus on mathematical literacy among Australian 15 year old students in PISA 2003*. Lokan, J et al 2001, *15-up and counting, reading, writing, reasoning: how literate are Australian students?: the PISA 2000 survey of students' reading, mathematical and scientific literacy skills*.

International comparisons

Internationally, 15 year olds are nearing the end of compulsory secondary schooling.[3] The mathematical and scientific literacy of 15 year olds is an indicator of how well equipped they are for future education, work and life.

In 2003, PISA results showed Australian 15 year olds performed well when compared with 41 OECD and other countries across both maths and science scores. Australia's mean scores of 524 in mathematical literacy and 525 in scientific literacy placed it above the OECD average of 500 for each skill area and in the top third of countries.

Four countries performed significantly better than Australia in mathematical literacy (Finland, Hong Kong-China, Korea and the Netherlands), while nine countries including Canada and New Zealand had similar scores. In science, three countries scored significantly higher than Australia while eight countries (also including New Zealand and Canada) had similar results. Australia performed significantly better than the remaining countries.

Most countries had some variation between their performance in 2000 and 2003. Australian students' average performance was similar in 2000 and 2003, but more countries outperformed Australia in 2003.

Australian students

Over four in ten Australian students (43%) were capable of tackling items in mathematics with moderate difficulty through to items with relatively high difficulty (proficiency level 4 through to level 6). Only 14% were unable to do items with relatively low difficulty (level 1 or below).[3]

While Australian students attained a good overall result in 2003, achievement varied across students with different characteristics.

Programme for International Student Assessment (PISA)

PISA was developed by the Organisation for Economic Co-operation and Development (OECD). The first survey took place in 2000 and the second in 2003 with 41 countries taking part. It assesses the abilities of 15 year olds to apply knowledge and skills to real-life problems and situations.

PISA measures literacy in three domains: reading, scientific literacy and mathematical literacy. A scaling method assigns scores so that 500 is the OECD average in each domain. Students are also assessed in terms of proficiency levels for mathematical literacy.

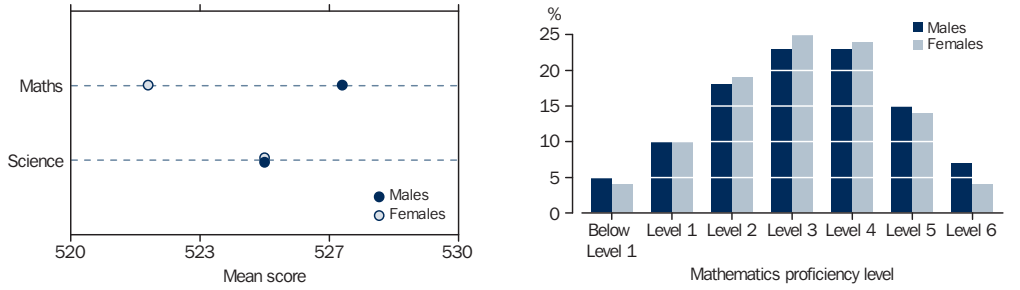
Each cycle of PISA has a different focus with reading literacy the main focus in 2000 and mathematical literacy in 2003. The mathematics domain testing in 2000 measured two content areas (space and shape, and change and relationship), while 2003 covered these two areas plus two additional content areas (quantity and uncertainty). Science covered the same content areas in 2000 and 2003: explaining and predicting scientific phenomena, understanding scientific investigation and interpreting scientific evidence and conclusions.[4]

Maths and science literacy is associated with a variety of social and demographic factors such as sex, socioeconomic status, family background, teacher characteristics and school setting.

...sex

Research shows that overall, while many boys in Australian schools are doing well, boys are not achieving as well as girls across a range of educational and social measures. Boys are more likely to drop out of school early and less likely to go on to university than girls.[5] However, recent research on school subject selection and subsequent study and work participation in Australia has found that males are still much more likely than females to be taking advanced mathematics and science at

Mathematics and science mean scores(a) and proficiency levels — 2003



(a) Of 15 year old school students in Australia as assessed by PISA.

Source: Thomson, S et al 2004, *Facing the Future: A focus on mathematical literacy among Australian 15 year old students in PISA 2003*.

State/territory mean scores(a) — 2003

State	*Maths*	*Science*
ACT	548	553
WA	548	546
SA	535	535
NSW	526	530
Qld	520	519
Vic.	511	510
Tas.	507	509
NT	496	495
OECD average	500	500

(a) Of 15 year old school students in Australia as assessed by PISA.

Source: Thomson, S et al 2004, *Facing the Future: A focus on mathematical literacy among Australian 15 year old students in PISA 2003.*

senior secondary school, and much more likely to move into mathematics and science-related courses in higher education.[3]

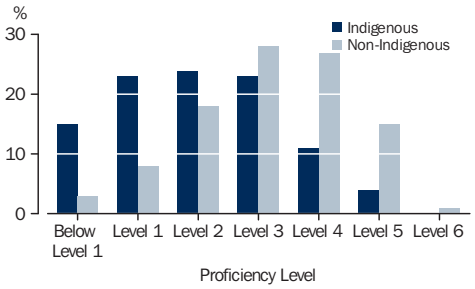
In 2003, there were no significant sex differences in scores for Australian 15 year olds, with boys' mathematical literacy (mean score of 527) similar to that of girls' (522). Overall, more boys (45%) than girls (42%) achieved the higher levels of proficiency (levels 4, 5 and 6).[3] Australian male and female students had the same average score of 525 for scientific literacy.

...states and territories

There are differences in school starting ages between Australian states and territories, which makes it difficult to compare aspects of education. The bulk of students tested were in Year 10 for all the states with the exception of Western Australia where more than half were in Year 11.[3]

In all states and territories, Australian 15 year old students performed on average at least as well as the average performance of students across all OECD countries in the study. Students in the Australian Capital Territory and Western Australia scored the highest within Australia, on average, in mathematical and scientific literacy. Over half of their students performed at or above the top three proficiency levels in mathematical literacy.[3] The average scores of the Australian Capital Territory and Western Australia were similar to the highest performing countries for mathematics and science.[3]

Indigenous and non-Indigenous mathematics proficiency levels(a) — 2003



(a) Of 15 year old school students in Australia as assessed by PISA.

Source: Thomson, S et al 2004, *Facing the Future: A focus on mathematical literacy among Australian 15 year old students in PISA 2003.*

...geographic location

Students attending schools in rural and remote areas experience educational disadvantage in a variety of ways. In remote areas, some of the major issues are recruiting and retaining teachers, barriers to accessing educational services and issues surrounding the access to, costs and use of information and communications technology.[6]

In 2003, metropolitan students had higher mean scores in both mathematical and scientific literacy (528 and 529) compared with provincial or rural (515 and 516) and remote areas (493 and 489).[3] These geographic locations have been coded using the Ministerial Council on Education, Employment Training and Youth Affairs (MCEETYA) Schools Geographic Location Classification.

Australian National Benchmarks

In 1997, all State, Territory and Commonwealth Education Ministers agreed on a national goal which stated that every child leaving primary school should be numerate and be able to read, write, and spell at an appropriate level. This led to the implementation of the National Literacy and Numeracy Plan, the essential features of which are: early assessment and intervention for students at risk of not achieving minimum numeracy and literacy goals; development of national benchmarks for each of Years 3, 5 and 7; and assessment of student progress against these benchmarks. The benchmarks describe nationally agreed minimum acceptable standards for aspects of literacy and numeracy at particular year levels.

In 2001, 94% of year 3 students achieved the numeracy benchmark compared with 90% for the Year 5's. (Data for Year 7 students are expected in mid 2005.)

Source: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling in Australia 2001.*

Schools and teachers

The school setting and characteristics of teachers are factors that can influence student performance. The Trends in Mathematics and Science Study (TIMSS 2002–03) included questionnaires to teachers and school principals covering qualifications and training, factors limiting instruction, and school contexts for learning.

Overall, Australian mathematics and science teachers of Year 8 students had relevant qualifications. The majority of Australian mathematics and science teachers had the relevant discipline as their main area of study (70% of mathematics teachers and 90% of science teachers).

Regarding factors limiting instruction, teachers in Northern Territory and Western Australia were most likely to state that disruptive students had some impact on learning mathematics (95% and 58% respectively). The ACT (18%) was the state with the lowest reporting of disruption.

In 2002–03, for Year 8 students, 1% of principals in Australian schools reported that shortages of resources affected mathematics instruction to a great extent, down from 6% in 1994–95. This was much lower than the international averages of 11% and 10% respectively.

Source: Thomson, S and Fleming, N 2004, *Summing it up: Mathematics achievement in Australian schools in TIMSS 2002* (TIMSS Australia Monograph no 6) and *Examining the evidence: Science achievement in Australian schools in TIMSS 2002* (TIMSS Australia Monograph no 7), Australian Council for Educational Research, Camberwell.

...Indigenous students

The National Indigenous English Literacy and Numeracy Strategy was launched in 2000 with the objective to achieve literacy and numeracy for Aboriginal and Torres Strait Islander students at levels comparable to those achieved by other young Australians.[7] The 2003 PISA results for Indigenous students were consistently lower than for non-Indigenous students. Indigenous students had a mean mathematics literacy score of 440 and science score of 434, compared with non-Indigenous students scores of 526 and 527 respectively.[3]

For mathematical literacy, there was an over-representation of Indigenous students at the lowest proficiency levels (1 and below – 43%) compared with all students in Australia (14%) and the OECD average of 21%. However, 13% of Indigenous students were performing at the higher levels (levels 4–6).[3]

Other factors affecting performance

The home environment has an influence on the reading literacy and numeracy outcomes for students. (See Australian Social Trends 2002, Literacy and numeracy among school students, pp. 114–118). Further analysis of the PISA results for 15 year old students in Australia has shown a moderately positive relationship between the mathematical literacy performance of 15 year old students and home environment factors such as parental education, the number of books in the home, computer resources, access to educational software and cultural possessions in the home, such as books of poetry and works of art.[3]

Books are an important educational resource. The number of books in the home were found to be related to student performance in PISA 2003. On average a student whose home had between 201–500 books scored 76 points higher in mathematical literacy and 89 points higher in scientific literacy than a student who had 11–25 books in their home.[3]

The OECD developed a socioeconomic index based on the types of factors discussed above. In 2003, Australian students in the lowest quartile of the socioeconomic index (signifying the highest degree of disadvantage) scored about 79 points less in mathematical literacy than students in the highest quartile (signifying the lowest degree of disadvantage). Overall, socioeconomic status had less of an impact on mathematics performance in Australia than across other OECD countries on average.[3]

In 2003, Australian students who spoke English at home had higher average scores for both mathematical and scientific literacy (scores of 529 in each domain) than those who spoke a language other than English at home (505 and 509 respectively).[3]

Study beyond school

Mathematics and science skills acquired at secondary level enable some students to attend university. Students with a mathematics and science background in Year 12 were more likely to enter higher education than other Year 12 students.[8]

In 2004, almost all people (94%) who were studying in the natural and physical sciences field (e.g. mathematics, chemistry and biology) in a non-school environment were enrolled in a bachelor degree or above. There has been an increase in the number of people with a degree in the natural and physical sciences at this level, from 147,000 in 1994 to 205,000 in 2004. However, as a proportion of all people with a bachelor degree or above, these students declined from 11% to 8% over the period.[9,10]

Endnotes

1 Ministerial Council on Education, Employment, Training and Youth Affairs 1999, *The National Goals for Schooling in the Twenty-first Century*, <http://www.mceetya.edu.au/nationalgoals/natgoals.htm>, accessed 16 May 2005.

2 Penman, R 2004, *An easy reference guide to Longitudinal Surveys of Australian Youth research reports, 1996-2003*, Australian Council for Educational Research, Camberwell.

3 Thomson, S. et al 2004, *Facing the Future: A focus on mathematical literacy among Australian 15 year old students in PISA 2003*, Australian Council for Educational Research, Camberwell.

4 Organisation for Economic Co-operation and Development, 2004, *Learning for Tomorrow's World; First Results from PISA 2003,* OECD, Paris.

5 Boys' education <http://www.dest.gov.au/sectors/school_education/policy_initiatives_reviews/key_issues/boys_education/default.htm> accessed May 27 2005.

6 Department of Education, Science and Training 2003, *National Evaluation of the Country Areas Program, 2002-03* <http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/national_evaluation_of_the_country_areas_program_2002_03.htm> accessed 14 June 2005.

7 Department of Education, Science and Training 2003, *Final Report on the National Evaluation of National Indigenous English Literacy and Numeracy Strategy(NIELS),* <http://www.dest.gov.au/sectors/indigenous_education/publications_resources/profiles/final_report_nielns.htm> accessed June 14 2005.

8 Lamb, S and Ball, K 1999, *Curriculum and careers: The education and labour market consequences of Year 12 subject choice*, Longitudinal Surveys of Australian Youth Research Report no. 12, Australian Council for Educational Research, Camberwell.

9 Australian Bureau of Statistics 2004, *Survey of Education and Work*, cat. no. 6227.0, ABS, Canberra

10 Australian Bureau of Statistics 1994, Transitions from Education to Work, cat. no. 6227.0, ABS, Canberra.

Work

Work: national summary

LABOUR FORCE	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1 Total labour force	'000	r8 691	r8 881	r9 061	r9 169	r9 256	r9 379	r9 495	r9 676	r9 832	r10 019	10 146
2 Females – of total labour force	%	42.3	42.7	43.0	43.1	43.2	43.3	r43.8	r44.2	r44.2	r44.7	44.6
3 Participation rate	%	r62.7	63.3	r63.6	r63.4	63.1	r63.1	r63.1	63.4	r63.4	r63.7	63.5
4 Males	%	73.6	r73.7	73.8	73.4	r72.9	r72.7	r72.3	r72.1	r72.1	r71.7	71.6
5 Females	%	52.2	53.2	53.8	r53.8	53.6	r53.8	r54.3	r54.9	r55.1	r55.9	55.6
6 Females with children aged 0–4	%	46.1	49.3	47.4	47.7	48.2	47.1	49.3	r50.0	r49.3	r50.0	47.5
7 Persons aged 15–19	%	55.8	r58.7	r59.1	r58.9	r57.6	r58.2	r59.1	r59.8	r59.5	r59.4	60.1
8 Persons aged 20–24	%	82.1	r82.7	83.0	82.5	r81.9	r82.1	r82.1	r82.2	81.8	r81.5	81.1
9 Median age of male labour force	years	36	36	37	37	37	r38	r38	38	38	39	38
10 Median age of female labour force	years	35	35	36	36	36	36	37	37	37	r38	38

EMPLOYED PEOPLE	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
11 Total employed	'000	r7 802	r8 113	r8 324	r8 404	r8 519	r8 689	r8 869	r9 057	r9 168	r9 395	9 560
12 Proportion of the total population in employment	%	43.7	r44.9	45.5	45.4	r45.5	r45.9	r46.3	r46.7	r46.7	r47.3	47.5
Part-time work												
13 Persons employed part-time – of total employed	%	r24.0	r24.5	r24.7	r25.3	r25.7	r26.1	r26.3	r26.8	r28.1	r28.7	28.4
14 Males employed part-time – of total males employed	%	r10.5	r11.0	r11.1	r11.8	r12.1	r12.6	r12.6	r13.4	14.4	14.8	14.7
15 Females employed part-time – of total females employed	%	r42.2	r42.6	r42.6	r43.1	r43.5	r43.6	r43.8	r43.6	r45.3	r45.8	45.6
16 Females employed part-time – of total part-time employed	%	r74.9	74.5	r74.5	r73.6	r73.3	72.7	r73.2	r72.2	r71.5	r71.5	71.3
17 Average hours worked per week by persons employed part-time	hours	r15.1	15.3	15.2	15.4	r15.4	r15.4	r15.6	r15.6	15.8	16.0	15.9
18 Persons employed part-time who prefer more hours – of all part-time employed	%	28.1	26.4	26.1	26.5	r26.1	r25.8	23.9	r24.2	r27.1	r26.2	26.3
19 Persons employed part-time who worked 15 hours or less per week – of all part-time employed	%	52.8	51.8	52.1	51.1	r51.1	r51.1	r50.2	r49.9	49.2	48.3	48.9
Full-time work												
20 Average hours worked per week by persons employed full-time	hours	40.7	40.9	40.5	41.0	r41.1	41.1	41.4	40.7	40.8	r41.2	40.4
21 Persons employed full-time working 50 hours or more per week – of all full-time employed	%	23.7	24.3	23.7	24.4	24.9	24.9	r25.6	r24.1	r24.5	r24.8	23.4
Employment arrangements												
22 Employees without leave entitlements – of all employees	%	23.7	24.0	26.1	25.8	26.9	26.4	27.3	27.2	27.3	27.6	27.7
23 Males employed without leave entitlements – of all male employees	%	18.1	18.5	21.2	20.9	22.6	22.0	23.0	23.6	23.5	24.0	24.7
24 Females employed without leave entitlements – of all female employees	%	30.8	30.8	32.0	31.7	32.0	31.8	32.3	31.5	31.6	31.9	31.2
25 Employers and own account workers – of total employed	%	15.2	14.6	14.6	13.9	14.3	13.6	13.5	r13.3	r13.4	r13.3	12.9
Industry												
26 Employed in service industries – of total employed	%	71.1	71.7	72.3	72.6	72.9	73.6	r73.2	r73.8	r74.1	r74.7	74.9
27 Employed in manufacturing industry – of total employed	%	14.1	13.8	13.4	13.5	r13.2	12.5	r12.4	r12.3	r11.8	r11.9	11.2
Occupation												
28 Employed in highest skill (ASCO Skill Level 1) occupations– of total employed(a)	%	24.9	24.7	24.8	24.5	r25.0	25.2	r25.2	r25.7	r26.5	r26.0	26.4
29 Employed in lowest skill (ASCO Skill Level 5) occupations– of total employed(a)	%	22.0	22.1	21.8	20.4	20.4	20.3	19.7	r19.5	19.0	19.4	19.3
30 Females – of all employed in highest skill (ASCO Skill Level 1) occupations(a)	%	35.0	35.0	35.5	41.4	41.2	r40.9	r42.1	r42.7	r42.5	r43.3	44.0

Work: national summary continued

	WORKPLACE RELATIONS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
31	Trade union members – of all employees	%	35.0	32.7	31.1	30.3	28.1	25.7	24.7	24.5	23.1	23.0	22.7
32	Working days lost due to industrial disputes (per 1,000 employees)	days	r82.3	r85.0	r114.1	90.0	r82.1	r55.8	r105.3	r45.1	r41.9	r30.2	66.9
33	Pay set by award only - of all employees	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	23.2	n.a.	20.5	n.a.	20.0
34	Pay set by collective agreements – of all employees	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	r36.8	n.a.	38.2	n.a.	40.9
35	Pay set by individual agreements – of all employees	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	40.0	n.a.	41.3	n.a.	39.1
	UNEMPLOYMENT	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
36	Total unemployed	'000	r888.5	r768.6	r736.5	r764.9	r737.8	r689.6	r626.3	r619.5	r663.3	r624.4	586.0
37	Long-term unemployed – of total unemployed	%	34.6	32.3	27.5	27.0	29.3	r29.8	r26.9	23.4	r22.1	r21.6	21.0
38	Long-term unemployed – of total labour force	%	3.5	2.8	2.2	2.3	2.3	2.2	1.8	1.5	1.5	r1.3	1.2
39	Unemployment rate	%	r10.2	r8.7	r8.1	r8.3	r8.0	r7.4	r6.6	r6.4	r6.7	r6.7	5.8
40	Males	%	r10.7	r8.9	r8.5	r8.6	r8.2	r7.6	r6.7	r6.7	r7.0	r6.3	5.6
41	Females	%	r9.6	r8.3	r7.6	r8.0	r7.6	r7.0	r6.4	r6.1	r6.5	r6.1	6.0
42	Capital cities	%	10.3	8.8	8.2	8.2	r7.4	r6.8	r6.0	r5.9	r6.4	r5.9	5.6
43	Balance of states and territories	%	11.0	9.2	8.9	9.4	r9.1	r8.3	r7.6	r7.2	r7.4	r6.8	6.1
	Unemployed looking for full-time work												
44	Of all persons aged 15–19	%	8.6	r7.3	r7.1	r6.9	6.5	r5.7	r5.0	r5.0	r5.3	4.7	4.6
45	Of all persons aged 20–24	%	r10.8	r8.7	r8.5	r8.9	r8.6	r7.6	r6.3	6.4	r6.7	r6.3	5.7
46	Median duration of unemployment – males	weeks	30	26	22	24	r26	r26	r24	18	20	19	18
47	Median duration of unemployment – females	weeks	22	21	17	17	r22	r19	r15	r16	14	14	13
48	Retrenchment rate	%	5.4	n.a.	4.6	n.a.	4.4	n.a.	4.0	n.a.	3.9	n.a.	2.7
49	Persons previously retrenched and currently employed – of all retrenched	%	42.2	n.a.	44.7	n.a.	42.4	n.a.	46.4	n.a.	52.7	n.a.	51.2
	Labour force underutilisation												
50	Labour force underutilisation rate	%	14.1	13.8	13.8	13.6	13.0	11.8	10.9	r12.6	12.1	11.5	11.1
51	Extended labour force underutilisation rate	%	15.5	15.1	15.2	15.0	14.3	13.2	12.2	r13.7	r13.1	12.5	12.2
	NOT IN THE LABOUR FORCE	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
52	Marginally attached	'000	773.3	862.8	879.6	890.5	922.6	883.2	823.9	816.5	808.1	834.6	855.3
53	Discouraged jobseekers	'000	106.5	111.9	118.9	118.4	110.9	105.8	106.5	81.7	78.0	79.8	82.0
	TRANSITION TO RETIREMENT	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Persons aged 55–64 years												
54	Participation rate – males	%	r61.3	r61.4	60.8	60.5	60.4	r60.8	r60.7	r60.9	r61.7	r63.0	64.2
55	Participation rate – females	%	27.3	27.9	r30.1	r31.1	31.6	r32.0	r34.5	36.1	38.4	40.2	41.4
56	Males employed part-time – of all employed males aged 55–64	%	r12.4	r13.5	r13.1	r13.8	r14.8	r14.9	r13.9	r15.8	16.3	r17.3	15.7
57	Females employed part-time – of all employed females aged 55–64	%	r50.2	r50.8	r49.8	r51.2	r49.7	r51.0	r51.3	r51.4	52.3	51.6	49.7

(a) Australian Standard Classification of Occupation (ASCO) second edition was introduced in August 1996. Data prior to this date are concorded with ASCO second edition at the major group level.

Reference periods: All data are annual averages for the year ending 30 June except:
Data for indicators 6, 9–10 and 46–47 are at June.
Data for indicators 22–24 and 31 are at August.
Data for indicators 33 –35 are at May.
Data for indicators 48–49 are at February.
Data for indicators 50–53 are at September.

Work: state summary

LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1 Total labour force	'000	2003–04	3 356	2514	1 968	766	1 032	226	101	183	10 146
2 Females – of total labour force	%	2003–04	44.4	44.6	44.9	44.6	43.7	44.8	44.7	47.7	44.6
3 Participation rate	%	2003–04	62.5	63.1	64.8	61.6	65.8	59.0	70.8	71.5	63.5
4 Males	%	2003–04	70.6	71.7	72.4	69.7	74.6	66.8	76.0	77.2	71.6
5 Females	%	2003–04	54.6	54.9	57.4	53.9	57.1	51.5	65.2	66.2	55.6
6 Females with children aged 0–4	%	2004	48.1	46.9	47.3	47.1	45.1	50.2	60.4	57.1	47.5
7 Persons aged 15–19	%	2003–04	57.1	56.0	68.1	61.6	64.0	58.2	49.2	63.5	60.1
8 Persons aged 20–24	%	2003–04	80.7	81.1	83.5	81.9	78.4	76.8	70.0	85.0	81.1
9 Median age of male labour force	years	2004	39	38	38	39	39	40	39	37	38
10 Median age of female labour force	years	2004	38	37	38	39	38	39	38	37	38

EMPLOYED PEOPLE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
11 Total employed	'000	2003–04	3 169	2 373	1 845	717	973	210	96	176	9 560
12 Proportion of the total population in work	%	2003–04	47.1	47.7	47.5	46.7	49.1	43.6	48.1	54.3	47.5
Part-time work											
13 Persons employed part-time – of total employed	%	2003–04	27.2	28.9	28.6	31.1	29.4	30.7	24.5	27.0	28.4
14 Males employed part-time – of total males employed	%	2003–04	14.2	15.2	14.4	15.4	14.6	14.4	18.2	17.7	14.7
15 Females employed part-time – of total females employed	%	2003–04	43.6	45.9	46.1	50.4	48.6	50.5	32.5	37.2	45.6
16 Females employed part-time – of total part-time employed	%	2003–04	70.9	70.8	72.2	72.5	71.9	74.3	59.0	65.8	71.3
17 Average hours worked per week by persons employed part-time	hours	2003–04	15.9	15.4	16.3	16.4	15.6	15.7	17.8	15.9	15.9
18 Persons employed part-time who prefer more hours – of all part-time employed	%	2003–04	26.8	25.2	27.2	28.5	25.3	28.0	14.8	19.4	26.3
19 Persons employed part-time who worked 15 hours or less per week – of all part-time employed	%	2003–04	48.4	51.0	47.2	47.7	50.7	49.6	27.6	49.2	48.9
Full-time work											
20 Average hours worked per week by persons employed full-time	hours	2003–04	40.5	39.8	40.9	40.1	41.1	40.1	40.6	38.5	40.4
21 Persons employed full-time working 50 hours or more per week – of all full-time employed	%	2003–04	23.3	22.3	25.2	22.2	25.5	21.3	24.7	18.9	23.4
Employment arrangements											
22 Employees without leave entitlements – of all employees	%	2004	26.8	26.3	30.4	31.1	27.8	28.4	23.6	23.0	27.7
23 Males employed without leave entitlements – of all male employees	%	2004	24.3	24.3	26.5	24.8	24.3	23.8	22.7	19.5	24.7
24 Females employed without leave entitlements – of all female employees	%	2004	29.5	28.6	35.0	38.2	31.7	33.5	24.6	26.5	31.2
25 Employers and own account workers – of total employed	%	2003–04	12.3	11.6	14.7	13.9	15.1	14.5	8.9	8.4	12.9
Industry											
26 Employed in service industries – of total employed	%	2003–04	76.7	73.7	74.5	71.0	72.5	72.8	83.2	90.0	74.9
27 Employed in manufacturing industries – of total employed	%	2003–04	10.5	14.0	10.0	14.2	9.3	10.7	3.5	3.5	11.2
Occupation											
28 Employed in highest skill (ASCO Skill Level 1) occupations(a) – of total employed	%	2003–04	28.1	28.2	22.1	25.3	24.6	23.1	24.7	37.6	26.4
29 Employed in lowest skill (ASCO Skill Level 5) occupations(a) – of total employed	%	2003–04	18.3	19.1	21.0	20.4	19.0	20.0	21.9	14.2	19.3
30 Females – of all employed in highest skill (ASCO Skill Level 1) occupations(a)	%	2003–04	43.5	44.9	44.2	43.3	42.1	44.4	49.3	45.4	44.0

Work: state summary continued

WORKPLACE RELATIONS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
31 Trade union members – of all employees	%	2004	24.7	22.0	21.8	22.7	18.0	30.0	22.7	21.3	22.7
32 Working days lost due to industrial disputes (per 1,000 employees)	days	2003–04	88.6	76.2	20.3	23.7	122.9	6.0	13.9	4.4	66.9
33 Pay set by award only – of all employees	%	2004	22.5	16.1	23.0	26.2	12.6	20.9	11.9	17.0	20.0
34 Pay set by collective agreements – of all employees	%	2004	37.2	42.3	41.4	44.8	40.8	43.3	52.7	55.6	40.9
35 Pay set by individual agreements – of all employees	%	2004	40.4	41.5	35.6	29.0	46.6	35.9	35.5	27.4	39.1

UNEMPLOYMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
36 Total unemployed	'000	2003–04	186.5	140.9	122.8	48.8	59.0	15.6	5.3	7.1	586.0
37 Long-term unemployed – of total unemployed	%	2003–04	22.5	21.2	19.1	22.8	17.7	32.7	9.4	10.9	21.0
38 Long-term unemployed – of total labour force	%	2003–04	1.3	1.2	1.2	1.5	1.0	2.3	0.5	0.4	1.2
39 Unemployment rate	%	2003–04	5.6	5.6	6.2	6.4	5.7	6.9	5.2	3.9	5.8
40 Males	%	2003–04	5.4	5.5	5.9	6.5	5.4	7.6	5.0	4.1	5.6
41 Females	%	2003–04	5.8	5.7	6.6	6.2	6.2	6.1	5.5	3.7	6.0
42 Capital cities	%	2003–04	5.1	5.5	6.0	6.7	5.7	6.3	. .	. .	5.6
43 Balance of states and territories(b)	%	2003–04	6.5	6.0	6.5	5.4	5.7	7.4	5.2	3.9	6.1
Unemployed looking for full-time work											
44 Of all persons aged 15–19	%	2003–04	4.5	3.3	5.3	6.2	5.5	5.7	5.0	4.4	4.6
45 Of all persons aged 20–24	%	2003–04	5.2	5.6	6.3	6.8	5.7	8.4	5.5	3.6	5.7
46 Median duration of unemployment – males	weeks	2004	18	15	11	20	14	23	7	9	18
47 Median duration of unemployment – females	weeks	2004	13	16	13	20	11	18	7	8	13
48 Retrenchment rate	%	2004	2.8	2.5	2.5	2.7	3.2	2.1	1.6	1.6	2.7
49 Persons previously retrenched and currently employed – of all retrenched	%	2004	50.4	51.8	52.7	45.9	55.2	31.7	58.5	58.1	51.2
Labour force underutilisation											
50 Labour force underutilisation rate	%	2004	10.5	12.3	10.6	12.0	10.3	13.4	11.1	8.3	11.1
51 Extended labour force underutilisation rate	%	2004	11.6	13.3	11.7	13.1	11.4	14.3	11.5	9.2	12.2

NOT IN THE LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
52 Marginally attached	'000	2004	278.9	226.8	156.5	67.5	83.8	24.7	4.9	12.2	855.3
53 Discouraged jobseekers	'000	2004	32.8	17.2	14.8	7.3	7.5	1.4	*0.2	*0.9	82.0

TRANSITION TO RETIREMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Persons aged 55–64 years											
54 Participation rate – males	%	2003–04	62.8	65.4	62.9	61.8	71.9	56.8	69.9	66.2	64.2
55 Participation rate – females	%	2003–04	41.9	40.2	40.6	38.6	45.0	38.4	59.3	49.6	41.4
56 Males employed part-time – of all employed males aged 55–64	%	2003–04	15.0	18.0	12.9	15.3	17.0	17.0	15.0	22.4	15.7
57 Females employed part-time – of all employed females aged 55–64	%	2003–04	47.7	51.7	49.3	49.7	51.7	61.6	35.7	42.8	49.7

(a) Australian Standard Classification of Occupation (ASCO) second edition was introduced in August 1996. Data prior to this date are concorded with ASCO second edition at the major group level.

(b) Data for Northern Territory and Australian Capital Territory include estimates for capital cities.

Reference periods: All data are for the financial year ending 30 June except:
Data for indicators 6, 9–10 and 46–47 are at June.
Data for indicators 22–24 and 31 are at August.
Data for indicators 33 – 35 are at May.
Data for indicators 48–49 are at February.
Data for indicators 50–53 are at September.

Work: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
ABS Labour Force Survey.	1–11, 13–21, 25–30, 36–47, 50–51, 54–57	1–11, 13–21, 25–30, 36–47, 50–51, 54–57
ABS Labour Force Survey and *Australian Demographics Statistics June 2004* (ABS cat. no. 3101.0).	12	12
Employee Earnings, Benefits and Trade Union Membership, Australia, August 2004 (ABS cat. no. 6310.0).	22–24, 31	22–24, 31
Employee Earnings and Hours, Australia, May 2004 (ABS cat. no. 6306.0).	33–35	33–35
Industrial Disputes, Australia, September 2004 (ABS cat. no. 6321.0.55.001).	32	32
Labour Mobility, Australia, February 2004 (ABS cat. no. 6209.0).	48-49	48–49
Persons Not in the Labour Force, Australia, September 2004 (ABS cat. no. 6220.0).	52–53	52–53

Work: definitions

Average hours worked per week
aggregate hours worked by a group divided by the number of persons in that group.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Discouraged jobseekers
persons who were marginally attached to the labour force, wanted to work and who were available to start work within four weeks but whose main reason for not actively seeking work was that they believed they would not find a job for any of the following reasons:
- considered too old or too young by employers
- difficulties with language or ethnic background
- lacked necessary schooling, training, skills or experience
- no jobs in their locality or line of work
- they considered that there were no jobs available at all.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Employed
persons aged 15 years and over who, during the reference week:
- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (comprising employees, employers and own account workers)
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers)
- were employees who had a job but were not at work and were
  - away from work for less than four weeks up to the end of the reference week
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week
  - away from work as a standard work or shift arrangement
  - on strike or locked out
  - on workers' compensation and expected to return to their job
- were employers or own account workers who had a job, business or farm, but were not at work.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Employee
a person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee by their employer while working on a commission basis, tips, piece rates or payment in kind, or a person who operates his or her own incorporated enterprise with or without hiring employees.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Employees without leave entitlements
employees who were not entitled to either paid holiday leave nor sick leave in their main job.
Reference: *Employee Earnings, Benefits and Trade Union Membership, Australia* (ABS cat. no. 6310.0).

Employer
a person who operates their own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Extended labour force underutilisation rate
the unemployed, plus the underemployed, plus two groups of persons marginally attached to the labour force:
i. persons actively looking for work, not available to start work in the reference week, but were available to start work within four weeks
ii. discouraged jobseekers

as a percentage of the labour force augmented by (i) and (ii).
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Full-time employed
persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Industrial dispute
a state of disagreement over an issue or group of issues between an employer and its employees, which results in employees ceasing work. Industrial disputes comprise of strikes, which are a withdrawal from work by a group of employees; and lockouts, which are a refusal by an employer or group of employers to permit some or all of their employees to work.
Reference: *Industrial Disputes, Australia* (ABS cat. No. 6321.0.55.001).

Labour force
the labour force is the labour supply available for the production of economic goods and services in a given period, and is the most widely used measure of the economically active population. Persons in the labour force are classified as either employed or unemployed according to their activities during the reference period by using a specific set of priority rules.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Work: definitions continued

Labour force underutilisation rate
the unemployed plus the underemployed, as a percentage of the labour force.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Long-term unemployed
persons unemployed for a period of 52 weeks or longer.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Manufacturing industries
consists of the manufacturing division of the Australian and New Zealand Standard Industrial Classification (ANZSIC).
Reference: *ANZSIC 1993* (ABS cat. no. 1292.0).

Marginally attached
persons aged 15–69 years who were not in the labour force, wanted to work and; were actively looking for work but were not available to start; or were not actively looking for work, but were available to start work or would have been if child care was available.
Reference: *Persons Not in the Labour Force, Australia* (ABS cat. no. 6220.0).

Median age
the age at which half the given population is older and half is younger.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Median duration of unemployment
the duration which divides unemployed persons into two equal groups, one comprising persons whose duration of unemployment is above the median and the other, persons whose duration is below it.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Occupation
a collection of jobs which are sufficiently similar in their main tasks to be grouped together for the purposes of classification. The Australian Standard Classification of Occupations (ASCO) Second Edition, which is used for the classification of occupations, applies skill level and skill specialisation as major criteria.
Skill level is measured by: formal education and training, and previous experience usually required for entry into an occupation. ASCO Second Edition assigns each of the nine major groups in the classification to one of five ranked skill levels.
Skill Level 1 — Managers and administrators and Professionals
Skill Level 2 — Associate professionals
Skill Level 3 — Tradespersons and related workers and Advanced clerical and service workers
Skill Level 4 — Intermediate production and transport workers and Intermediate clerical, sales and service workers
Skill Level 5 — Elementary clerical, sales and service workers and Labourers and related workers
Reference: *ASCO — Australian Standard Classification of Occupations, Second edition* (ABS cat. no. 1220.0).

Own account worker
a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees. (This category was formerly entitled self-employed).
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Participation rate
for any group, the labour force participation rate within the population is the labour force component of that group, expressed as a percentage of the population of that group.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Part-time employed
persons who usually worked less than 35 hours a week (in all jobs) and either did so during the survey reference week, or were not at work in the reference week.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Pay set by award only
employees who had their pay set by an award, and who were not paid more than the award rate of pay.
Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Pay set by collective agreements
employees who had the main part of their pay set by a registered or unregistered collective agreement or enterprise award.
Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Pay set by individual arrangements
employees who had the main part of their pay set by an individual contract, registered individual agreement (e.g.Australian Workplace Agreement), common law contract, employees who receive overaward payments by individual agreement, and working proprietors of incorporated businesses.
Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Persons employed part-time who prefer more hours
persons employed part-time who indicated they would prefer to work more hours.

Proportion of the total population in employment
the number of employed persons expressed as a percentage of the total population. Also known as employment to population ratio.
Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Retrenchment rate
total persons retrenched during the 12 month period before the survey, as a percentage of all people who had been employed at some time over the same period.
Persons retrenched are those who ceased their last job because they were either:
- employees who were laid off, including no work available, retrenched, made redundant, employer went out of business or dismissed
- self employed persons whose business closed down for economic reasons, including 'went broke', liquidated, no work, or no supply or demand.

Reference: *Labour Mobility, Australia* (ABS cat. no. 6209.0).

Service industries
the combination of the following divisions of the Australian and New Zealand Standard Industrial Classification (ANZSIC): Wholesale trade; Retail trade; Accommodation, cafes and restaurants; Transport and storage; Communication services; Finance and insurance; Property and business services; Government administration and defence; Education; Health and community services; Cultural and recreational services; and Personal and other services.
Reference: *ANZSIC 1993* (ABS cat. no. 1292.0).

Trade union members
employees with membership in an organisation consisting predominantly of employees, the principal activities of which include the negotiation of rates of pay and conditions of employment for its members, in conjunction with their main job.
Reference: *Employee Earnings, Benefits and Trade Union Membership, Australia* (ABS cat. no. 6310.0).

Underemployed
underemployed workers are employed persons who want, and are available for, more hours of work than they currently have. They comprise:
- Persons employed part-time who want to work more hours and are available to start work with more hours, either in the reference week or in the four weeks subsequent to the survey.
- Persons employed full-time who worked part-time hours in the reference week for economic reasons (such as being stood down or insufficient work being available). It is assumed that these people wanted to work full-time in the reference week and would have been available to do so.

Reference: *Underemployed Workers, Australia* (ABS cat. no. 6265.0).

Work: definitions continued

Unemployed

persons aged 15 years and over who were not employed during the reference week, and had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week, and:

- were available for work in the reference week
- were waiting to start a new job within four weeks from the end of the reference week, and could have started in the reference week if the job had been available then.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Unemployed looking for full-time work

unemployed persons who actively looked for full-time work and were either available for work in the reference week or were not available for work in the reference week because they were waiting to start a new full-time job.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Unemployment rate

for any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Working days lost

total working days lost by employees directly or indirectly involved in industrial disputes.

Reference: *Industrial Disputes, Australia* (ABS cat. no. 6321.0.55.001).

Labour force transitions

UNDERUTILISED LABOUR

In 2004, a greater proportion of young people changed labour force status from one month to the next, compared with prime working or mature age people.

People move between differing roles throughout their lives, such as student, parent, wage-earner, householder, and retired person. Many changes in role are accompanied by a change in labour force status, such as when a young person moves from full-time study to employment. People move between employment, unemployment and being out of the labour force as well as moving between jobs.

In 2004, the average annual unemployment rate for men and women aged 15–64 years was 5.5% and 5.7% respectively. While the unemployment rate overall may not change greatly from one month to the next, there is a reasonable amount of change in the actual people who are unemployed in those two months. There are similar patterns for those people who are employed or not in the labour force.

Analysis of labour force transition data provides insight, for particular groups of people, into the month to month changes not apparent in movement estimates. This article focuses on month to month transitions in labour force status of young workers (aged 15–24 years), prime working age workers (aged 25–44 years) and mature age workers (aged 45–64 years).

Labour force status

Data in this article are from the monthly Labour Force Survey (LFS). For the purposes of this article, *young* people are those aged 15–24 years, *prime working* aged people are aged 25–44 years, and *mature* aged people are aged 45–64 years.

In this article, *employed* people are those aged 15–64 years who worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.

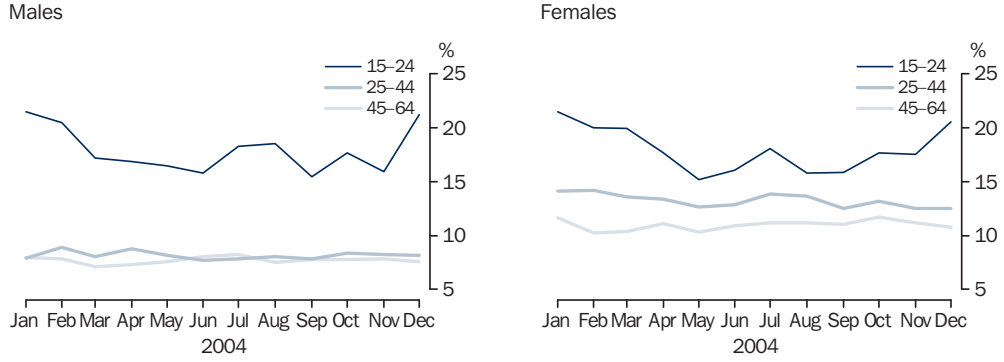
Full-time employed persons includes those who usually work 35 hours or more a week (in all jobs) and others who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week. *Part-time* employed persons are those who usually work less than 35 hours per week (in all jobs) and who did so during the survey reference week.

Unemployed people are people aged 15–64 years who were not employed during the survey reference week, but were available for work and actively looking for work. The *unemployment rate* for an age group is the number of unemployed people in that group expressed as a percentage of the *labour force* (the total number of employed and unemployed people) in that group. The *labour force participation rate* for an age group is the labour force expressed as a percentage of the civilian population in that age group.

Transitions in labour force status

In 2004, most people maintained the same labour force status from one month to the next. A larger proportion of younger people (aged 15–24 years) changed their status than older people. Averaging across 2004, a greater proportion of young men (18%) than prime working age or mature age men (both 8%) changed their labour force status from one month to the next. Similarly, on average, a larger proportion of young women (18%) changed their labour force status than did older women (13% of prime working age and 11% of mature age women).

Proportion of people changing labour force status — 2004



Source: Labour Force, Australia, Detailed - Electronic Delivery, monthly (ABS cat. no. 6291.0.55.001).

The rise in labour force transitions for young people between November and March coincides with the end of one academic year and the start of another. The relatively high mobility of younger people reflects the relatively high proportions taking short-term employment while studying, and their tendency to experience a variety of jobs before settling on a career path.

On average, in 2004, a smaller proportion of mature age women changed their labour force status from one month to the next compared with prime working age women. This may be related to the latter's tendency to be involved in child-rearing where transitions occur to balance work and home life.

Averaged over 2004, for men the most common labour force state to remain in from one month to the next was full-time employment (96%). For women, it was to continue in full-time employment or to remain outside the labour force (both 90%). The most common state from which people moved from one month to the next was unemployment.

Transitions in labour force status

Comparisons between labour force transitions of different age groups are made by analysing monthly gross flows data from the Labour Force Survey (LFS). Households selected for the LFS are interviewed over eight consecutive months, with one-eighth of the sample replaced each month. People who respond in two consecutive months form a 'matched sample'. On average, 80% of people are 'common' from one month to the next. About 20% of people cannot be matched due to the one-eight sample replacement, mobility of the population, non-response in either or both surveys and inability to match people in non-private dwellings (e.g. residents of short-stay caravan parks, and Aboriginal and Torres Strait Islander communities). About two-thirds of unmatched people have characteristics similar to those in the matched sample group, but the characteristics of the other one-third are likely to be somewhat different.

These transitions provide a guide to the movements between categories which underlie the changes in monthly levels. Transition data used in this article are annual averages based on monthly matched samples, while totals are based on full LFS estimates.

...moving from unemployment

Over half of all people aged 15–64 years who were unemployed in one month remained unemployed in the next month (59% of men and 51% of women). A smaller proportion (53%) of young men remained unemployed from one month to the next than men aged 25–44 years (61%) or men aged 45–64 years (64%). This may reflect younger people being more likely to find casual jobs that require low skill levels (see *Australian Social Trends 2005*, Casual employees, pp. 125–129). For some young people, these jobs may provide short-term employment while they are studying.

In 2004, the rate of unemployment for mature age men (annual average of 3.6%) was less than for young men (12.0%). However, older unemployed people often have more difficulty in obtaining work than younger job seekers and are therefore more at risk of remaining unemployed for a long time.[1]

Whether moved from unemployment — 2004

	Males				*Females*			
	15–24	*25–44*	*45–64*	*Total*	*15–24*	*25–44*	*45–64*	*Total*
Entered(a)	%	%	%	%	%	%	%	%
Full-time employment	10.6	15.4	10.7	12.4	6.1	7.5	*5.2	6.5
Part-time employment	12.9	9.3	*7.5	10.3	17.8	14.3	14.3	15.7
Not in the labour force	23.2	14.4	17.7	18.7	26.5	25.9	28.4	26.6
Stayed unemployed(a)	53.2	60.9	64.1	58.6	49.6	52.4	52.0	51.2
	'000	'000	'000	'000	'000	'000	'000	'000
Total annual average unemployed	**123.1**	**115.5**	**68.3**	**306.9**	**107.0**	**105.1**	**46.4**	**258.5**

(a) Proportion of people who were unemployed in month 1 and had the specified labour force status in month 2, averaged across the year.

Source: Labour Force, Australia, Detailed - Electronic Delivery, monthly (ABS cat. no. 6291.0.55.001).

Whether moved from full-time employment — 2004

	Males				Females			
	15–24	*25–44*	*45–64*	*Total*	*15–24*	*25–44*	*45–64*	*Total*
Entered(a)	%	%	%	%	%	%	%	%
Part-time employment	5.4	2.1	2.5	2.6	8.6	7.3	8.6	8.0
Unemployment	1.6	0.6	0.4	0.6	*1.1	*0.4	*0.3	0.5
Not in the labour force	1.7	0.8	1.1	1.0	1.5	1.5	1.4	1.5
Stayed in full-time employment(a)	91.3	96.5	96.1	95.7	88.8	90.8	89.6	90.1
	'000	'000	'000	'000	'000	'000	'000	'000
Total annual average employed full-time	**569.6**	**2 322.3**	**1 613.0**	**4 504.8**	**389.5**	**1 159.2**	**797.8**	**2 346.6**

(a) Proportion of people who were in full-time employment in month 1 and had the specified labour force status in month 2, averaged across the year.

Source: Labour Force, Australia, Detailed - Electronic Delivery, monthly (ABS cat. no. 6291.0.55.001).

A greater proportion of unemployed men moved to full-time or part-time employment (23%), while a greater proportion of women withdrew from the labour force (27%) than moved to employment (22%). Some of these women may have temporarily withdrawn from the labour force because they were unavailable or not actively looking for work for a brief period or may have been discouraged from seeking work. Other people may move from being unemployed to not in the labour force for longer-term reasons (for example, undertaking study or retirement).

A greater proportion of unemployed young men entered part-time employment (13%) than did prime working age and mature age men (9% and 7% respectively). More prime working age men (15%) gained full-time employment than did young and mature age men (both 11%). Unemployed women had a greater tendency to gain part-time work (16%) than full-time work (7%).

Three-quarters (75%) of men and almost two-thirds (63%) of women who had been unemployed long-term (52 weeks and over) remained unemployed from one month to the next. Conversely, smaller proportions of shorter-term (less than 52 weeks) unemployed people remained unemployed in the following month (54% of men and 48% of women unemployed in the first month). Many of the moves for long-term unemployed people are between unemployment and being not in the labour force, possibly reflecting discouragement about obtaining a job.

...moving from full-time employment

Compared to the 1960s, full-time permanent jobs have declined relative to various non-standard types of employment such as part-time or casual employment which have increased.[2] In 2004, the vast majority of both men (96%) and women (90%) aged 15–64 years who were employed full-time in one month remained in full-time employment in the next month.

It was less common for young men to remain in full-time employment (91%) than prime working age (97%) and mature age (96%) men. This reflects the greater labour force mobility of younger men.

Labour force experience

Information on labour force experience was collected in February 2003 in a supplement to the monthly LFS, the Labour Force Experience Survey. This survey uses a more limited set of questions than the LFS so the terms *worked* and *looked for work* are used rather than the more precise *employed* and *unemployed* terms of the LFS.

In the year ending February 2003, over three-quarters (78%) of Australians aged 15–69 years either worked or looked for work at some time during the year. Over half (57%) of the men and 42% of the women worked for the whole year. Some people worked for part of the year and looked for work for the rest of the year (6% of men and 4% of women). Others were not in the labour force for the entire year – over one-quarter (28%) of women and nearly one-sixth (15%) of men.

For more details regarding the Labour Force Experience Survey, see *Labour Force Experience* (ABS cat. no. 6206.0).

Whether moved from part-time employment — 2004

	Males				Females			
	15–24	*25–44*	*45–64*	*Total*	*15–24*	*25–44*	*45–64*	*Total*
Entered(a)	%	%	%	%	%	%	%	%
Full-time employment	10.1	25.9	20.3	17.1	8.4	10.3	10.8	10.1
Unemployment	3.6	3.8	*2.3	3.3	2.3	1.1	*0.8	1.3
Not in the labour force	8.5	4.6	6.8	7.0	6.3	5.7	5.2	5.6
Stayed in part-time employment(a)	77.9	65.7	70.6	72.6	83.0	83.0	83.2	83.0
	'000	'000	'000	'000	'000	'000	'000	'000
Total annual average employed part-time	**331.2**	**203.3**	**201.9**	**736.4**	**462.9**	**825.7**	**627.5**	**1 916.1**

(a) Proportion of people who were in part-time employment in month 1 and had the specified labour force status in month 2, averaged across the year.

Source: Labour Force, Australia, Detailed - Electronic Delivery, monthly (ABS cat. no. 6291.0.55.001).

The majority of people who did move from full-time employment moved to part-time employment (3% of men and 8% of women who were in full-time employment). A greater proportion of younger men moved to part-time employment (5%) than prime working (2%) or mature age (3%) men.

...moving from part-time employment

For some people seeking to balance work and non-work activities, part-time employment is desirable. Both men and women mature age workers are more likely to work part-time as they approach retirement age, and this appears to be largely by choice. On average in 2004, almost four-fifths (79%) of mature age part-time workers did not want to work more hours.

For others, part-time employment may be seen as a stepping stone to full-time employment with, in some cases, a part-time job easier to find than a full-time job. Financial pressure may induce people to take up casual employment rather than wait for a full-time permanent position.[3] Other people may work multiple part-time jobs to make up full-time hours (see *Australian Social Trends 2005*, Casual employees, pp. 125–129). In 2004, over one-quarter (27%) of part-time workers wanted to work more hours, with a higher proportion of men (35%) wanting more hours than women (24%).

In 2004, most men (73%) and women (83%) who were employed part-time in one month remained in part-time employment in the next month. A greater proportion of women across all three age groups stayed in part-time employment (83%) than men (between 66% and 78%). Over one-quarter (26%) of prime working age men and one-fifth (20%) of mature age men who were employed part-time moved from part-time employment to full-time employment. By comparison, around one-tenth (10% and 11%) of both prime working and mature age women moved from part-time to full-time employment.

...moving from not in the labour force

In 2004, on average there were 3.4 million people aged 15–64 years who were not in the labour force. Interest in these people in this article centres on their potential to participate in the labour force.

On average in 2004, a greater proportion of women were outside the labour force than were men (33% of women and 18% of men aged 15–64 years). Some people not in the labour force are marginally attached to the labour force and want to work, but do not meet the criteria to be unemployed (for example, they may not be available for work in the reference week). In September 2004, over one-fifth (22%) of people not in the labour force were marginally attached to the labour force.[4] A small proportion of these marginally attached people were discouraged jobseekers, almost two-thirds (65% in September 2004) of whom were female.

In 2004, the vast majority of people not in the labour force in one month remained outside the labour force in the next month (86% of

Whether moved from not in the labour force — 2004

	Males				Females			
	15–24	*25–44*	*45–64*	*Total*	*15–24*	*25–44*	*45–64*	*Total*
Entered (a)	%	%	%	%	%	%	%	%
Full-time employment	2.6	7.0	2.6	3.4	*1.3	1.5	0.9	1.2
Part-time employment	7.3	4.3	2.4	4.4	7.3	5.4	3.2	4.8
Unemployment	8.9	8.2	2.5	5.7	8.2	3.8	1.5	3.6
Stayed not in the labour force(a)	81.2	80.6	92.5	86.5	83.1	89.3	94.4	90.4
	'000	'000	'000	'000	'000	'000	'000	'000
Total annual average not in the labour force	**403.3**	**259.8**	**544.9**	**1 208.0**	**423.5**	**854.4**	**958.2**	**2 236.1**

(a) Proportion of people who were not in the labour force in month 1 and had the specified labour force status in month 2, averaged across the year.

Source: Labour Force, Australia, Detailed - Electronic Delivery, monthly (ABS cat. no. 6291.0.55.001).

men and 90% of women). A greater proportion of mature age men (93%) and women (94%) remained outside the labour force than prime working age (81% of men and 89% of women) or young people (81% of men and 83% of women). Some mature age workers might choose to retire, while others, having lost a job, may face difficulties in finding work. Older workers are more likely to become discouraged and drop out of the labour force altogether than people in younger age groups.[1] Some older discouraged jobseekers may decide to retire rather than to continue to seek employment. Government policies have been introduced to encourage retention of mature age workers in the workforce. These policies have increased the age at which women can access the Age Pension as well as providing incentives for workers to stay on beyond age pension age.[1]

In 2004, slightly more men than women made themselves available for work by moving from being outside the labour force to being unemployed (6% of men and 4% of women not in the labour force in the first month). The proportion of both men and women moving to unemployment declined with age from levels for young people of 9% of men and 8% of women, to 3% and 2% respectively of mature age people.

A greater proportion of people outside the labour force moved to employment than to unemployment, with a slightly higher proportion of men moving to full-time employment than women (3% and 1% respectively).

Endnotes

1 Australian Bureau of Statistics 2005, *Year Book Australia*, cat. no. 1301.0, ABS, Canberra.

2 Watson, I, Buchanan, J, Campbell, I et al. 2003, *Fragmented Futures,* The Federation Press, Australia.

3 Chalmers, J, and Kalb, G 2000, *The transition from unemployment to work. Are casual jobs a short cut to permanent employment?*, Discussion paper no. 109, Social Policy Research Centre, Sydney.

4 Australian Bureau of Statistics 2005, *Persons Not in the Labour Force, Australia, September 2004,* cat. no. 6220.0, ABS Canberra.

Nursing workers

PAID WORK

Between 1986 and 2001 there was a 22% decrease in nursing workers employed in aged care, and an 8% decrease in nursing workers employed in hospitals.

Nurses play a vital role in the delivery of Australia's health, aged and community care. Demand for nurses is widely anticipated to grow as the Australian population increases and ages. The ageing of the nursing workforce is presenting challenges to the field of nursing. In addition, the move to increased part-time work within the profession means more nurses are required to provide the same level of nursing services.[1]

In the late 1980s and through the 1990s nursing grew at half the rate of all occupations.[2] Some studies have suggested there may be a critical shortage of nurses in the future, particularly aged care and mental health nurses, that could lead to reduced access to a range of hospital and residential aged care services.[1] In response, the Australian government has introduced a number of initiatives to attract and retain nurses, with particular emphasis on addressing shortages in rural and remote areas and in the field of aged care.

How many nurses by sector?

While the total number of nursing workers has increased since the mid-1980s there has been a fall in the nursing workers to population ratio. The number of people reporting being employed in a nursing occupation in their main job increased by 10% between the 1986 and 2001 censuses, from 173,000 to 191,000. Over the same period, the ratio of nursing workers to total population dropped from 10.8 per 1,000 population in 1986 to 9.8 in 2001.

Nursing workers

For the purposes of this article, *nursing workers* comprise people aged 15 years or over who reported being employed as a Nursing professional or Enrolled nurse in their main job.

Nursing professionals mostly have a level of skill commensurate with a Bachelor degree or higher qualification. They include Nurse managers, Nurse educators and researchers, Registered nurses, Registered midwives, Registered mental health nurses and Registered developmental disability nurses.

Enrolled nurses have a skill level commensurate with an Australian Qualifications Framework Diploma or higher qualification, or at least three years relevant experience.

The article draws on data from the 1986, 1991, 1996 and 2001 ABS Censuses of Population and Housing unless otherwise stated. The classification for Nursing professionals and Enrolled nurses changed between the 1991 and 1996 censuses following changes in nursing accreditation. Between 1985 and 1993, nursing moved from hospital-based training to a higher education degree for nursing professionals. An implication of this change is that people undertaking hospital-based training are included as nursing workers, whereas people studying for a nursing degree are not included as nursing workers.

The two largest sectors employing nursing workers in 2001 were hospitals (employing 53% of nursing workers) and aged care (12%). The distribution of the nursing workforce across these sectors changed over the 15 years to 2001, largely through

Nursing workers by sector(a)

	1986	*1991*	*1996*	*2001*	*Change from 1986 to 2001*
	'000	'000	'000	'000	%
Nursing workers	173.4	179.1	186.2	191.1	10.2
Hospitals(b)	111.3	103.8	106.1	102.2	-8.2
Aged care(c)	30.1	31.9	30.0	23.4	-22.3
Other(d)	31.9	43.4	50.0	65.5	105.3
	Rate per 1,000 population(e)				
Nursing workers	10.8	10.4	10.2	9.8	n.a.

(a) Hospitals and nursing homes undefined were pro rated across the hospitals and aged care categories.
(b) Comprises hospitals and psychiatric hospitals.
(c) Comprises nursing homes and accommodation for the aged.
(d) Includes general practice medical services and specialist services.
(e) Estimated Resident Population at 30 June each year.

Source: ABS 1986, 1991, 1996 and 2001 Censuses of Population and Housing; *Australian Demographic Statistics Quarterly* (ABS cat. no. 3101.0).

decreases in numbers of nursing workers in both these sectors, and in particular in aged care. Between 1986 and 2001 there was a 22% decrease in nursing workers employed in aged care while in hospitals the decrease was 8%. Over the same period, the proportion of nursing workers working outside of the hospital and aged care sectors in areas such as general practice medical services and specialist services increased by 105%. This may in part be due to initiatives that encouraged general practices to employ more nurses to reduce workforce pressure and improve access to primary health care.

Aged care nursing was singled out as the sector of nursing in greatest crisis in the 2002 Senate Inquiry into Nursing, with large numbers of nurses leaving the sector and not being replaced.[1] Steps have been taken to address nursing shortages, particularly in aged care. For example, in the 2004–2005 Budget, the Government announced its *Investing in Australia's Aged Care: More Places, Better Care* package.[3]

Nursing workforce characteristics

Nursing has traditionally been a female sphere of employment. In 1986, 93% of nursing workers were female. While gender segregation of occupations has generally been dissipating over recent decades, nursing has remained an overwhelmingly female activity with 91% of nursing workers in 2001 being female.

Between 1985 and 1993, changes were made to training and accreditation for nurses, with a move from hospital based training to university accreditation. These measures were designed to standardise the quality of nursing to ensure a high standard of health care delivery. These changes were reflected in the nursing workforce, with 80% of nursing workers in 1986 identifying as nursing professionals, increasing to 90% by 2001.

With increasing proportions of nurses working part-time, nursing shortages may be exacerbated as more nurses are required to provide the same level of nursing supply.[1] In 2001, 49% of nursing workers worked part-time, compared with 37% in 1986. The hospital sector has seen the greatest increase of part-time workers, with 29% of nursing workers working part-time in 1986 rising to 47% in 2001.

Selected characteristics of nursing workers

	1986	*1991*	*1996*	*2001*
	%	%	%	%
Female	92.6	92.2	91.7	91.5
Part-time(a)	37.0	44.9	47.7	49.2
Full-time	63.0	55.1	52.3	50.8
Working 49 hours or more per week	1.8	1.7	2.8	6.3
Age groups				
15–24 years	21.3	12.5	7.9	5.1
25–34 years	35.9	33.8	26.5	21.8
35–44 years	24.7	31.2	35.8	33.1
45 years and over	18.1	22.4	29.8	40.0
Nursing qualifications				
Nursing professionals	79.7	77.8	86.8	89.8
Enrolled nurses	20.3	22.2	13.2	10.2
Total	**100.0**	**100.0**	**100.0**	**100.0**

(a) Reported working 1–34 hours in all jobs in the week prior to census night.

Source: ABS 1986, 1991, 1996 and 2001 Censuses of Population and Housing.

State/territory comparison

According to estimates from the Australian Institute of Health and Welfare (AIHW), in 2001 there were 10.2 full-time equivalent nurses per 1,000 population, down from 11.3 in 1995. There were decreases in each state and territory except the Australian Capital Territory where this ratio increased slightly from 10.2 in 1995 to 10.5 in 2001.

Full-time equivalent(a) nurses(b) per 1,000 population

State/territory	*1995* ratio	*2001* ratio
New South Wales	10.4	9.8
Victoria	12.9	11.3
Queensland	9.9	9.7
South Australia	12.4	10.9
Western Australia	12.0	9.4
Tasmania	12.3	12.0
Northern Territory	11.1	10.3
Australian Capital Territory	10.2	10.5
Australia	**11.3**	**10.2**

(a) Total hours worked by all nurses, divided by 35 hours, where total hours worked is based on the usual hours worked per week by nurses in all nursing related jobs.
(b) Employed registered and enrolled nurses on the rolls to practice nursing in each state or territory.

Source: AIHW 2003, *Nursing labour force 2002*.

AIHW estimates of nurses per 1,000 population are not comparable with ABS estimates of nursing workers presented elsewhere in this article. This is due to differences in scope and methodology between collections used to obtain data on nurses.

While the proportions of full-time nursing workers have generally been falling since 1986, the proportion of nursing workers working long hours has increased slightly. Between 1986 and 2001 the proportion of nursing workers who were working 49 hours or more a week increased from 2% to 6%.

The most recent ABS Working Arrangements Survey indicated that in 2003, 67% of nursing workers worked shift work in the previous four weeks compared to 16% for the general population. With regard to overtime, 30% of nursing workers worked overtime on a regular basis compared to 38% of all workers.

...age

Concern about a continuation of nursing shortages has arisen in part from the ageing profile of the nursing workforce over the 1980s and 90s. In 2001, census data showed 40% of all nursing workers were aged 45 years and over, an increase from 18% in 1986. Conversely, the proportion of nursing workers who were aged 15–24 years fell from 21% in 1986 to 5% in 2001. The fall in nursing workers aged less than 25 years may be related to the change in nursing training.

There were similar changes for full-time nursing workers. In 2001, 41% of full-time nursing workers were aged 45 years or older, up from 17% in 1986.

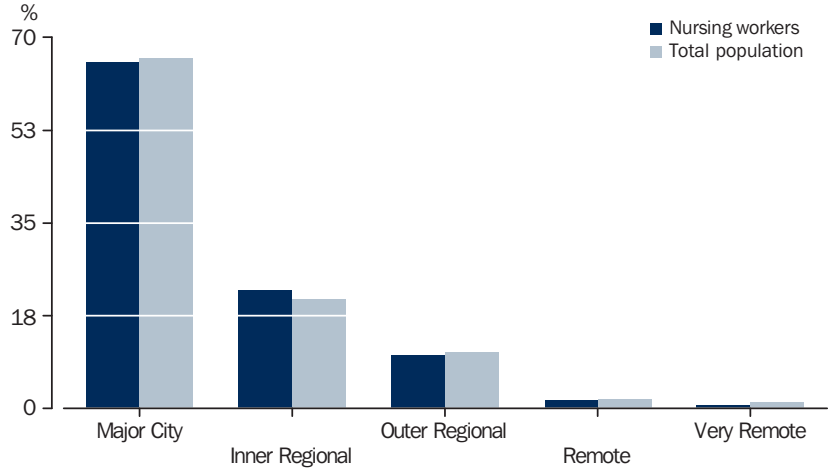
...regional differences

In 2001, 65% of nursing workers lived in Major Cities, compared with 22% in Inner Regional areas, 10% in Outer Regional and the remaining 2% in Remote and Very Remote areas. This is similar to the total population distribution in 2001. The location of specialist medical services in cities or larger regional centres attracts large numbers of nursing workers to these areas.

The profile of the nursing workforce appears to be ageing more rapidly in regional areas. Between 1991 and 2001, while the proportion of nursing workers aged 45 years and over increased in all geographic areas, the increase was greatest outside Major Cities. For example, in Major Cities the 45 years or over age group increased by 17 percentage points compared with 20 percentage points in Very Remote areas. Similarly, while the proportion of nursing workers aged 15–34 years decreased in all geographic areas over this period, the largest decreases were outside of Major Cities, with the 15–24 years age group falling by 10 percentage points in Very Remote areas.

In response to nursing shortages outside the metropolitan areas, the Australian Government implemented the Rural and Remote Nurse Scholarship Program in 1998 to assist professional development and skill training for registered and enrolled nurses working in remote and rural areas as well as those wishing to train and practice in these areas.[4]

Distribution of nursing workers across remoteness areas(a) — 2001



(a) Broad geographical regions which share common characteristics of remoteness based on the Remoteness Structure of the ABS's Australian Standard Geographical classification (ASGC).

Source: ABS 2001 Census of Population and Housing.

...earnings

Individual earnings for employees tend to vary widely according to the number of hours worked, the type of work done, the level of experience and the level of responsibility associated with a job. For this reason, the ordinary time earnings of full-time adult non-managerial employees are used to examine earnings of nursing workers. These are sourced from the ABS Survey of Employee Earnings and Hours.

In 2004, full-time adult non-managerial nursing professionals earned $1028.30 per week on average excluding overtime, and enrolled nurses earned $715.30 per week. In comparison, the average earnings per week across all full-time adult non-managerial employees was $867.50.

Future supply

The future supply of nurses depends on a number of factors. These include the numbers of people undergoing nursing training, the retention of nurses in the nursing workforce, the enticement of qualified nurses either working elsewhere or not in the labour force to return to the nursing workforce, and international migration.

...people starting nursing study

The number of nursing workers in coming years will be influenced by the number of people who start at higher education institutions in courses for initial registration as nurses. The Department of Education, Science and Training estimates that commencements for nursing study declined from 1995 to 2000 but generally increased over the period 2001 to 2003.[5] In 2003 there were 8,500 people starting courses for initial registration as nurses, an increase from 8,100 in 2001. Between 2001 and 2003, Queensland experienced the largest increase (29%) in new commencements of all states. All other states had smaller increases or remained the same over this period.

All commencing students enrolled in courses for initial registration as nurses(a)

	2001	*2003*
	'000	'000
New South Wales	2.2	2.5
Victoria	1.8	1.8
Queensland	1.2	1.6
South Australia	0.8	1.0
Western Australia	0.7	0.7
Tasmania	0.2	0.2
Northern Territory	0.2	0.2
Australian Capital Territory	0.1	0.1
Australia(b)	**8.1**	**8.5**

(a) Students enrolled in their first year of study.
(b) State totals when added may not equal Australian total due to rounding and revisions to yearly totals. Australian totals show latest revisions at November 2004.

Source: Department of Education, Science and Training, *Students 2004: Selected Higher Education Statistics.* <http: //www.dest.gov.au/highered /pubgen /pubsalph.htm#S (2001)> accessed 2 November 2004.

Labour force status of females(a) with nursing qualifications(b) — 2001

	Females
	%
Employed	83.5
Nursing professional	61.3
Other occupation	22.3
Unemployed	1.0
Not in the labour force	15.5
Total	**100.0**
	'000
Total	**183.4**
	%
Unemployment rate	1.2

(a) Aged 15-64 years.
(b) Bachelor degree or higher in a nursing field.

Source: ABS Survey of Education and Training 2001.

...people with a nursing qualification

One means of alleviating a current or anticipated nursing shortage is to entice people with nursing qualifications back to nursing work through programs such as the Australian government funded Metropolitan Nurse Re-entry Scheme providing 80 scholarships to encourage suitably qualified nurses to return to the field of nursing.[6]

In 2001, according to the ABS Survey of Education and Training, 84% of women aged 15–64 years with a Bachelor degree or higher in a nursing field (155,000 women) were in the labour force. This is similar to the labour force participation of women with a Bachelor degree or higher in any field and much higher than the labour force participation of all women (69%). Women with nursing qualifications also experienced lower unemployment rates compared with all women (1.2% and 6.3% respectively). Of

women with nursing qualifications who were not in the labour force, 37% belonged to a family with at least one child aged less than 15 years.

Nearly three quarters (73%) of employed women with a Bachelor degree or higher in a nursing field were working as Nursing professionals, with the remainder working in other occupations. The retention of women with nursing qualifications in nursing jobs decreases with age. For example, of women aged 25–34 years with a nursing qualification, 92% were employed as Nursing professionals. However this had decreased to 66% for women in both the age groups of 35–44 years and 45–64 years.

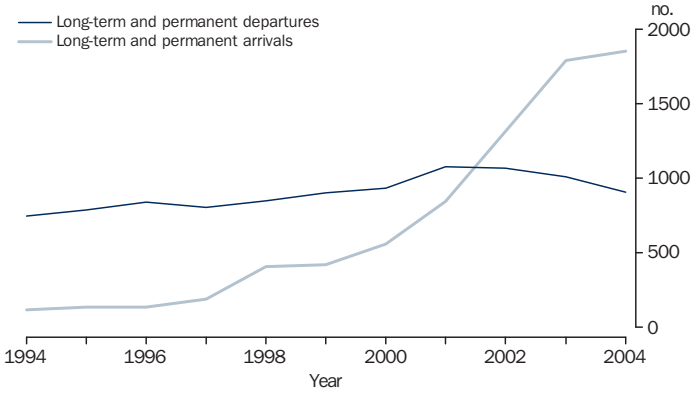
...international migration

Future supply will also be affected by employers being able to retain existing workers in Australia and attract new nurses from overseas into the workforce. Local health care providers may face a difficult task in attracting nurses since they are sometimes competing against overseas employers. In this competitive environment, moves have been made to attract overseas nurses into the Australian workforce.

Along with permanent settlers, another group of interest to the nursing workforce are long-term visitors. Long-term visitors to Australia with nursing qualifications can obtain a working visa to gain employment while on a working holiday.

On balance, Australia's supply of nursing workers was depleted by permanent and long-term international movement of nursing workers in the last ten years according to the ABS Overseas Arrivals and Departures Collection. However, since 2002, there has been a turn around in this trend with more arrivals than departures on a permanent or long-term basis. Approximately 800 nurses arrived from overseas to work during 2001 – a small addition to the total population of 191,000 nursing workers for that year.

International arrivals and departures of nurses(a)(b)



(a) Includes all nurses travelling for work.
(b) Where occupation was not known, non-response was pro rated across nursing and other occupations.

Source: ABS Overseas and Arrivals and Departures Collection.

Migration Occupations in Demand List (MODL)

The federal government has sponsored legislative and policy changes which have increased opportunities for various employers in the Australian health industry to recruit highly skilled overseas nurses.[1] People seeking to migrate to Australia on the basis of their work skills receive bonus points if their nominated occupation is on the Migration Occupations in Demand List (MODL).[1] At May 2005, Registered nurses, Registered midwives and Registered mental health nurses were on this list.[7]

Endnotes

1 Report of the Inquiry into Nursing, June 2002, *The Patient Profession: A time for action.*

2 Shah, C & Burke, G 2001, *Job Growth and Replacement Needs in Nursing Occupations*, Department of Education, Science and Training<http://www.dest.gov.au/archivehighered/eippubs/eip01_18/2.htm>, accessed 26 May 2005.

3 Department of Education, Science and Training <http://www.dest.gov.au/ministers/nelson/budget0 4/bud25_ 04.htm>, accessed 4 November 2004.

4 Department of Health and Ageing <http://search2.health.gov.au/cgi-bin/htsearch>, accessed 17 November 2004.

5 Department of Education, Science and Training, *Students 2003, Selected Higher Education Statistics*, DEST, Canberra.

6 E-mail, Nursing and Rural Workforce Strategies, 21 June 2004.

7 Department of Immigration and Multicultural and Indigenous Affairs 2005,<http://www .immi.gov.au/migration/skilled/ modl.htm>, accessed 15 June 2005.

Casual employees

EMPLOYMENT ARRANGEMENTS

In 2003, two-fifths (40%) of casual employees were young people (aged 15–24 years).

The arrangements by which people work impact on the wellbeing of individuals and society. Aspects of employment such as the amount of remuneration, conditions and tenure of employment, and the amount of opportunity or risk associated with their work can affect a worker's sense of economic security and overall wellbeing.

The nature of employment in Australia has become more diverse over the past two decades, with a growth in forms of employment other than the 'traditional' arrangement of full-time, ongoing wage or salary job, with regular hours and paid leave.[2] These changes may provide new freedoms to people seeking flexible working arrangements in order to balance work with family, study or other non-work activities. However, others may find themselves in less than favourable employment arrangements. Casual employment is one form of employment where there can be a range of differing circumstances and individual impacts, both positive and negative.

Current Australian government policy supports workplace flexibility and the diversification of forms of employment. However, casual employees, particularly those who have been casual for an extended period, may be disadvantaged because they do not enjoy the same rights and entitlements as ongoing employees. For example, their working conditions may involve low levels of training, poor career opportunities and adverse occupational health and safety outcomes.[3]

Casual employees

This article is based on time series data derived by combining data from the ABS Labour Force Survey (LFS) and Survey of Employee Earnings, Benefits and Trade Union Membership for August of each year from 1993 to 2003.[1]

Employees are people aged 15 years and over who, in their main job, worked for a public or private employer and received remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips or piece rates. This article excludes employees working for payment in kind only and those who operate their own incorporated business.

Casual employees are employees who are not entitled to either paid holiday leave or paid sick leave in their main job.

Ongoing employees are employees who are entitled to either paid holiday leave or paid sick leave (or both) in their main job.

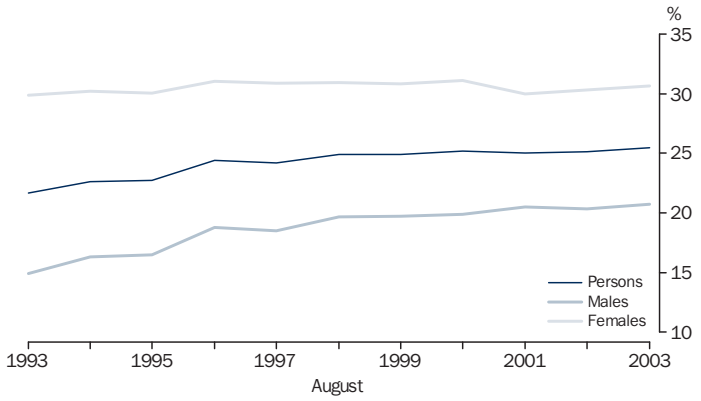
Trends in casual employment

While the nature and level of casual employment in Australia continues to be debated, it is widely agreed that casual employment has increased over the last two decades and will continue to do so.[2,4] In 2003, 26% of employees were casual, compared with 22% in 1993. Most of this increase occurred prior to 1998, with the proportion remaining relatively stable since then. There has also been an increase in the number of people employed in casual jobs from 1.3 million in 1993 to 1.9 million in 2003.

The increase in the proportion of employees who were casual is due mainly to changes for men rather than women. The proportion of male employees who were casual increased over the period 1993 to 2003, from 15% to 21%, while the proportion for women remained relatively stable (30% to 31% over the same period).

The growth in casual employment for male employees can be partly attributed to the growth in the number of casual male employees working in lower skilled occupations. Between 1996 and 2003, almost half (48%) of the increase in the number of male casual employees occurred in the lower skilled occupations of Elementary clerical, sales and service workers and Labourers and related workers.

Proportion of employees who were casual



Source: Australian Labour Market Statistics, October 2004 (ABS cat. no. 6105.0).

Full-time and part-time employees — August 2003

	Full-time	*Part-time*	*Total*
	%	%	'000
Males			
Ongoing	95.3	4.7	3 100.2
Casual	45.8	54.2	811.2
Females			
Ongoing	70.8	29.2	2 493.7
Casual	17.9	82.1	1 101.6

Source: Australian Labour Market Statistics, October 2004 (ABS cat. no. 6105.0).

Characteristics of casual employees

The common understanding of casual employment is that it is short-term or irregular, but often this is not the case. Many casuals have long-term and regular jobs. In August 2003, 57% of the 1.9 million casual employees in Australia had been with their employer for 12 months or more, compared with 83% of the 5.6 million ongoing employees.

There is also a strong link between working part-time hours (less than 35 hours a week in all jobs) and working as a casual employee. In 2003, 70% of casual employees worked part-time, compared with 16% of ongoing employees.

...age

Although young people (aged 15–24 years) made up 21% of all employees in 2003, they comprised 40% of casual employees. This is closely related to the relatively high participation of young people in education and their tendency to combine work with study. Between May 1994 and May 2003, the proportion of part-time workers aged 15–24 years who were participating in study increased from 67% to 75% (see *Australian Social Trends 2005*, Young people at risk in the transition from education to work, pp. 93–98).[5]

Men and women exhibit different employee patterns over their life cycles. Men engage predominantly as full-time ongoing employees for all age groups, except 15–19 year olds. While this is also the case for women, the proportion of women who are full-time ongoing employees is lower for all age groups compared with men, and the proportion who are part-time ongoing or casual is higher.

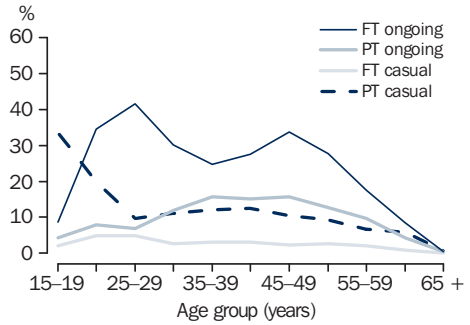
Many women leave full-time employment and the labour force to care for children.[6] In August 2003, the proportion of women aged 25–29 years who were full-time ongoing employees was 42%, compared to 25% for women aged 35–39 years.

Limitations of the definition of casual employees

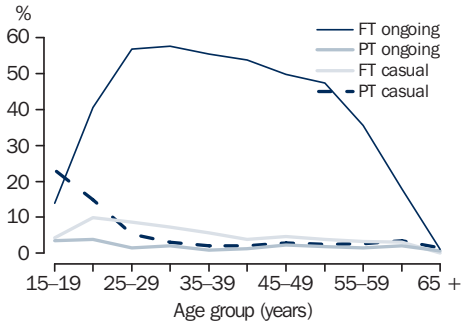
The ABS defines *casual employees* as those people who are not entitled to either paid holiday leave or paid sick leave in their main job. This approach has limitations as it does not fully capture attributes typically associated with a casual contract, such as precariousness of tenure and variability of hours and earnings.

Despite these limitations, 'employees without paid leave entitlements' is a good proxy for casual employment. Results from the Forms of Employment Survey in November 2001 showed that there is considerable overlap between employees without paid leave entitlements and whether an employee considers their job to be casual. Some 86% of those who identified as casual did not have paid leave entitlements, and 89% of employees without paid leave entitlements identified as casual.[1]

Female employees as a proportion of the population(a) — August 2003



Male employees as a proportion of the population(a) — August 2003



(a) Civilian population aged 15 years and over.

Source: Australian Labour Market Statistics, October 2004 (ABS cat. no 6105.0) and *Labour Force Survey, Australia, October 2004* (ABS cat. no. 6291.0.55.001).

Similarly, female employees aged 25–29 years have lower levels of part-time work than those aged 35–39 years. This was the case for both part-time ongoing employees (7% for 25–29 year olds and 16% for 35–39 year olds) and part-time casual employees (10% and 12% respectively). This reflects the differing pathways that women may take when their children are small: while some women leave employment altogether, many combine part-time work with family responsibilities. During their forties, the proportion of women who are full-time ongoing employees increases, but not to the same proportions seen in their late twenties.

...multiple jobs

Casual employees are more likely than ongoing employees to have more than one job. In 2003, 8% of employees who were casual in their main job were multiple job holders, compared with 4% of employees who were ongoing in their main job.

A higher proportion of casual employees who worked full-time hours (i.e. worked 35 hours or more in all jobs in the reference week) were multiple job holders (11%) than ongoing employees who worked full-time hours (4%). This indicates that casual employees were more likely to achieve full-time employment through the combination of two or more jobs than ongoing employees.

...industry and occupation

The industries and occupations that casual people are employed in tend to offer jobs which are part-time and jobs which require lower levels of skill. Employers in these industries may need a workforce which is flexible to cover the seasonal nature of the job, or the daily variations in workload (such as more staff needed at mealtimes in cafes and restaurants).[2] These types of jobs attract younger workers as they offer the opportunity to gain work experience and the flexibility to combine work with study. Women are also attracted to these types of jobs in order to combine work and family responsibilities.[2]

Over half of the employees in the Accommodation, cafes and restaurants industry (59%) and the Agriculture, forestry and fishing industry (51%) were casual employees. Retail trade (44%) and Cultural and recreational services (43%) also had high proportions of casual employees. The industries with the lowest proportions of casual employees were the Finance and

Industry of employees — August 2003

	Employees	*Proportion who are:*		
		Casuals	*Females*	*Under 25 years*
Industry	'000	%	%	%
Agriculture, forestry and fishing	145.5	50.6	26.0	22.3
Mining	72.1	13.8	12.6	7.1
Manufacturing	943.9	15.7	26.7	14.3
Electricity, gas and water supply	79.5	10.1	25.6	9.4
Construction	388.9	24.3	9.5	29.4
Wholesale trade	345.4	15.4	29.8	12.8
Retail trade	1 179.4	44.2	54.5	47.8
Accommodation, cafes and restaurants	393.3	58.8	58.7	40.6
Transport and storage	331.0	18.9	24.3	10.1
Communication services	145.2	12.4	31.7	12.1
Finance and insurance	304.0	7.6	57.5	13.4
Property and business services	795.8	25.8	49.4	19.7
Government administration and defence	410.3	8.0	48.8	6.9
Education	673.4	17.4	69.4	7.1
Health and community services	841.3	20.5	80.4	9.2
Cultural and recreational services	177.1	42.7	51.2	31.2
Personal and other services	280.6	23.6	47.5	20.6
Total	**7 506.8**	**25.5**	**47.9**	**21.0**

Source: Dataset constructed from the ABS 1992–2003 August Labour Force Surveys and the ABS 1992–2003 Surveys of Employee Earnings, Benefits and Trade Union Membership.

Occupation of employees — August 2003

	Employees	Proportion who are:		
		Casuals	Females	Under 25 years
Occupation group	'000	%	%	%
Managers and administrators	362.4	4.0	26.4	3.2
Professionals	1 462.5	13.1	54.8	7.9
Associate professionals	796.7	12.1	41.6	13.6
Tradespersons and related workers	849.2	16.3	9.0	26.9
Advanced clerical and service workers	261.5	19.1	87.3	14.4
Intermediate clerical, sales and service workers	1 510.2	27.2	73.3	21.6
Intermediate production and transport workers	656.5	26.5	13.9	15.8
Elementary clerical, sales and service workers	901.4	55.9	66.0	49.5
Labourers and related workers	706.5	47.3	38.2	28.5
Total	**7 506.8**	**25.5**	**47.9**	**21.0**

Source: Dataset constructed from the ABS 1992–2003 August Labour Force Surveys and the ABS 1992–2003 Surveys of Employee Earnings, Benefits and Trade Union Membership.

insurance industry and the Government administration and defence industry (each 8%), followed by Electricity, gas and water supply (10%) and Communication services (12%).

The two lowest skilled occupation groups contained the highest proportion of casuals. Over half of Elementary clerical, sales and service workers (56%) were casual, as were 47% of Labourers and related workers. Conversely the lowest proportions of casual employees were found in the highest skilled occupation groups: Managers and administrators (4%), Associate professionals (12%) and Professionals (13%).

....preference for more hours

The number of hours that a person works is linked to the earnings they receive. Casual employees have higher levels of variable hours than ongoing employees. In November 2003, 27% of casuals had hours which varied from week to week, compared to 9% of ongoing employees.[7] While variability of work arrangements may suit some casual employees, the unpredictability of earnings can make it harder to apply for bank loans, plan for a family or budget for the household.[8]

A higher proportion of casual employees who worked part-time preferred to work more hours than their ongoing counterparts. In 2003, 32% of casual part-time employees preferred to work more hours compared with 20% of ongoing part-time employees.

For both casual and ongoing part-time employees, a higher proportion of men preferred to work more hours than women. Close to two-fifths (38%) of male employees in casual part-time employment preferred more hours, compared with 31% of male employees in ongoing part-time employment. This figure was highest for 35–54 year old casual men, with 55% of this group preferring to work more hours.

For female part-time employees, 29% of casuals preferred more hours compared to 18% of ongoing employees. This figure ranged between 28% and 32% for all female casual age groups between 15 and 54 years, but was lower for those aged 55 years and over.

...earnings

There are a variety of factors that determine a person's level of earnings, the most obvious being the type of work done (e.g. occupation and industry), the amount of time worked each week (e.g. full-time or part-time status, and hours of work), whether people are paid at adult or junior rates, the level of experience, and the level of responsibility associated with the job (such as whether the job is managerial or non-managerial). Comparing the average hourly earnings of casual and ongoing employees removes the impact of the total number of hours worked by employees during a given week, but the extent of sex segregation between occupation and industry groups, as well as the populations that make up these groups, still needs to be considered.

Casual employees are generally compensated for lack of paid leave entitlements by a casual loading in their hourly rate of pay. Despite this, casual employees have lower average hourly earnings than ongoing employees at

Average hourly earnings of employees — August 2003

	Males		Females		Persons		
	Casual	Ongoing	Casual	Ongoing	Casual	Ongoing	Ratio(a)
Occupation group	$	$	$	$	$	$	
Managers and administrators	34.75	35.66	26.76	34.11	31.07	35.25	0.88
Professionals	30.38	30.80	30.96	26.88	30.75	28.71	1.07
Associate professionals	22.06	25.18	16.65	21.23	19.37	23.54	0.82
Tradespersons and related workers	19.88	19.40	16.18	13.64	19.22	18.99	1.01
Advanced clerical and service workers	*19.29	26.53	19.88	20.54	19.83	21.38	0.93
Intermediate clerical, sales and service workers	16.04	21.21	16.93	17.48	16.76	18.56	0.90
Intermediate production and transport workers	16.30	19.23	15.21	15.22	16.10	18.73	0.86
Elementary clerical, sales and service workers	13.26	16.95	13.06	14.77	13.12	15.60	0.84
Labourers and related workers	13.81	16.68	13.83	14.70	13.82	16.00	0.86
All occupations	**17.33**	**23.56**	**16.91**	**20.73**	**17.09**	**22.29**	**0.77**

(a) Ratio of average hourly earnings of casual employees to those of ongoing employees for persons.

Source: Dataset constructed from the ABS 1992–2003 August Labour Force Surveys and the ABS 1992–2003 Surveys of Employee Earnings, Benefits and Trade Union Membership.

the total level across all occupations ($17.09 compared with $22.29). The hourly earnings of all casual employees are 77% of those of ongoing employees. This is influenced by the fact that a higher proportion of casual employees than ongoing employees are women, are aged 15–24 years, and are employed in lower skilled occupations (which typically pay less). If casual and ongoing employees had the same age and sex distribution as all employees, the hourly earnings of casual employees would be 87% of those of ongoing employees.

As previously discussed, the Elementary clerical, sales and service workers group has a higher proportion of casual employees (56%) than other occupation groups. The average hourly earnings of casual Elementary clerical, sales and service workers are 84% of their ongoing counterparts. For women aged 15–24 years who work in this occupation group, the average hourly earnings for casuals are 93% of ongoing employees. The diversification of occupations within the Elementary clerical, sales and service workers group (as well as other factors such as level of experience and responsibility) still influences the comparison.

The differential between casual and ongoing average hourly earnings is higher for men than women. Male casual employees earn 74% of their ongoing counterparts ($17.33 and $23.56 respectively), compared with 82% for females ($16.91 for casuals and $20.73 for ongoing employees). A more detailed discussion of female and male earnings is in Female/male earnings, in this publication (*Australian Social Trends 2005*, pp. 150–155).

Endnotes

1 Australian Bureau of Statistics 2004, 'Changes in types of employment, 1992–2003', *Australian Labour Market Statistics, October 2004*, cat. no. 6105.0, pp. 10–17, ABS, Canberra.

2 Pocock, B, Buchanan, J and Campbell, I 2004, 'Meeting the Challenge of Casual Work in Australia: Evidence, Past Treatment and Future Policy', *Australian Bulletin of Labour*, vol. 30, no. 1, pp. 16–32.

3 Watson, I 2004, *Contented Casuals in Inferior Jobs? Reassessing Casual Employment in Australia*, Working paper no. 94, Australian Centre of Industrial Relations Research and Training, Sydney.

4 Watts, R 2001, 'The ACTU's Response to the Growth in Long-term Casual Employment in Australia', *Australian Bulletin of Labour*, vol. 27, no. 2, pp. 137–149.

5 Australian Bureau of Statistics 2003, *Education and Work, May 2003*, cat. no. 6227.0, ABS, Canberra.

6 Australian Bureau of Statistics 2005, 'Labour force participation in Australia', *Australian Labour Market Statistics, January 2005*, cat. no. 6105.0, pp. 10–18, ABS, Canberra.

7 Australian Bureau of Statistics, Working Arrangements Survey, November 2003.

8 Australian Centre of Industrial Relations Research and Training 1999, *Australia at Work: Just Managing?*, Prentice Hall, Sydney.

Labour force characteristics of people with a disability

PAID WORK

In 2003, working-age people with a disability had a lower labour force participation rate (53%) and a higher unemployment rate (8.6%) than other working-age Australians (81% and 5.0% respectively).

Income gained through employment is vital to the wellbeing of many working-age Australians and their families, contributing to their financial independence and security. People with reported disability generally experience lower levels of employment than other Australians.

The *Disability Discrimination Act 1992* (DDA) aims to give people with a disability the right to substantive equality of opportunity in specific areas of activity, making direct and indirect discrimination in employment unlawful.[1] In addition to legislative protection, employment support is provided through the Commonwealth State/Territory Disability Agreement (CSTDA).

Many people with a disability are also assisted by the provision of income support or supplementation through a range of pensions and allowances. Government spending on the Disability Support Pension has grown significantly over recent decades, with the number of recipients increasing from 222,000 in June 1981[2] to 706,000 in March 2005[3].

As the ratio of adults not in employment to those in employment is expected to increase in coming decades, greater labour force participation is being encouraged by the Australian government, among both the

Data sources and definitions

Data presented in this article are from the ABS 2003 Survey of Disability, Ageing and Carers (SDAC). Comparable historical data are from the ABS 1998 SDAC. Unless otherwise stated, this article limits its analysis to *working-age* people (i.e. people aged 15–64 years) living in *households* (comprising private dwellings and some non-private dwellings such as hostels for the homeless, boarding houses, staff quarters and camping grounds).

Disability as defined in SDAC refers to a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months. This definition is consistent with the International Classification of Functioning, Disability and Health, which defines disability as an umbrella term for impairments, activity limitations and participation restrictions.

People with a *profound core-activity limitation* always need help with self care, mobility or communication, or are unable to do these tasks. People with a *severe core-activity limitation* sometimes need help with self care, mobility or communication; or have difficulty understanding or being understood by family or friends; or communicate more easily using sign language or other non-spoken forms of communication.

For any given population, the *labour force participation rate* is the proportion who are employed or unemployed. Similarly, for any population, the *unemployment rate* is the number who are unemployed expressed as a percentage of the total number who are employed or unemployed.

Disability status(a) by labour force status

	1998			2003		
	Profound or severe core-activity limitation(b)	*All with reported disability(c)*	*No reported disability*	*Profound or severe core-activity limitation(b)*	*All with reported disability(c)*	*No reported disability*
Labour force status	%	%	%	%	%	%
Employed full-time	17.4	31.0	52.7	13.9	30.8	54.2
Employed part-time	13.4	16.1	21.1	13.1	17.8	22.3
Unemployed	3.8	6.1	6.3	3.0	4.6	4.0
Not in the labour force	65.3	46.8	19.9	70.0	46.8	19.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000
Total	**490.6**	**2 066.7**	**10 388.4**	**500.2**	**2 228.8**	**11 164.3**
	%	%	%	%	%	%
Participation rate	*34.7*	*53.2*	*80.1*	*30.0*	*53.2*	*80.6*
Unemployment rate	*11.0*	*11.5*	*7.8*	*10.1*	*8.6*	*5.0*

(a) Among persons aged 15–64 years living in households. (b) Core activities comprise communication, mobility and self care. (c) Includes those who do not have a specific limitation or restriction.

Source: ABS 1998 and 2003 Surveys of Disability, Ageing and Carers.

population in general and among people with a disability. More people undertaking paid work, and more hours worked by people currently employed for a small number of hours per week, would reduce government spending on pensions and allowances, thereby contributing to the long term sustainability of public finances.[4]

People with a disability

The number of 15–64 year olds with a disability increased by about 160,000 between 1998 and 2003 (from less than 2.1 million to more than 2.2 million) although the proportion with a disability remained at 17%. Around one-fifth (22%) of those with a disability had a profound or severe core-activity limitation in 2003, down slightly from 24% in 1998.

Disability rates increase with age. In 2003, the rate of reported disability among 15–19 year olds was 9%. This rate was higher for successively older age groups, reaching 39% of 60–64 year olds. Of the five disability groups listed in the adjacent box, the likelihood of having a physical disability increased most strongly with age, from 4% of 15–19 year olds to 32% of 60–64 year olds.

Disability groups

Disabilities can be broadly grouped depending on the type of functional limitation. A person could be classified to more than one of the following five disability groups.

- *Sensory or speech* (loss of sight or hearing, or speech difficulties)
- *Intellectual* (difficulty in learning or understanding things)
- *Physical* (such as chronic or recurrent pain, incomplete use of arms or fingers, disfigurement or deformity, etc.)
- *Psychological* (nervous or emotional condition, or mental illnesses or conditions)
- *Head injury, stroke or other brain damage* (with long-term effects that restrict everyday activities)

Physical limitations were the most common form of disability, followed by sensory or speech limitations.

Labour force participation

Labour force participation (working or looking for work) provides an indication of both the desire for paid work and the ability to obtain and perform such work. People with disabilities have lower rates of labour force participation than people without disabilities. Just over half of all people with a disability participate in the labour force compared with four in five people without a disability.

In 2003, most (58%) working-age people with a disability who were not in the labour force reported being permanently unable to work. The majority (52%) of those permanently unable to work were aged 55 years or older.

Disability status(a) by labour force status — 2003

	Males			*Females*		
	Profound or severe core-activity limitation(b)	*All with reported disability(c)*	*No reported disability*	*Profound or severe core-activity limitation(b)*	*All with reported disability(c)*	*No reported disability*
Labour force status	%	%	%	%	%	%
Employed full-time	21.1	41.7	71.8	7.7	19.5	36.5
Employed part-time	9.4	12.4	12.7	16.3	23.5	32.0
Unemployed	*3.3	5.2	4.3	*2.8	3.9	3.8
Not in the labour force	66.3	40.7	11.1	73.2	53.1	27.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000
Total	**229.8**	**1 137.2**	**5 603.6**	**270.4**	**1 091.6**	**5 560.7**
	%	%	%	%	%	%
Participation rate	*33.7*	*59.3*	*88.9*	*26.8*	*46.9*	*72.2*
Unemployment rate	**9.7*	*8.8*	*4.8*	**10.5*	*8.3*	*5.3*

(a) Among persons aged 15–64 years living in households. (b) Core activities comprise communication, mobility and self care. (c) Includes those who do not have a specific limitation or restriction.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Some disability groups had higher rates of reported permanent incapacity for work than others. For example, 48% of people with a psychological disability reported being permanently unable to work, compared with 28% of those with a sensory disability.

Participation rates for working-age people with and without disabilities did not change between 1998 and 2003. However, there was some change within the disability population. People with profound or severe core-activity limitation decreased their participation in the labour force over this period while other people with a disability increased theirs.

...age and sex

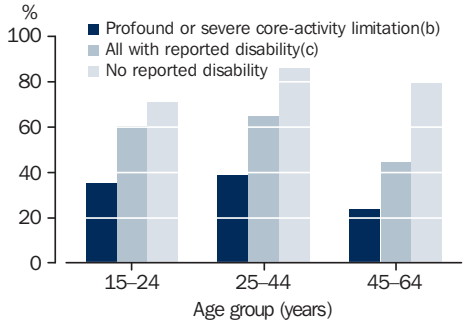
In 2003, labour force participation rates varied with age. People aged 25–44 years were more likely to be in the labour force than older working-age people. This difference prevailed among people with a disability, and people without a disability to a lesser degree. Lower participation by 45–64 year olds may partly mirror both the desire for early retirement and difficulties experienced by mature-age job seekers which can discourage some from looking for work.

Differences in labour force participation between working-age men and women were also evident among those with a disability, with women less likely to participate in the labour force than men.

...disability characteristics

In some cases, the severity of the disability limits the person's participation in the labour market. Generally, labour force participation decreases as severity of disability increases.

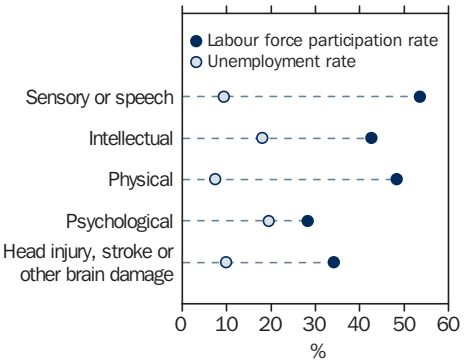
Labour force participation rate(a) by age group — 2003



(a) Among persons aged 15–64 years living in households.
(b) Core activities comprise communication, mobility and self care.
(c) Includes those who do not have a specific limitation or restriction.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Participation and unemployment among disability groups(a) — 2003



(a) Limited to persons aged 15–64 years living in households.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

People with a profound or severe core-activity limitation had the lowest participation rate of 30% in 2003 (compared with 81% of people without a disability).

The nature of the disability can also limit labour market participation. People with sensory disabilities were most likely to be participating in the labour market (54%) whereas people with psychological disabilities were least likely (28%). This difference may reflect greater difficulty in accommodating people with psychological conditions in the workplace, and greater difficulty faced by people with these conditions in obtaining and retaining a job.

...employment restrictions

Some people with disabilities experience employment restrictions such as being unable to work, being restricted in the types or hours

Income support

According to data from the General Social Survey (GSS) conducted by the ABS in 2002, among adults living in private households, more than half (53%) of those with a disability or long-term health condition were receiving a government cash pension or allowance. For the most part, this was their principal source of income: 83% of those receiving a government cash pension or allowance relied mainly on this source for their income.

Of those 18–64 year olds with disabilities or long-term health conditions who were receiving a government cash pension or allowance in 2002, 33% were receiving the Disability Support Pension and 17% were receiving an employment-related allowance (e.g. Newstart or Youth Allowance). For a more detailed discussion of income and other support services for people with a disability, see *Australian Social Trends 2004*, Support for people with a disability, pp. 41–45.

of work they can do, or needing special assistance in the workplace. People with disabilities who had an employment restriction were far less likely to be participating in the labour market (45%) than those without an employment restriction (72%). Of the 1.5 million people who had a disability and an employment restriction, 39% reported being permanently unable to work.

The more severe a person's core-activity restriction the more likely it was that he or she had an employment restriction. While 70% of working-age people with a reported disability had an employment restriction, the rate was higher for those with severe (90%) and profound (95%) levels of core-activity limitation. Among the disability groups, the proportion with an employment restriction ranged from 64% of the sensory or speech group to 91% of the psychological group.

Employed people

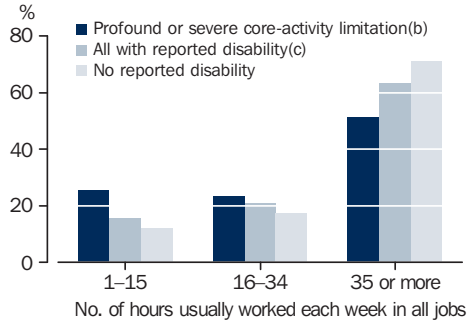
Paid work can provide many benefits including an income, skill development and a sense of contributing to the community. In 2003, among 15–64 year olds, more than three-quarters (77%) of those with no reported disability were employed. The rate of employment was considerably lower among those with a disability (49%), and much lower still among those with a profound or severe core-activity limitation (27%). Women with and without disabilities were less likely to be employed than men, consistent with their lower labour force participation. Women were also more likely to be working part-time than men.

Increased severity of disability was also associated with greater propensity to work part-time rather than full-time. Among employed 15–64 year olds, 29% of those with no disability usually worked less than 35 hours each week in all jobs. This rate of part-time work was higher among those with a disability (37%), and higher again among those with a profound or severe core-activity limitation (49%). One-quarter of the latter usually worked less than 16 hours per week.

In addition to being more likely to work part-time hours, employed working-age people with a reported disability were a little more likely than other employed working-age people to have more than one job (11% compared with 9%) and to run their own unincorporated business without employees (own account workers – 13% compared with 9%). Those with a disability were also more likely to be working some hours at home (37% compared with 31%).

Some employers make special arrangements to accommodate people with disabilities in their workplace. This happened for 12% of wage or salary earners with disabilities, in 2003. Around 6% had been provided with special equipment by their employer and 3% had been allocated different duties. Nearly 3% had been provided with, or allowed to have, a special support person to give ongoing assistance or supervision at work because of their health condition(s). Of the disability groups, wage or salary earners with a sensory or speech disability were least likely to have had a special arrangement made for them by their employer (12%), while those in the psychological group were most likely (27%).

Hours usually worked each week(a)



(a) By persons aged 15–64 years living in households.
(b) Core activities comprise communication, mobility and self care.
(c) Includes those who do not have a specific limitation or restriction.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Special arrangements made by employers because of health conditions of wage or salary earners(a) — 2003

	%
No special arrangement made	87.7
At least one special arrangement made	12.3
Special equipment	6.4
Different duties	2.9
Special support person(b)	2.6
Building or fitting modification	1.8
Help from someone at work	1.3
Training or retraining	*0.7
Special or free transport or parking	*0.5
Another special arrangement	1.5
	'000
Total(a)	**826.4**

(a) Wage or salary earners aged 15–64 years with a reported disability living in households.
(b) To give ongoing assistance or supervision.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

CSTDA-funded employment services

The Commonwealth government is responsible for the planning, policy setting and management of employment services – such as job placement, workplace support and counselling, and direct employment – which are funded under the third Commonwealth State/Territory Disability Agreement (CSTDA), 2002–07. These CSTDA-funded employment services are intended to benefit only people with disabilities that are likely to be permanent and result in substantially reduced capacity in self care/management, mobility or communication, requiring significant ongoing and/or long-term episodic support, and which manifest before the age of 65.[5]

During the first six months of 2003, there were an estimated 54,952 users of CSTDA-funded employment services. Most of these users were either unable to perform activities of daily living or always or sometimes needed support to perform them. However, more than a third of all CSTDA-funded employment service users did not need any support with these activities of daily living.[6]

Users of CSTDA-funded employment services — 1 January to 30 June 2003

Frequency of support needed with activities of daily living(a)	no.	%
Always	5 726	10.4
Sometimes	27 497	50.0
None but uses aids	2 599	4.7
None	17 836	32.5
Not stated	1 294	2.4
Total	**54 952**	**100.0**

(a) Comprises self-care, mobility and communication.

Source: AIHW 2004, *Disability support services 2002–03.*

People with and without disabilities had similar distributions across occupation groups, industries and the public and private sectors. Some industries had a higher than average (11%) disability prevalence rate, particularly Agriculture, forestry and fishing (16%), while Labourers and related workers had the highest disability rate among the occupation groups (15%).

These relatively high disability rates may be due to several factors. For example, in the 12 months to September 2000, both Agriculture, forestry and fishing workers and Labourers and related workers had comparatively high rates of injury (see *Australian Social Trends 2002*, Work-related injuries, pp. 77–81). Also, in November 2003, a relatively high proportion of Agriculture, forestry and fishing workers were aged 45–64 years (see *Australian Social Trends 2004*, Mature age workers, pp. 114–117). Given that disability rates increase with age, an industry with an older than average workforce might be expected to have a higher than average disability rate.

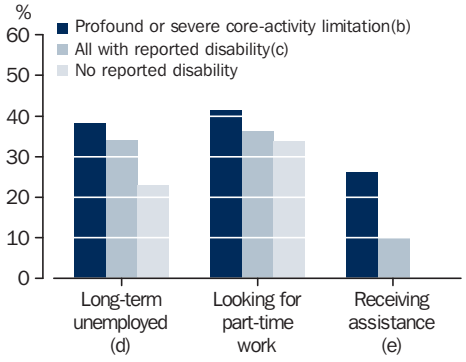
Further, in 2003, among employed 15–64 year olds, those with a disability were more likely than others to have a highest level of educational attainment of Year 10 or below (26% compared with 20%). This lower educational attainment by people with a disability may partly explain their over representation in the lowest ranked skill-level occupation group comprising Labourers and related workers, as occupational skill level partly reflects formal education and training required for entry.

Unemployed people

As well as being less likely to participate in the labour force, people with a disability who do participate are less likely to be working. The unemployment rate for working-age people with disabilities in 2003 was 8.6% compared to 5.0% for people without disabilities. The unemployment rate was lower for both groups than in 1998.

The unemployment rate varied considerably between disability groups. Groups with a relatively high rate of participation in the labour force (i.e. the physical group and the sensory or speech group) had comparatively low unemployment rates (7.4% and 9.3% respectively). Conversely, the psychological group had a low labour force participation rate (28%) and a high unemployment rate (19.5%).

Selected characteristics of unemployed persons(a) — 2003



(a) Aged 15–64 years living in households.
(b) Core activities comprise communication, mobility and self care.
(c) Includes those who do not have a specific limitation or restriction.
(d) Unemployed for a period of 52 weeks or longer.
(e) From a disability job placement program or agency.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

These labour market outcomes were poorer than prevailed among people with a profound or severe core-activity limitation (30% participation rate and 10.1% unemployment rate).

Around one-third (34%) of unemployed people with a disability were long-term unemployed (i.e. had been unemployed for at least the previous 52 weeks). This was higher than for unemployed people without a disability (23%). Those with a disability were also a little more likely to be looking for part-time work than those without a disability (36% compared with 34%).

People with disabilities may use mainstream or specialist disability employment services to help them obtain work. For example, some 10% of unemployed 15–64 year olds with a disability were receiving assistance from a disability job placement program or agency.

Endnotes

1 Productivity Commission 2004, *Review of the Disability Discrimination Act 1992, Volume 1: Chapters*, Report no.30 <http://www.pc.gov.au/inquiry/dda/finalreport/dda1.pdf>, accessed 10 May 2005.

2 Department of Family and Community Services 2003, *Income support customers: A statistical overview 2001*, Occasional paper no. 7 <http://www.facs.gov.au/internet/facsinternet.nsf/VIA/occasional_papers/$File/No7.pdf>, accessed 17 May 2005.

3 Centrelink SuperStar Pensions Database.

4 Treasury Department 2002, *Intergenerational Report 2002–03: In brief*, Canberra.

5 Department of Family and Community Services 2002, *Agreement between the Commonwealth of Australia and States and Territories of Australia in relation to Disability Services* <http://www.facs.gov.au/internet/facsinternet.nsf/via/cstda/$file/cstda_9Apr04.pdf>, accessed 18 May 2005.

6 Australian Institute of Health and Welfare 2004, *Disability support services 2002–03: the first six months of data from the Commonwealth State/Territory Disability Agreement National Minimum Data Set*, AIHW Cat. No. DIS 35, AIHW, Canberra.

Economic resources

Economic resources: national summary

	INCOME GROWTH	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1	Real net national disposable income per capita(a)	$'000	22.9	24.1	r25.6	r26.5	r27.5	r28.4	r29.4	r29.8	r30.6	r31.2	32.5
2	Real GDP per capita(a)	$'000	28.7	30.4	r32.1	r33.0	r34.0	r35.5	r36.4	r36.7	r37.6	r38.4	39.3
	Weekly earnings												
3	Average weekly total earnings – all employees	$	533	551	574	n.a.	610	n.a.	653	n.a.	698	n.a.	757
4	Average weekly ordinary time earnings of full-time adult non-managerial employees	$	578	608	634	n.a.	692	n.a.	737	n.a.	800	n.a.	868
5	Total hourly rates of pay excluding bonuses(b)	index no.	n.a.	n.a.	n.a.	n.a	r82.2	r84.8	r87.3	r90.3	r93.3	r96.5	100.0
6	Full weekly benefit received by a single age pensioner	$	197	189	197	199	202	203	203	207	211	220	232
7	Full weekly benefit received by a couple with two children	$	347	355	370	386	393	397	405	445	465	482	496
8	Consumer price index(c)	index no.	110.4	113.9	118.7	120.3	120.3	121.8	124.7	132.2	136.0	140.2	143.5

	INCOME DISTRIBUTION	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
9	Female/male ratio of mean weekly ordinary time earnings of full-time adult non-managerial employees	ratio	0.92	0.91	0.89	n.a.	0.89	n.a.	0.90	n.a.	0.89	n.a.	0.90
	Disposable household income												
	Mean weekly income of selected households(d)												
10	Lone person aged under 35 years	$	n.a.	n.a.	r477	r512	r487	n.a.	r530	r539	n.a.	527	n.y.a.
11	Couple only, reference person aged under 35	$	n.a.	n.a.	r983	r1 015	r1 024	n.a.	r1 138	r1 096	n.a.	1 148	n.y.a.
12	Couple with dependent children	$	n.a.	n.a.	r980	r999	r1 051	n.a.	r1 072	r1 126	n.a.	1 114	n.y.a.
13	One parent with dependent children	$	n.a.	n.a.	r543	r555	r572	n.a.	r600	r608	n.a.	604	n.y.a.
14	Couple only, reference person aged 65 and over	$	n.a.	n.a.	r457	r514	r488	n.a.	r520	r511	n.a.	542	n.y.a.
15	Lone person aged 65 and over	$	n.a.	n.a.	r259	r272	r275	n.a.	r303	r291	n.a.	304	n.y.a.
	Mean weekly equivalised income for selected groups of households(d)												
16	Low income	$	n.a.	r240	r241	r250	r252	n.a.	r256	r261	n.a.	269	n.y.a.
17	Middle income	$	n.a.	r395	r389	r404	r412	n.a.	r429	r439	n.a.	450	n.y.a.
18	High income	$	n.a.	r841	r819	r842	r882	n.a.	r932	r958	n.a.	976	n.y.a.
	Weekly equivalised household income of persons at top of selected income percentiles(d)												
19	20th(P20)	$	n.a.	r239	r237	r247	r249	n.a.	r255	r260	n.a.	267	n.y.a.
20	50th(P50)	$	n.a.	r394	r388	r402	r409	n.a.	r429	r438	n.a.	448	n.y.a.
21	80th(P80)	$	n.a.	r611	r612	r627	r639	n.a.	r674	r683	n.a.	702	n.y.a.
	Ratio of equivalised household incomes of persons at top of selected income percentiles												
22	P90/P10	ratio	n.a.	3.77	r3.73	3.66	3.77	n.a.	3.89	r3.98	n.a.	4.00	n.y.a.
23	P80/P20	ratio	n.a.	2.56	2.58	r2.53	2.56	n.a.	2.64	2.63	n.a.	2.63	n.y.a.
24	P80/P50	ratio	n.a.	1.55	r1.58	1.56	1.56	n.a.	1.57	1.56	n.a.	1.57	n.y.a.
25	P20/P50	ratio	n.a.	0.61	0.61	r0.62	0.61	n.a.	0.59	0.59	n.a.	0.60	n.y.a.
	Share of total equivalised income received by persons with:												
26	Low income	%	n.a.	10.8	r11.0	11.0	10.8	n.a.	10.5	10.5	n.a.	10.6	n.y.a.
27	High income	%	n.a.	37.8	37.3	37.1	37.9	n.a.	38.4	38.5	n.a.	38.3	n.y.a.
28	Gini coefficient of equivalised income	ratio	n.a.	0.302	0.296	0.292	0.303	n.a.	0.310	0.311	n.a.	0.309	n.y.a.

Economic resources: national summary cont.

	EXPENDITURE	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
29	Real household final consumption expenditure per capita(a)	$'000	17.2	16.6	17.3	17.8	18.6	19.5	20.3	20.9	21.6	22.4	23.9
	SOURCES OF INCOME	*Units*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*
	Main source of income – of all households												
30	Wages and salaries	%	n.a.	57.6	56.7	56.3	56.8	n.a.	56.7	56.9	n.a.	58.0	n.y.a.
31	Own business or partnership	%	n.a.	6.1	7.3	6.6	6.0	n.a.	6.4	6.4	n.a.	6.2	n.y.a.
32	Government pensions and allowances	%	n.a.	28.4	28.2	28.7	28.4	n.a.	28.7	28.3	n.a.	26.6	n.y.a.
33	Other	%	n.a.	6.7	6.8	7.6	7.7	n.a.	7.3	7.3	n.a.	8.1	n.y.a.
	Income support												
34	GDP spent on social assistance benefits in cash to residents	%	8.9	8.7	8.7	8.7	8.3	8.4	r8.5	r9.1	8.9	8.7	9.2
	Main source of income is government pensions and allowances – proportion of all households in selected groups												
35	Lone person aged under 35 years	%	n.a.	n.a.	14.6	15.6	16.3	n.a.	17.2	13.7	n.a.	10.3	n.y.a.
36	Couple only, reference person aged under 35	%	n.a.	n.a.	*1.6	*2.6	*3.6	n.a.	*2.6	*2.8	n.a.	3.4	n.y.a.
37	Couple with dependent children	%	n.a.	n.a.	9.7	10.6	10.3	n.a.	10.7	9.1	n.a.	8.7	n.y.a.
38	One parent with dependent children	%	n.a.	n.a.	53.3	58.7	54.3	n.a.	53.1	53.0	n.a.	48.9	n.y.a.
39	Couple only, reference person aged 65 and over	%	n.a.	n.a.	71.2	65.2	65.9	n.a.	70.1	71.7	n.a.	66.4	n.y.a.
40	Lone person aged 65 and over	%	n.a.	n.a.	79.8	80.0	77.9	n.a.	79.8	79.2	n.a.	79.9	n.y.a.
	Recipients of selected government payments												
41	Labour market program allowance(e)	'000	878.3	822.6	846.6	829.9	r871.5	r773.8	r699.4	r703.4	r674.8	r633.3	602.7
42	Single-parent payment(f)	'000	313.4	324.9	342.3	358.9	372.3	384.9	397.3	424.6	436.6	444.8	455.6
43	Disability support pension(g)	'000	436.2	464.4	499.2	527.5	555.3	577.8	602.4	623.9	658.9	673.3	696.7
44	Age pension	'000	1 582	1 579	1 603	1 680	1 683	1 716	1 730	1 786	1 811	1 854	1870
45	Age pensioners – of persons of qualifying age	%	64.3	63.0	62.7	64.4	65.4	65.5	65.9	65.8	66.2	66.3	67.4
46	Females – of all age pensioners	%	67.5	65.5	64.4	64.4	63.5	63.1	62.1	61.6	r59.6	r59.4	59.5

(a) Chain volume measure, reference year 2002–03.

(b) Base year is 2003–04 financial year.

(c) Base of each index: 1989–90 = 100.0.

(d) Adjusted for changes in the Consumer Price Index; values are given in 2002–03 dollars.

(e) Average weekly data for June. Includes people who receive a nil rate of payment.

(f) Includes people who receive a nil rate of payment and payments to people living overseas.

(g) Includes payments to people living overseas.

Reference periods: All data are for the financial year ending 30 June except:
Data for indicators 3–4 and 9 are at May.
Data for indicators 6–7, 41 and 43–46 are at June and data for indicator 42 is at June Quarter.

Economic resources: state summary

INCOME GROWTH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1 Gross household disposable income per capita	$'000	2003–04	26.8	27.2	22.9	23.9	26.0	22.0	28.0	38.2	25.9
Weekly earnings											
2 Average weekly total earnings – all employees	$	2004	802	759	709	679	757	618	759	856	757
3 Average weekly ordinary time earnings of full-time adult non-managerial employees	$	2004	904	865	819	812	893	797	864	900	868
4 Total hourly rates of pay excluding bonuses(a)	index no.	2004	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
INCOME DISTRIBUTION	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
5 Female/male ratio of mean weekly ordinary time earnings of full-time adult non-managerial employees	ratio	2004	0.91	0.88	0.89	0.92	0.85	0.92	0.95	0.93	0.90
Disposable household income											
Mean weekly income of selected households											
6 Lone person aged under 35 years	$	2002–03	495	580	515	510	556	389	480	618	527
7 Couple only, reference person aged under 35	$	2002–03	1 229	1 223	965	1 087	1 045	974	1 130	1 235	1 148
8 Couple with dependent children	$	2002–03	1 151	1 108	1 072	1 022	1 135	956	1 276	1 403	1 114
9 One parent with dependent children	$	2002–03	596	602	589	661	610	584	581	709	604
10 Couple only, reference person aged 65 and over	$	2002–03	522	554	593	470	515	573	433	753	542
11 Lone person aged 65 and over	$	2002–03	326	309	266	284	295	284	288	406	304
Mean weekly equivalised household income for selected groups of persons											
12 Low income	$	2002–03	270	269	267	263	272	250	330	363	269
13 Middle income	$	2002–03	457	455	433	429	446	392	552	615	450
14 High income	$	2002–03	1 012	1 003	910	895	970	777	973	1 127	976
Weekly equivalised household income of persons at top of selected income percentiles											
15 20th(P20)	$	2002–03	266	266	268	262	271	249	304	350	267
16 50th(P50)	$	2002–03	452	454	430	430	441	391	569	613	448
17 80th(P80)	$	2002–03	729	718	662	665	692	601	848	858	702
Ratio of equivalised household incomes of persons at top of selected income percentiles											
18 P90/P10	ratio	2002–03	4.26	4.09	3.65	3.81	3.86	3.49	4.05	3.79	4.00
19 P80/P20	ratio	2002–03	2.74	2.70	2.46	2.54	2.55	2.42	2.79	2.45	2.63
20 P80/P50	ratio	2002–03	1.61	1.58	1.54	1.55	1.57	1.54	1.49	1.40	1.57
21 P20/P50	ratio	2002–03	0.59	0.59	0.63	0.61	0.61	0.64	0.53	0.57	0.60
Share of total equivalised household income received by persons with:											
22 Low income	%	2002–03	10.3	10.4	11.0	11.0	10.7	11.5	10.6	11.3	10.6
23 High income	%	2002–03	38.7	38.7	37.4	37.2	38.3	35.8	33.8	34.9	38.3
24 Gini coefficient of equivalised income	ratio	2002–03	0.315	0.314	0.296	0.291	0.310	0.276	0.265	0.272	0.309

Economic resources: state summary continued

	SOURCES OF INCOME	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Main source of income – of all households											
25	Wages and salaries	%	2002–03	57.3	58.9	57.8	53.8	60.3	50.1	80.1	70.0	58.0
26	Own business or partnership	%	2002–03	6.0	5.7	6.5	6.7	7.4	5.0	*5.4	4.7	6.2
27	Government pensions and allowances	%	2002–03	26.3	25.8	27.7	30.8	24.7	37.6	11.4	12.1	26.6
28	Other	%	2002–03	8.9	8.7	6.7	8.4	6.3	6.4	*2.7	12.9	8.1
	Income support											
	Recipients of selected government payments											
29	Labour market program allowance(b)	'000	2004	184.8	141.6	124.2	49.5	57.5	21.4	17.0	5.6	601.7
30	Single-parent payment(c)(d)	'000	2004	146.3	100.4	100.6	36.3	46.5	13.6	6.1	5.3	455.6
31	Disability support pension(d)	'000	2004	225.6	165.6	134.2	66.3	58.7	33.3	7.0	5.7	696.7
32	Age pension(d)	'000	2004	608.3	473.1	325.0	172.3	155.9	52.3	6.1	17.0	1 869.6
33	Age pensioners – of persons of qualifying age	%	2004	63.1	67.0	65.3	70.4	63.3	71.3	62.4	52.1	67.4
34	Females – of all age pensioners	%	2004	60.0	60.0	58.8	60.1	59.7	59.4	55.4	62.3	59.5

(a) Base year is 2003–04 financial year.

(b) Point in time data. Includes people who receive a nil rate of payment.

(c) Includes people who receive a nil rate of payment.

(d) Components do not add to Australian total because total for Australia includes payments to people living overseas and where valid geographic data were not available.

Reference periods: All data are for the financial year ending 30 June except:
Data for indicators 2–3 and 5 are at May.
Data for indicators 29 and 31–34 are at June and data for indicator 30 is at June quarter.

Economic resources: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
ABS Australian System of National Accounts, 2002–03 (ABS cat. no. 5204.0).	34	—
ABS Australian System of National Accounts, 2002–03 and ABS Estimated resident population.	29	—
ABS Surveys of Income and Housing.	10–28, 30–33, 35–40	6–28
Australian National Accounts: State Accounts, 2002–03 (ABS cat. no. 5220.0).	—	1
Australian System of National Accounts, 2003–04 (ABS cat. no. 5204.0).	1–2	—
Consumer Price Index, Australia, December Quarter 2004 (ABS cat. no. 6401.0).	8	—
Department of Employment and Workplace Relations administrative data.	41–43	29-31
Department of Family and Community Services administrative data.	44, 46	32, 34
Department of Family and Community Services administrative data and ABS Estimated resident population.	45	33
Employee Earnings and Hours, Australia (ABS cat. no. 6306.0).	3–4, 9	2–3, 5
Guide to Commonwealth Government Payments.	6–7	—
Labour Price Index, Australia, September Quarter (ABS cat no. 6345.0).	5	4

Economic resources: definitions

Adult employees
employees aged 21 years and over, and those under 21 years who are paid at the full adult rate for their occupation.
Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Age pension recipients
people receiving full or partial Age pension excluding associated Wife's or Carer's pension. The qualifying age for Age pension eligibility for men is 65 years. Between 1 July 1995 and 2012, the qualifying age for women is gradually being raised from 60 to 65 years. At 30 June 2004 the qualifying age for females was 62.5 years.
Reference: Department of Family and Community Services, *Customers: a statistical overview*.

Age pensioners — of persons of qualifying age
the number of aged pension recipients as a proportion of the estimated resident population (ERP) of persons who meet the age requirements for the age pension. In the years where the age requirement for females was a number of years plus six months the ERP was prorated.

Average weekly ordinary time earnings of full-time adult non-managerial employees
refers to one week's earnings for the reference period attributed to award, standard or agreed hours of work. It is calculated before taxation and any other deductions have been made. Included in ordinary time earnings are agreed base rates of pay plus payment by measured result, such as bonuses and commissions. Excluded are non-cash components of salary packages, the value of salary sacrifice, overtime payments, and payments not related to the survey reference period, such as retrospective pay, pay in advance, leave loadings, and severance pay and termination and redundancy payments. Non-managerial employees are those who are not managerial employees as defined below, including non-managerial professionals and some employees with supervisory responsibilities.
Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Average weekly total earnings
average weekly total earnings of employees is equal to weekly ordinary time earnings plus weekly overtime earnings.
Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Chain volume measures
are obtained by linking together (i.e. compounding) movements in volumes, calculated using the average price of the previous financial year, and applying the compounded movements to the current price estimates of the reference year.
Reference: *Australian System of National Accounts: Concepts, Sources and Methods* (ABS cat. no. 5216.0).

Consumer price index
a measure of change over time in the retail price of a constant basket of goods and services which is representative of consumption patterns of employee households in metropolitan areas. Base year for index is 1989–90 = 100.0.
Reference: *Australian Consumer Price Index: Concepts, Sources and Methods* (ABS cat. no. 6461.0).

Couple
two people in a registered or de facto marriage, who usually live in the same household.

Couple only household
a household which contains a couple and no other persons.

Couple with dependent children household
a one-family household comprising a couple with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated persons.
Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Dependent children
children under 15 years of age; and full–time students, aged 15 to 24 years, who have a parent, guardian or other relative in the household and do not have a partner or child of their own in the household.
Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Economic resources: definitions continued

Disability support pension recipients
persons receiving a pension on the basis of an assessed physical, intellectual or psychiatric impairment and on their continuing inability to work or be retrained to work 30 hours or more per week within the next two years.

Disposable income
gross income less personal income tax (including the Medicare levy)

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Employees
all wage and salary earners who received pay for any part of the reference period.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Equivalised income
equivalising adjusts actual income to take account of the different needs of households of different size and composition. There are economic advantages associated with living with others, because household resources, especially housing, can be shared. The equivalence scale used to obtain equivalised incomes is that used in studies by the Organisation for Economic Co-operation and Development (OECD) and is referred to as the 'modified OECD scale'. The scale gives a weight of 1.0 to the first adult in the household, a weight of 0.5 for each additional adult (persons aged 15 years and over) and a weight of 0.3 for each child. For each household, the weights for household members are added together to form the household weight. The total household disposable income is then divided by the household weight to give an income that a lone person household would need for a similar standard of living.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Full-time employees
employees who normally work the agreed or award hours for a full-time employee in their occupation. If agreed or award hours do not apply, employees are regarded as full-time if they usually work 35 hours or more per week.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Full weekly basic single age pensioner rate
the amount paid to a single age pensioner, who passes the income and asset test for the full basic rate, excluding all allowances, indexed by CPI to the most recent year.

Reference: Department of Family and Community Services.

Full weekly benefit received by a couple with two children
the maximum weekly social security benefit available to an unemployed couple with two children (one aged under 5 years and one aged 5 years or over but under 13 years). The calculation for 2004 includes unemployment benefits for each partner (currently Newstart), Family Tax Benefit Part A for each child and Family Tax Benefit Part B for the family. This calculation excludes any rent assistance which may be available.

Reference: Department of Family and Community Services.

GDP (gross domestic product)
total market value of goods and services produced in Australia within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital.

Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Gini coefficient
a measure for assessing inequality of income distribution. The measure, expressed as a ratio that is always between 0 and 1, is low for populations with relatively equal income distributions and high for populations with relatively unequal income distributions.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Government pensions and allowances
payments from government under social security and related government programs.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Gross household disposable income per capita
where gross household disposable income, as measured in the Australian System of National Accounts, is gross household income less income tax payable, other current taxes on income, wealth etc., consumer debt interest, interest payable by dwellings and unincorporated enterprises, social contributions for workers' compensation, net non-life insurance premiums and other current transfers payable by households. The population used is the mean resident population for the financial year.

Reference: *Australian National Accounts: State Accounts* (ABS cat. no. 5220.0).

Gross income
cash receipts, that are of a regular and recurring nature, before tax or any other deductions are made.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

High income persons
persons in the 9th and 10th income deciles after being ranked by their equivalised disposable household income.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Household
a group of related or unrelated people who usually live in the same private dwelling or a lone person living in a private dwelling.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Labour market program allowance recipients
the number of recipients of Unemployment Benefit prior to 1991; Job Search Allowance, Newstart Allowance and Youth Training Allowance from 1991 to 1996; Newstart Allowance and Youth Training Allowance from 1997; Newstart Allowance and Youth Allowance (other) from July 1998. Also includes Community Development Employment Projects (CDEP) recipients.

Lone-person household
a household which consists of only one person.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Low income persons
persons in the 2nd and 3rd income deciles after being ranked by their equivalised disposable household income.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Main source of income
that source from which the most positive income is received. If total income is nil or negative the principal source is undefined.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Managerial employees
employees who are in charge of a significant number of employees and/or have strategic responsibilities in the conduct or operations of the organisation and who usually do not have an entitlement to paid overtime.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Mean weekly income
the sum of the income of all households, or persons, in a population, divided by the number of households, or persons, in the population.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Middle income persons
persons in the 5th and 6th income deciles after being ranked by their equivalised disposable household income.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

One parent with dependent children household
a one-family household comprising a lone parent with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated persons.

Economic resources: definitions continued

Ordinary time hours
award, standard or agreed hours of work, paid for at the ordinary time rate, including that part of annual leave, paid sick leave and long service leave taken during the reference period.
Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Own business or partnership income
the profit or loss that accrues to people as owners of, or partners in, unincorporated enterprises. Profit/loss consists of the value of the gross output of the enterprise after the deduction of operating expenses (including depreciation). Losses occur when operating expenses are greater than gross receipts.
Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Percentiles
when persons are ranked from the lowest to the highest on the basis of some characteristic such as their equivalised household income, they can then be divided into equal sized groups. Division into 100 groups gives percentiles. The highest value of the characteristic in the tenth percentile is denoted P10. The Median or the top of the 50th percentile is denoted P50. P20, P80 and P90 denote the highest values in the 20th, 80th and 90th percentiles.
Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Ratio of incomes
the ratio is calculated by dividing the highest value in a selected percentile by the highest value in a second selected percentile (see percentiles). For example, the person at the top of the 80th percentile for Australia when ranked by equivalised disposable income has an equivalised disposable household income of $702. If this is divided by the equivalised disposable household weekly income of the person at the top of the 20th percentile ($267), the result is 2.63.
Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Real GDP (gross domestic product)
an aggregate measure of the value of economic production in a year. The series used are GDP chain volume measures (reference year 2001–02) and GDP at current prices.
Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Real household final consumption expenditure per capita
net expenditure on goods and services by persons, and expenditure of a current nature by private nonprofit institutions serving households. Includes personal expenditure on motor vehicles and other durable goods, the value of 'backyard' production, the payment of wages and salaries in kind and imputed rent on owner-occupied dwellings. Excludes the purchase and maintenance of dwellings by persons and capital expenditure by unincorporated businesses and nonprofit institutions. The measure is expressed in Australian dollars using chain volume measures, reference year 2001–02, and is based on the mean resident population of each financial year.
Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Real net national disposable income per capita
where real net national disposable income is a broad measure of economic wellbeing which adjusts the chain volume measure of GDP for the terms of trade effect, real net incomes from overseas (primary and secondary) and consumption of fixed capital. The population estimates are based on data published in the quarterly publication *Australian Demographic Statistics* (ABS cat. no. 3101.0) and ABS projections.
Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Reference person
the reference person for each household is chosen by applying, to all household members aged 15 years and over, the selection criteria below, in the order listed, until a single appropriate reference person is identified:
- the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure
- one of the partners in a registered or de facto marriage, with dependent children
- one of the partners in a registered or de facto marriage, without dependent children
- a lone parent with dependent children
- the person with the highest income
- the eldest person.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Single-parent payment recipients
lone parents receiving the 'Parenting Payment — Single'. Prior to March 1998, this was known as the 'Sole Parent Pension'.

Social assistance benefits in cash to residents
includes current transfers to persons from general government in return for which no services are rendered or goods supplied. Principal components include: scholarships; maternity, sickness and unemployment benefits; child endowments and family allowances; and widows', age, invalid and repatriation pensions.
Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Total hourly rates of pay index excluding bonuses
measures quarterly change in combined ordinary time and overtime hourly rates of pay excluding bonuses.
Bonuses are payments made to a job occupant that are in addition to regular wages and salaries and which generally relate to the job occupant's, or the organisation's performance. Base period for index is September 1997 = 100.0.
Reference: *Wage Cost Index, Australia* (ABS cat. no. 6345.0).

Wages and salaries
the gross cash income received as a return to labour from an employer or from a household's own incorporated enterprise.
Reference: *Household Income and Income Distribution, Australia (*ABS cat. no. 6523.0).

Sources of personal income across Australia

SOURCES OF INCOME

In 2000–01, wages and salaries accounted for 73% of total gross income in metropolitan areas, and 65% in non-metropolitan areas. Government cash benefits were 10% of income in metropolitan areas, and 15% in non-metropolitan areas.

Regional areas across Australia have undergone considerable change during the last decade, and the impacts of change have been geographically diverse. Processes such as industry restructuring, for example, have resulted in regions experiencing different rates of economic and employment growth. Some regions have experienced changes in access to services and movements of people between rural areas, larger regional centres and metropolitan areas.[1]

The value and sources of personal income in regions can often indicate differences in opportunities or population characteristics, especially when compared over time for an individual region or between regions. As the economic wellbeing of most individuals is largely determined by the amount of income they and their families receive, analysing income data can assist in understanding the geographical diversity of regional socioeconomic wellbeing and the factors influencing these differences.

Metropolitan and non-metropolitan areas

In 2000–01, 73% of total gross income received by people living in metropolitan areas was from wages and salaries, and a further 10% was from government cash benefits. In the same period, 65% of income received by people living in non-metropolitan areas was from wages and salaries and 15% was from government cash benefits.

Income data

The income data used in this article are a combination of data on the taxable income reported by individuals to the Australian Taxation Office (ATO) and data on income received by individuals from government pensions, benefits and allowances. These data are available at a finer geographic level than is possible with data from a sample survey (such as the ABS Survey of Income and Housing). The data have been provided in aggregate form from the ATO and from the Department of Family and Community Services. All ATO data are for persons aged 15 years and over. The government pensions, benefits and allowance data do not include all benefits paid. Exclusions include: Family Tax Benefits when it is the only payment received; pensions and allowances paid by the Department of Veterans' Affairs and Community Development Employment Project payments administered by the Department of Employment and Workplace Relations.

Administrative data may have some limitations for statistical purposes, as they are designed for the management of particular government affairs. For example, address data may not be accurate because people may move address during the year and some data recorded against the current address (and region) may be for income received while at another address in another region. Similarly, income support recipients may move during any given year.

Income data are presented in original rather than real dollar terms. That is, data are not adjusted to remove the effects of price change.

For further information see *Information Paper: Experimental Estimates of Personal Income for Small Areas, Taxation and Income Support Data, 1995–96 to 2000–01* (ABS cat. no. 6524.0).

Percentage of total gross personal income by source — 1996–97 and 2000–01

	Wages and salaries	*Government cash benefits*	*Investment*	*Own unincorporated business*	*Superannuation and annuities*	*Other income*
	%	%	%	%	%	%
			1996–97			
Metropolitan	73.4	10.0	7.8	6.0	2.1	0.7
Non-metropolitan	66.7	14.5	6.4	9.9	2.0	0.4
Australia	**71.7**	**11.2**	**7.5**	**7.0**	**2.1**	**0.6**
			2000–01			
Metropolitan	73.0	9.6	8.7	5.5	2.3	0.8
Non-metropolitan	65.2	15.2	7.0	9.9	2.3	0.5
Australia	**71.1**	**11.0**	**8.3**	**6.6**	**2.3**	**0.8**

Source: Information Paper: Experimental Estimates of Personal Income for Small Areas, Taxation and Income Support Data 1995–96 to 2000–01 (ABS cat. no. 6524.0).

Between 1996–97 and 2000–01, the proportions for the different sources of income in metropolitan areas changed very little. The largest change was in investment, which rose from 8% of total income to 9%. In non-metropolitan areas, the contribution of wages and salaries to total income fell from 67% in 1996–97 to 65% in 2000–01, while the contribution from government cash benefits rose less than 1% in the same period.

In both 1996–97 and 2000–01, mean income per recipient was higher in metropolitan areas than in non-metropolitan areas for all sources of income except government cash benefits. The difference in mean income from wages and salaries widened significantly between metropolitan and non-metropolitan areas during this period. The mean income per recipient in metropolitan areas rose from $28,700 in 1996–97 to $34,400 in 2000–01, while the mean income in non-metropolitan areas rose from $24,000 to $27,900. Mean income per recipient from investment also rose more in metropolitan areas during this period. Mean investment income in metropolitan areas rose from $4,200 in 1996–97 to $6,300 in 2000–01, and from $3,000 to $4,300 in non-metropolitan areas.

Selected regional areas

This diversity in income is further illustrated with examples of four Statistical Local Areas (SLA), which have been selected to represent a range of changes in income and population.

Whyalla, SA — total personal income steady, population down

Whyalla is located on the upper western shore of the Spencer Gulf in South Australia. In the 1970s, Whyalla's economic base was in ship building and steel production.[2] While closure of the shipyards in 1978 began a period of industrial diversification, manufacturing remains the largest industry in which people are employed.

Income and population data

Income data are presented in six categories:

- Wages and salaries
- Government cash benefits (income support including pensions, benefits and allowances such as Age Pension and Newstart allowance)
- Investment income
- Own unincorporated business income (business profit or loss)
- Superannuation and annuities
- Other income (such as attributed foreign income)

The *mean income per recipient* is calculated by dividing the value of an income type (e.g. wages and salaries) by the number of people who receive that type of income. An individual may receive more than one type of income during any year.

Metropolitan areas in each state and territory have been defined as the Capital City Statistical Divisions with the following Statistical Subdivisions included: Newcastle and Wollongong (NSW); Greater Geelong City Part A (Vic); Gold Coast City Part B and Sunshine Coast (Qld); Darwin City and Palmerston-East Arm (NT). All other areas are *non-metropolitan areas*. For further information see *Statistical Geography: Volume 1 - Australian Standard Geographical Classification (ASGC) 2001* (ABS cat. no. 1216.0).

Total population data refer to the Estimated Resident Population (ERP), which is the official measure of the population of Australia at 30 June each year. ERP is based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia. For further information, see *Regional Population Growth, Australia and New Zealand 2001–02*, (ABS cat. no. 3218.0) and *Population Estimates by Age and Sex, Australia and States 2001* (ABS cat. no. 3235.0.55.001).

From 1996–97 to 2000–01, total personal income from all sources in Whyalla rose slightly (less than 1%), but there were changes in the value and relative contribution to total income of some income sources. The value of wages and salaries fell by 4% and its

Mean income per recipient — 2000–01

	Wages and salaries	*Government cash benefits*	*Investment*	*Own unincorporated business*	*Superannuation and annuities*	*Other income*
	$	$	$	$	$	$
Metropolitan	34 400	7 900	6 300	18 600	17 400	3 900
Non-Metropolitan	27 900	8 200	4 300	16 600	14 900	2 000
	Number of recipients					
	million	million	million	million	million	million
Metropolitan	6.2	3.5	4.0	0.9	0.4	0.6
Non-Metropolitan	2.1	1.7	1.5	0.5	0.1	0.2

Source: Information Paper: Experimental Estimates of Personal Income for Small Areas, Taxation and Income Support Data 1995–96 to 2000–01 (ABS cat. no. 6524.0).

Percentage of total gross personal income by source for selected Statistical Local Areas — 1996–97 and 2000–01

SLA	Wages and salaries	Government cash benefits	Investment	Own unincorporated business	Superannuation and annuities	Other income	Total income from all sources
	%	%	%	%	%	%	$m
				1996–97			
Whyalla (SA)	77.0	16.4	3.0	2.5	0.7	0.4	357.9
Clarence (Tas)	70.2	12.3	5.8	6.8	4.4	0.4	754.9
Griffith (NSW)	60.7	9.8	7.3	21.1	0.7	0.4	384.2
Burleigh Waters (Qld)	60.4	18.6	8.5	8.2	3.2	1.0	172.2
				2000–01			
Whyalla (SA)	73.7	20.1	2.6	2.1	1.1	0.5	359.3
Clarence (Tas)	68.4	13.7	6.2	6.0	5.0	0.5	873.8
Griffith (NSW)	66.1	10.9	9.0	12.7	1.1	0.3	436.9
Burleigh Waters (Qld)	63.0	15.9	9.2	7.6	3.4	0.9	248.5

Source: Information Paper: Experimental Estimates of Personal Income for Small Areas, Taxation and Income Support Data 1995–96 to 2000–01 (ABS cat. no. 6524.0).

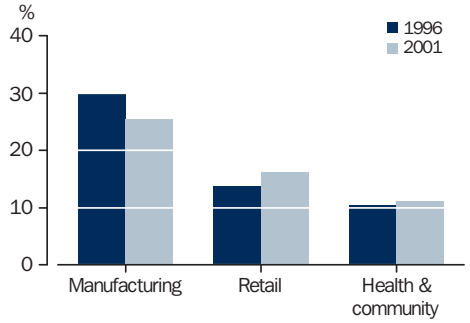
contribution to total income fell from 77% to 74%. The value of government cash benefits rose by 23%, while its contribution to total income rose from 16% to 20%.

The total population of Whyalla fell by 8% from 24,000 in 1997 to 22,100 in 2001, one of the largest falls in population in an SLA in that period. Over half of the population decline in Whyalla was in the 25–44 year age group.

According to census data, the number of people employed in Whyalla (full-time or part-time) fell by 12% from 1996 to 2001. In 1996, 30% of employed people were in Manufacturing, falling to 25% in 2001, while the proportion employed in Retail trade increased from 14% to 16%. In 1996, the occupations that were held by the largest proportions of people were Tradespersons and related workers (18%), Intermediate production and transport workers (16%) and Professionals (15%). In 2001, these proportions had fallen to 16%, 14% and 14% respectively.

Changes in employment opportunities in Whyalla and the decline in the prime working aged population (25–44 years) is reflected in the fall in the contribution to total income from wages and salaries, and the increase in the contribution from government cash benefits.

Percentage employed in selected industries, Whyalla — 1996 and 2001



Source: ABS 1996 and 2001 Censuses of Population and Housing.

Clarence, Tas — total personal income up, population steady

Clarence is located on the eastern shore of the Derwent River across from the city of Hobart. From 1996–97 to 2000–01, the value of total personal income from all sources rose by 16% in this region. While all sources of income rose in value, their relative contribution to total income changed. In particular, there were falls in the proportion of income from wages and salaries (70% to 68%), and from own unincorporated business (7% to 6%), while the contributions from other sources increased.

The population of Clarence remained relatively steady between 1997 and 2001 (rising less than 1% to 49,600 at the end of June 2001), although the population aged 25–44 years fell by 6%. Between the 1996 Census and the 2001 Census, the number of people employed in Clarence (full-time or part-time) fell by less than 1%. Of all people employed, 65% were employed full-time in 1996, falling to 63% in 2001.

According to census data in 1996, the three industries in which the largest proportion of

people were employed were Retail (15%), Health and community Services (12%), and Government administration and defence (11%). In 2001, the proportions in Retail and Health and community services had risen (to 16% and 13% respectively), while Government administration and defence fell to 8%, slipping from the third largest employing industry to the sixth largest in 2001.

The change in the relative contribution of wages and salaries to total income in Clarence is consistent with the fall in the population aged 25–44 years and the decrease in the proportion of people working full-time, and may also have been contributed to by changes in the industry base.

Griffith, NSW — wages/salaries up, own unincorporated business down

Griffith, New South Wales is located in the Riverina region and is known particularly as a citrus fruit and wine producing area. From 1996–97 to 2000–01, the value of total personal income from all sources rose by 14%. The largest contribution was from wages and salaries, which rose 24% (from $233.1 million to $288.6 million).

The relative contribution of each source of income to total income changed during this period. In particular, the share of income from wages and salaries rose from 61% to 66%, while own unincorporated business fell from 21% to 13% of total income. The number of people receiving income from own unincorporated business fell by 12% between 1996–97 and 2000–01. The mean income per recipient from own unincorporated business also fell (from $22,900 to $17,800 per recipient), contributing to the fall in the relative contribution to total income from this source.

During this period, there was strong population growth and changes to the patterns of employment. The population of Griffith grew by 9% between 1997 and 2001, reaching 24,600 at 30 June 2001. While the greatest contribution to total growth occurred in the 0–14 year age group, the working age population (aged 15–64) years also grew strongly.

From 1996 to 2001, according to census data, the number of people employed in Griffith (full-time or part-time) rose 11% and the number of people in high/medium skill level occupations grew by 13%. In 1996, the highest proportions of employed people were Labourers and related workers (17%), Managers and administrators (16%) and Tradespersons and related workers (14%). In 2001, Managers and administrators was the largest group (16%), followed by Labourers and related workers (16%) and Tradespersons and related workers (13%).

The increase in the share of income from wages and salaries in Griffith is consistent with strong population growth and changes in employment patterns.

Census data

The employment, industry and occupation data used in this article are from the five yearly ABS Census of Population and Housing. All Census data are based on place of enumeration. Occupation and industry are based on the main job held in the week prior to census night. All percentages shown exclude people for whom occupation/industry was not stated, or was inadequately described.

High/medium skill occupations are:

- Managers and administrators;
- Professionals;
- Associate professionals;
- Tradespersons and related workers; and
- Advanced clerical and service workers.

For further information see *Census of Population and Housing: Australia in Profile – a regional analysis, 2001* (ABS cat. no. 2032.0). See also *Australian Standard Classification of Occupations, Second Edition 1997* (ABS cat. no. 1220.0).

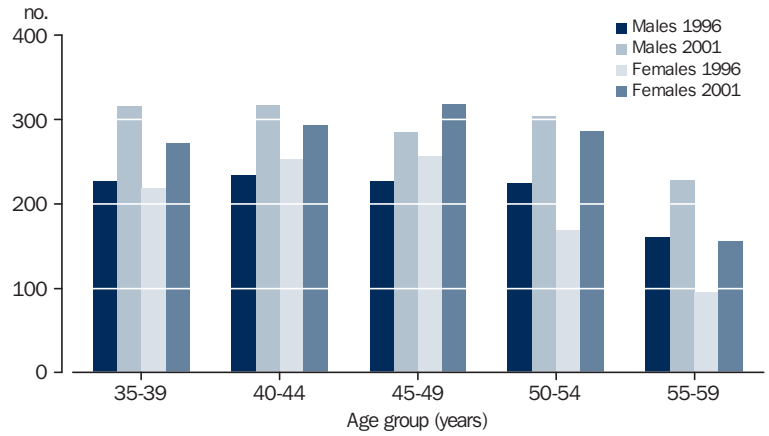
Burleigh Waters, Qld — government cash benefits down, wages and salaries up

Burleigh Waters is in the Gold Coast area of Queensland, known for its surf and beaches. From 1996–97 to 2000–01, the value of total personal income from all sources rose by 44% in this region.

While the value of income from each source rose during that period, the relative contributions to total income changed. In particular, the contribution from government cash benefits fell from 19% in 1996–97 to 16% in 2000–01, and the contribution from wages and salaries rose from 60% to 63%.

During this period, there was strong population growth in Burleigh Waters, up 16% between 1997 and 2001, reaching 12,800 people at 30 June 2001. While it is often perceived that older people retiring to the coast are a dominant source of population growth in those areas, this is not generally the case (see *Australian Social Trends 2004*, Seachange – new residents in coastal areas, pp. 11–15). In Burleigh Waters, the greatest contribution to total growth from 1997–2001 came from mature aged persons (i.e. those in the 45–64 year age group).

Total employed by selected age groups, Burleigh Waters — 1996 and 2001



Source: ABS 1996 and 2001 Censuses of Population and Housing.

From 1996–2001, according to census data, the number of people employed increased by 31%. The increase in the number of people in part-time employment over this period (39%) was greater than the increase in full-time employment (24%). For men, the total number employed increased particularly in the 35–39 year and 40–44 year age groups, while for women, the greatest increase was in the 50–54 year age group.

Increased opportunities for work in Burleigh Waters were reflected in the rise in income from wages and salaries and decreased contribution of government cash benefits to total income.

Endnotes

1 Bureau of Transport and Regional Economics 2003, *Government Interventions in Pursuit of Regional Development: Learning from Experience*, Working paper 55, Department of Transport and Regional Services, Canberra.

2 City of Whyalla<http://www.whyalla.com/site/page. cfm?=44>, accessed 25 February 2005.

Female/male earnings

INCOME DISTRIBUTION

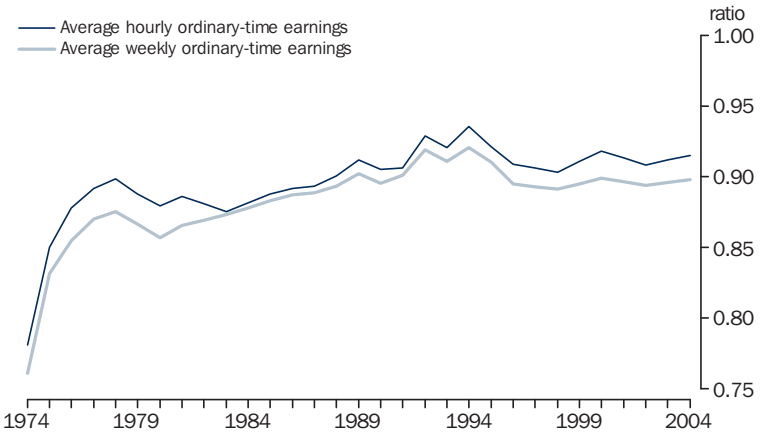
Between 1994 and 2004, the growth in average hourly ordinary-time earnings among full-time adult non-managerial employees was higher for males than females, resulting in a slight widening of the gender wage gap.

Wages and salaries were the principal source of income for 57% of Australian households overall in 2000–01 (see *Australian Social Trends 2004*, Household income, pp. 142–145). In general, men and women make different contributions to household incomes, with men being more likely than women to participate in the labour force, and employed men usually working more hours than employed women.

Among all employees, regardless of the number of hours worked per week, the average weekly total earnings of females was $611.50 in May 2004, representing slightly more than two-thirds (68%) of the average weekly total earnings of males ($897.50).[1] To examine the issue of equal pay for equal work, earnings-sensitive differences in the labour force characteristics of male and female employees, such as different number of hours worked per week, need to be standardised.

When looking at male and female employees in more closely comparable circumstances, the gender pay gap is much narrower. In 2004, the ratio of female to male average hourly ordinary-time earnings among full-time adult non-managerial employees was 0.92. In other words, female earnings were 92% of male earnings, resulting in a gender wage gap of 8%.

Female/male earnings ratio among full-time adult non-managerial employees — May 1974 to May 2004(a)



(a) Data points have been interpolated for years when the survey was not conducted. Data for years prior to 1983 are not strictly comparable with data for subsequent years because of changes introduced in the 1983 survey to the sampling frame and the definitions of 'full-time' and 'adult'.

Source: Employee Earnings and Hours, Australia (ABS cat. no. 6306.0).

Data sources and definitions

Most of the data presented in this article have been drawn from the ABS Survey of Employee Earnings and Hours (EEH), first conducted in May 1974 and most recently conducted in respect of May 2004. Other data have been sourced from the Organisation for Economic Co-operation and Development (OECD) and the ABS Employee Earnings, Benefits and Trade Union Membership Survey (EEBTUM), run annually in August.

Earnings is gross taxable income received from employment.

Average hourly ordinary-time earnings were derived from EEH data by dividing mean weekly ordinary-time earnings by mean weekly ordinary-time hours paid for.

The *female/male earnings ratio* is female earnings divided by comparable male earnings.

Ordinary-time earnings are payments for award, standard or agreed hours of work, including allowances, penalty payments, payments by measured result and regular bonuses and commissions. Excluded are items such as amounts salary sacrificed, overtime payments, pay in advance, leave loadings and redundancy payments.

Employees are people who work for an employer and receive pay or payment in kind, including those operating their own incorporated business.

Full-time employees usually work at least 35 hours a week, or the agreed or award hours for a full-time employee in their occupation (EEH), or at least 35 hours in the survey reference week (EEBTUM).

Adult employees are employees who are 21 years of age and over, and employees under 21 years who are paid at the full adult rate for their occupation.

In EEH, *non-managerial employees* are classified as such by employers based on supervisory and strategic responsibilities, and entitlement to paid overtime. In EEBTUM, they comprise all ASCO major groups except 'Managers and administrators'.

Trends in Australian earnings ratios

In Australia, prior to the 1970s, female pay rates were set as a proportion of the adult male basic wage. Differences between female and male wages were greatly reduced by a series of decisions on specific awards which followed a 1972 decision granting equal pay for equal work.

The gender wage gap, as measured by the ratio of female to male average hourly ordinary-time earnings among full-time adult non-managerial employees, narrowed markedly between 1974 (0.78) and 1978 (0.90).

A further but less pronounced narrowing of the pay gap occurred between 1983 (0.88) and 1994 (0.94). Over the last decade, the gap has moved within the range of 0.90 to 0.94.

Overseas ratios and trends

There is interest in knowing how levels and trends in the Australian gender wage gap compare with those in other countries. There is also an interest in the reasons for differences between countries, and the underlying factors that contribute to variation and change in the size of the gap.

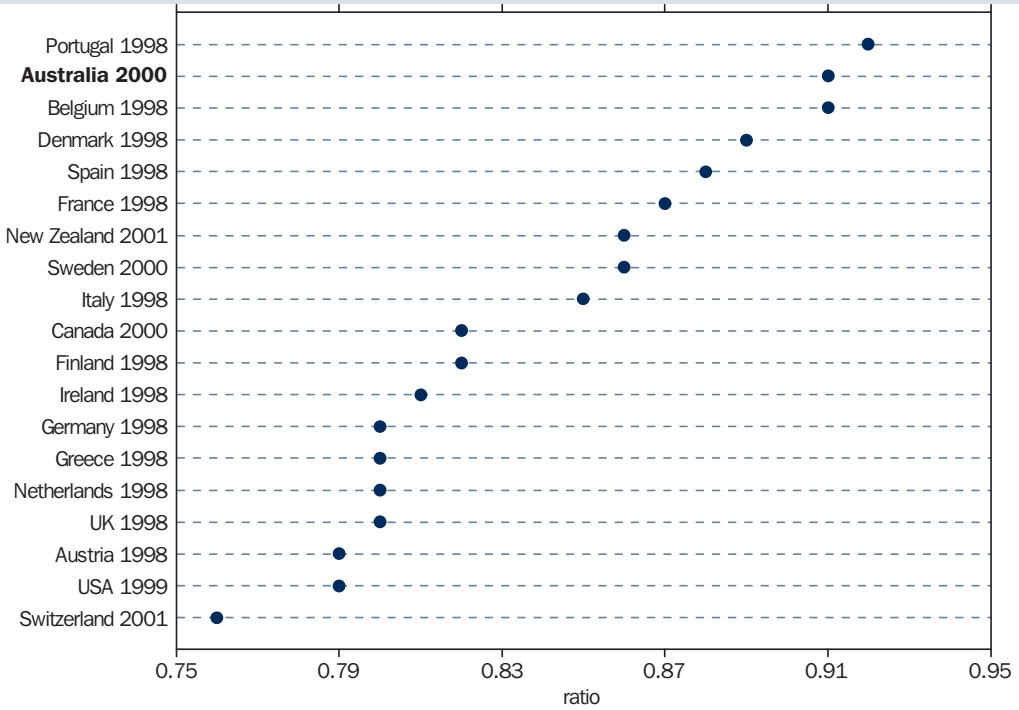
Comparisons between countries can be problematic. For example, some of the international difference in female/male earnings ratios may be due to the lack of strict comparability of data, caused by slightly different national definitions of earnings and hours worked, different data collection methods, and different age ranges.[2]

Issues of strict comparability aside, narrowing of the gender wage gap occurred in many other OECD countries during the closing quarter of the 20th century. However, at around the end of the century, the gap was considerably narrower in some countries than in others. As reported by the OECD, the Australian female/male earnings ratio (of average gross hourly total earnings among full-time wage and salary employees aged 18–64 years) of 0.91 in 2000 was higher than in many other OECD countries at around the same time. This indicates that Australia has a relatively small gender wage gap.[2]

According to the OECD, there is a range of factors that can influence a country's gender wage gap. These include differences between men and women in level of education, types of jobs held, amount of employment experience accumulated, and rate of employment of those with a relatively low level of education and skill. The structure of remuneration rates, premiums received for working in high-paying industries and occupations, wage setting practices and government policies and legislation can also affect a country's pay gap.[2]

The remainder of this article focuses on these factors in the context of the Australian gender wage gap.

Female/male ratio of average hourly earnings among full-time wage and salary employees(a) aged 20–64 years(b) — selected countries and years



(a) There are differences between some countries in the definitions of full-time work, hours worked and earnings, in the method of calculating hourly earnings, and in source data collection methodologies. The ratio for Australia was derived from data collected in the ABS Labour Force Survey, August 2000 and its supplementary 2000 Survey of Employee Earnings, Benefits and Trade Union Membership. Average gross hourly earnings were calculated by dividing total weekly earnings by actual hours worked.

(b) 18–64 years for Australia, Canada, New Zealand and Sweden, and 15–64 years for Switzerland.

Source: Organisation for Economic Co-operation and Development, *OECD Employment Outlook July 2002*.

Average hourly ordinary-time earnings of full-time adult non-managerial employees

A comparison of the earnings of men and women can be affected by compositional differences between male and female labour forces. One way of standardising for these compositional differences is to select a subset of employed men and women with similar earnings-sensitive labour force characteristics. To examine the issue of equal pay for work of equal value, this article largely focuses on *average hourly ordinary-time earnings of full-time adult non-managerial employees*, derived from data collected in the ABS Survey of Employee Earnings and Hours (EEH). This measure has a variety of features that makes it an informative indicator of the extent to which men and women receive equal pay for performing work of equal value.

The earnings measure (unit of analysis) is *average hourly ordinary-time earnings* and has been chosen because:

- It is an hourly measure. On average, male full-time employees work more hours per week than female full-time employees.
- It is a measure of ordinary-time earnings. Overtime earnings are usually paid at a higher hourly rate than ordinary-time earnings and, on average, male full-time employees work more overtime hours per week than female full-time employees.

The population for comparison is *full-time adult non-managerial employees* and has been chosen because:

- The issue of pay discrimination is relevant to employees only.
- The occupational profiles of full-time and part-time employees can be different. Some employers do not allow some jobs to be performed on a part-time basis.[3]
- Adult and junior rates of pay often differ widely. The gender wage gap would be affected if one sex had a higher proportion of juniors.
- Managerial employees are generally not paid at an hourly rate.
- Extremely high, outlying managerial earnings can distort means.

There were 7.7 million employees within the scope and coverage of the May 2004 EEH. The majority of these employees (4.1 million representing 54%) were full-time adult non-managerial employees.

Wage setting practices

Along with other countries, Australia was influenced by the OECD's Dahrendorf Report on labour market flexibility, released in 1986. By the early 1990s there was general support for moving away from centralised determination of wages and conditions via industry and occupational level awards, in favour of setting wages and conditions through enterprise and workplace agreements. Enterprise bargaining was formally introduced in Australia in 1993 through amendments to the *Industrial Relations Act 1988*, then actively promoted by the *Workplace Relations Act 1996*.[4]

Currently in Australia, there is a range of methods used to set the pay of employees, including awards, collective agreements and individual arrangements. In 2004, full-time adult non-managerial employees who had their pay set by award only (i.e. who were not paid more than the award rate of pay) received considerably lower average hourly ordinary-time earnings ($16.70) than those who had their pay set by collective agreement ($24.10) and individual arrangement ($23.30). A higher proportion of female full-time adult non-managerial employees had their pay set by award only (15%) compared with their male counterparts (12%).

Pay rates

There is variation among both industries and occupations in the gender mix of employees, the methods by which pay is set, and the level of average hourly earnings. The overall female/male earnings ratio will partly reflect such structural differences, if men tend to be more heavily concentrated in higher-paying industries and occupations that are more likely to set pay by collective agreement or individual arrangement.

...industry differences

The proportion of full-time adult non-managerial employees who were women ranged widely between industries (from 10% in the Construction industry to 71% in the Health and community services industry).

For both men and women, there were some large differences in pay rates between industries. In May 2004, among both male and female full-time adult non-managerial employees, average hourly ordinary-time earnings for those employed in the Mining industry ($34.30 for men and $27.10 for women) were almost double the hourly earnings of those in the Accommodation, cafes and restaurants industry ($17.60 for men and $17.10 for women) and the Retail trade industry ($18.10 for men and $17.00 for women). Overall, differences in hourly earnings between industries tended to be greater than earnings differences between men and women in the same industry.

Between May 1994 and May 2004, average hourly ordinary-time earnings increased at a slightly higher rate among male (51%) than female (48%) full-time adult non-managerial

Full-time adult non-managerial employees — May 2004

Industry (ANZSIC)	Average hourly ordinary-time earnings: Males $	Average hourly ordinary-time earnings: Females $	Female/male earnings ratio	Increase in average hourly ordinary-time earnings since May 1994: Males %	Increase in average hourly ordinary-time earnings since May 1994: Females %	Proportion who are female %	Proportion with awards only method of pay setting %
Mining	34.30	27.10	0.79	43.2	52.3	13.3	*1.7
Manufacturing	22.40	19.40	0.87	56.1	52.7	23.2	12.2
Electricity, gas and water supply	28.80	24.50	0.85	64.2	58.2	21.1	*1.4
Construction	23.40	19.60	0.84	52.4	46.0	9.9	14.3
Wholesale trade	21.60	19.80	0.92	54.2	51.5	28.4	13.2
Retail trade	18.10	17.00	0.94	48.7	47.6	38.0	23.7
Accommodation, cafes and restaurants	17.60	17.10	0.97	43.1	47.1	47.6	46.9
Transport and storage	22.60	20.60	0.91	45.1	42.0	29.8	12.2
Communication services	26.70	22.40	0.84	54.6	40.4	34.9	**0.5
Finance and insurance	30.30	23.30	0.77	85.0	65.7	54.3	3.3
Property and business services	24.70	21.70	0.88	55.9	46.6	45.2	16.7
Government administration and defence	24.70	24.10	0.98	56.1	54.3	43.6	*0.4
Education	27.90	25.50	0.91	33.0	40.2	65.1	6.4
Health and community services	25.00	21.40	0.86	50.2	40.7	71.1	17.2
Cultural and recreational services	23.70	22.10	0.93	37.5	39.3	45.0	11.3
Personal and other services	25.40	20.00	0.79	45.5	39.9	44.5	16.2
All industries	**23.60**	**21.60**	**0.92**	**50.9**	**47.6**	**40.3**	**13.3**

Source: Employee Earnings and Hours, Australia, May 2004 (ABS cat. no. 6306.0); *Distribution and Composition of Employee Earnings and Hours, Australia, May 1994* (ABS cat. no. 6306.0); ABS 2004 Survey of Employee Earnings and Hours (EEH).

employees. However, in particular industries such as Mining, and Education, female earnings increased more than male earnings in percentage terms.

While there was a gender pay gap in each industry, the female/male earnings ratio was much higher in some industries (e.g. Government administration and defence 0.98) than others (e.g. Finance and insurance 0.77, and Mining 0.79). The wage gap tended to be narrower in industries with lower hourly earnings, especially lower male earnings, and wider in industries with higher hourly earnings.

...occupational differences

Hourly rates of pay differ between occupations. In general, people in highly skilled jobs receive higher rates of pay than those in less skilled jobs. Differences in the concentration of men and women in particular occupations contribute to the gender wage gap.

The skill level of an occupation is measured by the amount of formal education and training and previous experience usually required for entry. In 2004, for both male and female full-time adult non-managerial employees, average hourly ordinary-time earnings rose with occupation skill level.

However, there were some marked differences between occupations at the same skill level. For example, at the highest skill level, both male and female Medical practitioners had considerably higher hourly earnings ($47.40 and $38.80 respectively) than male and female Social welfare professionals ($22.70 and $24.10).

Overall, 40% of full-time adult non-managerial employees in 2004 were women. Some occupations had a much higher than average proportion (e.g. Enrolled nurses 90% and Hairdressers 91%) while others (e.g. Mining, construction and related labourers) had a much lower than average proportion. Within each skill level, occupations with higher hourly earnings generally had lower proportions of women.

Selected occupations of full-time adult non-managerial employees — May 2004

	Average hourly ordinary-time earnings		Female/ male earnings ratio	Proportion who are female	Proportion with award only method of pay setting
	Males	Females			
Selected Minor groups (ASCO 2nd edition)	$	$	ratio	%	%
Skill level 1	32.10	27.30	0.85	51.2	5.3
Medical practitioners	47.40	38.80	0.82	38.2	**3.5
Social welfare professionals	22.70	24.10	1.06	66.4	16.6
Skill level 2	27.50	22.70	0.83	41.7	7.8
Police officers	29.80	26.20	0.88	23.4	—
Enrolled nurses	20.10	19.30	0.96	90.4	**7.9
Skill level 3	21.70	20.50	0.94	22.3	16.2
Mechanical engineering tradespersons	23.90	21.00	0.88	*1.4	*7.4
Hairdressers	14.00	14.60	1.04	91.1	60.6
Skill level 4	21.00	18.50	0.88	44.7	14.2
Intermediate mining and construction workers(a)	31.80	27.40	0.86	*2.5	**1.0
Hospitality workers	17.00	16.50	0.97	58.3	44.4
Skill level 5	18.30	16.40	0.90	34.1	24.9
Mining, construction and related labourers	21.40	21.60	1.01	*1.5	*9.4
Cleaners	15.30	15.20	0.99	34.2	40.9

(a) Comprises miners, blasting workers, scaffolders, steel fixers, structural steel erectors, construction riggers, building insulation installers, and home improvements installers.

Source: Employee Earnings and Hours, Australia, May 2004 (ABS cat. no. 6306.0) data cube Table 1; ABS 2004 Survey of Employee Earnings and Hours (EEH).

In 2004, at most skill levels, there were examples of relatively high-paying, predominantly male occupations with comparatively low reliance on the award only method of pay setting. There were also examples of lower-paying, largely female occupations, often substantially reliant on award increases for their pay rises.

The accompanying table shows the variability in hourly earnings and the gender mix that can exist among occupations at the same skill level. The two occupations presented for each skill level represent the highest and lowest paid recognisable occupation minor groups at that level which have a sufficiently sized sample to produce reasonable estimates. At Skill level 3, for example, Mechanical engineering tradespersons (99% male) had considerably higher hourly earnings than Hairdressers (91% female) and were much less likely to have their pay set by award only.

A reason often given for the persistence of a gender wage gap in Australia is that work performed by female-dominated occupations is undervalued relative to work performed by male-dominated occupations. While men and women doing the same job for the same employer may get paid at the same hourly rate, men and women performing 'comparable' work in very different occupations are paid at different rates.[5]

Pay rate differences between occupations at the same skill level suggest that factors other than skill (e.g. danger, remoteness, labour supply and demand, competitiveness and bargaining strength) also influence the hourly earnings of occupations in Australia.

Employment experience

Within the same occupation, female average hourly ordinary-time earnings are often (but not always) lower than male earnings. This may be partially attributable to different rates of pay for working at different grades of an occupation, and could reflect differences in levels of lifelong accumulation of experience obtained from working in a particular occupation. For example, the female/male average hourly ordinary-time earnings ratio of 0.88 among full-time adult non-managerial police officers in 2004 is likely to largely mirror the distribution of male and female officers at different grades across the ranks of Australian police forces.

Female/male average hourly earnings ratio(a) by age group — August 2004

(a) Total weekly earnings in main job divided by total hours paid for in main job among full-time non-managerial employees in their main job (excluding owner managers of incorporated enterprises).

Source: ABS 2004 Survey of Employee Earnings, Benefits and Trade Union Membership.

Some occupations are typically characterised by career progression across an incremental pay scale. In these occupations, women who withdraw from the labour force to raise children or perform other caring roles may forgo or postpone promotion-based increases that men of the same age may receive through continuous employment in an occupation.

In 2004, the female/male average hourly total earnings ratio was relatively high among 15–19 year old full-time non-managerial employees (0.98) and even higher among those aged 20–24 years (1.07). Thereafter, the ratio generally declined with increased age, falling to 0.82 among 45–49 year olds before rising again. This pattern was similar to that which prevailed a decade earlier, in 1994.

In addition to relative differences in lifelong accumulation of employment experience by same age male and female full-time non-managerial employees, higher female/male earnings ratios among younger age groups may represent fewer gender differences in educational attainment and employment opportunities. Lower earnings ratios among older age groups might also reflect the types of jobs women do when combining work and family.

Other data sources

There is a range of ABS data sources and earnings measures that could be used to compare male and female earnings. For explanation and discussion of the various options see Chapter 11 of *Labour Statistics: Concepts, Sources and Methods, 2001* (ABS Cat. no. 6102.0). Choice of the best available combination of data source, earnings measure, unit of analysis and population for comparison is mainly determined by the particular issue being analysed and the specific question being researched. Practical considerations such as data quality, survey sample size, standard errors on estimates, type of variables stored on a data file, and the timespan for trend analysis, also influence selection of the best available combination of options.

In addition to the EEH data used for the main analysis in this article, data from the EEBTUM survey can also be used to examine female and male earnings. EEBTUM is an annual household survey that includes data on a range of characteristics of employees in their main job, such as age, hours worked, leave entitlements, occupation and industry. The earnings measure in EEBTUM is based on amount of total last pay. However, it does not separate ordinary-time earnings from overtime earnings.

The Average Weekly Earnings (AWE) survey is sometimes used to compare earnings of men and women. While AWE data is available quarterly, it is a business survey and has little detail about the characteristics of employees. It does not include hourly earnings information, nor a decomposition by occupation. These items are important in understanding differences in earnings of male and female employees.

Endnotes

1 Australian Bureau of Statistics 2005, *Employee Earnings and Hours, Australia, May 2004*, cat. no. 6306.0, ABS, Canberra.

2 The Organisation for Economic Co-operation and Development 2002, *OECD Employment Outlook, July 2002*, OECD, Paris.

3 Whittard, J 2003, 'Training and career experiences of women part-time workers in a finance sector organisation: persistent remnant of the 'reserve army'?', *Australian Journal of Labour Economics*, vol. 6, no. 4, December 2003, pp. 537–557.

4 Australian Government Department of Employment and Workplace Relations 2003, *Good jobs or bad jobs: an Australian policy and empirical perspective* <http://www.workplace.gov.au/workplace/Category/Publications/LabourMarketAnalysis/GoodJobsorBadJobs-anAustralianPolicyandEmpirical.htm>, accessed 28 April 2005.

5 Wooden, M 1999, 'Gender Pay Equity and Comparable Worth in Australia: A Reassessment', *The Australian Economic Review*, vol. 32, no. 2, pp. 157–171.

Housing

Housing: national summary

	HOUSING STOCK	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1	Number of occupied private dwellings	'000	6 579	6 668	6 762	6 910	7 015	7 127	7 250	r7 367	n.y.a.	n.y.a.	n.y.a.
2	Public sector dwellings completed	'000	9.9	7.8	6.8	6.0	4.4	5.4	4.8	3.8	3.6	3.3	3.6
3	Private sector dwellings completed	'000	r158.5	162.4	129.1	113.4	127.2	136.7	150.5	130.1	r128.2	149.2	151.2
	Dwelling structure – selected(a)												
4	Separate house	%	79.4	n.a.	79.7	80.0	79.4	79.5	79.4	78.1	n.a.	77.7	n.y.a.
5	Semidetached	%	7.9	n.a.	7.9	7.8	8.6	8.9	9.8	9.9	n.a.	10.2	n.y.a.
6	Flat	%	12.5	n.a.	11.7	11.5	11.5	11.1	10.0	11.3	n.a.	11.4	n.y.a.
	Housing utilisation												
7	Average persons per household	no.	2.6	n.a.	2.7	2.7	2.7	2.6	2.6	2.6	n.a.	2.5	n.y.a.
8	Average bedrooms per dwelling	no.	2.9	n.a.	3.0	2.9	3.0	3.0	3.0	3.0	n.a.	3.0	n.y.a.

	TENURE AND LANDLORD TYPE(b)	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
9	Owner without a mortgage	%	41.8	n.a.	42.8	41.3	39.5	38.8	38.6	38.2	n.a.	36.4	n.y.a.
10	Owner with a mortgage	%	28.3	n.a.	28.1	28.3	30.9	31.3	32.1	32.1	n.a.	33.1	n.y.a.
11	Renter – state housing authority	%	6.2	n.a.	6.0	5.6	5.8	5.1	5.8	5.0	n.a.	4.9	n.y.a.
12	Renter – private landlord	%	19.0	n.a.	19.0	20.4	20.0	20.3	19.9	21.0	n.a.	22.0	n.y.a.

	HOUSING COSTS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Persons in households with housing stress												
13	Renters	%	n.a.	n.a.	3.0	3.2	3.4	n.a.	3.0	3.2	n.a.	3.2	n.y.a.
14	Total households	%	n.a.	n.a.	6.1	5.7	6.3	n.a.	5.5	5.8	n.a.	5.5	n.y.a.
	Rental												
15	Mean weekly public rent	$	62	n.a.	62	66	62	68	71	73	n.a.	81	n.y.a.
16	Mean weekly private rent	$	141	n.a.	149	154	157	167	166	173	n.a.	189	n.y.a.
17	Rental cost index	index no.	107.9	108.9	111.7	115.1	118.5	122.0	125.4	129.3	133.1	r135.1	138.9
	Construction/purchase												
18	Housing interest rate	%	8.9	r9.9	10.3	8.3	6.7	6.6	7.0	7.6	6.3	6.5	6.8
19	First home buyers – average loan(c)	$'000	r84.5	r89.8	r92.2	r98.8	r106.5	r119.8	r132.9	r125.1	r145.1	r162.1	191.4
20	Project home price index(d)	index no.	105.8	108.1	109.5	109.2	110.3	113.1	120.7	134.9	138.1	144.1	154.8
21	Established house price index(d)	index no.	109.1	112.6	112.7	115.1	122.8	130.4	142.3	152.8	178.0	209.9	245.0
22	Materials used in house building price index(c)(e)	index no.	112.0	115.4	115.7	116.1	118.2	119.5	122.8	124.4	126.0	130.5	134.3
	Finance commitments												
	Construction/purchase of new dwellings												
23	Number	'000	124	103	r83	r85	r92	r87	r87	r65	r88	r74	81
24	Value	$m	10 522	9 500	r8 076	r8 943	r10 800	r11 554	r12 701	r9 602	r14 137	r13 573	16 720
	Purchase of established dwellings(f)												
25	Number	'000	420	348	366	393	385	395	r456	r486	r541	r561	580
26	Value	$m	37 310	32 806	35 414	40 676	43 375	49 342	r61 577	r64 558	r82 613	r94 796	110 912
27	Value for alterations and additions	$m	2 899	3 477	3 509	3 039	2 779	2 821	3 321	3 108	4 083	r5 350	6 703

	HOUSING ASSISTANCE	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
28	Public sector rental dwelling stock	'000	384	389	393	400	381	386	363	359	354	348	345
29	Applicants on housing waiting lists	'000	235	235	236	221	218	184	213	222	223	208	204
30	Applicants accommodated	'000	55	53	51	47	42	41	41	40	37	33	31
31	Income units receiving private rental assistance	'000	n.a.	n.a.	n.a.	r986.6	r910.6	r963.8	r941.3	r976.3	r943.9	r940.7	949.7
32	Mean fortnightly rental assistance received	$	n.a	n.a	n.a	63	59	61	62	r69	r73	75	78
33	Mean fortnightly rent paid by rental assistance recipients	$	n.a	n.a	n.a	219	217	221	225	239	253	264	277

(a) Components do not total 100% because other dwellings are not included.
(b) Components do not total 100% because other renters (paying rent to the manager of a caravan park, an employer, a housing cooperative, or a church or community group), as well as other types of tenure (rent free and others), are not included.
(c) Measured at original prices.
(d) Data refer to capital cities only.
(e) Data refer to state capital cities only.
(f) Data includes refinancing committments.

Reference periods: All data are for year ended 30 June except:
Data for indicator 1 is at June 30.
Data for indicators 4–12, 15–16 and 31 vary according to the timing of the surveys within each year.
Data for indicators 31 to 33: for 1998, March data; for other years either May or June data.

Housing: state summary

HOUSING STOCK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
1 Number of occupied private dwellings	'000	2001	r2 455	r1 817	r1 383	r613	r724	r192	r63	r120	r7 367
2 Public sector dwellings completed	'000	2003–04	0.7	0.6	0.6	0.4	0.9	0.0	0.2	0.1	3.6
3 Private sector dwellings completed	'000	2003–04	41.2	41.9	36.5	9.0	17.3	2.2	0.7	2.4	151.1
Dwelling structure – selected(b)											
4 Separate house	%	2002	73.0	80.6	79.2	79.4	81.2	85.5	74.2	73.0	77.7
5 Semidetached	%	2002	10.4	9.5	7.7	13.0	13.4	6.6	*8.0	19.5	10.2
6 Flat	%	2002	15.8	9.7	11.9	7.2	5.3	7.0	14.9	7.5	11.4
Housing utilisation											
7 Average persons per household	no.	2002-03	2.6	2.6	2.5	2.4	2.5	2.4	2.7	2.5	2.5
8 Average bedrooms per dwelling	no.	2002-03	3.0	3.0	3.0	2.9	3.3	2.9	2.8	3.1	3.0

TENURE AND LANDLORD TYPE(c)	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
9 Owner without a mortgage	%	2002-03	37.5	39.6	32.7	35.9	34.1	41.1	16.0	28.2	36.4
10 Owner with a mortgage	%	2002-03	29.8	34.4	33.2	35.1	37.1	32.9	39.8	40.8	33.1
11 Renter – state housing authority	%	2002-03	5.5	3.5	3.6	8.2	4.7	6.3	*9.6	9.2	4.9
12 Renter – private landlord	%	2002-03	23.4	19.9	26.5	15.5	20.1	16.3	28.2	20.4	22.0

HOUSING COSTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Persons in households with housing stress											
13 Renters	%	2002-03	3.5	2.3	4.0	2.4	3.5	2.2	*2.9	*1.8	3.2
14 Total households	%	2002-03	5.8	4.9	6.4	3.7	6.9	3.3	*4.8	*3.1	5.5
Rental											
15 Mean weekly public rent	$	2002-03	77	87	78	80	77	79	103	112	81
16 Mean weekly private rent	$	2002-03	223	182	170	150	160	123	208	209	189
17 Rental cost index(e)(f)	index no.	2003-04	144.8	139.5	126.4	137.5	122.3	129.0	125.9	144.1	138.9
Construction/purchase											
18 First home buyers – average loan(d)(e)	$'000	2004	241.2	191.0	178.3	146.4	148.1	116.6	153.4	204.4	191.5
19 Project home price index(f)(g)	index no.	2003–04	151.2	153.1	161.7	165.9	145.4	172.0	176.4	187.0	154.8
20 Established house price index(f)(g)	index no.	2003–04	266.3	237.0	279.6	221.9	195.0	187.5	245.3	252.4	245.0
21 Materials used in house building price index(d)(f)(g)	index no.	2003–04	142.3	131.1	132.1	138.4	125.8	139.4	n.a.	n.a.	134.3
Finance commitments											
Construction/purchase of new dwellings											
22 Number	'000	2003-04	18.6	21.1	17.8	6.5	13.8	1.4	0.5	1.0	80.5
23 Value	$m	2003-04	4 714	4 399	3 657	1 046	2 379	199	93	233	16 720
Purchase of established dwellings(e)											
24 Number	'000	2003-04	186.6	123.1	126.7	48.3	70.0	12.7	4.6	7.7	579.8
25 Value	$m	2003-04	43 718	23 410	22 991	6 636	10 387	1 477	715	1 580	110 912
26 Value for alterations and additions	$m	2003-04	2 543	1 346	1 300	474	667	212	n.a.	n.a.	6 703

HOUSING ASSISTANCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
27 Public sector rental dwelling stock	'000	2003-04	124.7	64.9	49.1	46.7	31.5	11.7	5.6	11.1	345.3
28 Applicants on housing waiting lists	'000	2003-04	78.0	40.7	35.4	28.6	12.7	3.2	1.9	3.7	204.2
29 Applicants accommodated	'000	2003-04	9.9	5.9	4.6	3.6	4.1	1.2	0.8	0.8	31.0
30 Income units receiving private rental assistance	'000	2003-04	316.5	206.0	235.1	66.5	87.4	23.7	5.6	8.4	949.7
31 Mean fortnightly rental assistance received	$	2003-04	79	77	79	76	77	75	79	74	78
32 Mean fortnightly rent paid by rental assistance recipients	$	2003-04	294	267	280	253	255	236	280	296	277

(a) Estimates for dwelling structure, tenure type and mean weekly public and private rent for Northern Territory relate to mainly urban areas only.

(b) Components do not total 100% because other dwellings are not included.

(c) Tenure and landlord types do not total 100% because other renters (paying rent to the manager of a caravan park, an employer, a housing cooperative, or a church or community group), as well as other types of tenure (rent free and others), are not included.

(d) Measured at original prices.

(e) Data includes refinancing committments.

(f) State and territory data refer to capital cities only.

(g) Base of each index: 1989–90=100. The capital city index measure price movements in each city individually over time. They do not compare levels between cities. Please see definitions of each index.

Reference periods: All data are for year ended 30 June except:
Data for indicator 1 at June 30.

Housing: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
ABS Building Activity Survey.	—	2–3
ABS Consumer Price Index, Australia (ABS cat. no. 6401.0).	17	17
ABS Housing Finance for Owner Occupation, Australia (ABS cat. no. 5609.0).	19, 24–27	18, 22–26
ABS 1994 and 1999 Australian Housing Surveys; and Surveys of Income and Housing.	4–8, 9–12, 15–16	—
ABS Surveys of Income and Housing.	13–14	4–8, 9–16
Australian Demographic Statistics, (ABS cat. no. 3101.0).	1	1
Building Activity, Australia, (ABS cat. no. 8752.0).	2–3	—
Department of Family and Community Services administrative data.	31–33	30–32
House Price Indexes: Eight Capital Cities, September Quarter 2004 (ABS cat. no. 6416.0).	20–21	19–20
Producer Price Indexes, Australia, December Quarter 2004 (ABS cat. no. 6427.0).	22	21
Reserve Bank of Australia, *Indicator Lending Rates – F5*, <http://www.rba.gov.au/Statistics/Bulletin/F05hist.xls>, accessed 22 February 2005.	18	—
Steering Committee for the Review of Commonwealth/State Service Provision, *Report on Government Services 2003* <http://www.pc.gov.au/gsp/reports/rogs/2005/partgattachments.pdf>, accessed 23 February 2005.	28–30	27–29

Housing: definitions

Alterations and additions
all approved structural and non-structural changes which are integral to the functional and structural design of the dwelling, e.g. garages, carports, pergolas, reroofing, recladding etc., but excluding swimming pools, ongoing repairs, landscaping, and maintenance and home improvements not involving building work.
Reference: *Housing Finance for Owner Occupation, Australia* (ABS cat. no. 5609.0).

Applicants accommodated
the number of public rental applicants (households) accommodated in a year.
Reference: Australian Institute of Heath and Welfare *Commonwealth-State Housing Agreement national data reports 2002–03, Public rental housing.*

Applicants on housing waiting lists
the number of applicants (households) waiting for public rental accommodation on 30 June.
Reference: Australian Institute of Heath and Welfare *Commonwealth-State Housing Agreement national data reports 2002–03, Public rental housing.*

Average number of bedrooms per dwelling
the average number of bedrooms in private dwellings.

Average number of persons per household
the average number of usual residents in private dwellings.

Equivalised income
equivalising adjusts actual income to take account of the different needs of households of different size and composition. There are economic advantages associated with living with others, because household resources, especially housing, can be shared. The equivalence scale used to obtain equivalised incomes is that used in studies by the Organisation for Economic Co-operation and Development (OECD) and is referred to as the 'modified OECD scale'. The scale gives a weight of 1.0 to the first adult in the household, and for each additional adult (persons aged 15 years and over) a weight of 0.5, and for each child a weight of 0.3. For each household, the weights for household members are added together to form the household weight. The total household disposable income is then divided by the household weight to give an income that a lone person household would need for a similar standard of living.
Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Established house price index
measures changes in the price of detached residential dwellings on their own block of land, regardless of age (i.e. including new houses sold as a house/land package as well as established houses) expressed as an index, with base year 1989–90=100.0. Price changes therefore relate to changes in the total price of dwelling and land.
Reference: *House Price Indexes: Eight Capital Cities* (ABS cat. no. 6416.0).

Finance commitments
firm offers to provide finance for owner-occupation or alterations and additions which have been, or are normally expected to be, accepted. Commitments to provide housing finance to employees and commitments accepted and cancelled in the same month are included. Owner-occupied dwellings being purchased can be either established (completed for more than 12 months or previously occupied) or new (completed for less than 12 months with the borrower being the first occupant).
Reference: *Housing Finance for Owner Occupation, Australia* (ABS cat. no. 5609.0).

First home buyers: average loan size
first home buyers are persons entering the home ownership market for the first time. Their average loan is calculated by dividing the total value of lending commitments per month by the total number of dwellings financed per month.
Reference: *Housing Finance for Owner Occupation, Australia* (ABS cat. no. 5609.0).

Flat
includes all self-contained dwellings in blocks of flats, units or apartments. These dwellings do not have their own private grounds and usually share a common entrance foyer or stairwell. This category includes houses converted into flats and flats attached to houses such as granny flats. A house with a granny flat attached is regarded as a separate house.
Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Housing: definitions continued

Gross household disposable income per capita
where gross household disposable income, as measured in the Australian System of National Accounts, is gross household income less income tax payable, other current taxes on income, wealth etc., consumer debt interest, interest payable by dwellings and unincorporated enterprises, social contributions for workers' compensation, net non-life insurance premiums and other current transfers payable by households. The population used is the mean resident population for the financial year.

Reference: *Australian National Accounts: State Accounts* (ABS cat. no. 5220.0).

Household
a group of related or unrelated people who usually live in the same private dwelling or a lone person living in a private dwelling.

Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Housing stress
people in housing stress are those with household incomes between the bottom 10% and bottom 40% of the distribution of equivalised disposable household income, and living in households where housing costs are more than 30% of the household's gross income.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Housing interest rate
the financial year annual average of the interest rate applicable on the last working day of each month to standard variable rate loans for owner-occupation extended by large bank housing lenders. It is the predominant or representative rate of major banks, although some banks may quote higher or lower rates.

Reference: *Reserve Bank of Australia, Bulletin*.

Income units receiving private rental assistance
families or individuals who pay rent or similar payments for private accommodation and receive a rental assistance payment from the government. Rental assistance may be payable to pensioners without children, families receiving above the minimum family payment and people already receiving a government allowance or benefit.

Reference: Department of Family and Community Services.

Materials used in house building price index
measures changes in prices of selected materials used in the construction of dwellings expressed as an index, with base year 1989–90=100.0. Data for national total are a weighted average of the six state capital cities.

Reference: *Producer Price Indexes* (ABS cat. no. 6427.0).

Mean rental assistance received
average rental assistance received fortnightly by eligible social security customers who pay rent in the private rental market.

Reference: Department of Family and Community Services.

Mean rent paid by rental assistance recipients
the average rent paid fortnightly by social security customers who receive rental assistance.

Reference: Department of Family and Community Services.

Occupied private dwellings
the premises occupied by a household. For population estimation purposes, the total number of occupied private dwellings is treated as being equal to the total number of households of the usually resident population.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Other dwellings
includes caravans, houseboats, or houses or flats attached to a shop or other commercial premise.

Reference: *Housing Occupancy and Costs Australia* (ABS cat. no. 4130.0).

Owner with a mortgage
a household where the reference person or partner owes an amount on a mortgage or loan secured against the dwelling. Includes persons who have an outstanding mortgage amount but who are not making any payments.

Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Owner without a mortgage
a household where the reference person or partner does not owe any amount on a mortgage or loan secured against the dwelling. Includes persons who have repaid a mortgage or loan but have not formally discharged the associated mortgage.

Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Private/public sector dwellings completed
when building activity has progressed to the stage where the building can fulfil its intended function. The ABS regards buildings as completed when notified as such by the respondents (builders) to the survey.

Reference: *Building Activity, Australia* (ABS cat. no. 8752.0).

Project home price index
measures changes in the price of dwellings available for construction on a client's block of land expressed as an index, with base year 1989–90=100.0. Price changes therefore relate only to the price of the dwelling (excluding land).

Reference: *House Price Indexes: Eight Capital Cities* (ABS cat. no. 6416.0).

Public sector rental dwelling stock
those rental dwellings held by State and Territory Housing Authorities.

Reference: Department of Family and Community Services, *Housing Assistance Act 1996* Annual Report.

Rental cost index
measures changes in the average rent paid by private households for privately and government owned rental properties, expressed as an index, with base year 1989–90=100.0.

Reference: *Consumer Price Index, Australia* (ABS cat. no. 6401.0).

Renter: private landlord
a household paying rent to a landlord who is: a real estate agent; a parent or other relative not in the same household; or another person not in the same household, to reside in the dwelling.

Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Renter: State housing authority
a household paying rent to a state or territory housing authority or trust to reside in the dwelling.

Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Semidetached
a dwelling with its own private grounds and no dwelling above or below. A key feature is that they are attached in some structural way to one or more dwellings, or separated from neighbouring dwellings by less than half a metre. Examples include semidetached, row or terrace houses, townhouses and villa units.

Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Separate house
a dwelling which is self-contained and separated from other structures by a space to allow access on all sides (of at least one-half metre). Includes houses with an attached flat.

Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Supply of housing

HOUSING STOCK

Between 1991–92 and 2003–04, construction was completed on 145,000 new dwellings on average per year.

Housing provides shelter, safety and stability for individuals and families. In addition home ownership can provide financial benefits as it represents the accumulation of an asset. Traditionally, Australians have enjoyed high standards of housing, underpinned by growth in the supply of housing which has kept pace with population growth. However, several issues arise from population growth which impact on the supply of housing. These include city expansion, the limited availability of land for new developments, urban sprawl, increased population density and household size. All of these impact on the location and structure of new residential dwelling constructions. Changes in housing supply can affect housing affordability.[1,2] This article explores changes in Australia's housing supply, specifically the location and structure of dwellings since the early 1990s, by examining new residential construction.

Dwellings

This article examines the supply of new residential housing in Australia using data on new residential construction from the ABS quarterly Building Activity Survey.

Most Australians reside in a self-contained *dwelling unit*, consisting of a suite of rooms including cooking and bathing facilities, and intended for long term residential use. Units (whether self-contained or not) within buildings that offer institutional care (such as hospitals) or temporary accommodation (such as motels, hostels and holiday apartments) are not defined as dwelling units.

Dwelling units include *separate houses*, which are detached from surrounding buildings, and *higher density housing*, including semi-detached houses, terrace houses, townhouses, flats, units etc. For higher density housing, the number of individual dwelling units are presented, rather than the number of buildings.

Australia's existing housing stock

Most Australians live in separate houses on their own block of land. In 2001, 76% of private dwellings in Australia were separate houses, down slightly from 78% in 1991. The proportion of higher density housing increased from 20% to 22% with the proportion of other dwellings remaining at around 2% over the period.

The total number of occupied private dwellings increased by 21%, or 1.2 million dwellings, over the decade to 2001. But at the same time, Australia's total population only increased by 12%, resulting in an overall decline in the average size of households (the number of people living in a dwelling). Between 1991 and 2001, the average household size declined from 2.7 to 2.6 persons. For further information, see *Australian Social Trends 2003*, Changes in Australian Housing, pp. 175–179.

Occupied private dwellings(a)

	1991	*2001*	*Increase in number of dwellings 1991–2001*	*Annual average change 1991–2001*
Dwelling structure	%	%	%	%
Separate houses	78.0	75.9	17.5	1.6
Higher density housing	19.5	22.2	37.2	3.2
Other(b)	2.5	1.9	-6.1	-0.6
Total	**100.0**	**100.0**	**20.8**	**1.9**
	'000	'000	'000	%
Total	**5 852.5**	**7 072.2**	**1 219.7**	**1.9**
Average household size	**2.7**	**2.6**	**. .**	**. .**

(a) Dwellings where the dwelling structure was not stated were excluded prior to the calculation of percentages.
(b) Includes caravans, cabins and houseboats; improvised homes, tents and sleepers out; and houses and flats attached to a shop, office, etc. See also *Counting the Homeless, 2001* (ABS cat. no. 2050.0).

Source: ABS 1991 and 2001 Censuses of Population and Housing; *Household Estimates, Australia*, 1986 and 1991–1994 (ABS cat. no. 3229.0); *Australian Demographic Statistics, September 2004* (ABS cat. no. 3101.0).

New residential construction

In large towns and cities, new housing is provided both through the development of new land on the urban fringe, as well as the redevelopment of land within existing urban boundaries. However, new dwelling commencements may take over a year before the completed dwelling is available on the housing market.[3] The housing supply is also affected by government land release and development policies. Recently, some parts of the housing industry have expressed concerns that not enough land is being made available for residential development, particularly in the larger cities such as Melbourne and Sydney.[1]

Between 1991–92 and 2003–04, new dwelling commencements and completions tracked each other reasonably steadily (commencements leading completions) except for a short period around the introduction of the GST in July 2000.

Since 1969–70, there have been numerous peaks and troughs in the number of new dwelling commencements and completions in any one year. Nevertheless, over the past three decades the annual number of completions has always been between 115,700 (1982–83) and 170,200 (1994–95) and the underlying trend has been fairly flat.

Between 1991–92 and 2003–04, almost 2 million new residential dwellings were completed, an average of approximately 145,000 per year. The highest number of completions occurred in 1994–95 (170,200). The number of completions was lowest in 1996–97 (119,400 dwellings), representing a decrease of 30% from the peak two years earlier.

Dwelling commencements and completions

Statistics from the ABS quarterly Building Activity Survey were compiled from surveys completed by builders and other individuals and organisations engaged in building activity. The survey includes private sector residential building jobs valued at $10,000 or more and all public sector residential building jobs.

A *residential building* is a building predominantly consisting of one or more dwelling units. Dwelling units are either separate houses or higher density residences such as apartments and flats.

The ownership of a building is classified as either *public sector* or *private sector*, according to the sector of the intended owner of the completed building.

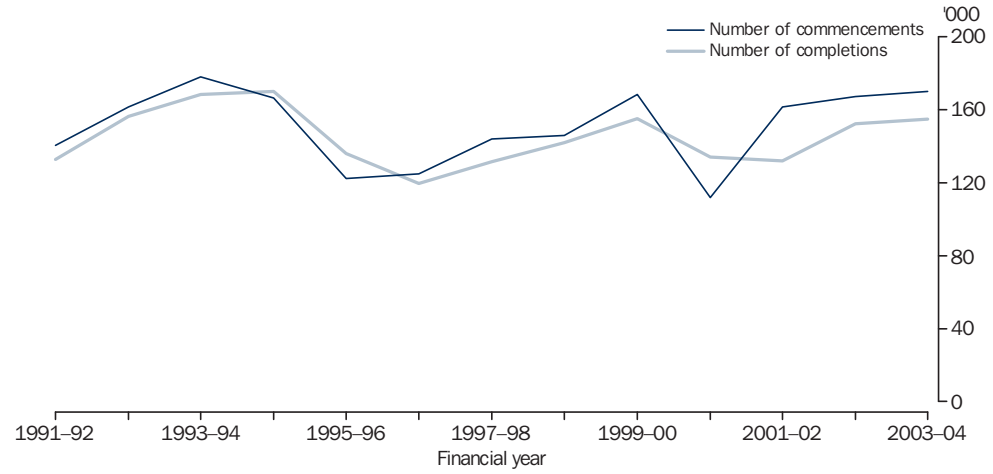
A *commencement* occurs when the first physical building activity has been performed on a building site in the form of materials fixed in place and/or labour expended, including site preparation. For further information, see *Building Activity, Australia,* ABS cat. no. 8752.0.

A *completion* occurs when building activity has progressed to the stage where the building can fulfil its intended function. For more information, see *Building Activity, Australia (*ABS cat. no. 8752.0).

It should be noted that a dwelling commencement and completion does not necessarily represent a net addition to Australia's total housing stock, as existing dwellings may have been demolished to make way for new construction or for other reasons.

In general, the pattern of housing completions over the last decade in each state and territory reflects the relative share of population growth over the same period. States with the highest population growth

New dwelling commencements and completions



Source: ABS 1991–2004 Building Activity Surveys.

recorded the highest number of completions, including an average of 43,000 per year in New South Wales and 36,100 in Queensland. NSW accounted for 29% of population growth over the period and 30% of housing completions, while Queensland accounted for 33% of population growth and 25% of completions. In recent years the average household size in Queensland has declined in comparison to the rest of Australia.

...separate houses

Traditionally, Australian housing has mainly consisted of a separate house on its own block of land. Separate houses remain the majority of new dwellings constructed, at over two thirds (72%) of new dwellings completed since 1991–92. This proportion declined from a high of 75% in 1991–1992 to a low of 69% in 2000–01.

While separate houses were the most common form of dwelling completions in all states and territories, the proportion varied widely. The highest proportions between 1991–92 and 2003–04 were in South Australia (84% of all completions), followed by Victoria and Tasmania (both 81%), and Western Australia (80%). The lowest proportions of separate house completions between 1991–92 and 2003–04 were in ACT and New South Wales (58% and 59% respectively).

Although the average size of the block of land on which separate houses are built has been declining, the floor size of houses has been increasing. Between 1993–94 and 2002–03, the average floor size of new houses built in capital cities increased from 196m^2 to 235m^2.

Between 1991–92 and 2003–04 the average purchase price of a new separate home, including land, increased by 55%. Over the same period, the cost of building materials for houses increased by around one-third (30%) (for further information see *Australian Social Trends 2005*, Housing summary tables, pp. 158–161).

...higher density housing

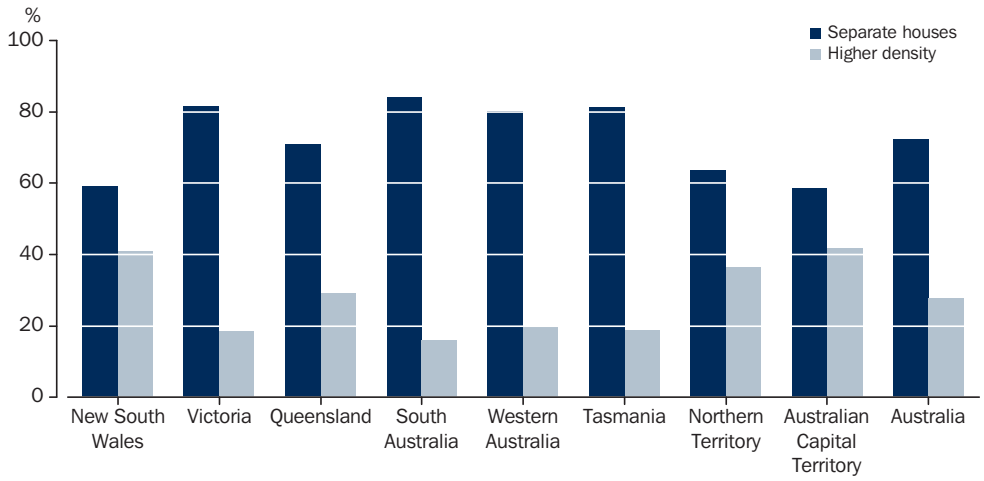
Higher density housing is often seen as a solution to the environmental and social problems caused by 'urban sprawl' in Australia's larger cities. It is also seen as improving housing affordability.[4]

Higher density dwellings made up around 28% of new dwelling completions between 1991–92 and 2003–04. This proportion increased from a low of 25% in 1991–92 to a high of 31% in 2000–01. In 2001 higher density dwellings made up 22% of the total housing stock, up from 20% in 1991. The highest number of higher density dwelling units (48,200) were completed in 1994–95.

Completions of higher density housing between 1991–92 and 2003–04 were most common in the ACT (42% of all completions) and New South Wales (41%), followed by the Northern Territory (36%).

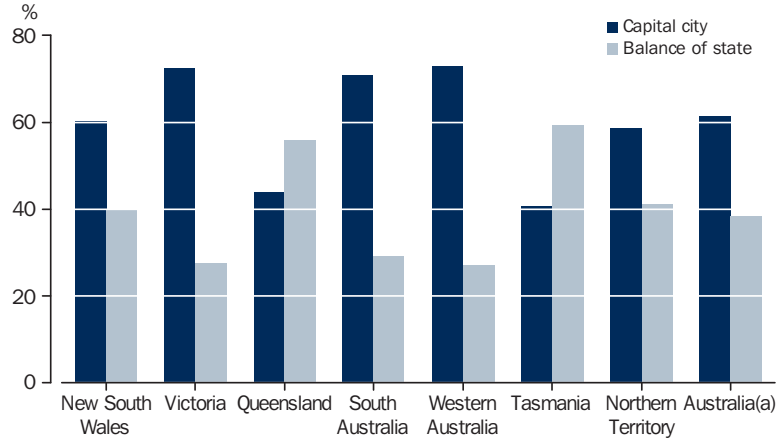
A small proportion (13% at 2001 Census) of higher density housing (town houses and apartments) are high rise apartments, which are defined as four stories or more (see *Australian Social Trends 2004*, High-rise living, pp. 166–170).

Separate houses and higher density housing as proportion of total completions, states and territories — 1991–92 to 2003–04



Source: ABS 1991–2004 Building Activity Surveys.

Location of completions, states and territories — 1992–93 to 2003–04



(a) Australian total includes ACT.

Source: ABS 1991–2004 Building Activity Surveys.

Capital city areas

Information on housing construction can be broken down geographically into capital city areas and the balance of the state or territory. Capital cities are referred to here in the wider sense, and include the area city planners expect to be incorporated into the city over the next 15–20 years. For example, Sydney in this sense includes areas such as Katoomba and Gosford, while Melbourne includes Werribee and the Mornington Peninsula.

As our capital cities expand, there may be a need for new planning measures to enhance liveability and environmental sustainability, as well as to make efficient use of the limited land which is available for further development.[5,6] Housing affordability is also an issue in capital cities, particularly Sydney.[7]

Across Australia, 62% of housing completions between 1991–92 and 2003–04 were located in capital city areas. This proportion increased from 57% in 1993–94 to a peak of 69% in 2000–01, before dipping to 63% in 2003–04.

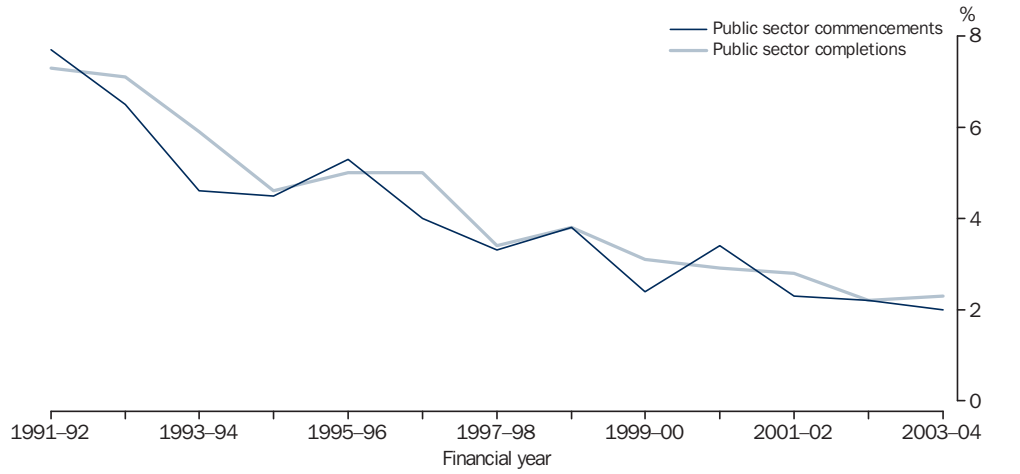
Excluding the ACT, where almost all residential development is within Canberra, the states with the highest proportion of housing completions located in their capital city between 1991–92 and 2003–04 were Western Australia and Victoria, with 73% of completions located in Perth and Melbourne. The only states where less than half of completions were located in the capital city were Queensland (44% in Brisbane) and Tasmania (41% in Hobart).

A greater proportion of higher density dwellings (such as flats and townhouses) than separate houses are constructed in capital cities, reflecting the greater density of urban development in large cities. Between 1991–02 and 2003–04, 57% of separate house completions were located in capital cities, compared to 73% of higher density completions.

Sector of ownership

The vast majority of housing construction in Australia is undertaken for the private sector, averaging 96% since 1991–92. There has been a steady decline in the proportion of housing construction undertaken for the public sector

Commencements and completions in the public sector: percentage of total commencements and completions



Source: ABS 1991–2004 Building Activity Surveys.

since the early 1990s. The proportion of direct public sector construction was at its highest (at 7%) in 1991–92, but fell to 2% by 2002–03. At the same time, there has been an increase in government housing assistance provided through schemes such as Commonwealth Rent Assistance. It should be borne in mind that state and territory housing authorities also add to public housing stock by purchasing dwellings not initially constructed for public housing and by leasing dwellings from the private sector.

A greater proportion of dwellings constructed for the public sector were higher density dwellings compared with dwelling construction for the private sector. Between 1991–92 and 2003–04, 61% of public sector dwelling completions were for higher density dwelling units, compared to 27% in the private sector.

Endnotes

1 Productivity Commission 2004, *First home ownership*, Report no. 28, Melbourne.

2 *National summit on housing affordability* 2004,< http://www.housingsummit.org.au>, accessed 1 October 2004.

3 Australian Bureau of Statistics 2004, 'Work in the Pipeline', in *Construction Work Done, Australia, Preliminary, June quarter 2004*, cat. no. 8755.0, ABS, Canberra.

4 Yates, J 2001, 'The rhetoric and reality of housing choice: The role of urban consolidation', *Urban Policy and Research*, vol. 19, no. 44, pp. 491–527.

5 Searle, G 2004, 'The limits to urban consolidation', *Australian Planner*, vol. 41, no. 1, pp. 42–48.

6 Newton, P 2002, 'Urban Australia 2001; Review and prospect', *Australian Planner*, vol. 39, no. 1, pp. 37–45.

7 Randolph, B, Holloway, D 2002, 'The anatomy of housing stress in Sydney', *Urban Policy and Research*, vol. 20, no.4, pp. 329–355.

Housing for older Australians

HOUSING ARRANGEMENTS

In Australia in 2002–03, 83% of older person households lived in their own home, and 13% lived in rented accommodation.

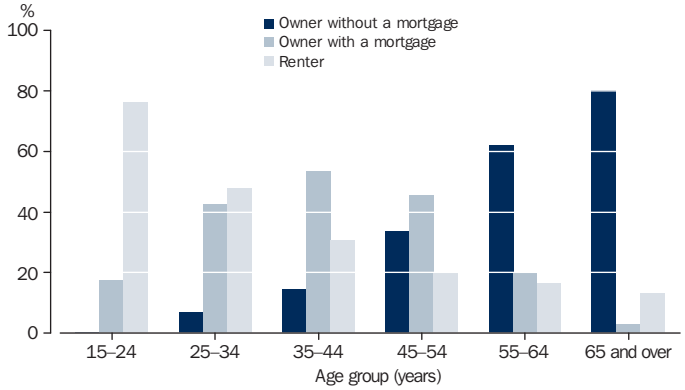
As people age, they experience various life transitions associated with changes in levels of physical and economic independence, and personal circumstance, which may lead to changes in their living arrangements and accommodation needs. Population ageing will have considerable impact on the type of housing stock needed to house the population in future.[1] The Productivity Commission report, *Economic Implications of an Ageing Australia*, states that the ageing of the population is likely to lead to an increase in the level of housing assistance to older people who do not own their homes.[2]

The Australian government and state and territory governments provide accommodation assistance through a range of housing and other programs. These include assistance for people with low incomes (provided through public housing, home purchase assistance and rent assistance schemes), and aged care and crisis accommodation programs. This article examines the housing characteristics of older person households, including assistance provided by governments to support housing for older Australians.

Housing tenure patterns

Tenure refers to the nature of a household's legal right to occupy the premises in which household members live. A household's tenure tends to be related to the current life-cycle stage of household members. Generally, this cycle follows a pattern of renting in early adulthood, moving to home purchase and mortgages as relationships are formed and families raised, through to outright home-ownership (without a mortgage) in older age.[3]

Household tenure by age of reference person — 2002–03



Source: ABS 2002–03 Survey of Income and Housing.

Older Australians and housing

The majority of this article draws data from the ABS 2002–03 Survey of Income and Housing (SIH).

A *household* is a person living alone or a group of related or unrelated people who usually live together in private dwellings.

Older Australians are people aged 65 years and over.

Older person households refer to households with a reference person aged 65 years and over. Some 93% of persons aged 65 and over live in older person households.

Younger households refer to households with a reference person aged less than 65 years.

The *reference person* for each household is chosen by applying, to all usual residents aged 15 years and over in the household, the following selection criteria, in order of precedence:

- the person with the highest tenure type ranked from owner without a mortgage, owner with a mortgage, renter, other tenure;
- the person with the highest income;
- the eldest person.

The tenure types for which data are provided are given below.

An *owner household* is a household where at least one member owns the dwelling. There are two sub-categories:

- *Owner without a mortgage (outright owner)* is an owner household for which there is no outstanding loan amount secured against the dwelling.
- *Owner with a mortgage (purchaser)* is an owner household for which there is an outstanding loan amount secured against the dwelling.

A *renter, state or territory housing authority* is a household that pays rent to a state or territory housing authority or trust.

A *renter, private landlord* is a household that pays rent to a landlord who is other than a state or territory housing authority.

Home ownership is an aspiration for many Australians, an aspiration that has been referred to as 'the great Australian dream'. This is reflected nationally in high levels of home ownership.[4] As expected, older person households have higher levels of home ownership than other households.

In 2002–03, there were approximately 1.5 million older person households. Of these, approximately 80% lived in a dwelling that

Households by tenure and age of reference person — 2002–03

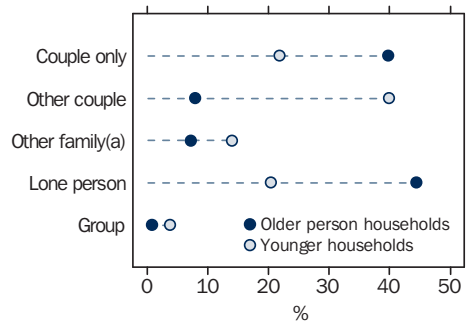
	Age of reference person		
	Less than 65 years	*65 years and over*	*Total*
Tenure	'000	'000	'000
Owner without a mortgage	1 550.2	1 230.2	2 780.4
Owner with a mortgage	2 481.5	43.5	2 525.0
Renter	1 949.0	204.2	2 153.2
Other	124.5	55.2	179.6
Total	**6 105.2**	**1 533.1**	**7 638.2**

Source: ABS 2002–03 Survey of Income and Housing.

they owned outright, compared with 25% of younger households. These proportions have remained largely stable since 1995–96 when 80% of older households owned outright compared with 33% of younger households. The proportion of owner households with a mortgage is highest for households with a reference person aged 35–44 years and declines steadily with age. Only 3% of older person households were purchaser households paying off a mortgage.

After owning their home outright, the next most common tenure for older person households was renting. In 2002–03, approximately 13% of older person households were living in rental accommodation compared with 32% of younger households. Almost half (45%) of the 204,000 older person households that were renting rented their home from a state or territory housing authority. A further 44% rented from a private landlord, and most of the remaining 11% rented from community and church groups, housing cooperatives or caravan parks. Older person households that were renting, except for those renting from a state or territory housing authority, were very likely to be receiving Commonwealth Rent Assistance (CRA) to subsidise their housing costs. At 30 June 2003 there were about 160,000 income units (mostly single person income units) receiving both the age pension and rent assistance.

Composition of households — 2002–03



(a) Includes one parent households.

Source: ABS 2002–03 Survey of Income and Housing.

Household characteristics

In 2002–03, the proportion of lone person and couple only households was much higher among older person households than among younger households. Some 44% of older person households were lone person households compared with 20% of younger households. Similarly, 40% of older person households were couple only households, compared with 22% of the younger group.

Almost three quarters (72%) of older lone person households comprised women living alone. The higher proportion of women than men living in older lone person households in part reflects that women live longer than men. According to the 2001 Census, for people aged 65 and over, 45% of women were widowed compared with 14% of men.

Compared with younger households, a much smaller proportion of older person households were lone parents or couples with dependent children (1% of older person and 37% of younger households). Many of the older couple only households would be 'empty nest' households, that is, couples with older children who have left home.

Housing characteristics

Like most Australian households, older person households tend to live in dwellings with more bedrooms than they might need according to the number of people who live in the household (see *Australian Social Trends 1998,* Smaller households, larger dwellings, pp. 157–159). In 2002–03, older couple only households had an average of 3.0 bedrooms in their dwelling and older lone person households had an average of 2.4 bedrooms. Many older person households still occupy houses selected decades earlier when they needed to accommodate larger numbers of family members at home and the household was at a different life-cycle stage.[5]

Housing costs

For owner households, by the traditional retirement age of 65 years, both household incomes and housing costs are likely to have been greatly reduced. In 2002–03, 89% of older couple only households were owners without a mortgage, with average weekly housing costs of $21. Older couple only households that still had a mortgage spent on average $98 a week on housing. These costs were considerably lower than the average $270 per week paid by younger couple only households with a mortgage. This reflects in part the fact that most older couple only households would, on average, have purchased their home some years earlier when house prices and mortgages were lower, and would have repaid much of their mortgage by the age of 65.

Of older lone person households, 72% owned their house outright and had average housing costs of $18 a week. Those still paying a mortgage had average housing costs of $52 a week.

Analysis of housing costs for older Australians who are not home owners is complicated by a number of factors, including: the 7% of older Australians who live in non-private dwellings; the 7% of older Australians who live in private dwellings where the reference person is not an older Australian; and the provision of accommodation support (through both supply of public housing and rent assistance). In June 2003, there were 158,000 income units (representing about 180,000 people) receiving both the age pension and rent assistance (CRA), and their average CRA payment was $69 per fortnight. Other older Australians receiving other government

Housing costs

Housing costs are the recurrent outlays by household members for their shelter and can be a major component of total living costs. Housing costs differ for different tenure types and are dependent on a number of factors, including property prices, general and water rates and interest rates. The housing costs for the main tenure types comprise:

- Owners without a mortgage – general and water rates.
- Owners with a mortgage – general and water rates and mortgage payments.
- Renters – rent payments.

Commonwealth Rent Assistance

Commonwealth Rent Assistance (CRA) is a non-taxable income support payment paid through Centrelink to help people on low incomes with the cost of private rental housing. It is only available to income support recipients (including those who receive more than the base rate of Family Tax Benefit Part A) who rent in the private market and pay rent that is more than a set minimum.

Housing costs by tenure and landlord type — 2002–03

	Couple only households, reference person aged 65 and over			*Lone person households, person aged 65 and over*		
	Mean housing costs per week	*Housing costs as a proportion of gross income*	*Number of households*	*Mean housing costs per week*	*Housing costs as a proportion of gross income*	*Number of households*
	$	%	'000	$	%	'000
Owners						
Without a mortgage	21	4	541.2	18	5	487.4
With a mortgage	98	16	23.4	52	21	11.2
Renters						
State/territory housing authority	83	23	12.7	53	23	69.1
Private landlord	185	(c)	19.3	125	(c)	54.4
Total renters(a)	(c)	(c)	34.0	(c)	(c)	143.7
Total(b)	(c)	(c)	**609.9**	(c)	(c)	**680.2**

(a) Includes other landlord type.
(b) Includes other tenure type.
(c) Data not included in this table because the different methods of providing housing to older Australians (through public housing and through rent assistance) cannot be made comparable from the Survey of Income and Housing (SIH). Respondents to the SIH cannot report for CRA separately from other government income support payments.

Source: ABS 2002–03 Survey of Income and Housing.

Older Australians living in cared accommodation and institutions

While most older Australians live in private dwellings, a proportion live in non-private dwellings (see *Australian Social Trends 2003,* People in institutional settings, pp. 17–21). *Non-private dwellings* are establishments that provide communal or transitory type accommodation. Most of the older Australians living in non-private dwellings live in cared accommodation for the retired and aged.

On census night 2001, of the 2.2 million older Australians, about 150,000 (7%) lived in non-private dwellings. The proportion of older Australians living in non-private dwellings increased steadily with age. For example, of 1.2 million people aged 65–74 years, 20,000 lived in non-private dwellings (2%). By comparison, more than half (52%) of the 18,100 people who were aged 95 and over lived in non-private dwellings.

Living arrangements of older Australians — 2001

	In private dwellings	*In non-private dwellings*	*Total*
Age (years)	%	%	'000
65–74	98.3	1.7	1 197.1
75–84	93.1	6.9	782.9
85–94	72.2	27.8	230.7
95 and over	48.1	51.9	18.1
65 and over	**93.3**	**6.7**	**2 228.8**

Source: 2001 Census of Population and Housing: Ageing in Australia, 2001 (ABS cat. no. 2048.0).

income support benefits may also have received CRA. The primary data source for the analysis in this article (the SIH) cannot distinguish the receipt of CRA from other government cash benefits.

The 13,000 older couple only households that were renting from state or territory housing authorities paid an average of $83 per week on housing costs in 2002–03, or 23% of their households' gross weekly income. The 19,000 older couple only households that were renting from private landlords were spending an average of $185 per week on housing costs before deducting CRA from those costs. While the average rents paid by these private renters were higher than for those renting from housing authorities, their incomes were also higher on average, and so their income after housing costs and tax had been deducted was likely to be higher, on average, than public renters.

Wealth

Household wealth is a term that refers to the net worth of a household, or the sum of its assets minus the sum of its liabilities.

The *value of dwelling* is the estimated value of the dwelling and its land, as estimated and reported by the household respondent. The data are only collected for owners.

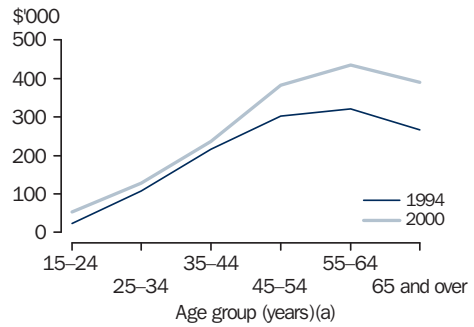
The 69,000 older lone person households renting publicly paid, on average, $53 per week in housing costs, or 23% of their households' gross weekly income. This is the same proportion as spent by older couple only households renting publicly. The 54,000 older lone person households in the private rental market paid, on average, $125 per week in housing costs before deducting CRA from those costs. As with couple only households, the incomes of older lone person households renting from private landlords were higher than those renting from housing authorities. However, their income after housing costs and tax was deducted was likely to be a little lower, on average, than for those renting publicly.

Home ownership and wealth

Experimental estimates of average household wealth show that wealth increases with age. Wealth also appears to be depleted to some degree after the traditional retirement age.

Average household wealth rose between 1994 and 2000 for all age groups, but the rise was most marked for older person households. The estimated average wealth for older person households increased from $267,000 in 1994 to $390,000 in 2000. The greater increase in the wealth of older person

Average household wealth — 1994–2000



(a) Age group of reference person.

Source: Working Papers in Econometrics and Applied Statistics: No 2002/1 Experimental Estimates of the Distribution of Household Wealth, Australia, 1994–2000 (ABS cat. no. 1351.0).

households is partly due to substantial rises in the value of real estate.[5] In 2002–03, the average value of dwellings owned by lone person older households was similar to the average value of dwellings owned by older couple only households ($280,000 and $285,000 respectively).

...dwelling values by state and territory

The average value of dwellings owned by older person households differs across states and territories. In 2002–03, New South Wales had the highest average value ($395,000), followed by the Australian Capital Territory ($312,000) and Victoria ($280,000), while Tasmania had the lowest average of $141,000.

Endnotes

1 Australian Housing and Urban Research Institute 2004, *Housing futures in an ageing Australia*, AHURI Research & Policy Bulletin, Issue 43, AHURI, Melbourne.

2 Productivity Commission 2004, *Economic Implications of an Ageing Australia*, Draft Research Report, Productivity Commission, Canberra.

3 Australian Bureau of Statistics, *Australian Housing Survey, 1999*, cat. no. 4182.0, ABS, Canberra.

4 Australian Bureau of Statistics, *Measuring Wellbeing: Frameworks for Australian Social Statistics*, 2001, cat. no. 4160.0, ABS, Canberra.

5 Olsberg, D, Perry J, Encel, S, Adorjany, L 2004, *Ageing-in-Place? Intergenerational and Intra-familial Housing Transfers and Shifts in Later Life*, AHURI, Melbourne.

6 Australian Bureau of Statistics, *2001 Census of Population and Housing: Ageing in Australia,* cat. no. 2048.0, ABS, Canberra.

Other areas of social concern

Other areas of social concern: national summary

COMMUNICATIONS	Units	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1 Households with a computer	'000	n.a.	n.a.	n.a.	n.a.	3 083	3 337	3 803	4 311	4 556	5 038	n.a.
2 Households with a computer	%	n.a.	n.a.	n.a.	n.a.	44	47	53	58	61	66	n.a.
3 Households connected to the internet	'000	n.a.	n.a.	n.a.	n.a.	1 098	1 538	2 340	3 114	3 445	4 039	n.a.
4 Households connected to the internet	%	n.a.	n.a.	n.a.	n.a.	16	22	32	42	46	53	n.a.
TRANSPORT	*Units*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*
5 Number of passenger vehicles(a)	'000	n.a.	8 629	8 989	9 206	9 527	9 686	n.a.	9 836	10 101	10 366	10 629
6 Passenger vehicles per 1,000 population(b)	no.	n.a.	477	491	497	509	512	n.a.	507	514	522	529
ENVIRONMENT	*Units*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*
7 Net water consumption(c)(d)	ML'000	18 575	21 142	19 875	22 186	n.a.	n.a.	n.a.	24 909	n.a.	n.a.	n.a.
8 Net household water consumption(d)	ML'000	1 704	1 800	1 691	1 829	n.a.	n.a.	n.a.	2 181	n.a.	n.a.	n.a.
CRIME	*Units*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*
9 Victims of personal crime(e)(f)	%	n.a.	n.a.	n.a.	n.a.	4.8	n.a.	n.a.	n.a.	5.3	n.a.	n.a.
10 Victims of household crime(f)(g)	%	n.a.	n.a.	n.a.	n.a.	9.0	n.a.	n.a.	n.a.	8.9	n.a.	n.a.

(a) The number of passenger vehicles refers to the total number of passenger vehicles registered at the date of the motor vehicle census.

(b) The ratio of passenger vehicles registered to 1, 000 estimated resident population at 30 June.

(c) Net water consumption estimates cannot be compared from 1994–1997 to 2001. This is due to the differences in data sources and the methodologies used to calculate estimates.

(d) One megalitre (ML) equals 1 million litres.

(e) Data refers to the victimisation prevalence rate.

(f) Assault and robbery among people aged 15 and over. Sexual assault among people aged 18 and over.

(g) Actual or attempted break-ins and motor vehicle theft.

Reference periods: Data for indicators 1–4 are at the point in time when the surveys were conducted.
Data for indicators 5–6 are at 31 May in 1995; 31 October in 1996–1999; 31 March in 2001–2004; 30 June ERP.
Data for indicators 7–8 are for year ending 30 June.
Data for indicators 9–10 are for the 12 months prior to the survey.

Other areas of social concern: state summary

COMMUNICATIONS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
1 Households with a computer	'000	2003	1 653	1 278	957	390	512	111	np	99	5 038
2 Households with a computer	%	2003	65	68	65	62	67	57	np	80	66
3 Households connected to the internet	'000	2003	1 365	1 019	757	300	406	78	np	82	4 039
4 Households connected to the internet	%	2003	54	54	52	48	53	41	np	66	53
TRANSPORT	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
5 Number of passenger vehicles(b)	'000	2004	3 250	2 873	1 987	887	1 122	256	69	186	10 629
6 Passenger vehicles (per 1000 population)(b)(c)	no.	2004	483	578	512	578	566	530	345	573	529
ENVIRONMENT	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT(e)*	*Aust.*
7 Net water consumption(d)	ML'000	2000-01	9 425	7 140	4 711	1 647	1 409	417	160	n.a.	24 909
8 Net household water consumption(d)	ML'000	2000-01	679.2	472.3	500.9	180.6	82.4	59.3	44.6	n.a.	2 181.4
CRIME	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT(f)*	*ACT*	*Aust.*
9 Victims of personal crime(g)(h)	%	2002	5.7	5.2	4.7	4.9	5.7	5.2	8.1	5.9	5.3
10 Victims of household crime(g)(i)	%	2002	9.6	7.0	9.0	8.2	10.4	8.9	20.3	9.2	8.9

(a) Northern Territory estimates for 2003 are included in the total and other classifications but cannot be shown separately.
(b) The number of passenger vehicles refers to the total number of passenger vehicles registered at the date of the motor vehicle census.
(c) The ratio of passenger vehicles registered to 1, 000 estimated resident population at 30 June.
(d) One megalitre (ML) equals 1 million litres.
(e) Data for ACT is included in NSW data.
(f) Data for NT refers mainly to urban areas.
(g) Data refers to victimisation prevalence rate.
(h) Assault and robbery among people aged 15 and over. Sexual assault among people aged 18 and over.
(i) Actual or attempted break-ins and motor vehicle theft.

Reference periods: Data for indicators 1–4 are at the point in time when the surveys were conducted.
Data for indicators 5–6 are at 31 March; 30 June ERP.
Data for indicators 7–8 are for year ending 30 June.
Data for indicators 9–10 are for the 12 months prior to the survey.

Other areas of social concern: data sources

DATA SOURCE	Indicators using this source	
	National indicators	*State indicators*
ABS Population Survey Monitor 1998, 1999, 2000; ABS Survey of Education, Training and Information Technology 2001; ABS General Social Survey 2002; ABS Survey of Disability, Ageing and Carers 2003.	1–4	1–4
ABS Motor Vehicle Census, Australia (ABS cat. no. 9309.0); *Australian Demographic Statistics, Australia,* 2004 (ABS cat. no. 3101.0).	5–6	5–6
Crime and Safety, Australia, 2002 (ABS cat. no. 4509.0)	9–10	9–10
Water Account for Australia, Australia, 1993–94 to 1996–97, 2000–01 (ABS cat. no. 4610.0).	7–8	7–8

Other areas of social concern: definitions

Estimated resident population (ERP)
the official measure of the population of Australia based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months. It excludes overseas residents who are in Australia for less than 12 months.
Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Household
a group of related or unrelated people who usually live in the same private dwelling or a lone person living in a private dwelling.
Reference: *Housing Occupancy and Costs*, Australia (ABS cat. no. 4130.0.55.001).

Household crime
includes break-in, attempted break-in and motor vehicle theft.
Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Passenger vehicles
motor vehicles constructed primarily for the carriage of persons and containing up to nine seats (including the driver's seat). Included are cars, station wagons, four-wheel drive passenger vehicles and forward-control passenger vehicles. Excluded are campervans.
Reference: *Motor Vehicle Census, Australia* (ABS cat. no. 9309.0).

Personal crime
includes robbery, assault and sexual assault.
Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Victim
a household or person reporting at least one of the offences surveyed. Victims were counted once only for each type of offence, regardless of the number of incidents of that type.
Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Victims of personal crime
data refers to the victimisation prevalence rate which is the number of victims of an offence in a given population expressed as a percentage of that population.
Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Water consumption
water consumption is equal to mains water use plus self-extracted water use plus reuse water use minus mains water supplied to other users minus in-stream use (where applicable).
Reference: *Water Account Australia* (ABS cat. no. 4610.0).

Higher criminal court outcomes

In 2002–03, males represented 87% of adjudicated defendants in the Higher Criminal Courts.

The criminal courts in Australia contribute to the effort to attain a safe and just society. The criminal courts form one part of the criminal justice system in Australia, which also includes the police and corrective services. The criminal justice system provides an avenue for individuals to defend themselves against criminal charges, protects the community from those who are proven guilty, and attempts to rehabilitate the convicted to avoid re-offending. The Report on Government Services estimated total criminal court administration expenditure in 2002–03 to be $414 million, or around $21 for each person in Australia.[1]

There are several levels of adult criminal courts with offenders allocated according to the type and seriousness of the offence. The Higher Criminal Courts deal with the majority of cases involving serious offences, while the Magistrates' Criminal Courts deal with more routine and minor charges. In 2002–03 there were 14,500 adjudicated defendants in the Higher Criminal Courts, that is, defendents whose cases were finalised by a judgement or decision of the courts. In the same period, almost 425,000 adjudicated defendants were finalised in the Magistrates' Criminal Courts.

This article will examine characteristics of adjudicated defendants in the Higher Criminal Courts, including their age and sex, principal offence, and their court and sentencing outcomes.

Criminal courts in Australia

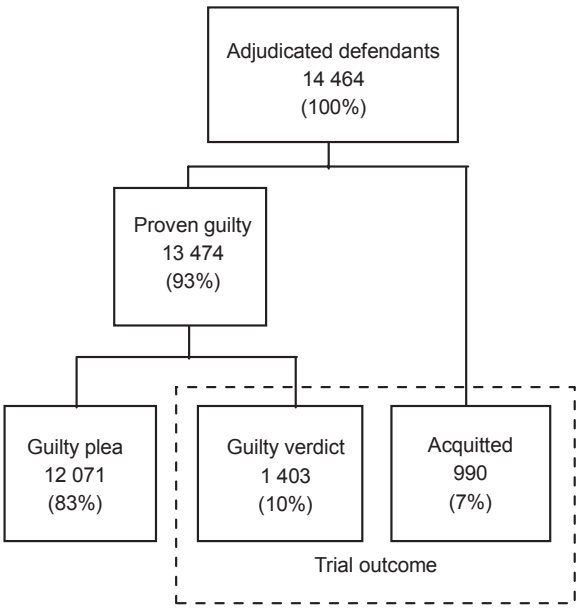
The data used in this article are drawn from *Criminal Courts, Australia, 2002–03* (ABS cat. no. 4513.0). The data refer to adjudicated defendants in the Higher Criminal Courts of Australia (Supreme, District and County courts in each state and territory). These courts hear serious criminal offences including murder, manslaughter and drug importation, as well as serious sexual offences, robberies and assaults.[2] Data relating to the Magistrates' Criminal Courts of Australia, which hear more minor charges such as road traffic offences, are experimental and are only included where specified. As a general rule, adult courts hear cases of defendants aged 17 or 18 years and older. Defendants can face more than one charge at the same time, with each offence able to have a different outcome as to the defendant's guilt or innocence.

An *adjudicated defendant* is a person or organisation whose case is finalised and where at least one charge has a guilty plea, guilty verdict or acquittal outcome. In this article, the term 'defendants' refers to adjudicated defendants.

A *non-adjudicated defendant* is a person or organisation whose case is finalised by either being withdrawn by the prosecution or not proceeding for other reasons, such as the defendant being unfit to plead or having died. In 2002–03, there were under 2,200 non-adjudicated defendants in the Higher Criminal Courts.

The *principal offence* is the offence category associated with the main, or most serious, charge finalised against an adjudicated defendant. Where more than one offence is finalised against a defendant, the selection of principal offence gives precedence to offences for which the defendant was proven guilty. The National Offence Index (NOI) is a seriousness ranking of the Australian Standard Offence Classification and is used to determine a principal offence when a defendant has multiple charges. For further information see *Criminal Courts, 2001–02* (ABS cat. no. 4513.0).

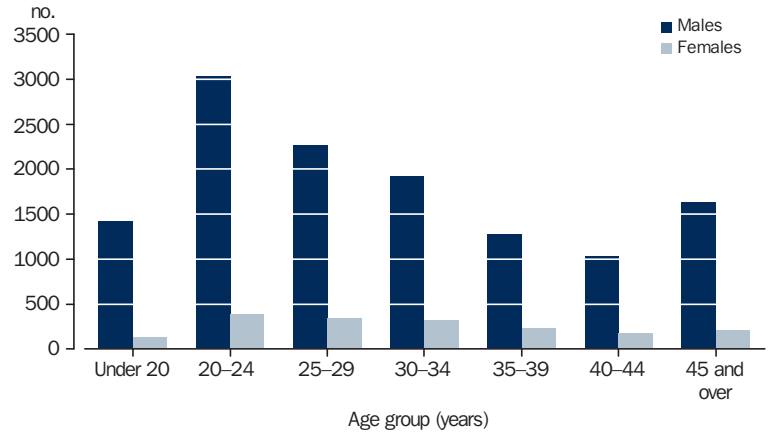
Adjudicated defendants in the Higher Criminal Courts (a) — 2002–03



(a) If a person or organisation was a defendant in a number of criminal cases active within the courts during 2002–03 then they are counted more than once.

Source: Criminal Courts, Australia 2002–03 (ABS cat. no. 4513.0).

Age(a) and sex of adjudicated defendants(b) — 2002–03



(a) Age at the date the defendant was finalised in the court.
(b) Excludes organisations, and persons with sex not recorded.

Source: ABS 2002–03 Criminal Courts collection.

Offenders and their crimes

Adjudicated defendants in the Higher Criminal Courts in Australia were predominantly male. In 2002–03, males represented 87% of adjudicated defendants. With a median age of 30 years, female defendants had a slightly higher median age than males (28 years). Almost a quarter (24%) of defendants in the Higher Criminal Courts were aged 20–24 years.

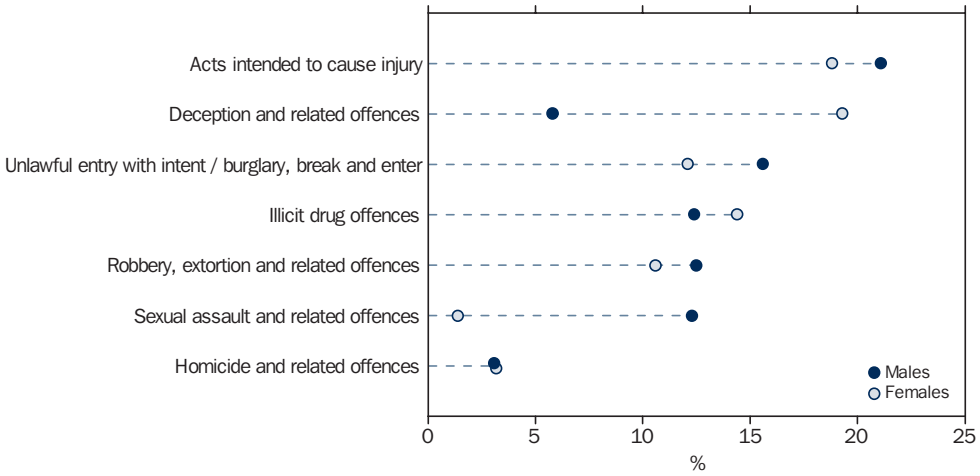
Defendants may face several charges in the criminal courts simultaneously. When these charges are finalised, the principal offence of the defendant is selected from the list of charges by taking into account the seriousness of each of the offences and the outcome of the court proceedings, i.e. whether the defendant is proven guilty (via a plea or verdict) or is acquitted.

Five principal offence categories accounted for almost three-quarters (72%) of defendants in the Higher Criminal Courts during 2002–03. These were acts intended to cause injury (21%), unlawful entry with intent (15%), illicit drug offences (13%), offences related to robbery and extortion (12%), and offences related to sexual assault (11%). For male defendants, the most common principal offence categories were acts intended to cause injury (21%) and unlawful entry with intent (16%). For females, acts intended to cause injury (19%) and offences related to deception (19%) were the most common.

Different principal offences were observed for older persons compared to younger persons. The most common principal offence for male defendants aged 45 years and over was an offence related to sexual assault. This category of offence accounted for around one-third (32%) of male defendants in this age group, compared to 6% of those aged less than 20 years. For younger male defendants aged less than 20 years, over one-quarter (27%) appeared in the Higher Criminal Courts with a principal offence of unlawful entry with intent, compared to 3% of male defendants aged 45 years and over.

For women, almost a quarter (24%) of the defendants aged less than 20 years were finalised in the Higher Criminal Courts with a principal offence of acts intended to cause injury. The most common principal offence of women aged 45 years and over was an offence related to deception (37%).

Selected principal offence of adjudicated defendants(a) — 2002–03



(a) Excludes organisations, and persons with sex or principal offence not recorded.

Source: ABS 2002–03 Criminal Courts collection.

Going to trial

In 2002–03, 83% of adjudicated defendants had entered a guilty plea while around 17% were subject to a trial outcome (guilty verdict or acquittal). A greater proportion of female defendants had entered a guilty plea than male defendants (88% and 83% respectively).

The proportion of adjudicated defendants who had entered a guilty plea varied by the type of principal offence. Of defendants with a principal offence related to homicide or sexual assault, a smaller than average proportion had entered a guilty plea (51% and 60% respectively). In comparison, 95% of defendants with a principal offence of unlawful entry with intent had entered a guilty plea, with the remaining 5% having a trial outcome.

Defendants with a principal offence related to sexual assault accounted for more than a quarter of all defendants finalised by trial in 2002–03. As defendants with these offences were overwhelmingly male, this contributed to a greater proportion of male defendants with a trial outcome (17%) than female defendants (12%).

In 2002–03, of defendants with a principal offence of acts intended to cause injury, 17% of men and 13% of women had a trial outcome. Similar proportions of men and women with a principal offence related to deception had a trial outcome (11% and 9% respectively).

Proven guilty or acquitted

Adjudicated defendants in the Higher Criminal Courts can be either acquitted of the charge against them, or proven guilty through a guilty verdict at trial or by entering a guilty plea. In 2002–03, 93% of defendants whose cases were heard in the Higher Criminal Courts were proven guilty, with 83% entering a guilty plea and 10% being proven guilty at trial.

With just 17% of defendants having their court outcome decided by trial in 2002–03, acquittals subsequently comprised a small proportion of all defendants who appeared in the Higher Criminal Courts (7%). For those defendants who did have a trial outcome, 41% received an acquittal. Men were more likely than women to successfully contest charges at trial – 42% of male defendants who went to trial were acquitted compared with 35% of female defendants.

Patterns around whether defendants choose to go to trial and the likelihood of being acquitted at trial varied by principal offence. In 2002–03, two out of every five (40%) defendants with a principal offence related to sexual assault had a trial outcome and of these about half (51%) were acquitted. As men accounted for almost all (98%) defendants with a principal offence related to sexual assault, this contributed to a greater proportion of male defendants being acquitted at trial than female defendants. The relatively high acquittal rate for sexual assault and related offences is in part due to the nature of the offences. [3] It can often be difficult to prove that the offence occurred, and even with evidence of this, whether it was consensual. [4]

In 2002–03, 97% of defendants with a principal offence of illicit drug offences were proven guilty, with 87% entering a guilty plea

Magistrates' Criminal Courts

In the ABS data collection, the Magistrates' Courts includes the Court of Petty Sessions and the Local Court, but excludes other courts of summary jurisdiction such as the Childrens' Courts, Electronic Courts, and Drug Courts.

The Magistrates' Courts of Australia deal with more minor charges which are decided by a magistrate, without a jury. In 2002–03, 38% of adjudicated defendants in the Magistrates' Courts had a principal offence of road traffic and motor vehicle regulatory offences, while a further 10% had public order offences.

In 2002–03, 80% of defendants in the Magistrates' Courts were male, a smaller proportion than for the same period in the Higher Criminal Courts. Defendants in the Magistrates' Courts had a similar age profile to those in the Higher Criminal Courts with around half being aged less than 30 years.

The majority of defendants in the Magistrates' Courts were proven guilty in 2002–03 (around 97% were convicted). However, owing to the less serious nature of the offences, a relatively small proportion of convicted offenders were sentenced to custody in a correctional institution or the community (6%). The most common sentencing outcome was a monetary order (71%).

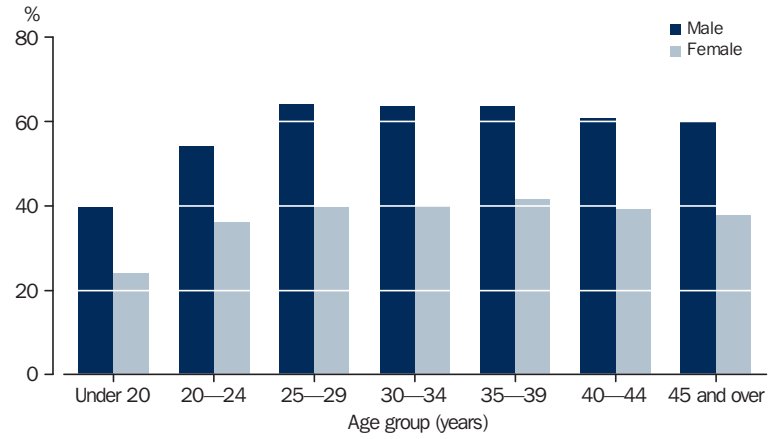
Adjudicated defendants in the Magistrates' courts(a)(b) — 2002–03

		Sex of defendant	
	unit	*Male*	*Female*
Adjudicated	no.	332 805	81 820
Proven guilty	%	97.2	97.6

(a) Data are considered to be 'experimental' due to data quality issues. State and territory differences in recording finalised defendants may have resulted in an over-count in New South Wales and the Northern Territory and an undercount in Tasmania.
(b) Excludes organisations, and persons with sex not recorded.

Source: Criminal Courts, Australia 2002–03 (ABS cat. no. 4513.0).

Proportion of convicted defendants(a) sentenced to custody in a correctional institution or the community — 2002–03



(a) Excludes organisations, and persons with sex not recorded.

Source: ABS 2002–03 Criminal Courts collection.

and 10% being given a guilty verdict at trial. Defendants with this principal offence were more likely to receive a guilty verdict at trial than defendants with most other principal offences at trial. Of defendants who were finalised with a principal offence of illicit drug offences, and who had a trial outcome, 83% of women and 79% of men received a guilty verdict.

Sentencing outcomes

In determining the appropriate sentence for a convicted offender, the courts take into account aggravating and mitigating factors which may have influenced the offenders' behaviour or the outcome of the incident.[5] For example where violence is used, or the offender has a prior conviction, a heavier sentence may be imposed. On the other hand, the sentence may be more lenient, where an offender is provoked, is unlikely to re-offend, shows remorse or pleads guilty.

Sentences can be either custodial or non-custodial. Custodial orders require a person to have their liberty restricted for a specified period of time through either detainment or regular supervision, for example custody in a correctional institution or home detention. Suspended sentences may also be given, where at least part of the sentence does not have to be served, subject to the person being of good behaviour for a specified period. In 2002–03, over half (53%) of convicted offenders in the Higher Criminal Courts were sentenced to custody in a corrections facility, 3% to custody in the community, and a further 18% of convicted offenders were given fully suspended sentences. During the same year, the remaining quarter (26%) of convicted offenders received a non-custodial sentence such as a fine or community service order.

Different sentencing outcomes were also evident for young men and women. In 2002–03, convicted men and women aged less than 20 years were more likely to receive community supervision or work orders (41%) than offenders in older age-groups. Further, a smaller proportion of these young offenders were sentenced to imprisonment in a correctional institution than any other age group.

In 2002–03, a higher proportion of convicted men than convicted women were ordered into custody in a correctional facility or the community (58% and 38% respectively). A principal offence related to deception accounted for a greater proportion of convicted women than convicted men (20% compared with 6%), and this crime was less likely to result in a custodial sentence than crimes such as sexual assault and robbery. However, even when convicted of the same offence type, a greater proportion of men than women were sentenced to custody in a correctional institution or the community.

Behind bars

Defendants who are proven guilty of a charge may be sentenced to serve time in a correctional institution. In 2002–03, 53% of people convicted of crimes in the Higher Criminal Court were sentenced to custody in a correctional institution.

At the end of June 2003, there were 23,555 prisoners in Australia and of these, 93% were men. Four out of every five prisoners was aged between 20–44 years, with male and female prisoners having a similar age profile. Around 58% of male prisoners and 49% of female prisoners were known to have been imprisoned previously.

Prior imprisonment of prisoners — 2003

	Male	*Female*
Prior imprisonment	%	%
Yes	57.8	48.9
No	40.9	47.4
Total(a)	**100.0**	**100.0**
	no.	no.
Total(a)	21 961	1 594

(a) Includes prisoners whose prior imprisonment status is unknown.

Source: *Prisoners in Australia*, 2003 (ABS cat. no. 4517.0)

For example, 56% of men convicted of acts intended to cause injury were sentenced to custody in a correctional institution or the community compared with 30% of women. This difference could be associated with a range of aggravating and mitigating factors. For more information on women in custody, see *Australian Social Trends 2004,* Women in Prison pp. 185–189.

Endnotes

1 Steering Committee for the Review of Government Service Provision, Productivity Commission, *Report on Government Services, 2004*: *Volume 1* <http://www.pc.gov.au/gsp/reports/rogs/2004/2004v1.zip>, accessed 12 August 2004.

2 Australian Bureau of Statistics 2004, *Yearbook Australia 2005*, cat. no. 1301.0, ABS, Canberra.

3 Australian Bureau of Statistics 2004, *Sexual assault in Australia: a statistical overview,* cat. no. 4523.0, ABS, Canberra.

4 Cook, B, David, F, and Grant, A.2001, *Sexual violence in Australia*, Australian Institute of Criminology, Research and Public Policy Series No. 36, AIC, Canberra.

5 New South Wales Consolidated Acts, Crimes (Sentencing procedure) Act 1999 Section 21A <http://www.austlii.edu.au/au/legis/nsw/consol_act/cpa1999278/s21a.html>, accessed 23 September 2004.

Household water use and conservation

ENVIRONMENT

In 2004, the vast majority (90%) of Australian households reported conserving water by using a water saving device (such as a dual flush toilet) and/or by a practice such as taking shorter showers.

Australia is the second driest continent after Antarctica.[1] Low overall rainfall is compounded by variability from year-to-year and season-to-season, with recent droughts having a very strong impact in many regions. Australian cities and towns depend on rain falling in the catchment areas of water storage facilities such as Warragamba Dam – which accounts for about 80% of the water supplied to the Sydney region. In recent years the water level in Warragamba Dam has fallen dramatically, from 76% of full capacity at the end of January 2002 to 42% at the end of January 2005.[2]

In 1994, representing all three levels of government, the Council of Australian Governments (COAG) developed a water reform framework for Australia's rural and urban water industries. For households, this generally meant the introduction of a two-part tariff, made up of an access charge and a variable use charge. These tariffs aim to manage demand and to send signals to households that water is a limited resource and needs to carefully used.[3] Water restrictions, of different levels, have also been implemented to limit demand for water across states and territories, and households have been encouraged to use water saving devices. These programs aim to address demand for water and consumer behaviour.

Water use

This article uses data from two sources. Data on water use and consumption come from the 2000–01 Water Account for Australia, which is compiled by the ABS using information from a range of ABS surveys as well as state, territory and local government agencies, water authorities and industry organisations. Data on water source, quality and conservation come from supplements to the ABS Monthly Population Survey.

The majority of the *water supply* and infrastructure in Australia's urban environments is under the jurisdiction of state and local governments and water authorities.

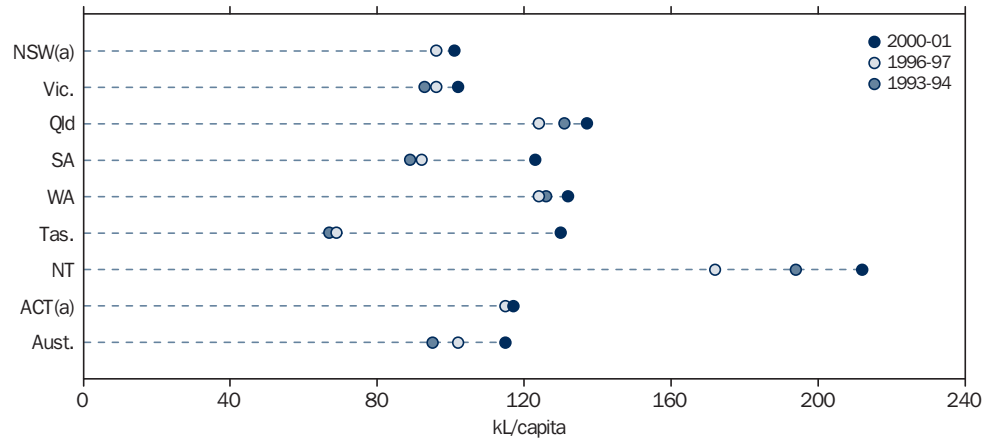
Water utilities supply water and remove waste water.

Mains water is supplied to users through pipes or channels. *Self-extracted water* is extracted directly from the environment (for example from rivers or lakes) for use.

Household water use

In 2000–01, households directly used almost one-tenth (9%) of the total water consumed in Australia. While agriculture consumes a much larger proportion (67%), the water is consumed in the production of goods and services which are in part utilised by households. In 2000–01, Australian households used 2181GL of water (more than four times the volume of Sydney Harbour)

Household water use per capita — 1993–94, 1996–97 and 2000–01



(a) 1993-94 not available for publication.
(b) 1 kilolitre (kL) equals 1000 litres and 1 gigalitre (GL) equals 1 billion litres.

Source: Water Account, Australia, 2000–01, (ABS cat. no. 4610.0).

an increase of 28% from 1993–94 when they used 1704GL. Although some of the increase in volume used is due to population growth, average per capita use also increased over this period from 95kL in 1993–94 to 115kL in 2000-01. This pattern was evident across all states and territories, with Tasmania (from 67 to 130kL) and South Australia (from 89 to 123kL) having the largest relative increases in average per capita use.

In 2000-01, the Northern Territory had the highest average household water use per capita (212kL), followed by Queensland (137kL) and Western Australia (132kL). New South Wales had the lowest average use per capita (101kL). Climate plays a significant role in household water use, explaining some of the differences between states and territories.

Sources of household water

In 2004, the vast majority of Australian households in capital cities (98%) and in the rest of the country excluding remote and sparsely settled areas (85%) reported sourcing all or some of their water from mains or town supplies. More households outside of capital cities reported sourcing all or some of their water from self-extracted sources (such as rivers) than did households in capital cities. Almost one-third (31%) of households outside capital cities had rainwater tanks, 9% had bores or wells and 6% sourced at least some of their water from rivers, creeks and dams.

Water conservation

Data on household water source, quality and conservation are from *Environmental Issues: People's Views and Practices*, March 2004 (ABS cat. no. 4602.0). Surveys were conducted in June 1994, and in March 1998, 2001 and 2004 as a supplement to the Monthly Population Survey. The data relate to rural and urban areas across all states and territories of Australia (Northern Territory data refer mainly to urban areas). Remote and sparsely populated parts of Australia are excluded.

Households were asked a variety of questions relating to water conservation including questions relating to devices (such as dual flush toilets and reduced flow shower heads), as well as practices or behaviours (such as taking shorter showers and recycling water).

Recycled water supplied by water utilities for household use is virtually non-existent in Australia due to health legislation and the absence of infrastructure.

About one-third (34%) of households in 2004 considered installing a rainwater tank compared to just over one-quarter (26%) in 1994. In 2004, the most commonly reported reason preventing households from installing a rainwater tank was cost (41%) followed by having no time (25%).

In both 2001 and 2004, around two-thirds of households reported satisfaction with the quality of the mains/town water for drinking (66% in 2001 and 70% in 2004). In 2004, households in South Australia (36%), Western Australia (33%) and Queensland (28%) were

Sources of household water — 1994, 1998, 2001 and 2004

	Capital city				*Rest of state/territory(a)*			
	1994	*1998*	*2001*	*2004*	*1994*	*1998*	*2001*	*2004*
Source(b)	%	%	%	%	%	%	%	%
Mains/town water	98.5	98.2	98.7	98.2	84.5	84.3	85.5	85.4
Rainwater tank	6.7	7.9	7.5	8.5	28.6	31.0	29.0	31.1
Purchased bottled water	3.7	12.6	17.6	21.2	1.3	9.6	12.7	19.6
Bore/well	3.2	3.4	3.2	3.8	8.1	8.4	7.9	8.6
Spring	0.4	0.2	0.1	0.2	1.4	0.7	0.5	0.7
River/creek/dam(c)	. .	1.1	0.8	0.7	. .	7.6	8.1	6.0
Other	0.7	0.7	0.4	0.9	5.5	1.6	1.0	2.2
	'000	'000	'000	'000	'000	'000	'000	'000
All households	**3 917.7**	**4 293.0**	**4 521.9**	**4 773.2**	**2 496.8**	**2 706.7**	**2 822.3**	**3 002.2**

(a) Excludes remote and sparsely populated areas.
(b) More than one source may be specified.
(c) Data not available for 1994.

Source: Environmental Issues: People's Views and Practices, March 2004 (ABS cat. no. 4602.0).

less likely to be satisfied with the quality of their mains water than were households in other states or territories. Households in these states were more likely to use water filters for drinking water (South Australia 30%, Western Australia 29% and Queensland 27%). Across Australia, the use of water filters increased from 18% of households in 1998 to 26% in 2004.

Bottled water has become more popular in capital cities (from 4% reporting some use of bottled water in 1994 to 21% in 2004) and in the rest of state or territory (from 1% in 1994 to 20% in 2004). At the same time, the proportion of people satisfied with the quality of mains water for drinking has increased from 66% in 2001 to 70% in 2004.

Conserving water

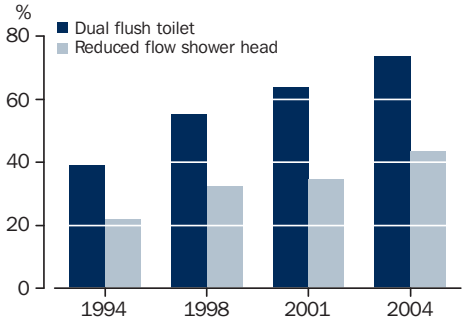
In 2004, the vast majority (90%) of Australian households reported conserving water by installing a water conservation device such as a dual flush toilet, and/or by undertaking a water conservation practice such as taking shorter showers or using full loads when washing clothes. Households can conserve water both in and around their dwelling as well as in the garden.

...in and around the dwelling

In 2000–01, bathrooms and toilets accounted for over one-third (35%) of household water use. Installing water efficient devices can reduce the volume of water used. From 1994 to 2004, the proportions of households with reduced flow shower heads and dual flush toilets have increased (from 22% to 44% and from 39% to 74% respectively). In some areas of Australia the installation of water efficient devices is compulsory in new dwellings.

From 2001 to 2004, there were also increases in the proportion of households recycling and/or reusing water (from 11% to 16%), using full loads when washing (from 16% to 18%) and taking shorter showers (from 14% to 18%). The proportion of households turning off or repairing dripping taps decreased from 20% to 16%.

Water conservation devices — 1994 1998, 2001 and 2004



Source: Envrionmental Issues: People's Views and Practices, March 2004 (ABS cat. no. 4602.0).

Selected water conservation practices(a) in and around the dwelling — 2001 and 2004

	2001	*2004*
Methods(b)	%	%
Take shorter showers	14.4	17.9
Use full loads when washing clothes/dishes	15.8	17.6
Recycle/reuse water	11.3	15.9
Turn off/repair dripping taps	19.5	15.9
Use less water in baths/troughs/basins	6.6	8.7
Use bucket not hose to wash car	4.6	6.1
Proportion of housholds which take conservation practices in and around the dwelling	43.6	46.5
	'000	'000
All households	**7 344.8**	**7 775.4**

(a) Excludes conservation practices in the garden.
(b) More than one method may be specified.

Source: Environmental Issues: People's Views and Practices, March 2004 (ABS cat. no. 4602.0).

Water conservation measures in households with gardens — 2001 and 2004

Methods(a)	2001 %	2004 %
Use mulch(b)	50.6	58.8
Plant native shrubs or trees(b)	10.3	17.0
Water early morning/late evening	26.2	22.5
Check soil moisture before watering	5.7	3.9
Use recycled water	10.6	17.9
Reduce lawn areas	2.0	2.4
Don't water lawn area	6.3	7.0
Water less frequently but for longer periods	12.4	10.8
Other	12.4	14.9
Don't water at all	5.6	10.0
Proportion of households with gardens which take conservation measures in the garden	89.2	91.3
	'000	'000
Total households with gardens	**6 241.9**	**6 427.6**

(a) More than one method may be specified.
(b) Includes only those households who used mulch, or planted native shrubs or trees specifically to conserve water in the garden.

Source: Environmental Issues: People's Views and Practices, March 2004 (ABS cat. no. 4602.0).

...in the garden

The proportion of Australian households with gardens declined over the decade from 87% in 1994 to 83% in 2004. This may reflect the move towards higher density housing which often has little or no garden (see *Australian Social Trends 2003*, Changes in Australian housing, pp. 175–179).

The volume of water used outside the house depends on a number of factors including the size of the garden and climate. In 2000–01, of the water used by households across Australia, 44% was used for outdoor purposes with the vast majority (88%) of water being supplied by the mains.

Water restrictions were introduced in most capital cities around Australia during 2002–03. The level and extent of restrictions vary across states and territories. For households, these restrictions impact on the use of water outside the house, primarily in the garden.

In 2004, the most common method of conserving water in the garden was to use mulch (59% of households with gardens – up from 51% in 2001). The proportion of households planting native shrubs or trees in order to use less water also increased over this time period from 10% to 17%. In 2004, 23% of households watered early in the morning or late in the evening and 10% did not water their garden at all, compared with 26% and 6% respectively in 2001. Watering gardens by hand was more common in 2004 (71%) than in 2001 (66%). An increase in hand-watering may reflect restrictions on the use of other methods such as moveable or fixed sprinklers which have both declined in use over the same period (from 28% to 15%, and 31% to 22% respectively).

In 2004, using recycled water in the garden was one of the most common methods of conserving water (18% of households with gardens – increasing from 11% in 2001). The vast majority of households with gardens do attempt to conserve water in the garden (over 90% in 2004).

Population projections and water consumption

Based on the three main projection series produced by the ABS, Australia's population in 2026 is projected to increase to between 22.8 million and 25.7 million people (see *Australian Social Trends 2004*, Scenarios for Australia's ageing population, pp. 16–21). Within this range the population is projected by Series B to be around 24.2 million in

2026.[4] With a population of this size, if the 2000–01 average per capita use of water (115kL) were to remain constant, Australians would consume around 28% more water than in 2000–01.

There has been debate over whether water supply will constrain population and economic growth or whether flexibility in water allocation and increases in the efficiency of use will allow population and economic growth, despite water resource limitations.[5] Either way, there seems to be little doubt that water use will continue to receive community and government attention.

Endnotes

1 Department of the Environment and Heritage 2004, *Integrated Water Resource Management in Australia* <http://www.deh.gov.au/water/publications/case-studies/water-reforms.html>, accessed 22 June 2004.

2 Sydney Water 2002, *Bulk Water Storage and Supply Report* <http://www.sydneywater.com.au/OurSystemsAndOperations/WaterConsumptionStorageReport/ReportArchive.cfm>, accessed 9 February 2005.

3 McDonald,D.H. 2004, *The Economics of Water: Taking Full Account of First Use, Reuse and Return to the Environment,* CSIRO.

4 Australian Bureau of Statistics 2003, *Population Projections, Australia,2002 to 2101*, cat. no. 3222.0, ABS, Canberra.

5 Department of Environment and Heritage 2004, *Human Settlements Theme Report* <http://www.deh.gov.au/soe/2001/settlements/settlements06-4.html> accessed 30 August 2004.

Aboriginal and Torres Strait Islander peoples: contact with the law

CRIME AND JUSTICE

In 2002, taking into account the different age structures of the populations, twice as many Indigenous Australians were victims of physical or threatened violence compared with non-Indigenous Australians.

Imprisonment and victimisation can have serious and long-term implications for offenders and victims. Prisoners experience higher rates of substance use and mental health issues.[1] Victims of violent crime can suffer physically, emotionally and financially. Aboriginal and Torres Strait Islander Australians are over represented in Australian prisons and greater proportions report being victims of violent crime in comparison to non-Indigenous Australians.

Data from the 2002 NATSISS show that 24% of Indigenous Australians aged 15 years or over reported being the victim of physical or threatened violence in the 12 months prior to the survey, 16% reported being arrested and 7% reported being incarcerated in the five years prior to the survey.

Indigenous Australians in custody

The over-representation of Indigenous Australians in prisons was drawn to public attention by the 1987–1991 Royal Commission into Aboriginal Deaths in Custody. One of the main findings of the Royal Commission was that the high number of deaths of Aboriginal people in prisons was a result of the high rate of imprisonment of Aboriginal Australians rather than different treatment for Aboriginal prisoners.

Indigenous Australians continue to be over represented in our prisons and make up a high proportion of deaths in custody. In 2003, 20% of prisoners in Australia (4,818 prisoners) identified as Indigenous[2], and 10 of the 39 deaths that occurred in prison custody (26%) were Indigenous prisoners.[3]

At June 2004, there were 5,048 Indigenous persons in prisons across Australia (21% of all prisoners).[2] After taking into account the age differences between the Indigenous and non-Indigenous populations in 2004, Indigenous persons were 11 times more likely to be in prison compared with non-Indigenous persons.

Data collections

Most of the data used in this article are drawn from the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). The 2002 NATSISS collected data about Indigenous persons aged 15 years or over. The NATSISS provides data about contact with law enforcement, victimisation and many other social and economic circumstances such as employment, education and health. See also information published in *National Aboriginal and Torres Strait Islander Social Survey* (ABS cat. no. 4714.0).

Indigenous refers to people who identified themselves as being of Aboriginal and/or Torres Strait Islander origin.

Some of the data in this article have been adjusted to take into account the differences in the age structures of the Indigenous and non-Indigenous Australian populations. That is, data has been *age standardised.* Selected data items have been age-standardised on the basis that these topics are strongly influenced by age. Age-standardised data are used for comparison between the Indigenous and non-Indigenous populations only.

Some data on Indigenous prisoners are drawn from the ABS 2004 National Prisoner Census. The ABS National Prisoner Census provides a snapshot of the number of prisoners in Australia. Prison census data are used in this article to compare the level of *imprisonment* in the Indigenous and non-Indigenous populations, while 2002 NATSISS data are used to show the relationships between *incarceration* and other social and economic circumstances (see also p. 12 of this publication).

Prisoners(a): selected indicators — 2004

		Indigenous			*Non-Indigenous*		
	Unit	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Imprisonment rate	rate(b)	n.a.	n.a.	1 416.9	n.a.	n.a.	129.0
Mean expected time to serve	months	34.5	17.0	33.2	44.6	30.6	43.7
Median expected time to serve	months	16.2	9.0	15.3	26.6	15.1	25.4
Prior imprisonment	%	77.4	70.0	76.8	53.7	43.7	53.1
Australia	**no.**	**4 624**	**424**	**5 048**	**17 561**	**1 214**	**18 775**

(a) Excludes prisoners whose Indigenous status was unknown.
(b) Age standardised rate per 100,000 adult population.

Source: ABS 2004 National Prisoner Census.

Indigenous prisoners tend to be serving shorter sentences and have higher rates of prior imprisonment. In 2004, the median expected time to serve for Indigenous prisoners was 15 months, compared with 25 months for non-Indigenous prisoners. Over three quarters (77%) of Indigenous prisoners had prior imprisonment in comparison to 53% of non-Indigenous prisoners.

Data from the 2002 NATSISS show that Indigenous people who had been incarcerated had higher rates of unemployment and lower incomes. Over half (58%) of Indigenous persons who were not still at school and had been incarcerated in the last five years had not completed Year 10, compared with 40% of those who had not been incarcerated in the last five years.

Incarceration usually follows frequent and/or serious offending and contact with the criminal justice system. Higher proportions of Indigenous people who had been incarcerated in the last five years, compared with those who had not been incarcerated, were first formally charged in early adolescence and had been arrested more than once in the last five years.

Higher proportions of those who had been incarcerated had been removed from their natural families and/or had relatives removed from their natural families. This disruption in social attachment early in life often has serious and long-term consequences for those who have been removed and their families.[4]

In every state and territory of Australia Indigenous Australians were more likely than non-Indigenous Australians to be in prison. In 2004, Western Australia recorded the highest age standardised ratio of Indigenous to non-Indigenous imprisonment, as the

Concepts

In the 2002 NATSISS, *contact with law enforcement* was measured by asking respondents whether they had ever been formally charged (and if so, at what age they were first formally charged), whether they had been arrested in the last five years (and if so, how often), and whether they had been incarcerated in that period.

Incarceration was broadly defined to include all persons aged 15 years and over who had spent any time in jail in the last five years at the time of the survey.

2002 NATSISS respondents who had been formally charged by police at any time in their life were asked to recall their *first formal charge*. The accuracy of this data is dependent on the accuracy of the respondent's recall.

Equivalised gross household income is a standardised income measure which has been adjusted for the different income needs of households of different size and composition. It takes into account the greater needs of larger households and the economies of scale achieved by people living together.

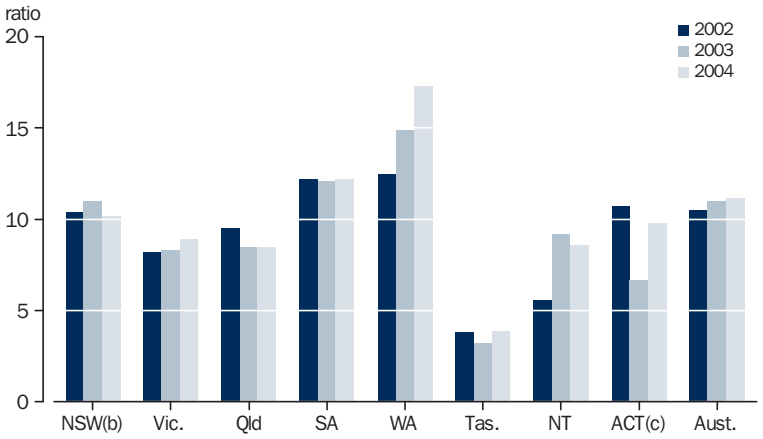
Indigenous people(a): whether incarcerated by selected indicators — 2002

	Incarcerated in the last 5 years	*Not incarcerated in the last 5 years*	*Total(b)*
	%	%	%
Unemployed for 1 year or more	9.6	3.0	3.5
Highest year of schooling completed Year 9 or below(c)	57.9	39.7	41.1
Fair/Poor self assessed health	25.6(d)	23.1(d)	23.3
Has a disability or long-term health condition	45.3(d)	35.8(d)	36.5
Person and/or relative removed from natural family	51.8	36.5	37.6
First formal charge at 15 years or below	35.5	7.0	9.0
Arrested more than once in last 5 years	63.7	5.1	9.3
Victim of physical or threatened violence in last 12 months	44.1	22.8	24.3
	'000	'000	'000
Indigenous persons	**20.0**	**262.1**	**282.2**
	$	$	$
Mean weekly equivalised gross household income	302.0	393.0	387.0

(a) Aged 15 years or over.
(b) Total includes persons who did not state whether they had been incarcerated in the last five years.
(c) Proportions of persons not still at school. Includes persons who never attended school.
(d) Difference between incarcerated and not incarcerated is not statistically significant.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

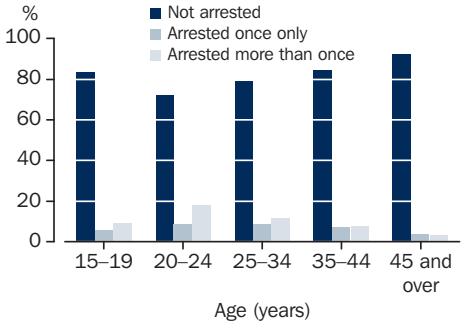
Ratio of Indigenous to non-Indigenous imprisonment(a) — 2002–04



(a) Indigenous imprisonment rate divided by the non-Indigenous imprisonment rate, based on age standardised data.
(b) Excludes ACT prisoners held in NSW.
(c) Includes ACT prisoners held in ACT as well as ACT prisoners held in NSW.

Source: ABS 2004 National Prisoner Census.

Indigenous people(a): frequency of arrest(b) — 2002



(a) Aged 15 years or over.
(b) In the last 5 years.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Indigenous imprisonment rate was 17 times the non-Indigenous imprisonment rate. Tasmania recorded the lowest ratio, where Indigenous rates were four times the non-Indigenous rates.

Contact with law enforcement

In 2002, over one in three (35%) Indigenous Australians aged 15 years or over reported having been formally charged at some time in their lives. Approximately one in six (16%) Indigenous persons reported having been arrested in the last five years.

The proportion of men who had been charged was more than double the proportion of women (50% compared with 21%). High proportions of both Indigenous men (24%) and Indigenous women (9%) reported being arrested in the last five years. The frequency of arrests of Indigenous people declined with age.

Support from family and community can help to prevent re-offending. However, offenders can have difficulty reintegrating with their family and community following contact with the criminal justice system. Indigenous people who had been arrested in the last five

Indigenous people(a): selected indicators of social attachment — 2002

	Arrested in the last 5 years	*Not arrested in the last 5 years*
	%	%
Not involved in social activities	11.4(b)	9.7(b)
Does not have support in a time of crisis	14.8	8.6
Did not participate in sport or recreational activities	51.6(b)	50.5(b)
Did not undertake voluntary work	75.4(b)	71.7(b)
Not married(c)	57.8(b)	52.8(b)
Moved house in last 12 months	46.1	27.9
No access to motor vehicle or no license	61.1	41.9
Cannot or often has difficulty getting to the places needed	17.4	11.0
	'000	'000
Indigenous persons	**46.3**	**235.9**

(a) Aged 15 years or over.
(b) Difference between arrested and not arrested is not statistically significant.
(c) Neither registered nor de facto marriage.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

years were more likely to report not having access to support from someone outside their household in a time of crisis (15% compared with 9%). A greater proportion of Indigenous people who had been arrested in the last five years had moved house in the last 12 months compared with other Indigenous people.

Contact with law enforcement both reflects and leads to social and economic disadvantages. Unemployment was higher for Indigenous people who reported being arrested in the last five years (29% compared with 11% of those not arrested) and employment was lower (36% compared with 48%).

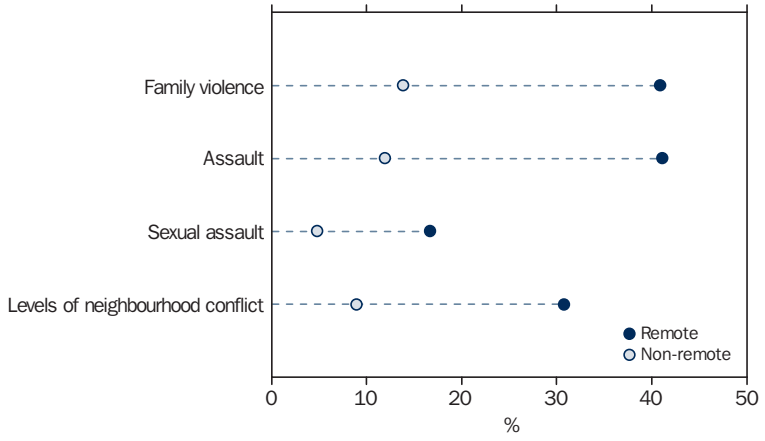
A higher proportion of Indigenous people who had come into contact with law enforcement reported being victims of personal violence. About half (47%) of Indigenous people who reported being arrested also reported being the victim of physical or threatened violence compared with 20% of those who had not been arrested.

Victims of violence

...family violence

Family violence and other violent crimes are widespread in many Indigenous communities.[5] In 2002, one in five (21%) Indigenous Australians aged 15 years and over reported that family violence was a common problem in their neighbourhood or community. Survey respondents reported family violence as being a community problem much more in remote areas than in non-remote areas. It was also more frequently reported as a community problem by people living in overcrowded dwellings. Other neighbourhood or community problems including assault, sexual assault and generally high levels of neighbourhood conflict were also more frequently identified as community problems by Indigenous persons in remote areas or living in overcrowded dwellings.

Indigenous people(a): proportion reporting selected neighbourhood or community problems by remoteness — 2002



(a) Aged 15 years or over.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Victimisation

The 2002 NATSISS questions used to measure *victimisation* in non-remote areas were the same as those used in the ABS 2002 General Social Survey, and asked about attempted, threatened or actual physical force or violence used. In remote communities, testing resulted in the questions being modified to ask "In the last year, did anybody start a fight with you or beat you up?" or "try to or say they were going to hit you or fight with you?". The intention of this modified language was to capture the same concept as that being measured in non-remote areas.

Remoteness

The ABS *Remoteness* classification is based on road distance to different sized urban centres, where the population size is considered to govern the range and type of services available. In this article *remote areas* include the Remoteness categories Remote Australia and Very Remote Australia, and *non-remote areas* include Major Cities of Australia, Inner Regional Australia and Outer Regional Australia. For further information see *Statistical Geography: Volume 1 - Australian Standard Geographical Classification (ASGC), 2001* (ABS cat. no. 1216.0).

...personal violence

In 2002, 24% of Indigenous people aged 15 years and over had been victims of physical or threatened violence in the last 12 months. Victimisation declined with age, with the highest level of victimisation reported by 15–24 year olds, and the lowest levels reported by those aged 55 years and over.

Data from the ABS 2002 General Social Survey and the 2002 NATSISS[6] show that, after removing the effects of the different age structures of the Indigenous and non-Indigenous populations, Indigenous people recorded higher levels of victimisation than non-Indigenous people (20% compared with 9%).

People who are victims of violence may also experience other disadvantages. In 2002, Indigenous people who were victims of physical or threatened violence were more likely to be unemployed than those who did not report victimisation (21% compared with 11%) and less likely to be employed (39% compared with 49%).

Indigenous people(a): proportion reporting selected neighbourhood or community problems by overcrowding(b) — 2002

Neighbourhood or community problem reported	*Dwelling requires additional bedroom/s(b)*	*Dwelling does not require additional bedroom/s(b)*	*Total*
	%	%	%
Family violence	31.6	17.6	21.2
Assault	33.6	15.1	19.9
Sexual assault	12.6(c)	6.5(c)	8.1
Levels of neighbourhood conflict	26.2	10.9	14.1
	'000	'000	'000
Indigenous people	**72.6**	**209.7**	**282.2**

(a) Aged 15 years or over.
(b) Indicates potential overcrowding based on the number of bedrooms in a given dwelling and household demographics such as the number of usual residents and their age and sex. The model used to calculate this measure is the Canadian National Occupancy Standard for housing appropriateness.
(c) Difference between persons living in dwellings that required additional bedroom/s and other persons is not statistically significant.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Indigenous people who were victims of physical or threatened violence were more likely than those who did not report victimisation to assess their health as Fair or Poor (28% compared with 22%). Victims of physical or threatened violence were also more likely than those who did not report victimisation to have a disability or long-term health condition (43% compared with 34%).

Endnotes

1 Australian Institute of Health and Welfare 2004, *Australia's Health 2004*, AIHW, Canberra.

2 Australian Bureau of Statistics 2003, *Prisoners in Australia*, cat. no. 4517.0, ABS, Canberra.

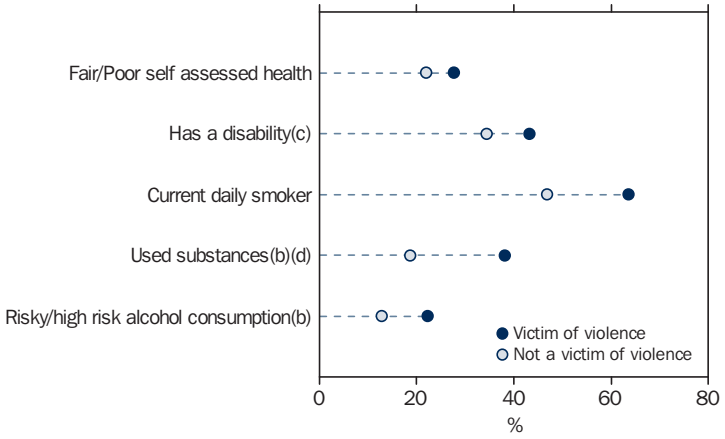
3 McCall, M 2004, *Deaths in Custody in Australia: 2003 National Deaths in Custody Program (NDICP) Annual Report*, Technical and background paper no. 12, Australian Institute of Criminology, Canberra.

4 Human Rights and Equal Opportunity Commission 1997, *Bringing Them Home: Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families.* HREOC, Sydney.

5 Gordon, S, Hallahan K, Henry, D, 2002 *Putting the picture together: Inquiry into Response by Government Agencies to Complaints of Family Violence and Abuse in Aboriginal Communities.* Department of Premier and Cabinet, Western Australia, Perth.

6 Australian Bureau of Statistics 2004, *National Aboriginal and Torres Strait Islander Social Survey*, cat. no. 4714.0, ABS, Canberra.

Indigenous people(a): victimisation(b) by selected health indicators — 2002



(a) Aged 15 years or over.
(b) In the last 12 months.
(c) Includes long-term health conditions.
(d) Proportions are of Indigenous persons living in non-remote areas only.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

International comparisons

Caution

Statistics presented in this chapter have been reproduced from international statistical compendia. National statistical systems differ from country to country and therefore caution should be exercised when comparing international data. Source publications may differ in their classification of China, specifically in regards to the inclusion or exclusion of Hong Kong, Macau and Taiwan. Details of national differences and country classifications can be found in the country specific notes in the source publications.

Population composition(a)

Country	Reference year	Total population '000	0–14 years %	15–59 years %	60 years and over %
Australia	**2005**	**20 155**	**20**	**63**	**17**
Canada	2005	32 268	18	65	18
China	2005	1 315 844	21	68	11
France	2005	60 496	18	61	21
Greece	2005	11 120	14	63	23
Hong Kong (SAR of China)	2005	7 041	14	70	15
Indonesia	2005	222 781	28	63	8
Italy	2005	58 093	14	60	26
Japan	2005	128 085	14	60	26
Korea (Republic of)	2005	47 817	19	68	14
Malaysia	2005	25 347	32	61	7
New Zealand	2005	4 028	21	62	17
Papua New Guinea	2005	5 887	40	56	4
Singapore	2005	4 326	20	68	12
Sweden	2005	9 041	18	59	23
United Kingdom	2005	59 668	18	61	21
United States of America	2005	298 213	21	63	17
Viet Nam	2005	84 238	30	63	8

(a) Medium variant projection.

Source: United Nations 2005, *World Population Prospects: The 2004 Revision* <http://www.un.org/esa/population/publications/wpp2004wpphighlightsfinal.pdf>, accessed 31 March 2005.

Population growth(a)

Country	Reference year	Annual average growth rate(b) %	Crude birth rate(c) rate	Crude death rate(c) rate	Total fertility rate rate
Australia	**2000–2005**	**r1.1**	**r13**	**7**	**r1.8**
Canada	2000–2005	r1.0	r11	r7	1.5
China	2000–2005	0.7	r14	7	r1.7
France	2000–2005	r0.4	13	9	1.9
Greece	2000–2005	r0.3	9	r10	1.3
Hong Kong (SAR of China)	2000–2005	r1.2	r8	r5	r0.9
Indonesia	2000–2005	1.3	21	r8	2.4
Italy	2000–2005	r0.1	9	r10	r1.3
Japan	2000–2005	r0.2	9	8	1.3
Korea (Republic of)	2000–2005	r0.4	r10	6	r1.2
Malaysia	2000–2005	r2.0	23	5	2.9
New Zealand	2000–2005	r1.1	14	r7	2.0
Papua New Guinea	2000–2005	r2.1	32	r11	4.1
Singapore	2000–2005	r1.5	10	5	1.4
Sweden	2000–2005	r0.4	r11	r10	1.6
United Kingdom	2000–2005	0.3	11	10	r1.7
United States of America	2000–2005	1.0	r14	8	2.1
Viet Nam	2000–2005	1.4	20	6	2.3

(a) Medium variant projection.
(b) Data is the average exponential rate of growth.
(c) Per 1,000 population.

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2004 Revision* and *World Urbanization Prospects: The 2003 Revision*, <http://www.esa.un.org/unpp>, accessed 31 March 2005 and 27 April 2005.

Population projections(a)

	Population			Median age			0–14 years			65 years and over		
	2005	2020	2050	2005	2020	2050	2005	2020	2050	2005	2020	2050
Country	million	million	million	years	years	years	%	%	%	%	%	%
Australia(b)	**r20.2**	**r23.3**	**r27.9**	**r36.6**	**r39.8**	**r43.6**	**r19.6**	**r17.6**	**r16.2**	**r12.7**	**r17.2**	**r23.8**
Canada	r32.3	r36.4	r42.8	r38.6	r42.2	r45.2	r17.6	r15.2	r15.7	r13.1	r18.4	r25.6
China	r1 315.8	r1 423.9	r1 392.3	r32.6	r37.9	r44.8	r21.4	r18.4	r15.7	r7.6	r11.9	r23.6
France	r60.5	r63.0	r63.1	r39.3	r42.5	r45.5	r18.2	r17.0	r15.7	r16.6	r20.8	r27.1
Greece	r11.1	r11.2	r10.7	r39.7	r44.8	r49.3	14.3	r13.1	r13.7	r18.2	r20.2	r30.2
Hong Kong (SAR of China)	r7.0	r8.1	r9.2	r38.9	r45.0	r51.0	r14.4	r12.4	r12.4	r12.0	r17.4	r32.3
Indonesia	r222.8	r255.9	r284.6	r26.5	r31.8	r40.5	r28.3	r23.1	r17.6	r5.5	r7.3	r17.4
Italy	r58.1	r57.1	r50.9	r42.3	r48.6	r52.5	r14.0	r12.5	r13.1	r20.0	r24.5	r35.5
Japan	r128.1	r126.7	r112.2	r42.9	r48.0	r52.3	14.0	r12.9	r13.4	19.7	28.1	r35.9
Korea (Republic of)	r47.8	r49.4	r44.6	r35.1	r43.3	r53.9	r18.6	r13.2	r12.0	r9.4	r15.6	r34.5
Malaysia	25.3	r31.5	r38.9	r24.7	r29.3	r39.3	r32.4	r25.2	r18.2	4.6	7.4	r16.1
New Zealand	r4.0	r4.4	r4.8	r35.8	r38.6	r44.0	r21.3	18.3	r16.0	r12.3	r16.8	r23.6
Papua New Guinea	r5.9	r7.6	r10.6	19.7	r23.8	r32.1	40.3	r31.8	r22.9	r2.4	r3.1	r7.9
Singapore	r4.3	r5.0	r5.2	37.5	r45.3	r52.1	r19.5	r12.7	12.6	r8.5	r17.5	r31.3
Sweden	r9.0	r9.5	r10.1	r40.1	r42.4	r43.9	r17.5	r16.7	r16.1	r17.2	r21.4	r24.7
United Kingdom	r59.7	r62.5	r67.1	r39.0	r41.2	r42.9	17.9	r16.5	r16.4	r16.0	r18.8	r23.2
United States of America	r298.2	r338.4	r395.0	r36.1	r37.6	r41.1	r20.8	r19.2	r17.3	12.3	r15.8	r20.6
Viet Nam	r84.2	r99.9	r116.7	24.9	r31.2	41.3	r29.5	r23.5	r17.4	5.4	r6.7	r18.6

(a) Medium variant projection.
(b) United Nations projections for Australia may not agree with ABS projections owing to differences in assumptions and methodology.

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2004 Revision* and *World Urbanization Prospects: The 2003 Revision* <http://www.esa.un.org/unpp>, accessed 31 March 2005.

Life expectancy

Country	Reference year	Infant mortality rate(a)(b)	Life expectancy at birth(b) Males	Life expectancy at birth(b) Females	Reference year	Healthy life expectancy at birth(c) Males	Healthy life expectancy at birth(c) Females
		rate	years	years		years	years
Australia	**2000–2005**	**r5**	**r77.6**	**r82.8**	**2002**	**70.9**	**74.3**
Canada	2000–2005	5	r77.3	r82.4	2002	70.1	74.0
China	2000–2005	r35	r69.8	73.3	2002	63.1	65.2
France	2000–2005	5	r75.8	83.0	2002	69.3	74.7
Greece	2000–2005	7	r75.6	r80.8	2002	69.1	72.9
Hong Kong (SAR of China)	2000–2005	4	r78.6	r84.6	..	n.a.	n.a.
Indonesia	2000–2005	r43	r64.6	r68.6	2002	57.4	58.9
Italy	2000–2005	5	r76.8	r83	2002	70.7	74.7
Japan	2000–2005	r3	r78.3	r85.3	2002	72.3	77.7
Korea (Republic of)	2000–2005	4	r73.2	r80.5	2002	64.8	70.8
Malaysia	2000–2005	10	70.8	r75.5	2002	61.6	64.8
New Zealand	2000–2005	r5	r76.7	r81.3	2002	69.5	72.2
Papua New Guinea	2000–2005	r71	r54.7	r55.8	2002	51.4	52.4
Singapore	2000–2005	3	r76.7	r80.5	2002	68.8	71.3
Sweden	2000–2005	3	r77.8	r82.3	2002	71.9	74.8
United Kingdom	2000–2005	5	r75.9	r80.6	2002	69.1	72.1
United States of America	2000–2005	7	r74.6	r80	2002	67.2	71.3
Viet Nam	2000–2005	r30	r68.4	r72.4	2002	59.8	62.9

(a) Per 1,000 live births.
(b) Medium variant projection.
(c) Healthy life expectancy at birth summarises the expected number of years to be lived in what might be termed the equivalent years of 'full health'.

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2004 Revision*<http://esa.un.org/unpp>, accessed 1 April 2005; The World Health Organization, *The World Health Report 2003: Shaping the Future* <http://www.who.int/whr/2003/en/Annex4-en.pdf/>, accessed 1 April 2005.

Health services and expenditure

Country	Reference year	Health expenditure as % of GDP	Health expenditure per capita at PPP(a)	Reference year	Doctors per 1,000 population	Reference year	Acute hospital beds per 1,000 population
		%	$US '000		no.		no.
Australia	**2002**	**9.5**	**2.5(b)**	**2001**	**2.5**	**2001**	**3.7**
Canada	2002	9.6	2.9	2002	2.1	2001	3.2
China	2002	5.8	0.2(b)	..	n.a.	..	n.a.
France	2002	9.7	2.7	2002	3.3	2001	4.0
Greece	2002	9.5	1.8	2001	r4.5	2000	4.0
Hong Kong (SAR of China)	..	n.a.	n.a.	..	n.a.	..	n.a.
Indonesia	2002	3.2	0.1(b)	..	n.a.	..	n.a.
Italy	2002	8.5	2.2	2002	4.4	2001	4.6
Japan	2002	7.9	2.1(b)	2002	2.0	..	n.a.
Korea (Republic of)	2002	5.0	1.0	2002	1.5	2001	5.2
Malaysia	2002	3.8	0.3(b)	..	n.a.	..	n.a.
New Zealand	2002	8.5	1.9	2002	2.1	1991	7.0
Papua New Guinea	2002	4.3	0.1(b)	..	n.a.	..	n.a.
Singapore	2002	4.3	1.0(b)	..	n.a.	..	n.a.
Sweden	2002	9.2	2.5	2000	3.0	2000	2.4
United Kingdom	2002	7.7	2.2	2002	2.1	2002	3.9
United States of America	2002	14.6	5.3	2001	2.4	2002	2.9
Viet Nam	2002	5.2	0.1(b)	..	n.a.	..	n.a.

(a) PPP (purchasing power parities) are the rates of currency conversion which eliminate the differences in price levels between countries.
(b) Reference year is 2001.

Source: The World Health Organisation 2005, *The World Health Report 2005: Make every mother and child count* <www.who.int/whr/2005/annexes-en.pdf>, accessed 11 April 2005; Organisation for Economic Co-operation and Development 2004, *OECD Health Data 2004: A comparative analysis of 30 countries* <http://www.oecd.org>, accessed 1 April 2005.

Distribution of persons aged 25–64 years by level of educational attainment

Country	Reference year	Below upper secondary education(a)	Upper secondary education and post-secondary non-tertiary education(b)	Tertiary type B education(c)	Tertiary type A and advanced research programs(d)	Total(e)
		%	%	%	%	%
Australia	**2002**	**39**	**30**	**11**	**20**	**100**
Canada	2002	18	40	22	21	100
China	..	n.a.	n.a.	n.a.	n.a.	100
France	2002	35	40	12	12	100
Greece	2002	47	34	6	13	100
Hong Kong (SAR of China)	..	n.a.	n.a.	n.a.	n.a.	100
Indonesia	1999	77	18	2	3	100
Italy	2002	53	36	(f)	10	100
Japan	2002	16	47	16	20	100
Korea (Republic of)	2002	30	45	8	18	100
Malaysia	1998	65	27	—	8	100
New Zealand	2002	24	47	15	15	100
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	100
Singapore	..	n.a.	n.a.	n.a.	n.a.	100
Sweden	2002	18	49	15	18	100
United Kingdom	2002	16	56	8	19	100
United States of America	2002	13	49	9	29	100
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	100

(a) International Standard Classification of Education (ISCED) levels 0, 1 and 2. For Australia this includes Preschool, Primary School and lower Secondary School levels as well as the Basic Vocational level.
(b) International Standard Classification of Education (ISCED) levels 3 and 4. For Australia this includes Year 12 completion as well as the Skilled Vocational level.
(c) International Standard Classification of Education (ISCED) level 5B. For Australia this includes Associate Diplomas and Undergraduate Diplomas.
(d) International Standard Classification of Education (ISCED) levels 5A and 6. For Australia this includes Bachelor degree level or higher.
(e) Component totals when added may not equal 100% due to rounding.
(f) Data included in Tertiary Type A and advanced research programs.

Source: Organisation for Economic Co-operation and Development 2004, *Education at a Glance: OECD Indicators, 2004*, OECD, Paris.

Educational participation(a) and expenditure

		Enrolment rates by age group (years)						
	Reference year(b)	15–19	20–29	30–39	40 and over	Reference year(b)	Total public expenditure as a proportion of GDP(c)	Total public and private expenditure as a proportion of GDP(d)
Country		%	%	%	%		%	%
Australia	**2002**	**82.6**	**32.9**	**15.2**	**6.7**	**2001**	**4.5**	**6.0**
Canada	2000	74.2	21.7	4.6	1.2	2001	4.9	6.1
China	**2002**	12.7	n.a.	—	—	1999	2.0	3.7
France	2002	86.7	19.6	1.8	n.a.	2001	5.6	6.0
Greece	2002	82.6	24.5	0.3	—	2001	3.8	4.1
Hong Kong (SAR of China)	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.
Indonesia	2002	45.6	3.6	—	—	2001	1.3	2.0
Italy	2002	75.8	18.4	2.5	0.1	2001	4.9	5.3
Japan	..	n.a.	n.a.	n.a.	n.a.	2001	3.5	4.6
Korea (Republic of)	2002	79.9	26.5	1.7	0.4	2001	4.8	8.2
Malaysia	2002	55.4	6.8	0.2	0.1	2001	7.2	n.a.
New Zealand	2002	72.1	25.4	10.9	4.1	2001	5.5	n.a.
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.
Singapore	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.
Sweden	2002	86.2	33.6	14.1	3.5	2001	6.3	6.5
United Kingdom	2002	76.8	26.8	16.2	8.3	2001	4.7	5.5
United States of America	2002	74.8	25.2	4.6	1.3	2001	5.1	7.3
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.

(a) Participation rates are based on full-time and part-time enrolments.
(b) 1 January of the reference year is considered a good proxy for the midpoint of the school year except for New Zealand, Australia and Korea where 1 July is used as the midpoint of the reference period.
(c) Includes both purchases by the government agency itself on educational resources and also appropriations by the government agency to educational institutions which have been given responsibility to purchase educational resources themselves. Also includes public subsidies to households attributable for educational institutions, and direct expenditure on educational institutions from international sources.
(d) Public expenditure refers to the spending of public authorities at all levels. Private expenditure refers to expenditure funded by private sources i.e. households, private business firms and nonprofit organisations of religious, charitable or business and labour associations.

Source: Organisation for Economic Co-operation and Development 2004, *Education at a Glance: OECD Indicators, 2004,* OECD, Paris.

Student performance on combined reading, mathematical and scientific literacy scales(a)

		Combined reading literacy		*Mathematical literacy*		*Scientific literacy*	
	Reference year	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*
Country		Mean score	Mean score	Mean score	Mean score	Mean score	Mean score
Australia	**2003**	**506**	**545**	**527**	**522**	**525**	**525**
Canada	2003	514	546	541	530	527	516
China	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	2003	476	514	515	507	511	511
Greece	2003	453	490	455	436	487	475
Hong Kong (SAR of China)	2003	494	525	552	548	538	541
Indonesia	2003	369	394	362	359	396	394
Italy	2003	455	495	475	457	490	484
Japan	2003	487	509	539	530	550	546
Korea (Republic of)	2003	525	547	552	528	546	527
Malaysia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	2003	508	535	531	516	529	513
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	2003	496	533	512	506	509	504
United Kingdom	2000	512	537	534	526	535	531
United States of America	2003	479	511	486	480	494	489
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) A scaling method assigns scores so that 500 is the OECD average in each domain.

Source: Organisation for Economic Co-operation and Development 2004, *Knowledge and skills for life: First results from PISA 2003,* OECD, Paris.

Unemployment ratio(a) by level of educational attainment and gender of 25–64 year olds

		Below upper secondary education		Upper secondary and post-secondary non-tertiary education		Tertiary non-University education		University education		All levels of education	
	Reference year	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Country(b)		%	%	%	%	%	%	%	%	%	%
Australia	**2002**	**6.8**	**3.4**	**3.6**	**3.3**	**4.1**	**3.7**	**2.6**	**2.0**	**4.5**	**3.1**
Canada	2002	8.3	5.3	5.8	5.0	5.4	3.9	4.5	3.9	5.9	4.6
China	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	2002	8.1	7.4	4.7	6.7	5.0	3.9	4.8	4.8	5.8	6.4
Greece	2002	4.0	4.8	5.0	8.9	4.6	8.4	3.6	7.0	4.3	6.6
Hong Kong (SAR of China)	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	2002	5.1	4.8	4.0	6.1	(c)	(c)	3.3	5.9	4.5	5.4
Japan	2002	6.8	2.6	5.1	3.2	4.3	3.1	3.1	2.7	4.8	3.0
Korea (Republic of)	2002	2.5	0.8	2.8	1.1	4.2	1.9	2.6	1.1	2.8	1.1
Malaysia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	2002	4.7	3.0	2.6	3.0	3.3	2.7	3.0	2.4	3.2	2.9
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	2002	4.2	4.1	4.5	3.3	3.3	2.4	3.2	2.1	4.0	3.1
United Kingdom	2002	6.8	3.2	3.7	3.0	2.6	1.5	2.5	1.8	3.8	2.7
United States of America	2002	7.5	5.4	5.3	3.7	3.8	2.5	2.8	2.1	4.7	3.3
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Unemployment ratio is the number of unemployed persons as a percentage of the total number of persons in the population.
(b) Care should be taken when comparing these data between countries. In any one year, different countries can be at different stages of the economic cycle which is a major influence on unemployment rates.
(c) Data for tertiary non-university are included in University education column.

Source: Organisation for Economic Co-operation and Development 2004, *Education at a Glance:* OECD Indicators, 2004, OECD, Paris.

Labour force

Country(a)	Reference year	Economically active population(b)(c)(d) '000	Reference year	Participation rate of persons aged 15 years and over: Total %	Males %	Females(b) %
Australia	**2003**	**10 066.5**	**2001**	**74.9**	**83.3**	**66.5**
Canada	2003	17 046.9	2001	77.5	83.5	71.5
China	2001	737 060.0	1995	79.8	85.6	73.7
France	2003	27 125.0	2001	68.3	74.7	62.1
Greece	2002	4 369.0	2001	63.6	78.4	49.7
Hong Kong (SAR of China)	2003	3 500.9	2001	61.4	72.9	50.7
Indonesia	1999	95 793.2	1999	67.9	84.6	51.5
Italy	2003	24 229.0	2001	61.7	75.6	47.8
Japan	2003	66 670.0	2001	78.3	92.2	64.3
Korea (Republic of)	2003	22 917.0	2001	68.2	80.6	55.9
Malaysia	2000	9 616.1	2000	65.5	83.3	46.7
New Zealand	2003	2 015.1	2001	77.3	85.5	69.4
Papua New Guinea	2000	2 257.9	1995	77.4	86.9	67.0
Singapore	2003	2 152.0	2000	68.6	81.1	55.5
Sweden	2003	4 450.0	2001	80.5	83.1	77.9
United Kingdom	2003	29 234.8	2001	77.6	85.2	69.8
United States of America	2003	146 510.0	2001	79.2	86.2	72.5
Viet Nam	2003	42 124.7(e)	2001	71.9	76.0	68.2

(a) Care should be taken when comparing these data between countries. In any one year, different countries can be at different stages of the economic cycle which is a major influence on the labour force.

(b) "Economically active population are all those persons who during the specified reference period are classified either as employed or as unemployed". Reference: International Labour Office, *Year Book of Labour Statistics, 2003 p.3.*

(c) Participation rates for women are frequently not comparable internationally since, in many countries, relatively large numbers of women assist on farms or in other family enterprises without pay. There are differences between countries in the criteria used to count economically active workers.

(d) For most countries the Economically active populations are aged 15 years and over. However, the age range varies for some countries: Malaysia – 15–64 years; Sweden – 16–64 years; China, UK and USA – 16 years and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.

(e) Economically active population for Viet Nam is calculated using Viet Nam's Employment and Unemployment rates which are published in the International Labour Office*, Year Book of Labour Statistics.*

Source: International Labour Office, *Year Book of Labour Statistics LABORITE* <http://ilo.org/public/english/bureau/stat/portal/topics.htm>, accessed 2 April 2005; International Labour Office*, Key Indicators of the Labour Market 2003*.

Employment and unemployment

Country (a)	Reference year	Employment '000	Unemployment '000	Unemployment rate %
Australia	**2003**	**9 459.2**	**607.4**	**6.0**
Canada	2003	15 746.0	1 300.9	7.6
China(b)	2002	737 400.0	7 700.0	4.0
France	2003	24 485.0	2 640.4	9.7
Greece	2002	3 948.9	r420.1	9.6
Hong Kong (SAR of China)	2003	3 223.3	277.6	7.9
Indonesia	2002	91 647.0	9 132.1	9.1
Italy	2003	22 133.0	2 096.0	8.7
Japan	2003	63 160.0	3 500.0	5.3
Korea (Republic of)	2003	22 139.0	777.0	3.4
Malaysia	2003	9 869.7	369.8	3.6
New Zealand	2003	1 921.0	93.9	4.7
Papua New Guinea	..	n.a.	n.a.	n.a.
Singapore	2003	2 033.7	116.4	5.4
Sweden	2003	4 234.0	217.0	4.9
United Kingdom	2003	27 820.8	1 414.0	4.8
United States of America	2003	137 736.0	8 774.0	6.0
Viet Nam	2003	41 175.7	949.0	2.3

(a) Care should be taken when comparing these data between countries. In any one year, different countries can be at different stages of the economic cycle which is a major influence on employment and unemployment.
(b) Employment relates to total economy; unemployment relates to urban areas only.

Source: International Labour Office, *Year Book of Labour Statistics LABORITE* <http://ilo.org/public/english/bureau/stat/portal/topics.htm>, accessed 2 April 2005.

Cumulative topic list

Cumulative topic list

Education and training

Work

Edition Page

Economic resources

Housing

Other areas of social concern

FOR MORE INFORMATION...

INTERNET	**www.abs.gov.au** the ABS web site is the best place to start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a statistical profile.
LIBRARY	A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.
CPI INFOLINE	For current and historical Consumer Price Index data, call 1902 981 074 (call cost 77c per minute).
DIAL-A-STATISTIC	For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

INFORMATION SERVICE

Data which have been published and can be provided within five minutes are free of charge. Our information consultants can also help you to access the full range of ABS information—ABS user-pays services can be tailored to your needs, time frame and budget. Publications may be purchased. Specialists are on hand to help you with analytical or methodological advice.

PHONE	**1300 135 070**
EMAIL	**client.services@abs.gov.au**
FAX	1300 135 211
POST	Client Services, ABS, GPO Box 796, Sydney 2001

FREE ACCESS TO PUBLICATIONS

All ABS publications can be downloaded free of charge on the ABS web site.

WEB ADDRESS *www.abs.gov.au*

ISSN 1321-1781

Recommended retail price $53.00

Produced by the
Australian Bureau of Statistics