

A Social Health Atlas of Australia: Volume 2, New South Wales

Errata 9 August 2000

Details of the following errors have been posted to the PHIDU web site, and the affected pages replaced in the PDF documents on the web site at <http://www.publichealth.gov.au>

Contents: Executive summary, page vi

Percentages incorrect for Early school leavers, Unskilled and semi-skilled workers and Disability Support Pensioners.

Ch 3: Unemployed people, 1996

Users of the data on page 38 and (in particular) page 40 should be aware of the following additional information.

The 1996 Census unemployment figures are based on self-report information in the Census. As it is unclear how Indigenous people would record their involvement in CDEP schemes, it may be more appropriate to use the information provided for unemployment beneficiaries on pages 94 and 96.

Ch 4: Disability support pensioners, page 86-89

The data shown include details of the wife pension, thus inflating the proportions (although not the spatial patterns) shown in the tables and maps.

This data also affects:

- Executive summary, page vi
- Rates for females shown in Figure 4.2, page 80
- Correlations, page 351-354
- Table 9.1 and associated text, page 375-376

Ch 8: Correlations, page 351-354

Correlation matrices affected by Disability Support Pension data.

Ch 9: Summary, page 375-376

Table 9.1 and associated text for Early school leavers, Unskilled and semi-skilled workers and Disability Support Pensioners.

Appendix 1.4: Lens insertion, page 399

Codes should be 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, not just 13.7

Index: Lens insertion, page 421, 422, 423

refers page 296, should be 269

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Executive summary: Amended text/figures are highlighted on the next page

The information in this atlas adds to a convincing body of evidence built up over a number of years in Australia on the striking disparities in health that exist between groups in the population. People of low socioeconomic status (those who are relatively socially or economically deprived) experience worse health than those of higher socioeconomic status for almost every major cause of mortality and morbidity. The challenge for policy makers, health practitioners and governments is to find ways to address these health inequities.

The primary aims of the first edition of *A Social Health Atlas of Australia* were to illustrate the spatial distribution of the socioeconomically disadvantaged population, and to compare this with patterns of distribution of major causes of illness and death and use of health services. The maps and correlation analysis highlighted associations between social and economic factors in relation to health and illness.

A number of new variables have been included in this second edition, together with new data on many of the variables from the first edition. One of the additions is the presentation of data by the new Accessibility/Remoteness Index of Australia (ARIA). Also included is a cluster analysis, providing profiles at the Statistical Local Area (SLA) level of the socioeconomic status, health status and health service utilisation of the population.

The extent of change (between the editions) in the patterns of distribution in death rates by socioeconomic status is also highlighted.

There is clear evidence in the data of an association at the SLA level between high premature death rates (both for deaths from all causes and from most specific causes) and socioeconomic disadvantage, as measured by the IRSD. These associations are generally evident not only between the most advantaged (Quintile 1) and disadvantaged areas (Quintile 5), but also at each of the intervening levels of socioeconomic status (Quintiles 2 to 4) (**Figures 9.2 and 9.4**).

Similarly, there are associations between socioeconomic disadvantage and high rates of use of general medical practitioner services in the major urban centres, and for most of the variables for hospital admission in both the major urban centres and the non-metropolitan areas of New South Wales (**Figures 9.4 and 9.5**). The gradients for admissions by socioeconomic status of area are particularly strong in the non-metropolitan SLAs.

It is also clear that, despite an overall improvement in death rates from all causes and for all of the specific causes studied (with the exception of the 'other causes' group) for **Sydney, Newcastle** and **Wollongong** (**Table 9.2, Figure 9.6**), these improvements have not resulted in any significant reduction in the disparities evident in death rates between residents of the most well off areas and those in the poorest areas. In fact, for all but infant deaths and deaths from the external causes of accidents, poisonings and violence, the gap in death rates has increased (**Figure 9.6**).

Correlation analysis

There were correlations of significance at the SLA level between the indicators of socioeconomic disadvantage drawn from the 1996 Population Census (Chapter 3) and a number of the health status variables. In **Sydney**, the strongest of these were generally with the variables for people reporting their health as fair or poor (as opposed to those reporting their health as being excellent, very good, or good); the Physical Component Summary (PCS, a measure of physical health); the handicap status of the population; and premature deaths from circulatory and respiratory system diseases (**Table 8.1**). Similarly strong associations were evident in the correlation analysis with the variables for the use of GP services by males and females; and of admissions to hospital for circulatory and respiratory system diseases, and admissions to a public hospital.

There were fewer correlations of significance at the SLA level in the non-metropolitan areas of New South Wales than was the case in **Sydney**. This is, in part, a result of the number of areas with relatively small numbers of cases (population, deaths, hospital admissions, etc.) which reduces the strength of the analysis. However a number of variables are highly correlated with each other: these are the variables for low income families, unemployed people, Indigenous Australians, people born in non-English speaking countries, people with poor proficiency in English and dwellings without a vehicle.

Various sub-sets of these indicators of socioeconomic disadvantage are correlated with indicators of health status and use of health services. The strongest correlations with the measures of socioeconomic disadvantage were with the variables for people reporting their health as fair or poor, and the PCS. There was a consistent although weaker association between socioeconomic disadvantage and the variables for deaths of males; hospital admissions of males and females; and hospital admissions from circulatory and respiratory system diseases.

There was a correlation of substantial significance at the SLA level between high proportions of the Indigenous population and the variable for years of potential life lost (the summary measure of premature death). There were also correlations of substantial significance with high rates of admission to hospital (the total of public and private hospitals); admissions to a public hospital; admissions from the combined causes of accidents, poisonings and violence; and admissions for neuroses.

Changes over time in socioeconomic status

Marked variations were recorded between 1986 and 1996 for a majority of the socioeconomic status variables mapped for New South Wales (**Table 9.1**). For **Sydney**, the largest increases were for the population of Aboriginal and Torres Strait Islander people (an increase of 85.3 per cent over this ten year period); the occupational grouping of managers and administrators, and professionals (41.3 per cent); people born overseas in

predominantly non-English speaking countries: an increase of 41.2 per cent for those resident for five years or more, of 33.2 per cent for those resident for less than five years, and of 36.0 per cent for those with poor proficiency in English; single parent families (30.3 per cent); low income families (29.8 per cent); and housing authority rented dwellings (23.0 per cent). The largest decreases recorded over this ten year period were for the variables for unemployment among 15 to 19 year olds (down by 26.5 per cent) and early school leavers (down by 17.8 per cent).

Variations of this order were also recorded in the non-metropolitan areas of New South Wales. The major differences from the changes noted for **Sydney** were larger increases in the population aged 65 years and over, single parent families and dwellings without a motor vehicle; and smaller increases for the occupations of managers and administrators and professionals, Indigenous people, each of the three variables for people born overseas in predominantly non-English speaking countries, and housing authority rented dwellings.

Changes over this period for the major urban centres of **Newcastle** and **Wollongong** were relatively consistent, with the exception of the population aged from 0 to 4 years, unemployment (all ages), the three variables for people born overseas in predominantly non-English speaking countries, housing authority rented dwellings and dwellings without a motor vehicle: the change recorded for these variables varied between the two cities. The changes in **Newcastle** and **Wollongong** were generally consistent with those recorded for **Sydney** (and frequently showed larger increases), other than for the variable for the population aged 65 years and over and the three variables for people born overseas in predominantly non-English speaking countries (which all recorded lower increases).

Substantial variations were recorded in income support payments to residents of **Sydney** for all of the payment types analysed (Disability Support pension, Sole Parent Pension and unemployment benefits), other than the Age Pension, for which there was a small decrease (a decrease of 4.1 per cent). The number of recipients for each of the other payment types increased substantially, with the number of disability support pensioners doubling (an increase of 100 per cent) and similar increases occurring for dependent children (68.6 per cent) and disability support pensioners (65.7 per cent) (Table 9.1). Similar, although smaller increases were recorded in the non-metropolitan areas of New South Wales for all of these income support payments other than the Age Pension, for which there was a much smaller increase (5.8 per cent). The increases in **Newcastle** and **Wollongong** were more in line with those recorded for the non-metropolitan areas of the State than with those in **Sydney**.

Changes over time in death rates

Death rates in New South Wales have declined over the years 1985 to 1989 and 1992 to 1995 for the majority of causes studied.

In **Sydney**, the largest decreases were recorded in the infant death rate (down by 34.4 per cent); and for deaths of people aged from 15 to 64 years from circulatory system diseases (-42.2 per cent), respiratory system diseases (-30.7 per cent) and accidents, poisonings and violence (-28.9 per cent). All causes

mortality was 25.4 per cent lower over this period, marginally more so for males than for females.

There were reductions in death rates for each of the causes studied for **Newcastle** and **Wollongong**, with the decreases being generally more pronounced in **Wollongong**.

There were also reductions in rates of premature death in the non-metropolitan areas of New South Wales for all but cancer (for which there was a slight increase). However the reductions were all lower than those recorded for **Sydney**, at around half (52.4 per cent) for all cause mortality.

Differences in health by socioeconomic status of area of residence

Comparisons are made of differences in the health status and health service use of the population by socioeconomic status. In the absence of any direct measure of socioeconomic status in the health status data, the socioeconomic status of the SLA of usual residence in the health status records is used. In this analysis socioeconomic status is measured by the Index of Relative Socio-Economic Disadvantage (IRSD, see page 17). The SLAs in the major urban centres of **Sydney**, **Newcastle** and **Wollongong** have been grouped into five groups (quintiles) based on the IRSD score, with Quintile 1 comprising the twenty per cent of SLAs with the highest IRSD scores, and Quintile 5 comprising the twenty per cent of SLAs with the lowest IRSD scores.

Health status by socioeconomic status of area of residence

Although there is some variability across the quintiles, the pattern is always for the highest socioeconomic status SLAs (those in Quintile 1) to have the most advantageous (ie. in the majority of cases the lowest) rates and, generally, for the most disadvantaged SLAs (those in Quintile 5) to have the highest rates. The exception is the Physical Component Summary, for which low scores indicate poorer health (Figure 9.2).

Years of potential life lost (YPLL) from deaths between the ages of 15 to 64 years varied from a standardised ratio (SR) in the most advantaged areas of 72 (28 per cent fewer YPLL than were expected from the New South Wales State rates) to an SR of 122 in the most disadvantaged areas (indicating that there were 22 per cent more YPLL than were expected from the State rates). Large differentials were also evident for deaths of 15 to 64 year old males (from an SDR of 74 in Quintile 1 to 127 in Quintile 5) and deaths of 15 to 64 years olds from lung cancer (70 to 124), circulatory system diseases (66 to 117) and respiratory system diseases (61 to 124).

The most notable differences from the gradients evident for **Sydney** and the other major urban centres are deaths from the external causes of accidents, poisonings and violence (for the 15 to 64 year age group, the ratios are less consistent, and for the 15 to 24 year group are substantially different) and for the Total Fertility Rate (which shows little association in the non-metropolitan areas with socioeconomic status) (Figure 9.4).

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Chapter 4: The amended data in this chapter has not been highlighted as the majority of figures (other than for 1989) have been amended

The postcode data were converted to Statistical Local Areas (SLAs) for mapping using a converter produced by the Australian Bureau of Statistics (ABS). This process is described in Appendix 1.2. In some instances, the number of people in receipt of a pension or benefit in a postcode exceeds the population in that postcode: this is particularly a problem with the Age Pension data. This is the case even when the pensioner/beneficiary data are compared with the population data by five year age group, separately for males and females. As a result, the calculation of the proportion of the population in receipt of a particular pension or benefit type can produce percentages of greater than 100 per cent. Other percentages of less than 100 per cent may also be overstated.

The reason for this is not clear. It is unlikely to be the result of people claiming both a DFACS Age and a DVA Service Pension (Age), as checks are made each year to ensure that such events do not occur. While it is likely in part to be a result of faults in the process of allocating pensions data, and it would have been possible to scale all the percentages back to 100, or less than

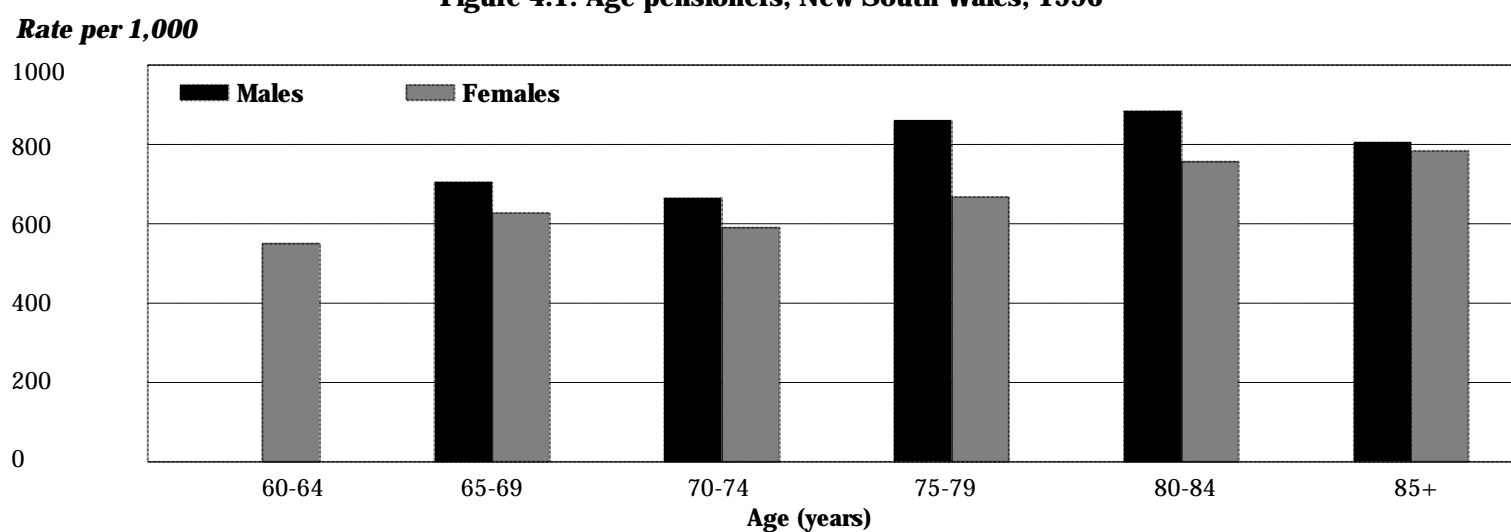
100, this would have concealed the problem and would not have represented the data for the areas as estimated. Percentages in excess of 100 per cent are noted separately in the text. Although the other pension or benefit types analysed only rarely have such high proportions, it is not possible to say to what extent they may also be overstated.

Details of age and sex of recipients

The age and sex profiles of recipients of the Age and Disability Support Pensions and unemployment benefits and the age profiles of female sole parent pensioners are shown in the following charts.

Females can receive the Age Pension from age 60 years and males from age 65 years (Figure 4.1). Although the numbers of females receiving this pension are higher from 65 years of age, their rates are lower in all age groups. Rates for both males and females follow a pattern of a decline in the 70 to 74 year age group, then increasing over the next two age groups before declining for men and slowing for women.

Figure 4.1: Age pensioners, New South Wales, 1996

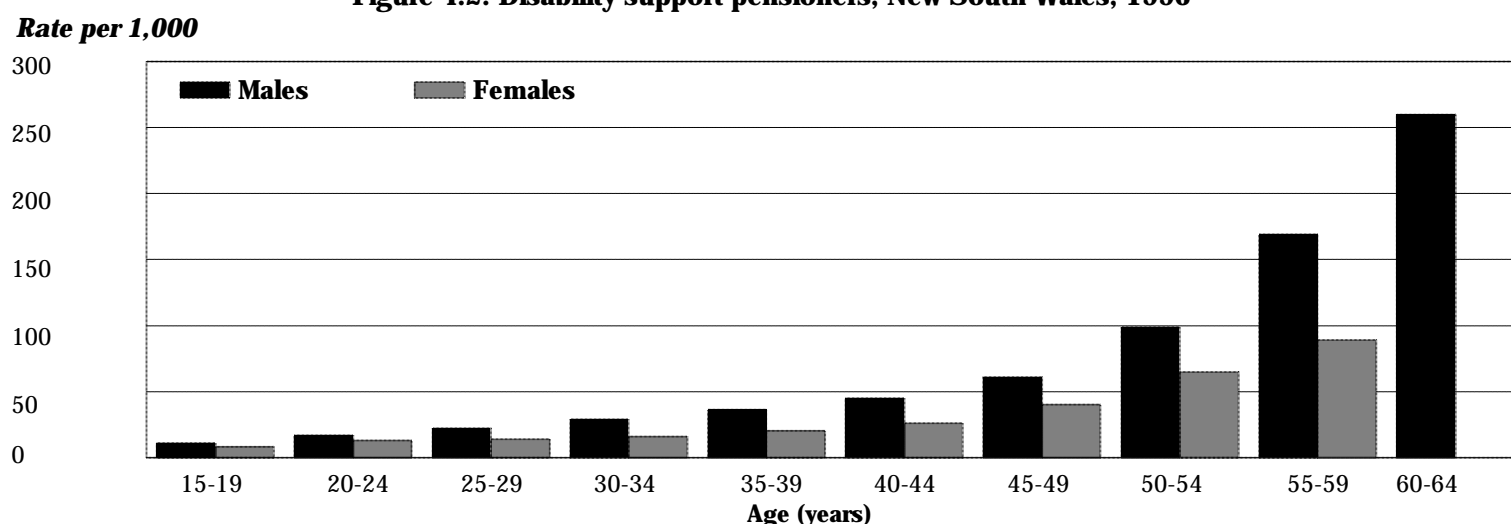


Source: Calculated on data supplied by DFACS (Age Pension) and DVA (Service Pension (Age))

Male rates are marginally higher in each age group under 40 years for those receiving the Disability Support Pension, with substantially higher rates at older ages (Figure 4.2). From age

60 years, females eligible for this pension are transferred to the Age Pension. The rates for both males and females grow steadily across the ages, most markedly from around 50 years of age.

Figure 4.2: Disability support pensioners, New South Wales, 1996



Source: Calculated on data supplied by DFACS (Disability Support Pension) and DVA (Service Pension (Permanently Incapacitated))

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Disability support pensioners, 30 June 1996

Capital city comparison

People eligible for a Disability Support Pension, paid by the Department of Family and Community Services (DFACS), must be aged 16 years or over and have not reached age-pensionable age; be permanently blind or have a physical, intellectual or psychiatric impairment level of 20 per cent or more and a continuing inability to work. Details of males under 65 years of age and females under 60 years of age receiving the DVA service pension (permanently incapacitated) have been combined with the Disability Support Pension data: details on people above these ages were included in the data for age pensioners.

The proportion of the population in the capital cities in receipt of the Disability Support Pension has increased considerably since 1989, rising from 2.6 per cent in 1989 to 3.9 per cent in 1996. High levels of unemployment have impacted significantly on the increase in the number of disability support pensioners (Centrelink 1997). This increase was evident in all capital cities, with the largest increases recorded in **Hobart, Adelaide, Sydney** and **Brisbane**. In both 1989 and 1996, **Hobart** and **Adelaide** had the largest proportions of disability support pensioners, while **Canberra** and **Darwin** had the lowest.

Table 4.4: Disability support pensioners, capital cities

	<i>Per cent</i>								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All Capitals
1996	3.8	3.7	4.1	5.1	3.9	5.6	3.1	2.2	3.9
1989	2.3	2.6	2.7	3.5	3.0	3.6	2.1	1.2	2.6

¹Includes Queanbeyan (C)

Source: See Data sources, Appendix 1.3

Sydney

The number and proportion of people in **Sydney** receiving the Disability Support Pension increased substantially, from 55,310 people in 1989 (2.3 per cent of the eligible population of males aged 15 to 64 years and females aged 15 to 59 years) to 91,668 people in 1996 (3.8 per cent).

Proportions were highest in the far northern, inner and western SLAs of South Sydney (7.6 per cent), Wyong (7.3 per cent) and Marrickville (6.1 per cent). The inner SLAs of Sydney (5.8 per cent) and Leichardt and Botany (both with 4.7 per cent); the central western SLAs of Auburn (5.7 per cent), Holroyd (5.5 per cent), Fairfield (5.0 per cent), Blacktown (4.9 per cent), Bankstown (4.7 per cent) and Parramatta and Liverpool (both with 4.6 per cent); and the far northern SLA of Gosford (4.9 per cent) also recorded proportions well above **Sydney's** average.

The higher socioeconomic status SLAs located just north of the city centre had notably lower percentages (**Map 4.3**). The lowest of these was in Ku-ring-gai, with 1.0 per cent of the population receiving the Disability Support Pension. Similarly low proportions were recorded in Mosman (1.1 per cent), North Sydney (1.5 per cent), Woollahra and Lane Cove (both with 1.6 per cent) and Pittwater (1.7 per cent).

The largest numbers of people in receipt of a Disability Support Pension in 1996 were recorded in Blacktown (7,345 people), Fairfield (5,921 people), Wyong (4,743 people), South Sydney (4,680 people), Bankstown (4,571 people), Parramatta (4,161 people) and Gosford (4,119 people).

The correlation analysis revealed a positive association at the SLA level with many of the indicators of socioeconomic disadvantage, including the variables for low income families (0.90), unemployed people (0.80) and single parent families (0.71). Inverse correlations were recorded with the variables for high income families (-0.79), female labour force participation (-0.66) and managers and administrators, and professionals (-0.55). These results, together with the inverse correlation of substantial significance with the IRSD (-0.84), indicate an association at the SLA level between high proportions of disability support pensioners and socioeconomic disadvantage.

Newcastle

There were 18,609 people in receipt of the Disability Support Pension in **Newcastle** in 1996, representing 6.7 per cent of the eligible population. All SLAs had in excess of 6.0 per cent of their population in this category, ranging from 6.1 per cent in Maitland to 7.2 per cent in both Cessnock and the City of Newcastle.

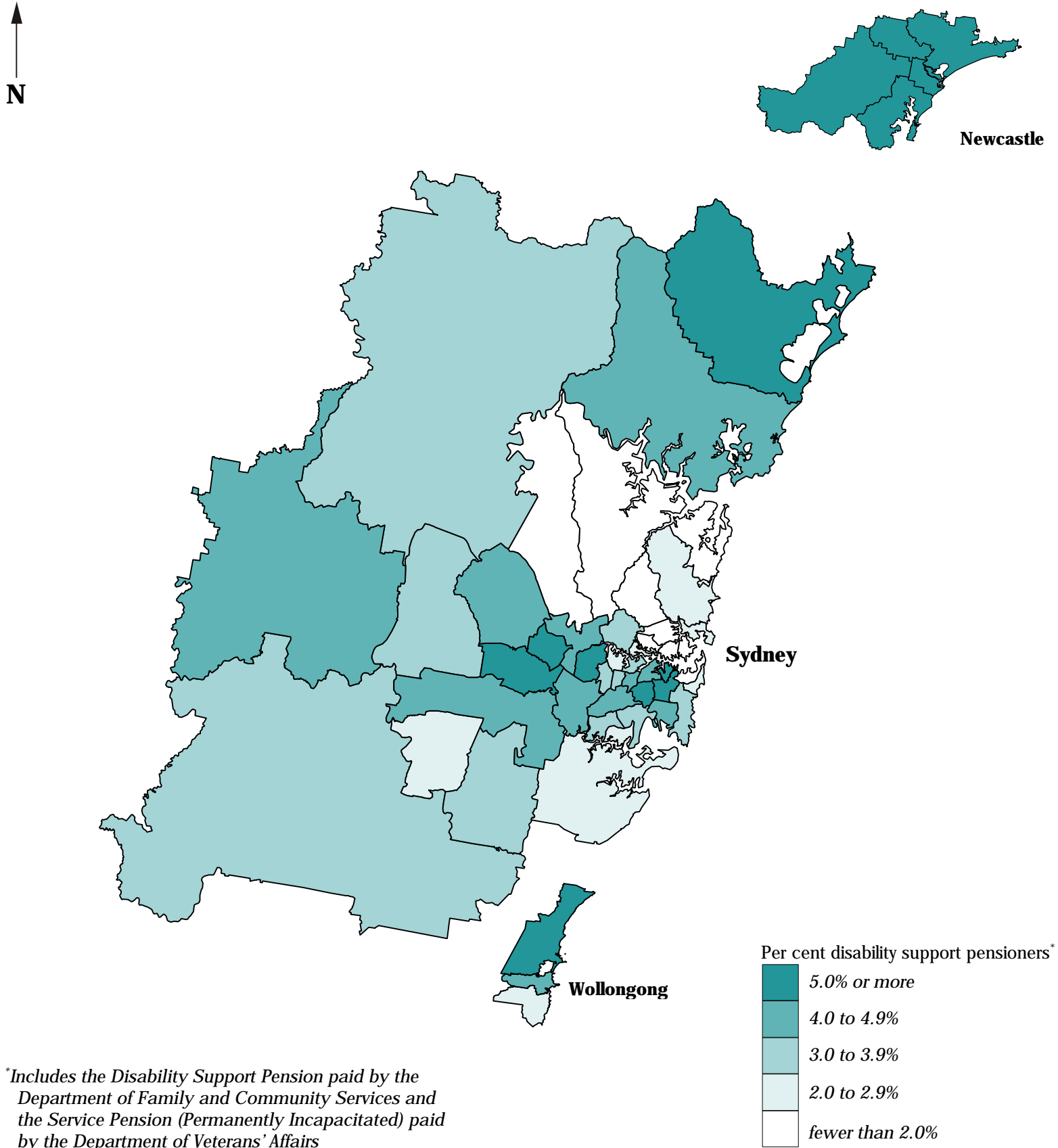
Wollongong

In 1996, 4.9 per cent of the eligible population in **Wollongong** were receiving a Disability Support Pension, a total of 7,709 people. The highest percentages were recorded in the SLAs of Wollongong (5.2 per cent) and Shellharbour (4.9 per cent). Kiama recorded the lowest proportion, of 2.9 per cent.

Map 4.3

Disability support pensioners*, Sydney, Newcastle and Wollongong, 1996

as a percentage of males ages 15 to 64 years and females aged 15 to 59 years in each Statistical Local Area



*Includes the Disability Support Pension paid by the Department of Family and Community Services and the Service Pension (Permanently Incapacitated) paid by the Department of Veterans' Affairs

Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999

Disability support pensioners, 30 June 1996

State/Territory comparison

In 1996, the proportions of people in receipt of the Disability Support Pension (see previous text page for details of those included) were generally higher in the non-metropolitan areas than in the capital cities, with the exception of South Australia, Western Australia and Northern Territory. The average for the *Rest of State/Territory* areas was 5.0 per cent, with similar proportions recorded in Queensland (4.6 per cent), Victoria (4.9 per cent) and South Australia (5.0 per cent). The highest proportion was in Tasmania (6.2 per cent) and the lowest in the Northern Territory (2.7 per cent). Comparisons between 1989 and 1996 show an increase in the proportions across all States and Territories, with the largest increases evident in Tasmania, South Australia and New South Wales.

Table 4.5: Disability support pensioners, State/Territory
Per cent

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
1996									
Capital city	3.8	3.7	4.1	5.1	3.9	5.6	3.1	2.2 ²	3.9
Other major urban centres ³	6.1	4.7	3.9	5.1
Rest of State/Territory	5.7	4.9	4.6	5.0	3.7	6.2	2.7	— ⁴	5.0
Whole of State/Territory	4.5	4.0	4.2	5.1	3.8	6.0	2.8	2.1	4.3
1989									
Rest of State/Territory	3.9	3.3	3.1	3.3	3.1	3.7	2.2	— ⁴	3.4

¹Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands)

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data unreliable: included with ACT total

Source: See Data sources, Appendix 1.3

Rest of State

In 1989, 35,871 people in the non-metropolitan areas of New South Wales were receiving a Disability Support Pension, 3.9 per cent of the population aged from 15 to 64 years for males and 15 to 59 years for females. By 1996, the number had risen to 54,792 and the proportion to 5.7 per cent.

Proportions of above 8.0 per cent were recorded in a number of areas throughout the State (**Map 4.4**). These included Broken Hill (11.2 per cent) and Unincorporated Far West (8.6 per cent) situated in the far west; Bingara (10.9 per cent), Manilla (9.4 per cent), Severn (9.2 per cent), Barraba (8.8 per cent) and Richmond River (8.3 per cent), all of which were located in the north; Brewarrina (10.4 per cent) and Walgett (8.3 per cent), situated in the far north-west; Rylstone (9.0 per cent), in the central west; Great Lakes (8.4 per cent) and Nambucca (8.2 per cent), on the coast north of **Sydney**; and Eurobodalla (8.3 per cent), situated in the south-east.

In total, 35 SLAs (26.3 per cent of all SLAs) were mapped in the middle class interval, ranging from 5.0 per cent in Windouran, Tumut, Hay, Copmanhurst and Bega Valley to 5.9 per cent in Ballina.

As can be seen in **Map 4.4**, the lowest proportions of people in receipt of a Disability Support Pension were found in the south-eastern region of the State. These areas included Snowy River (1.0 per cent), Gunning (2.5 per cent), Cooma-Monaro (2.6 per cent), Yarrolumla [Part A] (3.0 per cent), Holbrook (3.3 per cent) and Tumbarumba (3.4 per cent). Also mapped in the lowest range were the SLAs of Lord Howe Island (1.7 per cent), Oberon (2.4 per cent), Singleton and Cobar (both 3.2 per cent), Jerilderie (3.3 per cent), Wagga Wagga and Muswellbrook (both 3.4 per cent).

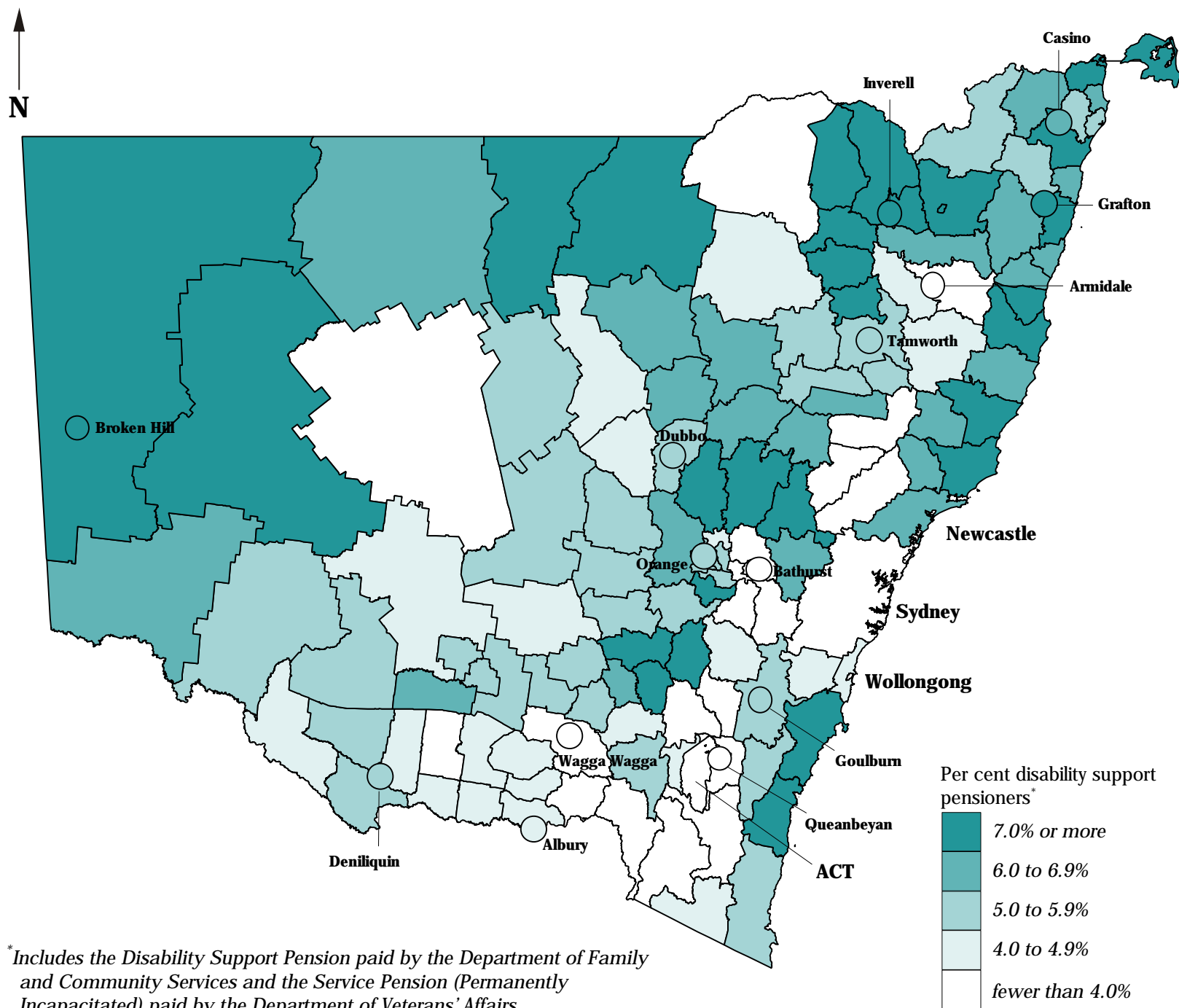
The SLA of Shoalhaven recorded the largest number of people receiving a Disability Support Pension in 1996, a total of 3,141 people. Relatively large numbers were also recorded in Coffs Harbour (2,268 people), Hastings (2,024 people), Greater Taree (1,887 people) and Tweed Heads (1,596 people).

The correlation analysis revealed an association at the SLA level with many of the indicators of socioeconomic disadvantage, the strongest being with the variable for low income families (0.71). Correlations of meaningful significance were recorded with the variables for unemployed people (0.57) and early school leavers (0.53). Inverse correlations of meaningful significance were recorded with the variables for female labour force participation (-0.60) and high income families (-0.56). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.67), indicate an association at the SLA level between high proportions of disability support pensioners and socioeconomic disadvantage.

Map 4.4

Disability support pensioners*, New South Wales, 1996

as a percentage of males aged 15 to 64 years and females aged 15 to 59 years in each Statistical Local Area

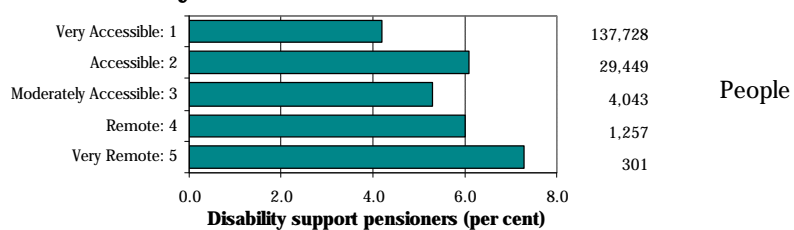


*Includes the Disability Support Pension paid by the Department of Family and Community Services and the Service Pension (Permanently Incapacitated) paid by the Department of Veterans' Affairs

Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The Very Remote and Accessible categories have the highest proportions of disability support pensioners, of 7.3 and 6.1 per cent, respectively. Proportions in the other categories range from 4.2 per cent in the Very Accessible category to 6.0 per cent in the Remote category.

Source: Calculated on ARIA classification, DHAC National Social Health Atlas Project, 1999

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9 Summary: The variables highlighted in table 9.1 have been amended: references to these variables in the text have also been changed but have not been highlighted.

Introduction

This chapter presents details of the major changes noted in the data between this and the first edition, as well as some summary measures of the health differentials calculated from the health status and health service utilisation data mapped in Chapters 5 and 6.

Changes in data rates between editions

The reference period for the data in the first and this second edition varies according to the dataset. In general, the Census data in this edition are ten years on from the first edition (Chapter 3: 1986 Census and 1996 Census); and the income support (Chapter 4: 1989 and 1996) and health status (Chapter 5: 1985-89 and 1992-95) datasets are seven years later. The data for hospital admissions (see *Differences in data treatment between editions*, Chapter 6) and services and facilities are not discussed in this chapter because of difficulties in comparing the available series over time.

Readers should note that some variables are not discussed below because the data were available only for the latest period.

Changes in socioeconomic status variables

Marked variations were recorded between 1986 and 1996 for a majority of the socioeconomic status variables mapped for Australia (Table 9.1). For the capital cities, the largest increases were for the population of Aboriginal and Torres Strait Islander people (an increase of 79.0 per cent over this ten year period); the occupational grouping of managers and administrators, and professionals (42.2 per cent); low income families (41.1 per cent);

single parent families (39.5 per cent); people born overseas in predominantly non-English speaking countries (an increase of 33.1 per cent for those resident for five years or more, of 26.1 per cent for those resident for less than five years, and of 24.5 per cent for those with poor proficiency in English); and people aged 65 years and over (27.0 per cent). The largest decreases recorded over this ten year period were for the variables for unemployment among 15 to 19 year olds (down by 14.7 per cent) and early school leavers (down by 13.3 per cent).

Variations of this order were also recorded in the non-metropolitan areas of Australia. The major differences from the changes noted for the capital cities were the larger increases in the number of single parent families and the population of people aged 65 years and over; smaller increases for Indigenous people, the occupations of managers and administrators and professionals, low income families and people born overseas in predominantly non-English speaking countries who have been resident for five years or more; and decreases for the remaining two variables for people born overseas in predominantly non-English speaking countries.

Changes over this period for the other major urban centres were relatively consistent with those recorded in the capital cities, although with much larger increases recorded for the population aged from 0 to 4 years, people aged 65 years and over, single parent families and people born in predominantly non-English speaking countries who had been resident for five years or more.

Table 9.1: Changes in demographic and socioeconomic status variables, by Section of Australia
Per cent change

Variable	Capital cities	Other major urban centres	Rest of Australia	Australia
1986 to 1996				
0 to 4 year olds	8.6	21.5	1.0	6.4
65 years & over	27.0	57.0	36.6	31.4
Single parent families	39.5	63.6	43.3	42.0
Low income families	41.1	44.5	30.2	36.7
Unemployed people	21.4	24.0	7.0	16.4
Unemployed people aged 15 to 19 years	-14.7	-15.9	-26.1	-19.0
Female labour force participation (20 to 54 years)	8.4	16.9	12.4	10.0
Early school leavers	-13.3	-7.1	-5.0	-10.1
Unskilled & semi-skilled workers	-12.4	-6.8	-4.8	-9.7
Managers & administrators, & professionals	42.2	61.3	9.0	31.8
Aboriginal & Torres Strait Islander people	79.0	80.4	44.4	55.1
People ¹ born overseas & resident for less than 5 years	26.1	59.9	-13.0	23.8
People ¹ born overseas & resident for 5 years or more	33.1	27.0	11.8	30.3
People ¹ born overseas: speaks English not well/not at all	24.5	11.4	-15.2	21.5
Housing authority rented dwellings	20.3	31.7	10.7	18.4
Dwellings without a motor vehicle	10.5	25.9	23.6	14.3
1989 to 1996				
Age pensioners	0.6	20.5	1.3	2.4
Disability support pensioners	56.5	76.1	49.6	55.1
Female sole parent pensioners	42.7	66.9	35.9	42.4
Unemployment beneficiaries	142.9	127.7	85.5	118.5
Dependent children of selected pensioners & beneficiaries	75.3	99.3	50.1	66.7

¹Includes people who were born in a predominantly non-English speaking country.

Substantial variations were recorded in income support payments to residents of the capital cities for all of the payment types analysed, other than the Age Pension, for which there was a small increase (an increase of 0.6 per cent). The number of recipients for each of the other payment types increased substantially, with the number of unemployment beneficiaries more than doubling (an increase of 142.9 per cent) (Table 9.1). Similar, although smaller increases were recorded in the non-metropolitan areas of Australia for all of these income support payments other than the Age Pension, for which there was a larger increase (1.3 per cent). The increases in the other major urban centres were more in line with those recorded for the capital cities than with those in the non-metropolitan areas.

Changes in health status variables

As noted in Chapter 5 (see *Background*), death rates in Australia have declined for the majority of causes, with lower rates for all of the major causes of death mapped in the atlas: percentage

changes between the two periods (from 1985 to 1989 and 1992 to 1995) are shown in Table 9.2.

In the capital cities, the largest decreases were recorded for the infant death rate (down by 29.5 per cent); and for deaths of people aged from 15 to 64 years from circulatory system diseases (down by 37.7 per cent), respiratory system diseases (down by 30.9 per cent), lung cancer (down by 24.3 per cent) and accidents, poisonings and violence (down by 22.9 per cent). All causes mortality was 22.6 per cent lower over this period, marginally more so for males than for females. There were reductions in the rates for every category in Table 9.2 for the other major urban centres.

There were also reductions in premature death rates in the non-metropolitan areas for all major causes of death. However the reductions were all lower than those recorded for the capital cities, at around two thirds (65.4 per cent) for all cause mortality.

Table 9.2: Changes in selected health status variables, by Section of Australia
Per cent change¹ 1985-89 to 1992-95

Variable	Capital cities	Other major urban centres	Rest of Australia	Australia
Infant deaths	-33.0	-31.9	-26.9	-29.5
Deaths of 15 to 64 year olds				
Males	-26.8	-21.3	-18.0	-23.8
Females	-24.1	-14.0	-14.1	-20.5
Persons, by cause				
Circulatory system diseases	-42.1	-33.5	-29.1	-37.7
All cancers (malignant neoplasms)	-19.2	-7.5	-4.0	-14.2
Lung cancer	-24.3	-18.7	-17.5	-22.1
Respiratory system diseases	-35.3	-28.2	-23.2	-30.9
Accidents, poisonings & violence	-24.1	-17.4	-22.1	-22.9
Other causes	-3.9	-3.7	-5.6	-4.7
All causes	-25.7	-18.4	-16.8	-22.6

¹'Per cent change' represents the difference (between the reference periods) in death rates: for infants, it is the infant death rate (infant deaths per 1,000 live births); and for deaths of 15 to 64 year olds, it is the rate per 100,000 population produced by indirect age (or age-sex) standardisation

Summary of findings by socioeconomic status of area of residence

Background

In order to summarise the extent of health inequalities shown in the maps in the earlier chapters, the health status and health service utilisation data are presented in chart form on the following pages. The data have been re-cast to show the average rate (or standardised ratio or percentage) by socioeconomic status of the Statistical Local Area (SLA) of address in the records studied. To do this, each SLA in the major urban centres was allocated to one of five categories (quintiles) based on its Index of Relative Socio-Economic Disadvantage (IRSD) score (this index is described on page 17). Quintile 1 comprises the twenty per cent of SLAs in these major urban centres with the highest IRSD scores, and Quintile 5 comprises the twenty per cent of SLAs with the lowest IRSD scores. The average rate (or standardised ratio or percentage) was then calculated for each of the five quintiles. For example, the average infant death rate was calculated for the most advantaged SLAs (Quintile 1), for the most disadvantaged SLAs (Quintile 5) and for each of the intervening quintiles (Quintiles 2 to 4). These rates were then graphed, with the rate, standardised ratio or percentage for the

first quintile set to 1 in order to highlight variations from the rates recorded in the most advantaged areas (Figure 9.2). This exercise was repeated for SLAs in the non-metropolitan areas of Australia.

As noted in Chapter 3, the ABS has calculated the IRSD so that low scores indicate greatest disadvantage. This is the reverse of the way in which other data in the atlas has been calculated, where higher rates, standardised ratios etc. indicate poorest health, highest utilisation of health services and greatest disadvantage. In order to present the graph of the IRSD in a form that is visually consistent with the other graphs in this chapter (ie. with the bars increasing in size to the right, and above the base of 1), the scales on the chart in Figure 9.1 have been reversed.

Figure 9.1 shows that the average IRSD score in 1991 for Quintile 1 (comprising the most socioeconomically advantaged SLAs across the capital cities and other major urban centres) was 1105, decreasing for each quintile to a score of 933 in Quintile 5 (the most socioeconomically disadvantaged SLAs). The range of index scores for the non-metropolitan areas of Australia was from 1052 in Quintile 1 to 929 in Quintile 5.