Section 5

Socioeconomic status - current, and change over time

In this section ...

Graphs by socioeconomic status, with comparisons over time, where data are available

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Introduction

As described in detail in Section 2, different risk factors and determinants of health operate to varying extents across the life course. They include poor intra-uterine conditions, stress, violence and traumatic experiences, educational disadvantage, and inadequate living environments that fail to support healthy behaviours.^{103,104} Such factors are generally more prevalent in communities characterised by low levels of educational attainment, high levels of unemployment, substantial levels of racism and discrimination, interpersonal violence and social exclusion, and long-term poverty. These characteristics tend to be more common for many remote Aboriginal and Torres Strait Islander communities and other groups living in substantially socioeconomically disadvantaged areas.103,105

A person's socioeconomic position in society their socioeconomic status (SES) - is a strong predictor of health and risk of injury. It is well established that:

- the risk of adverse health outcomes increases with declining socioeconomic position;
- the relationship is widespread, and evident in many industrialised nations and during most periods of time;
- it is apparent for all age groups; and
- the strength of the association varies between groups, places, and over time.¹⁰⁶

With some exceptions, the lower a person's SES, the shorter his or her life expectancy and the more prone he or she is to a wide range of chronic diseases and conditions. The link between SES and health begins before birth and continues through life, but the strength of the relationship varies at different life stages. It is also likely that the health effects of SES through a person's life are cumulative.³⁵ However, there is much more to the link between SES and health than the effects of poverty and adversity. In fact, health improves with each step up the SES ladder. The greatest individual burdens are found among those who are poor and disadvantaged, but the largest population-wide effects are found in the middle SES groups.¹⁰⁷

There is a strong, but indirect, two-way association in which SES affects health and health affects SES.¹⁰⁸ The multiple components of SES, their impact on health, and the mechanisms and pathways by which this impact occurs are not fully understood. The main socioeconomic factors that are relevant to health (education, income, and wealth, employment status, and geographic area characteristics) also reinforce

While recognising the multiplicity of factors that contribute over the life course to chronic disease, risk factors and mortality, the role and the importance of any single factor for any particular outcome are likely to depend on time, place, life stage, history, and the social and cultural contexts. In contrast, social class, or socioeconomic position, has more pervasive effects across time and circumstances.¹¹⁰ For example, adverse socioeconomic position across the life course increases coronary heart disease (CHD) risk cumulatively.¹¹¹ Thus, strategies for the prevention of socioeconomic inequalities in CHD need to reduce these inequalities in early life as well as in adulthood.¹¹¹ Money, knowledge, beneficial social networks, power and prestige are all associated with socioeconomic status, and permit more educated, affluent people to protect themselves from adversities and to take positive action to prevent or ameliorate a wide range of risks to health.¹¹² These advantages allow such people to lead a healthful life, to identify and avoid many dangers, to be health literate, and therefore able to access the latest biomedical technologies, treatments and services and a range of other beneficial people, information, and resources.¹¹²

For those in the population without these advantages, health outcomes in terms of the prevalence of risk factors and chronic diseases are generally poorer, and, to the extent that they are also avoidable and systematic, they are inequitable.¹¹⁴ While health inequities persist across the population, they place considerable financial pressure as a result of increased health care and other costs on the sustainability of the Australian health care system.¹¹³

each other. One or more of these socioeconomic factors can be used to define socioeconomic groups within the population.

Mechanisms for the association of socioeconomic status with health

There are multiple and complex pathways by which SES determines health. A comprehensive analysis includes macroeconomic contexts and social factors as well as more immediate social environments, individual psychological and behavioural factors, and biological and genetic predispositions and processes.¹⁰⁹ Some factors that can lead to SES effects on health include:

- differential access to high-quality health care;
- individual behaviours, such as smoking and other substance use; poor nutrition; stress and depression;

- environmental factors, such as pollution and overcrowding; and
- aspects of social environments, including families, work, neighbourhoods, kinship and cultural groups, and regional communities.¹⁰⁹

Access to high-quality health care explains only part of the association between SES and health. Health-risky behaviours play a significant role in health outcomes, but are also the result of the interaction of individual characteristics and psychosocial processes with environmental constraints and opportunities.¹¹² Other factors contributing to the association between SES and health include the long-term impacts of prenatal and early childhood factors, the cumulative biologic effects of prolonged exposures to individual stressful events, reactions to societal factors such as rising levels of income inequality or unemployment, and discrimination.¹⁰⁴⁻¹⁰⁶ However, the mechanisms behind these associations are still being determined, and further research is needed to enhance our understanding of the pathways by which socioeconomic factors affect the health of individuals and their communities.35,107

Describing differences in socioeconomic status

A useful way to highlight differences in socioeconomic status between groups in the population for a particular indicator is to present the data by the socioeconomic status of the person to which the indicator relates.

The charts are of particular relevance to those seeking to implement policy to address inequalities in society, in that they frequently show that what change that has occurred has been most successful in reducing rates (of smoking, or premature death, etc.) in the most advantaged populations, with often limited success among the most disadvantaged; populations in the middle quintiles generally fare less well as the extent of socioeconomic disadvantage increases.

In the absence of information as to the socioeconomic status of individuals, as elsewhere in the atlas we have used the socioeconomic status of the SLA of the individual's address. SLAs in the major urban centres (the capital cities and other major urban centres were combined for this analysis) were first ranked by their 2006 IRSD score, and then allocated to one of five groups (quintiles), each with approximately 20% of the population. The data for each indicator were then allocated at the SLA level to the quintile into which the SLA fell, and rates were calculated for each quintile. This exercise was repeated for the non-metropolitan areas. The groupings are graphed and referred to as 'quintiles of socioeconomic disadvantage of area'.

Quintile data for the variables, for which estimates were produced by the modelled estimate method, were not compiled from the modelled data, but were provided by the ABS, directly from the original data.

A selection of the indicators presented in maps, above, is repeated in this way. Where data are available, the graphs are shown for both the current period and an earlier period, highlighting both absolute change, and relative change over time.

In the charts below, data for the major urban centres include the capital cities and other major urban centres with populations of 100,000 or more at the 2006 Census, of Newcastle, Wollongong, Geelong, Gold Coast and Townsville-Thuringowa.

Jobless families with children

Children living in jobless families are most highly concentrated in the most disadvantaged areas, although they are evident in all quintiles, and their numbers as a proportion of all children increase steadily with increasing socioeconomic disadvantage, a clear illustration of the social gradient (Figure 31).

Further, although there has been a decline in the absolute level of children living in jobless families in both the urban centres and the non-metropolitan areas, the gap in proportions between those living in the most disadvantaged areas and the least disadvantaged areas has widened over this ten-year period: this is evidenced in the increasing rate ratios noted in the charts below.

This increasing concentration is of concern as, in areas with high proportions of disadvantaged populations, people have lower incomes, and education, health, welfare and leisure facilities, and transport and other services are frequently not as well resourced.¹³⁰



Figure 31: Children under 15 years of age living in jobless families, by socioeconomic status, 2001 and 2011

Over a five-year period, the workforce in long-term unemployment increased in both the major urban centres and the non-metropolitan areas. In addition, whilst decreasing marginally over the period, the gap in proportions between those living in the most disadvantaged to the least disadvantaged in 2011 was 4.11 in the major urban centres and 2.60 in the non-metropolitan areas (Figure 32).



Figure 32: Long-term unemployment, by socioeconomic status, 2006 and 2011



Children at greatest risk of long-term disadvantage

Children living in low income, welfare-dependent families are also more highly concentrated in the most disadvantaged areas, as well as being in increasing proportions in each quintile, as disadvantage increases (Figure 33). Furthermore, despite a reduction in the proportion of children living in these circumstances, both overall and in each quintile, the relative differential between those living in the most disadvantaged compared with the least disadvantaged areas has increased markedly in recent years. The patterns across the quintiles in the major urban centres and the non-metropolitan areas are similar, although the differentials in the major urban centres are twice those in the non-metropolitan areas.





There is also an increase across the quintiles in the proportion of children in families where the mother has low educational attainment, with the highest proportions in the non-metropolitan areas and the largest differential across the quintiles in the major urban centres (Figure 34). However, as noted above (pages 68 and 70), there has been a marked decrease in the overall proportion of the population in this group, down from 30.6% in 2006 to 23.5% in 2011. This is an important development, given the association between a parent's education and the education, health and wellbeing outcomes of their children.^{130,131}





The data in Figure 35, however, show that there remains a substantial disparity across the population of children who are developmentally vulnerable on one or more of the five domains of the AEDI. As in the earlier charts, the proportions change in a step-wise fashion, increasing with each increase in disadvantage: although this pattern is less evident in non-metropolitan areas, proportions in each quintile are higher than in the major urban centres. These results have important implications for children's development, health, wellbeing and readiness to learn.

Figure 35: The Australian Early Development Index (AEDI) – children 'developmentally vulnerable on one or more domains', by socioeconomic status, 2009





As noted earlier (page 74), maternal smoking during pregnancy carries a higher risk of adverse outcomes for the baby, before and after delivery. Although there have been some improvements in the overall rate over the short period shown in the charts in Figure 36, no progress has been made among pregnant women in the most disadvantaged areas in either the major urban centres or in the non-metropolitan areas.





* Excludes data for Victoria and Queensland



People affected by homelessness

The distribution of homeless people across the major urban centres is somewhat different to that seen for many indicators (Figure 37). Although the rate increases with increasing socioeconomic disadvantage, the highest rate is in areas in Quintile 3, which typically include inner city areas, and a mix of middle and outer areas. In the non-metropolitan areas, where the overall rate is higher than in the major urban centres, rates are lower in the first four quintiles, increasing to around twice the rate in Quintile 5.

Figure 37: Estimated homeless people, by socioeconomic status, 2006





The distribution of public rental housing remains an important indicator of socioeconomic disadvantage. Public housing tenants are increasingly welfare-dependent (especially single parents; those unemployed, aged or with a disability; and Aboriginal and Torres Strait Islander peoples), and public housing stocks have declined substantially since 1986¹, as the following chart shows (Figure 38). In the major urban centres, the decline in the number of these dwellings as a proportion of all dwellings has been most notable in Quintiles 3 and 4. The decline in non-metropolitan areas has been much more substantial, and is evident across all quintiles.



Figure 38: Dwellings rented from the government housing authority, by socioeconomic status, 1986 and 2011

People living with disability or mental illness, and their carers

People who have a profound or severe disability (and live in the community, and not in long-term residential accommodation), and who are not employed, are among the most severely disadvantaged in society: their proportion in the population increases consistently with increasing socioeconomic disadvantage of area, with an overall higher rate in the most disadvantaged areas, compared with the least disadvantaged areas. Rates for this population group increased between 2006 and 2011, and the differentials in rates increased; in 2011 the rate ratio in the major urban centres was 3.73 and in the non-metropolitan areas it was 2.30 (Figure 39).

¹ However, as noted on page 88, there was a large increase between 2006 and 2011 in the number of dwellings rented from Territory Housing in the non-metropolitan areas of Northern Territory.

Figure 39: People aged 15 to 59 years and living in the community who have a profound or severe disability and are not employed, by socioeconomic status, 2006 and 2011





The estimated prevalence of high or very high psychological distress (as indicated by the K–10) is also substantially higher in the most disadvantaged areas, being just over twice as high in the major urban centres (a rate ratio of 2.04) and two and a half times higher in the non-metropolitan areas (Figure 40).

Figure 40: People aged 18 years and over with high/ very high psychological distress, by socioeconomic status, 2007-08





* The most remote areas of Australia are excluded from these modelled estimates

Aboriginal and Torres Strait Islander Australians

Estimates derived by the ABS from the 2011 Census population counts show the Indigenous population in the major urban centres to be most highly clustered in the two most disadvantaged quintiles (Quintiles 4 and 5) and that their proportion of the population has doubled, or near-doubled, in each quintile since 1986 (Figure 41). Aboriginal and Torres Strait Islander peoples make up a substantially higher proportion of the population in the non-metropolitan areas (than in the major urban centres) in both periods, with by far the highest proportions in the most disadvantaged areas (Quintile 5). Again, the proportions have increased in all quintiles, with the largest increases in the first four quintiles.

Figure 41: Indigenous population, by socioeconomic status, 1986 and 2011





The participation in full-time secondary education of Aboriginal and Torres Strait Islander people aged 16 years in the major urban centres declined by 26% from the highest to the lowest socioeconomic status areas in 2011, a much smaller decline than that of 50% found for 1986 (Figure 42). Participation rates were substantially higher than in 1986 in all areas other than those in Quintile 1, where the increase was somewhat smaller. In the non-metropolitan areas, participation in 2011 was 21% lower in the lowest socioeconomic status areas. Rates were, again, substantially higher in each quintile in 2011 than in 1986, unlike the metropolitan areas, and the gap in participation in full-time secondary education at this age had also narrowed.

Figure 42: Indigenous participation in full-time secondary education at age 16, by socioeconomic status, 1986 and 2011



The gap in median age at death between the Indigenous and non-Indigenous populations in the major urban centres varies from 18 years in Quintile 1 (highest SES areas) to 25 years in Quintile 3, with a gap of 24 years in Quintile 5 (lowest SES areas) (Figure 43). Further, Aboriginal and Torres Strait Islander people living in the most disadvantaged areas had a median age at death some 14% lower than in the least disadvantaged areas of Australia's major cities. In the non-metropolitan areas, the gap between the Indigenous and non-Indigenous median age at death ranged from 22 years in Quintile 3 to 27 years in Quintile 2; however, the median age at death varies less across the quintiles, from 52 years in Quintile 2 to 57 years in Quintile 3.

Figure 43: Median age at death, by Indigenous status and socioeconomic status, 2003 to 2007*





Excludes data for Victoria, Tasmania and the Australian Capital Territory as Indigenous deaths data are not considered to be reliable for these jurisdictions

Indicators of health status, risk factors, outcomes and use of services

There is a marked socioeconomic gradient in the prevalence of circulatory system diseases in the major urban centres, with around 43% more people in the most disadvantaged areas reporting that they had been told by a doctor or nurse that they had these diseases when compared with the least disadvantaged areas (Figure 44). In the non-metropolitan areas, rates increase from 10.7% in Quintile 1 to 16.4% in Quintile 4 (53% higher than in Quintile 1), before dropping in Quintile 5 (the second highest rate, and 19% above that in Quintile 1).





* The most remote areas of Australia are excluded from these modelled estimates

In the major urban centres, type 2 diabetes rates increase in a step-wise fashion, with the lowest rates in the least disadvantaged areas, higher rates (just under 4%) in the middle quintiles and a rate in the most disadvantaged areas over three times that in the least disadvantaged areas (Figure 45). The differential in rates between the most and the least disadvantaged areas in the rest of Australia is 89%.

Figure 45: Estimated population with type 2 diabetes, by socioeconomic status, 2007-08





Rest of state

Rest of state

Lowest SES

5th

RR = 2.55

3rd

4th

2nd

* The most remote areas of Australia are excluded from these modelled estimates

Smoking rates among males aged 18 years and over in the major urban centres increase steadily with increasing socioeconomic disadvantage, with the rate in the most disadvantaged areas over twice that in the least disadvantage areas (a rate ratio of 2.38) (Figure 46). The pattern in the non-metropolitan areas is somewhat different, with the lowest rates in the least disadvantaged areas, higher rates in the middle quintiles, and a rate in the most disadvantaged areas just over two and a half times that in the least disadvantaged areas.





* The most remote areas of Australia are excluded from these modelled estimates

In the major urban centres, female smoking rates follow a similar pattern to that seen for males, with a slightly smaller differential in the rate in the most disadvantaged areas and the least disadvantaged areas, a rate ratio of 2.23 (Figure 47). The highest female smoking rate in the non-metropolitan areas is in Quintile 4 (26.5%, two and a half times the rate in the most advantaged areas).

Figure 47: Estimated female population who were current smokers, 18 years and over, by socioeconomic status, 2007-08^{*}





Quintile of socioeconomic disadvantage of area

* The most remote areas of Australia are excluded from these modelled estimates

Male obesity rates in the major urban centres are highest in the most disadvantaged areas (55% higher than the lowest rates, in the least disadvantaged areas), with rates between these extremes in the middle quintiles (Figure 48). In the non-metropolitan areas, rates increase to the highest rate in Quintile 4 (20.7%, over one third (34.4%) higher than in Quintile 1), with a slightly lower rate reported for Quintile 5 (18.8%).



Figure 48: Estimated male population who were obese, 18 years and over,

* The most remote areas of Australia are excluded from these modelled estimates

Quintile of socioeconomic disadvantage of area

Although overall rates in the major urban centres are lower for females than for males, the differential in obesity rates for females is larger, with rates in Quintile 4 and 5 around twice those in Quintile 1 (Figure 49). In the non-metropolitan areas, rates follow a similar pattern to those for males, with the highest rate in Quintile 3, a rate of 15.9% (30% above that in Quintile 1).

Figure 49: Estimated female population who were obese, 18 years and over, by socioeconomic status, 2007-08[°]





* The most remote areas of Australia are excluded from these modelled estimates

Participation in the National Bowel Cancer Screening Program (following an invitation to participate) declined steadily with increasing socioeconomic disadvantage in the major urban centres, with the participation rate in the most disadvantaged areas 13% lower than in the most advantaged areas (Figure 50). Rates vary little across the quintiles of socioeconomic disadvantage in non-metropolitan areas, with participation in the least advantaged areas only 6% below that in the most advantaged areas.







There is a clear social gradient in rates of positive test results in the major urban centres, and a substantial differential, of 33%, in rates between the most disadvantaged and the least disadvantaged areas (Figure 51). In the non-metropolitan areas, the social gradient is not as strong, and the differential in rates between the most disadvantaged areas (12%) is smaller.

Note, again, that the data contained within this report only represent participation within the National Bowel Cancer Screening Program implemented by the Australian Government in partnership with State and Territory governments, and not in other bowel cancer screening programs. This is likely to have influenced the socioeconomic patterns evident for participation in testing, and for positive test results, published here. Additional information is provided on page 127 and in Appendix A, page 205.

Figure 51: National Bowel Cancer Screening Program, positive test results, participants aged 50, 55 or 65 years, by socioeconomic status, 2010





Deaths before 75 years of age accounted for just over 40% of deaths of males of all ages, and just over one quarter of deaths of females over this period.¹⁰⁰ The absolute level of premature mortality rates (for deaths from all causes) in the major urban centres is over one third lower in the later period, but with a higher differential (55%) between the most and least disadvantaged areas than in the earlier period (47%) (Figure 52). In the non-metropolitan areas, premature mortality rates are higher than in the major urban centres in each quintile; rates have declined over this period by over one third in all but the two most disadvantaged quintiles, where the declines were still marked, at 27.7% in Quintile 5 and 30.4% in Quintile 4, and the differential in rates between the most and least disadvantaged areas has declined.



Figure 52: Premature mortality: deaths from all causes at ages 0 to 74 years, by socioeconomic status, 1987 to 1991 and 2003 to 2007

Death rates before 75 years of age from suicide and self-inflicted injury varied by 51% between the most disadvantaged and least disadvantaged areas of the major urban centres over the five years 1987-91 (Figure 53). By 2003-07, the overall rate of deaths from these causes was lower, and the differential was smaller (42%). In the non-metropolitan areas, premature mortality rates were higher than in the major urban centres in each quintile, have shown smaller declines over this period, and have increased in the most disadvantaged areas, relative to the least disadvantaged areas, leading to an increase in the differential in rates from 33% to 58%.

Figure 53: Premature mortality: deaths from suicide and self-inflicted injury at ages 0 to 74 years, by socioeconomic status, 1987 to 1991 and 2003 to 2007



