

Young people learning or earning

Post-compulsory education and training participation builds the stock of skills in the economy and is an important determinant of future individual and state/national economic and social wellbeing ⁽⁶⁾. Young people who fail to engage in school, employment or further education and training run a significant risk of school failure, unemployment, risky health behaviours and mental health problems, social exclusion, and socioeconomic disadvantage over the longer term.

Indicator definition: People aged 15 to 19 years who are fully engaged in school, work or further education/training.

Key points

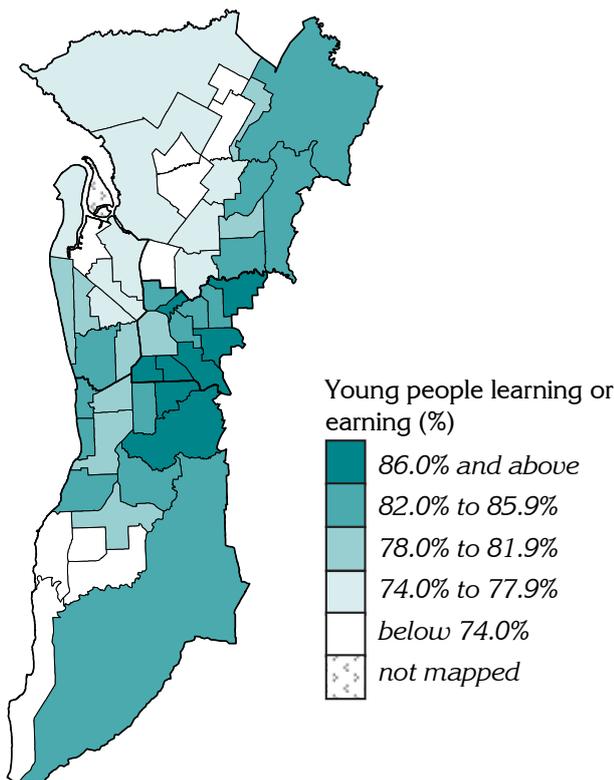
- Young people who live in high socioeconomic areas are more likely to be learning or earning than are those in the most disadvantaged areas.
- The proportion of the population aged 15 to 19 years and learning or earning is particularly low in the most remote areas of the State, including in areas with relatively large Aboriginal populations.

Geographic variation

Adelaide

The distribution of young people aged 15 to 19 years who were learning or earning provides a striking example of the divide between high and low socioeconomic status areas in Adelaide (**Map 69**). In August 2006, young people from the SLAs of Burnside - North-East and - South-West, Mitcham - North-East, Walkerville and Unley - West were those most likely to be engaged in school, work or further education/training; those least likely to be were living in Playford - Elizabeth and - West Central, Onkaparinga - North Coast and Salisbury - Inner North.

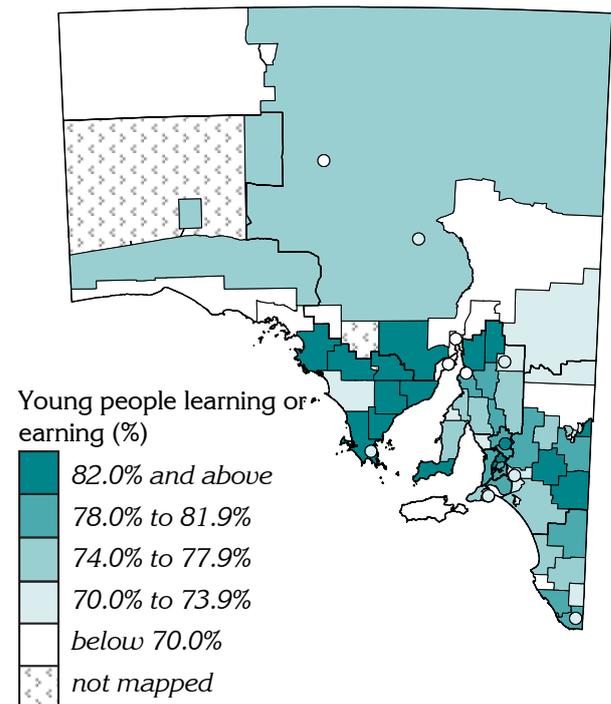
Map 69: Young people learning or earning, Adelaide, 2006



Country South Australia

In country South Australia, SLAs with the highest levels of young people learning or earning were mainly on Eyre Peninsula, in the Murray Mallee and in SLAs in close proximity to metropolitan Adelaide (**Map 70**). Low rates were found in all of the larger towns, other than Tanunda (with a rate of 83.3%), as well as across much of the far north and west, and in parts of the south east. Karoonda East Murray, Unincorporated Whyalla, Kimba, Southern Mallee, Le Hunte and Cleve all had percentages above 90%; and Anangu Pitjantjatjara, Coober Pedy, Unincorporated Riverland, Unincorporated Flinders Ranges, Robe and Port Augusta had percentages below 65%.

Map 70: Young people learning or earning, South Australia, 2006



Regional totals

The majority of regions had near-average rates of participation by young people in work or study with the exception of the low rate in Far North (59.9%) and the above average rates in Adelaide Hills (82.4%) and Eastern Adelaide (85.6%).

Table 32: Young people learning or earning, by State Region, 2006

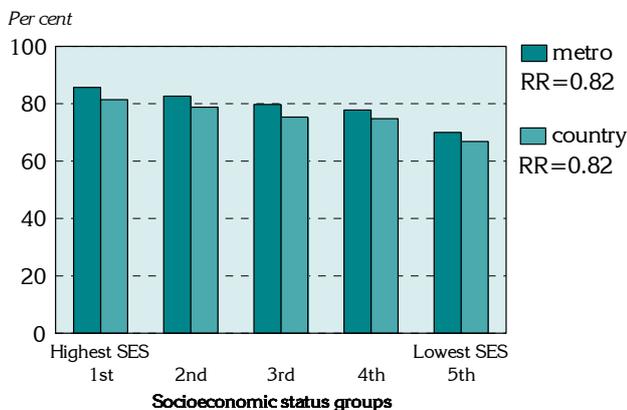
Region	No.	%
Northern Adelaide	17,653	75.6
Western Adelaide	9,572	79.0
Eastern Adelaide	11,538	85.6
Southern Adelaide	17,941	80.0
Metropolitan regions	56,704	79.4
Adelaide Hills	4,028	82.4
Murray and Mallee	3,143	75.5
Fleurieu and Kangaroo Island	1,695	73.8
Limestone Coast	3,033	76.0
Barossa	3,354	77.6
Yorke and Mid North	3,191	76.0
Eyre and Western [#]	2,627	72.8
Far North [#]	1,030	59.9
Country SA	22,102	75.7
South Australia	78,809	78.4

[#] See 'Notes on the data' in the Appendix

Socioeconomic status

A clear socioeconomic gradient is apparent in rates of young people learning or earning in metropolitan Adelaide, with the rates decreasing with increasing disadvantage (**Figure 58**). The range in rates was from 85.7% in the most advantaged (highest SES) areas to 70.0% in the most disadvantaged (lowest SES) areas, a differential of 18% (a rate ratio of 0.82). The largest decline is between the lowest socioeconomic status groups.

Figure 58: Young people learning or earning, by socioeconomic status, South Australia, 2006



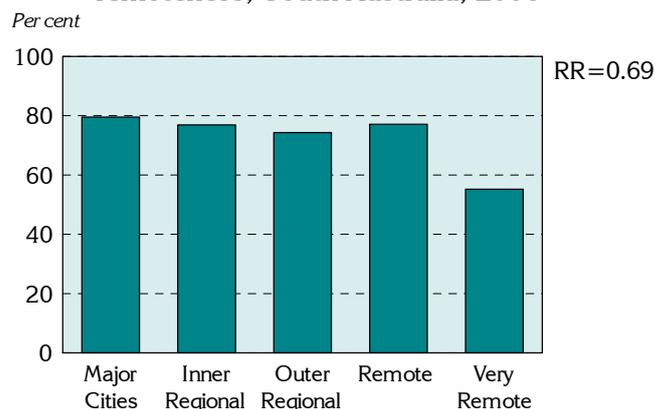
Although the overall level is a little lower, the pattern in country South Australia is the same, (**Figure 58**), with the proportion of the population aged 15 to 19 years and learning or earning

decreasing from 81.4% in the highest SES areas to 66.8% in the lowest SES areas. Again, the differential is 18%, and the largest decline is between the lowest socioeconomic status groups.

Remoteness

The percentage of young people learning or earning is similar across the first four remoteness classes, but declines markedly in the Very Remote areas (**Figure 59**). Rates vary from 79.5% in the Major Cities areas to 55.2% in the Very Remote areas, a differential of 31%.

Figure 59: Young people learning or earning, by remoteness, South Australia, 2006



Correlations

There are strong to very strong correlations at the SLA level in metropolitan Adelaide between areas with high proportions of the population aged 15 to 19 years who were learning or earning and participation in secondary school education at age 16 and in preschool, and access to a high speed Internet connection at home; and very strong inverse correlations with many of the indicators of socioeconomic disadvantage, including jobless families, high rates of welfare dependency, low rates of participation in formal schooling, lack of access to the Internet at home (in particular to a high-speed connection), children developmentally vulnerable on two or more domains under the AEDI, poor educational performance under NAPLAN and use of public health services (admissions to a public acute hospital and clients of CAMHS). Correlations with poor health outcomes (high proportions of four year old children who were obese, poor dental health at age 12 and smoking during pregnancy) and substantiations of notifications of child abuse or neglect are inverse and very strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Internet access at home for children and young people

The socioeconomic characteristics of households continue to influence the rate of computer and Internet connectivity across Australia. Households that are located in non-metropolitan or regional areas of Australia and/or have lower household incomes are less likely to have a computer and/or the Internet ⁽⁷⁾. These socioeconomic factors also influence the rate of broadband access, in addition to technical issues regarding service availability in certain locations.

Indicator definition: Private dwellings with at least one person under 16 years of age with no Internet connection.

Key points

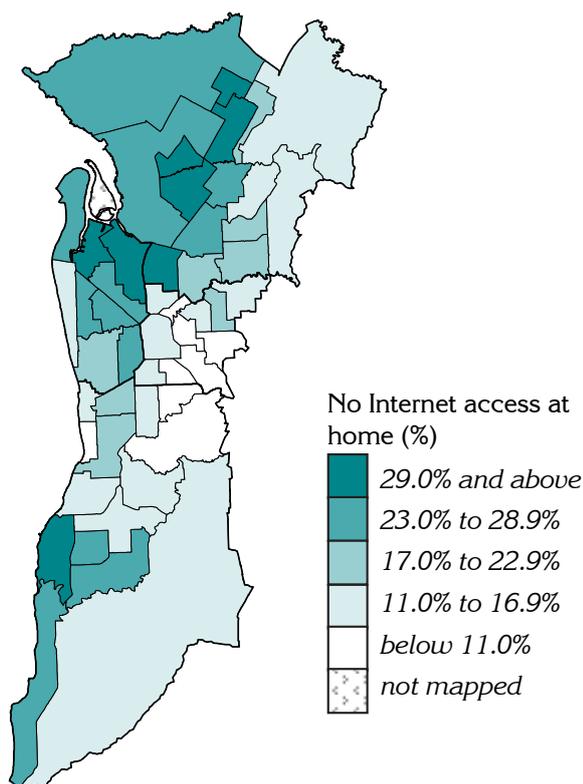
- Almost one quarter (22.7%) of dwellings in South Australia with children and young people below 16 years of age had no Internet connection.
- The distribution of the population without an Internet connection has strong associations with the pattern of socioeconomic disadvantage across the State.

Geographic variation

Adelaide

The majority of dwellings with children and young people where there was no access to the Internet were located in the north-western and outer northern suburbs, and in the south, along the coast (Map 71). More than 40% of dwellings with children and young people in Playford - Elizabeth and - West Central and Port Adelaide Enfield - Park had no access to the Internet at home. In contrast, fewer than 10% of these dwellings in Walkerville, Burnside - North-East and - South-West, Mitcham - North-East and Unley - East had no Internet access.

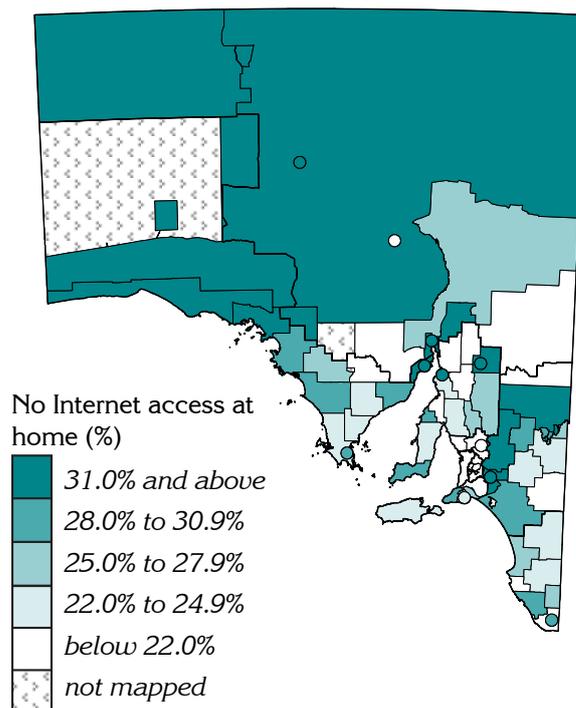
Map 71: No Internet access at home for children and young people, Adelaide, 2006



Country South Australia

In country South Australia, there were high percentages of children and young people with no Internet access at home in the north and west of the State, around the Riverland and also in a number of the major towns (Map 72). By far the lowest rate of access was recorded in Anangu Pitjantjatjara, with very low access rates also in Unincorporated West Coast, Unincorporated Riverland, Peterborough, Port Augusta, Ceduna and Murray Bridge. Those living in Adelaide Hills - Central, Adelaide Hills - Ranges, Roxby Downs, Robe and Adelaide Hills Balance had the highest rate of access (lowest percentage).

Map 72: No Internet access at home for children and young people, South Australia, 2006



Regional totals

At the regional level, there is substantial variation in access to the Internet, ranging from 12.7% in Eastern Adelaide to almost three times that level in Far North, with 35.3% (Table 33). Even with these large geographic areas, the variation within metropolitan Adelaide shows a more than doubling of rates, from 12.7% in Eastern Adelaide to 26.5% in Northern Adelaide (with a slightly smaller differential with Western Adelaide).

Table 33: No Internet access at home for children and young people, by State Region, 2006

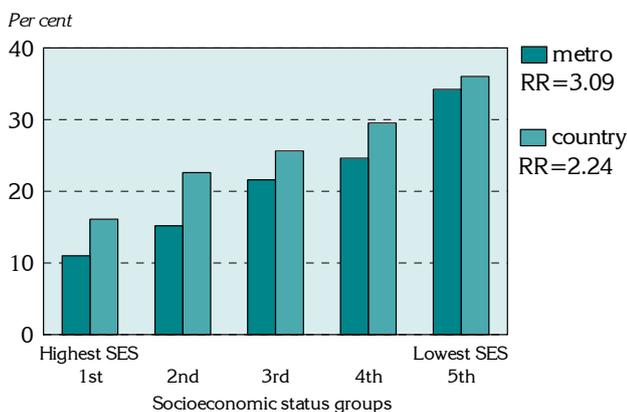
Region	No.	%
Northern Adelaide	10,654	26.5
Western Adelaide	5,025	24.9
Eastern Adelaide	2,342	12.7
Southern Adelaide	6,379	18.2
Metropolitan regions	24,400	21.4
Adelaide Hills	1,144	14.4
Murray and Mallee	2,288	30.4
Fleurieu and Kangaroo Island	955	23.9
Limestone Coast	1,910	25.9
Barossa	1,555	21.6
Yorke and Mid North	2,080	27.7
Eyre and Western [#]	2,009	30.7
Far North [#]	1,115	35.3
Country SA	13,056	25.5
South Australia	37,456	22.7

[#] See 'Notes on the data' in the Appendix

Socioeconomic status

In metropolitan Adelaide, there is a clear socioeconomic gradient in rates of access at home to the Internet, for children and young people (Figure 60). The most disadvantaged (lowest SES areas (34.2%)) had three times more dwellings with no Internet connection than the most advantaged (highest SES) areas (11.0%).

Figure 60: No Internet access at home for children and young people, by socioeconomic status, South Australia, 2006

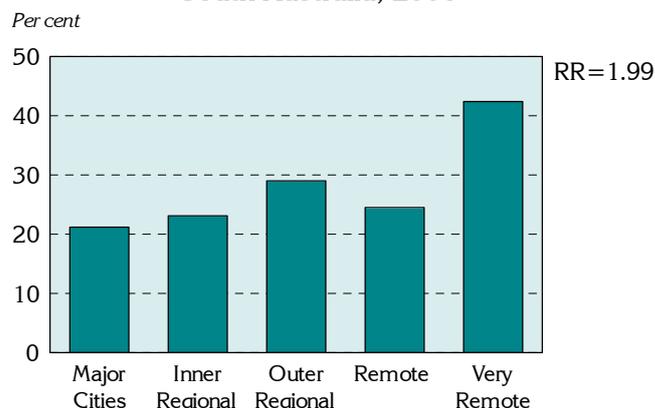


Although not as strong as the gradient recorded in the metropolitan area, the proportion of dwellings with no Internet connection increased from 16.1% in the highest SES areas to 36.0% in the lowest SES areas (Figure 60).

Remoteness

The Very Remote areas had the highest proportion of children and young people without Internet access at home, almost twice the level in the Major Cities area (with percentage of 42.4% and 21.2%, respectively) (Figure 61). The second highest level was 29.0%, in the Outer Regional areas.

Figure 61: No Internet access at home for children and young people, by remoteness, South Australia, 2006



Correlations

There are very strong correlations at the SLA level in metropolitan Adelaide between areas with high rates of dwellings with children and young people with no Internet access and many of the indicators of socioeconomic disadvantage, including jobless families, high rates of welfare dependency, low rates of participation in formal schooling, children developmentally vulnerable on two or more domains under the AEDI, poor educational performance under NAPLAN and in secondary school, and use of public health services (admissions to a public acute hospital and clients of CAMHS). Correlations with poor health outcomes (high proportions of four year old children who were obese, poor dental health at age 12 and smoking during pregnancy) are strong to very strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Admissions to hospital of children and young people

Hospital admission for infants, children and young people is usually an uncommon occurrence and most health practitioners aim to keep young patients out of hospital.

Indicator definition: Admissions at ages 0 to 24 years to public acute and private hospitals in South Australia.

Key points

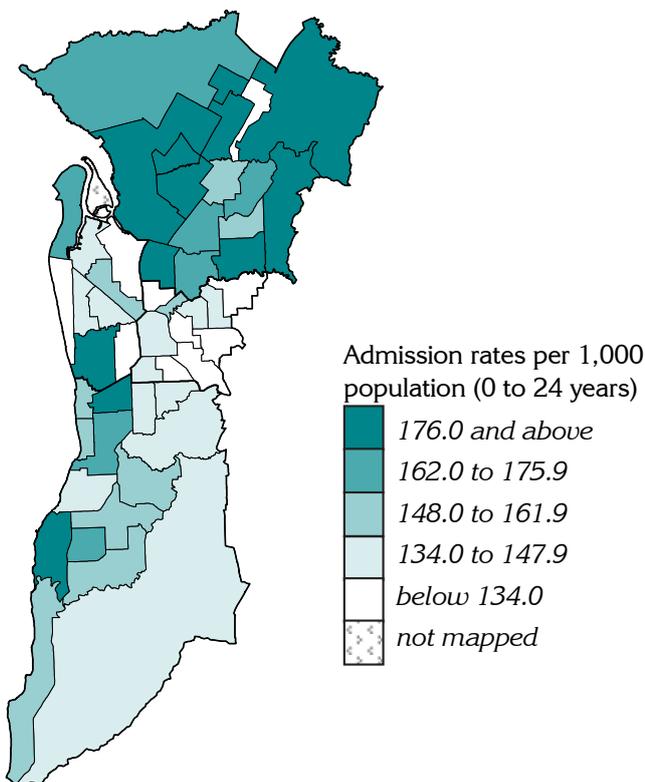
- Variations in rates of admission to hospital of children and young people are strongly associated with socioeconomic status.
- Admission rates in country South Australia are notably higher than in metropolitan Adelaide.

Geographic variation

Adelaide

The highest hospital admission rates for children and young people aged 0 to 24 years were largely recorded in suburbs to the north and north-east of the city centre, with high rates also in some western and outer southern SLAs (**Map 73**). These areas include Playford - Elizabeth, - Hills and - West Central; Tea Tree Gully - Hills and - South; Port Adelaide Enfield - Inner; and Salisbury Balance, Onkaparinga - North Coast, West Torrens - West and Marion - North. The lowest rates were recorded in the inner city areas of Prospect, Unley - East, Burnside - North-East and - South-West, Campbelltown - East and Norwood Payneham St Peters - West.

Map 73: Hospital admissions for children and young people, Adelaide, 2006/07

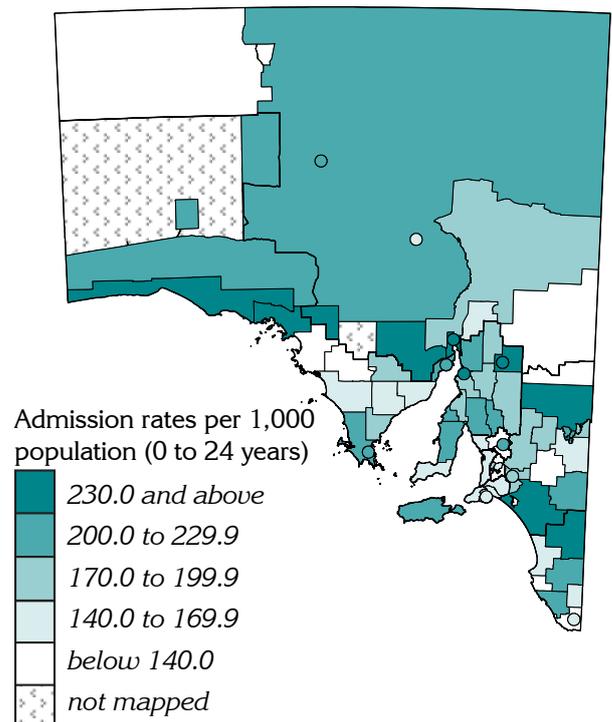


Country South Australia

There is no notable pattern in the distribution of children and young people admitted to hospital for residents of country South Australia, other than the higher rates in the towns around the northern tip of Spencer Gulf and the generally lower rates in SLAs closer to metropolitan Adelaide and in some areas in the far north (**Map 74**). It is widely accepted that rates are higher in country areas, in part due to the limited availability of other health services. The mixture of low and high rates in areas with relatively large Aboriginal populations partly reflects differential access to hospital services.

The highest rates were recorded in the northern and western SLAs of Unincorporated West Coast, Unincorporated Whyalla, Port Augusta, Ceduna and Peterborough; in Unincorporated Riverland; and in the south-east of the State in Tatiara and The Coorong. The lowest rates were recorded in Grant, Mount Barker Balance, Streaky Bay, Unincorporated Pirie, Robe, Barossa - Barossa and Light.

Map 74: Hospital admissions for children and young people, South Australia, 2006/07



Regional totals

Admission rates were considerably higher in country South Australia (182.7) than in metropolitan Adelaide (156.9 per 1,000 population) (**Table 34**). The lowest rates were recorded in Eastern Adelaide and Western Adelaide, and in Adelaide Hills, and Fleurieu and Kangaroo Island, with markedly higher rates (above 200 per 1,000 population) in Far North, Eyre and Western, and Yorke and Mid North.

Table 34: Hospital admissions for children and young people, by State Region, 2006/07

Region	No.	Rate*
Northern Adelaide	21,515	177.4
Western Adelaide	9,139	144.8
Eastern Adelaide	8,594	129.6
Southern Adelaide	16,831	157.7
Metropolitan regions	56,079	156.9
Adelaide Hills	3,381	152.5
Murray and Mallee	3,996	188.8
Fleurieu and Kangaroo Island	1,668	154.7
Limestone Coast	3,893	184.7
Barossa	3,134	156.1
Yorke and Mid North	4,259	207.2
Eyre and Western [#]	3,968	209.5
Far North [#]	2,135	214.9
Country SA	26,434	182.7
South Australia	82,513	164.3

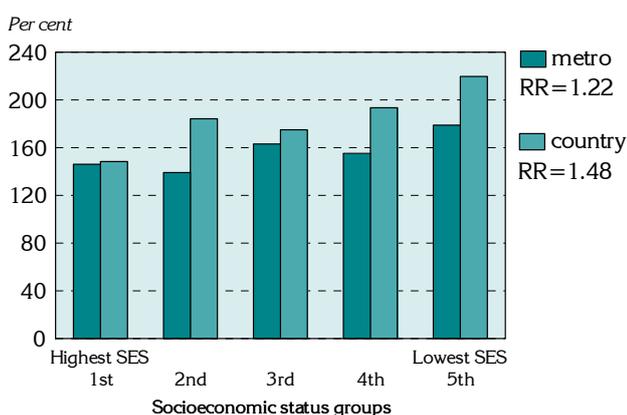
* Rate is the number of hospital admissions for children and young people aged 0 to 24 years per 1,000 population at that age

[#] See 'Notes on the data' in the Appendix

Socioeconomic status

The rate of hospitalisation among the population aged 0 to 24 years increases, although not consistently, with increasing socioeconomic disadvantage (**Figure 62**). In metropolitan Adelaide, the rates ranged from 146.1 per 1,000 in the most advantaged areas (highest SES) to 178.9 in the most disadvantaged areas (lowest SES).

Figure 62: Hospital admissions for children and young people, by socioeconomic status, South Australia, 2006/07

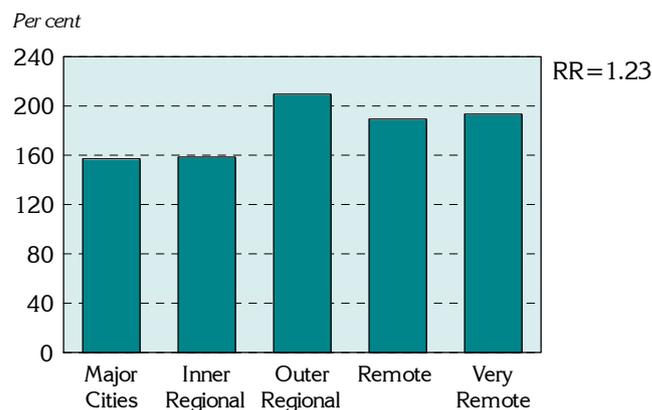


In country South Australia, the rates in each socioeconomic group, and the differential in rates between the lowest and highest SES areas, were greater than in metropolitan Adelaide. Overall, there were 48 per cent more children and young people admitted to hospital in the lowest SES areas (219.7 per 1,000) than in the highest SES areas (148.4) (**Figure 62**).

Remoteness

The highest rates of hospital admission were recorded in the Outer Regional areas (209.5 per 1,000), with similar rates in the Very Remote (193.4) and Remote (189.4) areas (**Figure 63**). The Major Cities (157.1) and Inner Regional (158.5) remoteness classes had the lowest rates of children and young people admitted to hospital. This distribution is, in part, explained by the commentary to the map for country South Australia, above.

Figure 63: Hospital admissions for children and young people, by remoteness, South Australia, 2006/07



Correlations

There are strong correlations at the SLA level in metropolitan Adelaide between areas with high rates of admission to hospital of children and young people and many of the indicators of socioeconomic disadvantage, including jobless families, high rates of welfare dependency, low rates of participation in formal schooling, children developmentally vulnerable on two or more domains under the AEDI, poor educational performance under NAPLAN and in secondary school, and clients of CAMHS. Correlations with poor dental health at age 12 and smoking during pregnancy are strong. When limited to admissions to public acute hospitals, the correlations become substantially stronger.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Child and Adolescent Mental Health Service clients

The Child and Adolescent Mental Health Service (CAMHS) is a state-wide service for infants, children and young people with emotional, behavioural or mental health problems, and their families. Services are provided by child and family specialists including psychologists, psychiatrists, social workers, nurses, occupational therapists and speech pathologists. CAMHS staff also offer prevention, early intervention and mental health promotion activities.

Indicator definition: Clients aged 0 to 19 years who attended a government-funded Child and Adolescent Mental Health Service, as a proportion of the population of the same age.

Key points

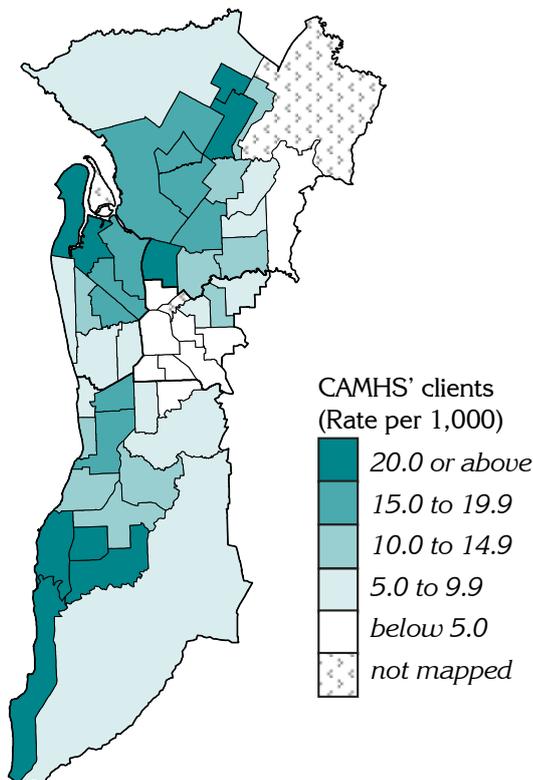
- The rate of CAMHS' clients living in country South Australia (a rate of 28.9 per 1,000) is more than twice the level of those living in the metropolitan Adelaide (13.3 per 1,000).
- Although influenced by the location of the services, variations in take-up of CAMHS' services reflect the need for this important public health service.

Geographic variation

Adelaide

CAMHS' clients living in metropolitan Adelaide came mainly from SLAs located in the inner north, north-west, outer north and outer south suburbs (**Map 75**). These areas included Playford - West Central and - Elizabeth; Port Adelaide Enfield - Port, - Inner and - Coast; and Onkaparinga - North Coast, - Hackham and - Morphett. In contrast, there were very few clients from Burnside - North-East and - South-West, Adelaide, Norwood,

Map 75: Child and Adolescent Mental Health Service clients, Adelaide, 2007/08

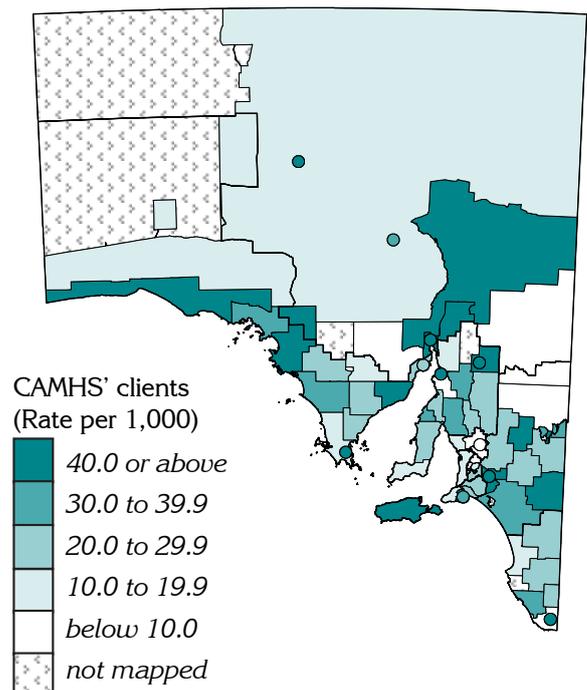


Unley - East and - West, Prospect, Mitcham North-East and Tea Tree Gully - Hills.

Country South Australia

As there are substantially higher rates in country SLAs, the legend for this map (**Map 76**) is different to that of the map for metropolitan Adelaide. Some of the highest rates were recorded in the towns of Streaky Bay and Flinders Ranges, and the towns of Port Pirie, Port Lincoln, Peterborough, Coober Pedy, Mt Gambier and Murray Bridge. Children and adolescents living in Grant; Barossa - Barossa and -Tanunda; Port Pirie City Districts Balance; and Adelaide Hills - Ranges and - North had the lowest rates.

Map 76: Child and Adolescent Mental Health Service clients, South Australia, 2007/08



Regional totals

The rate of CAMHS' clients in country South Australia is more than twice that in metropolitan Adelaide (Table 35). All country regions, other than Barossa - Barossa with a rate of 12.5 per 1,000 population, had higher rates than the South Australian average, ranging from 21.3 per 1,000 in Adelaide Hills to 39.1 in Far North. A substantially lower rate was recorded in Eastern Adelaide, with only 4.9 CAMHS' clients per 1,000 population, well below the levels in the other regions in Adelaide.

Table 35: Child and Adolescent Mental Health Service clients, by State Region, 2007/08

Region	No.	Rate*
Northern Adelaide	1,545	15.4
Western Adelaide	685	14.8
Eastern Adelaide	222	4.9
Southern Adelaide	1,208	14.5
Metropolitan regions	3,569	13.3
Adelaide Hills	415	21.3
Murray and Mallee	677	36.5
Fleurieu and Kangaroo Island	280	28.2
Limestone Coast	541	30.5
Barossa	224	12.5
Yorke and Mid North	641	33.5
Eyre and Western [#]	570	35.8
Far North [#]	298	39.1
Country SA	3,646	28.9
South Australia	7,215	18.3

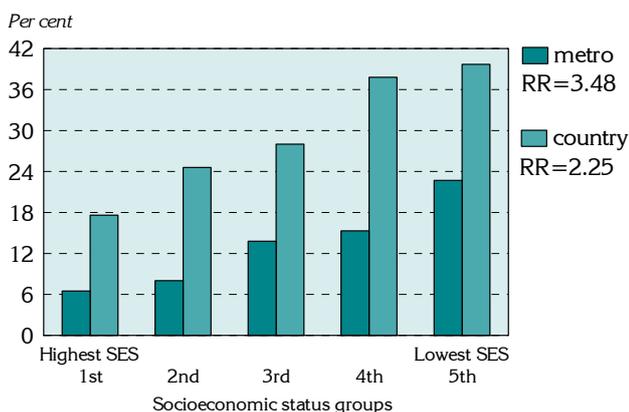
* Rate is the number of CAMHS' clients aged 0 to 19 years per 1,000 population at that age

[#] See 'Notes on the data' in the Appendix

Socioeconomic status

The rate of CAMHS' clients in metropolitan Adelaide increases substantially with increasing socioeconomic disadvantage, from a rate of 6.5 per 1,000 in the most advantaged (highest SES) areas to 22.7 in the most disadvantaged (lowest SES) areas, a rate ratio of 3.48 (Figure 64).

Figure 64: Child and Adolescent Mental Health Service clients, by socioeconomic status, South Australia, 2007/08

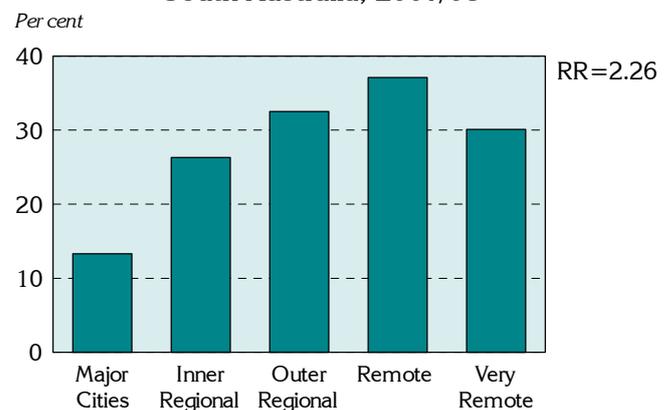


There are substantially more clients per head of population in country South Australia than in metropolitan Adelaide in each of the socioeconomic status groups. However, the differential in rates between the highest SES areas (a rate of 17.6 per 1,000) and lowest SES areas (39.7 per 1,000) is less marked (a rate ratio of 2.25).

Remoteness

Just over half (51.3%) of the clients of the Child and Adolescent Mental Health Service live in the Major Cities remoteness class, compared to 70.8% of the population aged 0 to 19 years, resulting in the lowest rates. The highest rates were recorded for those children and adolescents living in the Remote (a rate of 37.1 per 1,000 population) and Outer Regional (32.5 per 1,000) remoteness areas (Figure 65).

Figure 65: Child and Adolescent Mental Health Service clients, by remoteness, South Australia, 2007/08



Correlations

There are very strong correlations at the SLA level in metropolitan Adelaide between areas with high rates of clients of CAMHS and many of the indicators of socioeconomic disadvantage, including jobless families, high rates of welfare dependency, low rates of participation in formal schooling, children developmentally vulnerable on two or more domains under the AEDI, poor educational performance under NAPLAN and in secondary school, and admission to hospital of children and young people. Correlations with poor health outcomes (high proportions of four year old children who were obese, poor dental health at age 12 and smoking during pregnancy) are strong to very strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Active parental involvement with school activities

Parent involvement with activities in their children's school has been described as a form of cultural capital, and an important means to support better learning outcomes for children⁽⁸⁾. Parents may be involved in school governance and decision-making (i.e., parents participate in formal school structures); in teaching and learning activities in the school and at home (e.g., parents volunteer in the classroom, help with sports coaching or organisation and discuss school-related issues with children); and in communications between home and school⁽⁹⁾. Such involvement is strongly influenced by family socioeconomic status; and also by the cultural and ethnic backgrounds of parents and their proficiency in English^(10, 11).

Indicator definition: people with school aged children who reported being involved with activities in their child's or children's school(s). These data were not available for all SLAs, so only limited geographical analysis was possible.

Key points

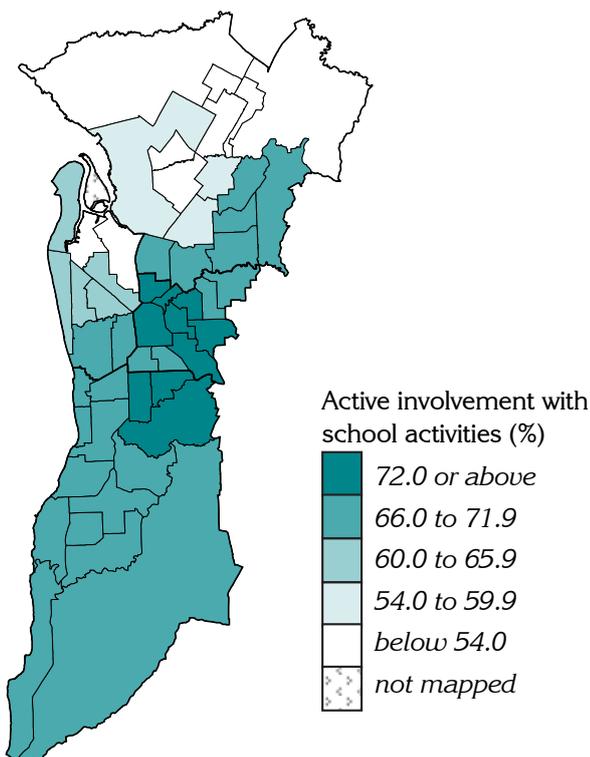
- The proportion of the population with school-aged children who were involved in school activities was slightly higher in metropolitan Adelaide (64.8%) than in country South Australia (60.5%).
- People in lower socioeconomic areas in the north-west and outer north were less likely to be involved in school activities than those in other parts of Adelaide, in particular areas of high socioeconomic status.

Geographic variation

Adelaide

The geographic distribution of parents of school-aged children, who were actively involved in school activities, is somewhat unusual. On the one hand, it shows a clear and strong association with socioeconomic status, with the highest rates of participation in the city and in adjacent SLAs to the north, east and south-east (**Map 77**).

Map 77: Active parental involvement with school activities, Adelaide, 2006



On the other hand, there is a high level of involvement across all of the south-western and outer southern SLAs, including those of low socioeconomic status.

More than 80% of parents with school-aged children were actively involved in school activities in the higher SES areas of Adelaide, Burnside, Prospect and Walkerville, and Mitcham.

Fewer than 50% of parents reported being actively involved in Salisbury - Central and - Inner North, Playford - West and - West Central, and Port Adelaide Enfield - Port.

Country South Australia

The highest level of involvement in school activities in country South Australia was recorded on the Eyre Peninsula, with the lowest rates in Murray and Mallee and Southern and Hills (**Table 36**).

Table 36: Active parental involvement with school activities, country South Australia, 2006

Area#	%
Central	59.1
Eyre Peninsula	74.7
Gawler	64.1
Murray and Mallee	52.9
South East	59.0
Southern and Hills	55.2

See Glossary

Regional totals

Parent involvement in school activities was slightly higher in metropolitan Adelaide (64.8%) than in country South Australia (60.5%).

In metropolitan Adelaide, participation rates ranged from 55.6% in Northern Adelaide to 76.7% in Eastern Adelaide (Table 37).

Table 37: Active parental involvement with school activities, by State Region, South Australia, 2006

Region	%
Northern Adelaide	55.6
Western Adelaide	62.6
Eastern Adelaide	76.7
Southern Adelaide	71.1
Metropolitan regions	64.8
Country SA	60.5
South Australia	63.7

Correlations

There are strong correlations at the SLA level in metropolitan Adelaide between areas with high proportions of the population who reported being actively involved with activities in their children's school with participation in preschool and secondary school, and access to a high speed Internet connection at home; and strong to very strong inverse correlations with many of the indicators of socioeconomic disadvantage, including jobless families, high rates of welfare dependency, low rates of participation in formal schooling, lack of access to the Internet at home (in particular to a high-speed connection), children developmentally vulnerable on two or more domains under the AEDI, poor educational performance under NAPLAN and use of public health services (admissions to a public acute hospital and clients of CAMHS). Correlations with poor health outcomes (high proportions of four year old children who were obese, poor dental health at age 12 and smoking during pregnancy) are inverse and strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Young women at risk of a poor pregnancy outcome

Late fetal and neonatal death rates are often used to identify geographic areas of increased perinatal risk, but these deaths are now too infrequent to provide reliable risk estimations for small population groups. In 1986, data from perinatal deaths was supplemented with additional risk factor assessments to gain a broader basis for inferring risk by area ⁽¹²⁾. Factors found to correlate with adverse perinatal outcomes in South Australia include low birthweight, low gestational age at birth, birth defects, Aboriginal births, pregnancies among teenagers and women in their late thirties and older, single mothers, three or more prior live births, a prior perinatal death, and limited antenatal care. These factors help to explain the differences in perinatal risk by area. A variety of obstetric and other clinical conditions also contribute ⁽¹²⁾.

Indicator definition: The results of seventeen perinatal risk factors (see notes in Appendix) were calculated separately for women aged 15 to 24 years; SLAs with nine or more individual risk factors with a poor outcome relative to the state-wide score (e.g., percentage of low birthweight babies higher than the South Australian average; fewer than the average number of antenatal visits), were given a 'high risk' score.

Key points

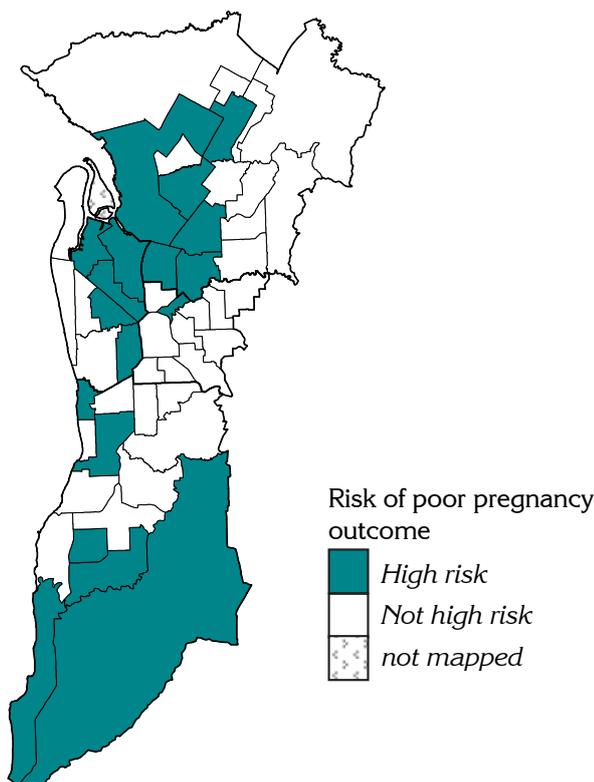
- There is a strong association at the SLA level in metropolitan Adelaide between the risk of a poor pregnancy outcome and socioeconomic disadvantage.

Geographic variation

Adelaide

Metropolitan SLAs where young pregnant women were considered to be at a high risk for an adverse perinatal outcome were located in three clusters, with the largest cluster extending from areas immediately to the west and north of the city to the outer northern suburbs; two smaller clusters occurred in the middle and outer south (**Map 78**).

Map 78: Risk of poor pregnancy outcome, Adelaide, 2003 to 2005

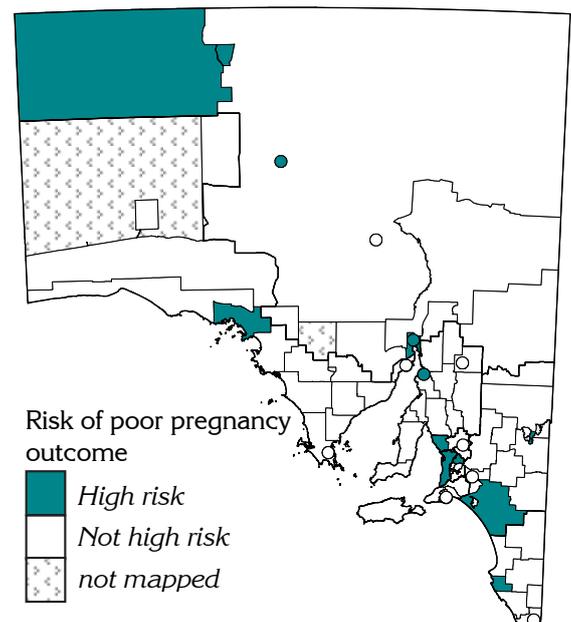


Areas where women were not considered at a high risk for an adverse perinatal outcome include those areas of higher socioeconomic status, as well as some of relatively low socioeconomic status, using the IRSD (see **Map 25**).

Country South Australia

Pregnant women aged 15 to 24 years in the majority of SLAs in country South Australia were not considered to be at a high risk for adverse perinatal outcomes: this may, in part, reflect the smaller number of births in these areas imposing a limit on the value of the analysis.

Map 79: Risk of poor pregnancy outcome, South Australia, 2003 to 2005



SLAs where pregnant women were considered to be at a high risk an adverse perinatal outcome included Ceduna, Port Pirie, Port Augusta, Anangu Pitjantjatjara and Coober Pedy in the more remote parts of the State, and as well as Mallala, Adelaide Hills - North, Berri, The Coorong and Robe.

Regional totals

At the regional level in the metropolitan area, young pregnant women living in the Northern Adelaide and Western Adelaide regions were considered to be at a high risk of a poor pregnancy outcome; and in country South Australia, regions where women were considered to be at a high risk included Murray and Mallee, Yorke and Mid North, and Far North (Table 38).

Table 38: Risk of poor pregnancy outcome, by State Region, 2003 to 2005

Region	Risk
Northern Adelaide	High risk
Western Adelaide	High risk
Eastern Adelaide	Not high risk
Southern Adelaide	Not high risk
Metropolitan regions	High risk
Adelaide Hills	Not high risk
Murray and Mallee	High risk
Fleurieu and Kangaroo Island	Not high risk
Limestone Coast	Not high risk
Barossa	Not high risk
Yorke and Mid North	High risk
Eyre and Western [#]	Not high risk
Far North [#]	High risk
Country SA	Not high risk
South Australia	..

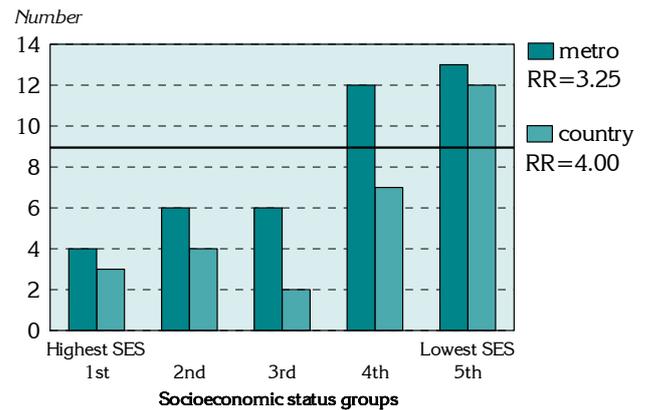
[#] See 'Notes on the data' in the Appendix

Socioeconomic status

Figure 66 shows the number of individual perinatal risk factors that were above the State average in each socioeconomic status group. In metropolitan Adelaide, the number of risk factors indicating a poorer outcome of pregnancy than the state-wide average increases with socioeconomic disadvantage, ranging from four in the most advantaged (highest SES) areas to 13 in the most disadvantaged (lowest SES) areas.

In country South Australia, the number of risk factors indicating poorer outcomes is four times higher in the lowest SES areas (12) compared to the highest SES areas (three). The step-wise gradient is broken by a much lower figure in the middle socioeconomic status group.

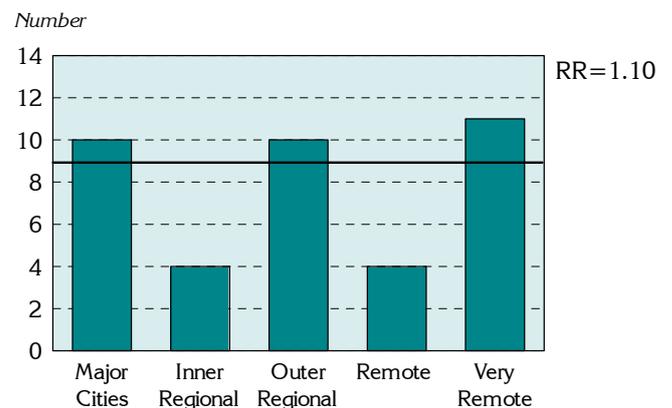
Figure 66: Risk of poor pregnancy outcome, by socioeconomic status, South Australia, 2003 to 2005



Remoteness

The number of perinatal risk factors with elevated scores was substantially below the state-wide average of nine risk factors in the Inner Regional and Remote areas (both with four), and above average in the other three remoteness classes. The highest number is in the Very Remote areas (13) (Figure 67).

Figure 67: Risk of poor pregnancy outcome, by remoteness, South Australia, 2003 to 2005



Correlations

There are moderate correlations at the SLA level in metropolitan Adelaide between areas where pregnant women were considered to be at a high risk of an adverse perinatal outcome and many of the indicators of socioeconomic disadvantage, including jobless families, high rates of welfare dependency, low rates of participation in formal schooling, lack of access at home to the Internet and clients of CAMHS. Correlations with poor health outcomes (high proportions of four year old boys who were obese and smoking during pregnancy) are also of moderate strength.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Smoking in pregnancy by young women

Maternal smoking during pregnancy results in higher risks of adverse outcomes for the baby before and after delivery, such as premature birth, miscarriage and perinatal death, poor intra-uterine growth and SIDS (Sudden Infant Death Syndrome). Other related problems include a higher risk of disability and developmental delay, decreased lung function and increased respiratory illness, which may affect children through to adulthood.

Indicator definition: Females aged 15 to 24 years who reported that they smoked during their pregnancy.

Key points

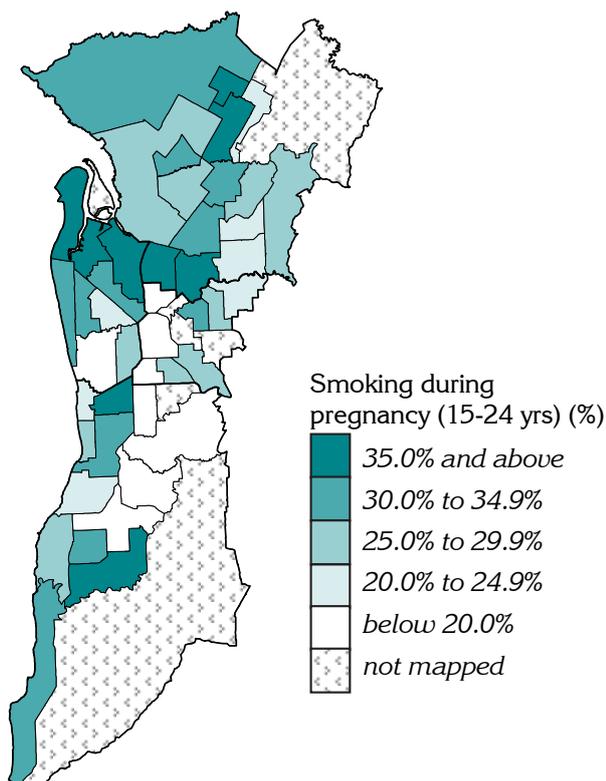
- Just over one third (34.4%) of young women reported smoking during their pregnancy, with a higher rate for Aboriginal women (64.9%) than for non-Aboriginal women (32.4%).
- There is substantial variation in rates when viewed by socioeconomic status, with rates of 37.9% in the areas of greatest socioeconomic disadvantage in metropolitan Adelaide, and 44.4% in country areas.

Geographic variation

Adelaide

The distribution of young women who smoked during pregnancy is strongly associated with socioeconomic disadvantage (**Map 80**). The SLAs of Playford - Elizabeth, - West Central and - West; Port Adelaide Enfield - Coast, - Port, - Inner and - East; Walkerville and Onkaparinga - Hackham, - Morphett and - South Coast had the highest rates. In areas with five or more cases, the lowest rates were recorded in Onkaparinga - Reservoir, West Torrens - West, Unley - West and Mitcham - Hills.

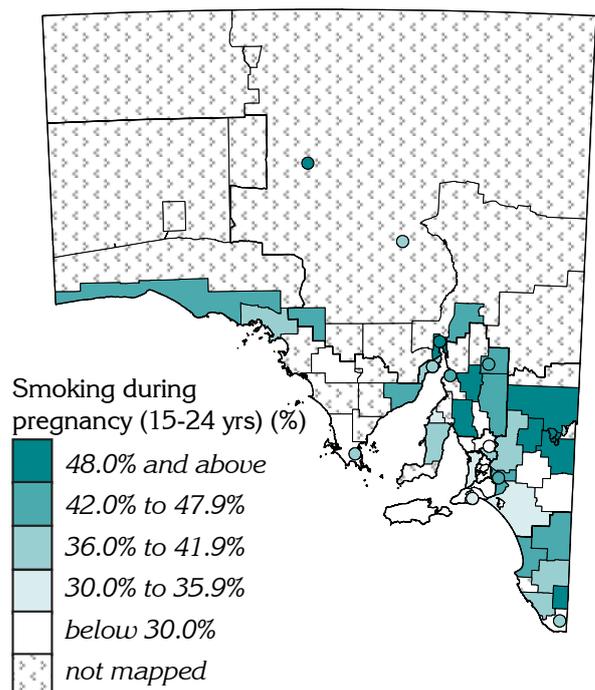
Map 80: Females aged 15 to 24 years who smoked during pregnancy, Adelaide, 2003 to 2005



Country South Australia

The highest rates of smoking during pregnancy by young women were found in country South Australia (note the higher ranges used in the legend in **Map 81**). They included Unincorporated Riverland, Northern Areas, Wakefield, Berri and Wattle Range - East: also in this highest range were Coober Pedy (with the highest rate in the State) and Port Augusta. The lowest rates, in areas where there were five or more cases, were recorded in Alexandrina - Strathalbyn, Grant, Adelaide Hills - Ranges, Mount Barker Balance and Southern Mallee. As can be seen by the number of areas 'greyed' out in the map, many areas had too few cases for analysis. See over for comment on smoking rates for Aboriginal women.

Map 81: Females 15 to 24 years who smoked during pregnancy, South Australia, 2003 to 2005



Regional totals

There is wide variation at the regional level in smoking rates among young pregnant women, ranging from a low of 23.2% in Eastern Adelaide to a high of 49.1% in Far North (Table 39). Relatively high percentages were also recorded in the regions of Murray and Mallee, and Yorke and Mid North.

Table 39: Females aged 15 to 24 years who smoked during pregnancy, by State Region, 2003 to 2005

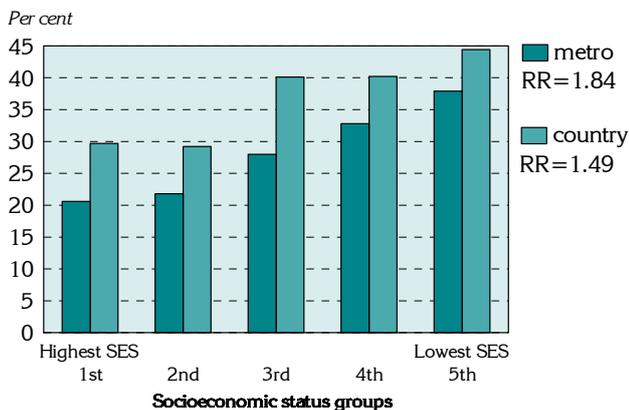
Region	No.	%
Northern Adelaide	1,256	34.8
Western Adelaide	371	32.1
Eastern Adelaide	105	23.2
Southern Adelaide	518	28.4
Metropolitan regions	2,250	32.0
Adelaide Hills	74	28.9
Murray and Mallee	311	42.7
Fleurieu and Kangaroo Island	63	27.3
Limestone Coast	236	38.4
Barossa	141	33.5
Yorke and Mid North	230	40.6
Eyre and Western [#]	270	38.5
Far North [#]	184	49.1
Country SA	1,509	38.7
South Australia	3,759	34.4

[#] See 'Notes on the data' in the Appendix

Socioeconomic status

In metropolitan Adelaide, there is a clear pattern of higher rates of smoking by young women during their pregnancy with increasing socioeconomic disadvantage (Figure 68). Rates in metropolitan Adelaide increased, from 20.6% in the most advantaged (highest SES) areas to 37.9% in the most disadvantaged (lowest SES) areas, a differential of 84%. Rates in each socioeconomic status group were below those in country South Australia.

Figure 68: Females aged 15 to 24 years who smoked during pregnancy, by socioeconomic status, South Australia, 2003 to 2005



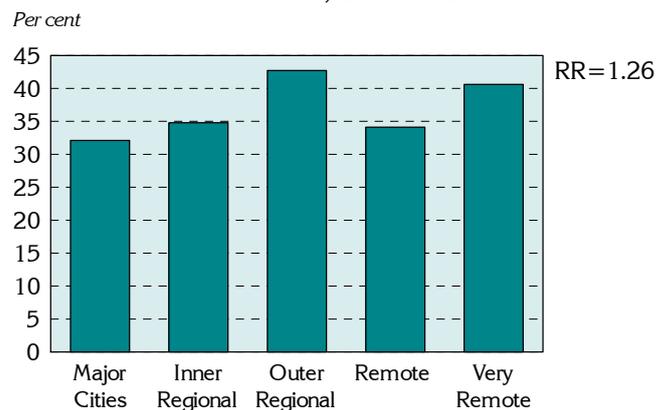
A clear gradient is also evident in rates in country South Australia. Although the differential in rates between the lowest and highest SES areas is smaller than in metropolitan Adelaide, this is a result of the substantially higher rate in the highest SES areas (Figure 68). There were 49% more women aged 15 to 19 years smoking during pregnancy in the lowest SES areas (44.4%) compared with those in the highest SES areas (29.7%).

Remoteness

The percentage of young women smoking during pregnancy was highest in the Outer Regional and Very Remote areas, with rates of 42.7% and 40.6% respectively (Figure 69). Rates were similar in the Inner Regional and Remote classes (just under 35%), with the lowest rate recorded in the Major Cities areas (32.1%).

These data, and those in the map, regional table and SES graph, are influenced by the higher rate of smoking among Aboriginal women.

Figure 69: Females aged 15 to 24 years who smoked during pregnancy, by remoteness, South Australia, 2003 to 2005



Correlations

There are very strong correlations at the SLA level in metropolitan Adelaide between areas with high rates of smoking by young women during their pregnancy and many of the indicators of socioeconomic disadvantage, including high rates of jobless families, welfare dependency, lack of access to the Internet at home and use of public health services (admissions to a public acute hospital and clients of CAMHS). The correlation with children developmentally vulnerable on two or more domains under the AEDI is strong; and those with poor health outcomes (high proportions of four year old children who were obese and poor dental health at age 12) are moderate to strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Overweight and obesity in four year old children

Overweight and obesity in childhood and adolescence can cause a range of physical and emotional health problems; and obesity increases the risk of chronic disease and premature death in adulthood.

Four year old children who are overweight

Indicator definition: four year old children assessed as being overweight (but not obese) on the basis of their measured height and weight: details of the distribution of children assessed as obese are also shown.

Key points

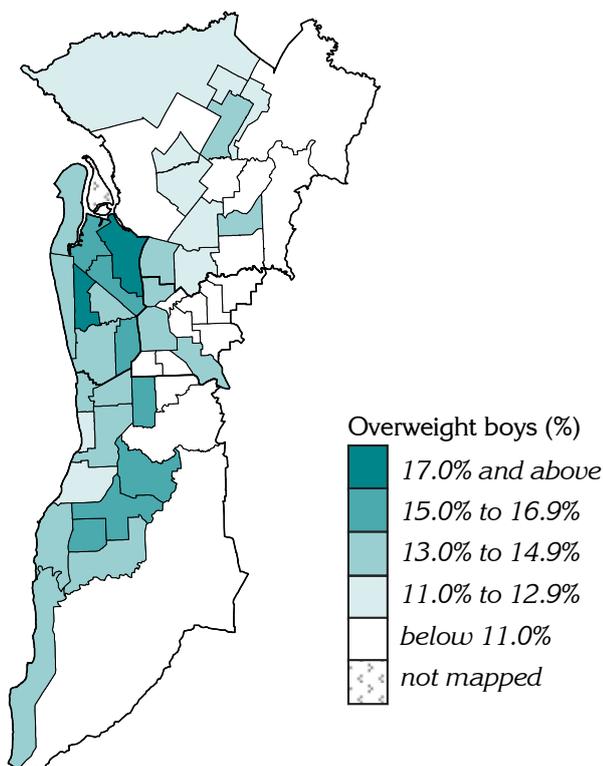
- There are more overweight girls (15.7% of girls) than boys (12.7%) at four years of age.
- Variations are evident across the State, with different geographic distributions evident for boys and girls; however, overall there are similar percentages of overweight four year old children in country and metropolitan areas.

Geographic variation

Adelaide

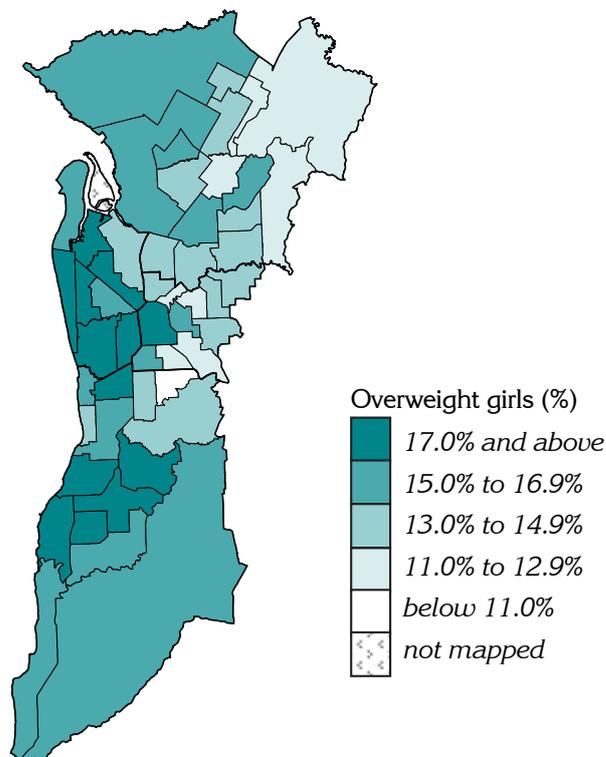
The distribution of overweight four year old boys is relatively even, with a majority of SLAs mapped in the middle and lowest ranges (**Map 82**). The highest rates were in SLAs in the north-west, in Charles Sturt - Inner West and Port Adelaide Enfield - Park. Of the many areas with very low rates, the lowest (with fewer than 9% of boys assessed as being overweight) were Norwood Payneham St Peters - East, Tea Tree Gully - North and Unley - East.

Map 82: Overweight four year old boys, Adelaide, 2004 to 2007



The distribution for girls differs somewhat, with more SLAs in the highest range in the north-west, west and the outer south, where the highest rates were found in the Onkaparinga SLAs of - Morphett, - Reservoir and - Woodcroft. Mitcham - North-East, Unley - East and Burnside - South-West had the lowest percentages (**Map 83**). Notably, no SLA in the outer north had high rates.

Map 83: Overweight four year old girls, Adelaide, 2004 to 2007

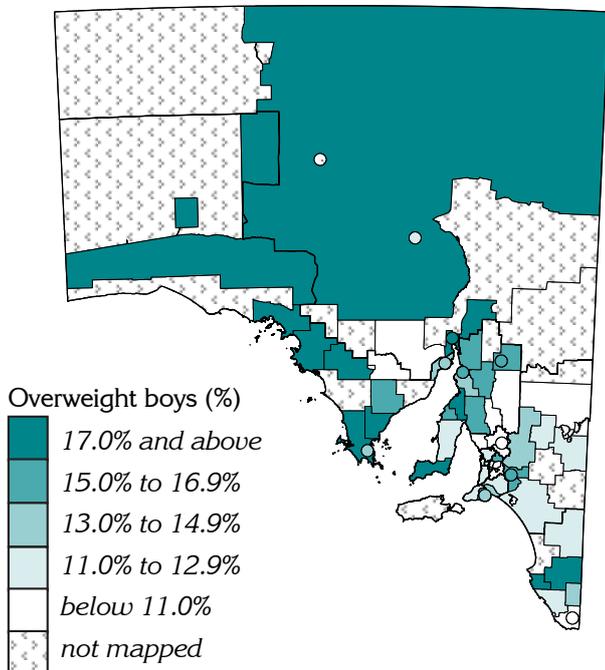


Country South Australia

Country areas with the highest rates of overweight four year old boys were widely spread, including in the SLAs of Barunga West, Unincorporated Far North, Le Hunte and Ceduna (**Map 84**).

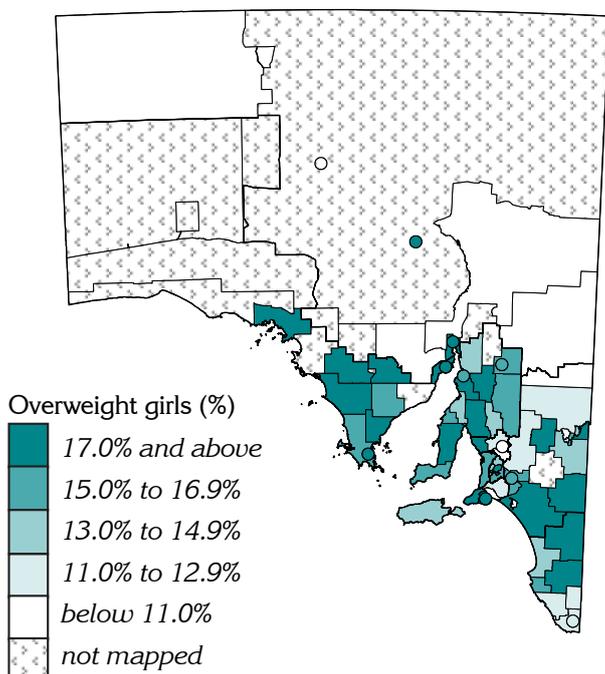
The lowest percentages were generally in SLAs located closer to Adelaide (in the Barossa - Barossa SLAs of - Tanunda and - Barossa), the mid north and the Riverland, including Berri and Barmera.

Map 84: Overweight four year old boys, South Australia, 2004 to 2007



The distribution of overweight girls is rather different to that for boys, with more SLAs mapped in the highest range, and more of the larger towns with above-average rates. The lowest percentages, in areas with ten or more overweight girls, were recorded in Barossa, Alexandrina - Coastal and Light (Map 85).

Map 85: Overweight four year old girls, South Australia, 2004 to 2007



High rates for overweight girls were recorded in a number of areas, including in several SLAs on Eyre Peninsula, in the Mid North and Yorke Peninsula, and the South East, as well as in some SLAs near Adelaide. Le Hunte, Ceduna and Northern Areas had the highest rates, followed by a number of the larger towns (Port Lincoln, Whyalla, Port Augusta, Roxby Downs and Victor Harbor).

Regional totals

The highest proportion of overweight children in metropolitan Adelaide for both boys (Table 40) and girls (Table 41) was in Western Adelaide, with rates of 15.2% and 17.5%, respectively.

In the country regions, the highest percentage for both boys and girls were recorded in Eyre and Western, Far North, and Yorke and Mid North.

Table 40: Overweight four year old boys, by State Region, 2004 to 2007

Region	No.	%
Northern Adelaide	678	11.4
Western Adelaide	373	15.2
Eastern Adelaide	222	10.1
Southern Adelaide	648	14.2
Metropolitan regions	1,920	12.7
Adelaide Hills	132	11.8
Murray and Mallee	159	11.9
Fleurieu and Kangaroo Island	52	12.1
Limestone Coast	164	11.6
Barossa	94	9.0
Yorke and Mid North	227	14.9
Eyre and Western*	180	15.2
Far North*	69	15.6
Country SA	1,076	12.7
South Australia	3,028	12.7

See 'Notes on the data' in the Appendix

Table 41: Overweight four year old girls, by State Region, 2004 to 2007

Region	No.	%
Northern Adelaide	811	14.5
Western Adelaide	413	17.5
Eastern Adelaide	282	13.6
Southern Adelaide	745	17.3
Metropolitan regions	2,251	15.7
Adelaide Hills	165	14.8
Murray and Mallee	208	15.2
Fleurieu and Kangaroo Island	58	13.9
Limestone Coast	204	14.2
Barossa	111	12.0
Yorke and Mid North	243	17.0
Eyre and Western*	225	20.0
Far North*	68	17.0
Country SA	1,282	15.6
South Australia	3,576	15.7

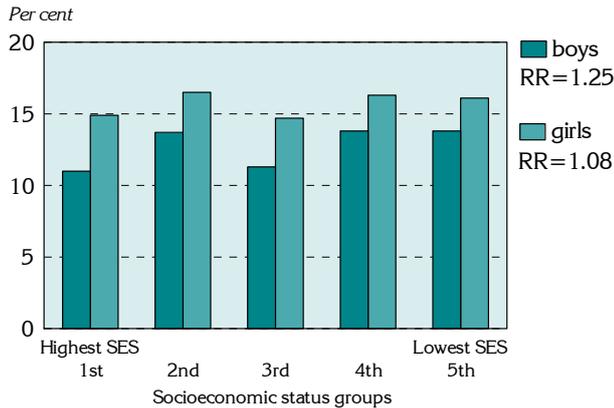
See 'Notes on the data' in the Appendix

Socioeconomic status

Adelaide

The differential in rates of overweight children between the most disadvantaged (lowest SES) areas and the most advantaged (highest SES) areas in metropolitan Adelaide was greater for boys (25%, a rate ratio of 1.25) than for girls (8%, 1.08) (Figure 70).

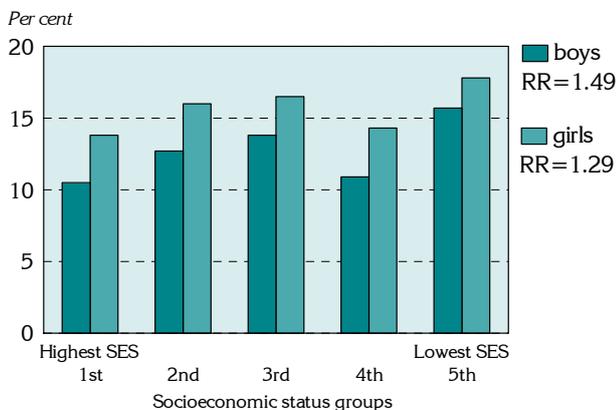
Figure 70: Overweight boys and girls, by socioeconomic status, Adelaide, 2004 to 2007



Country South Australia

In the country areas of South Australia, the differential in rates of overweight boys (49%, a rate ratio of 1.49) and girls (29%, 1.29) between the most disadvantaged and advantaged areas are both greater than in Adelaide, and are similarly greater for boys than girls (Figure 71). It is not clear why rates are so much lower in the fourth socioeconomic status group.

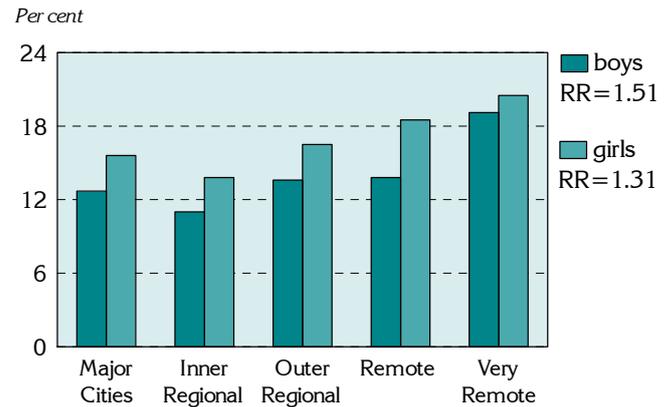
Figure 71: Overweight boys and girls, by socioeconomic status, country South Australia, 2004 to 2007



Remoteness

Being overweight is also associated with remoteness, with more boys and girls being assessed as overweight as remoteness increases, other than for the Inner Regional areas (Figure 72). There were 51% more overweight boys, and 31% more overweight girls, in the Very Remote areas than in the Major Cities areas under the remoteness classification.

Figure 72: Overweight boys and girls, by remoteness, Adelaide, 2004 to 2007



Correlations

There are correlations of moderate strength at the SLA level in metropolitan Adelaide between areas with high rates of boys and girls assessed as being overweight; and, for boys, a moderate correlation with clients of CAMHS.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Four year old children who are obese

Indicator definition: Four year olds assessed as being obese, on the basis of their measured height and weight.

Note: the overall variation at the SLA level in metropolitan Adelaide in percentages for boys in metropolitan Adelaide is relatively small (2.1% to 8.5%) compared to that for girls (1.8% to 12.9%) – and much smaller than the ranges in country areas. As a result, and so as to show as clearly as possible the variation between SLAs with the highest and lowest rates, as well as maintaining the same ranges for boys and girls, the ranges mapped are very small (one percentage point). Users are reminded that the most valid comparisons are between the highest and lowest ranges.

Key points

- There are substantially more obese girls than boys at four years of age, with rates of 6.2% and 4.6% respectively.
- Variations are evident across the State, although with different geographic patterns for boys and girls. However, there are similar percentages of obese four year old children in country and metropolitan areas, with the highest percentage found in the most disadvantaged areas.

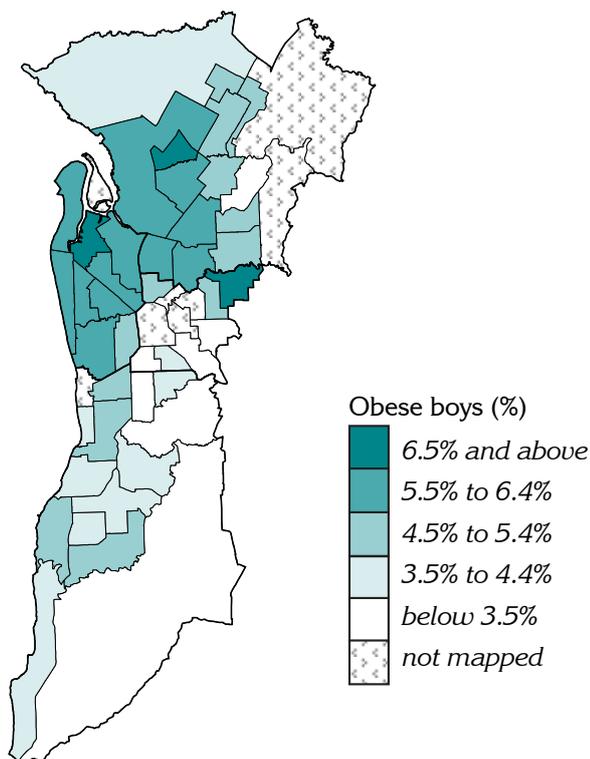
Geographic variation

Adelaide

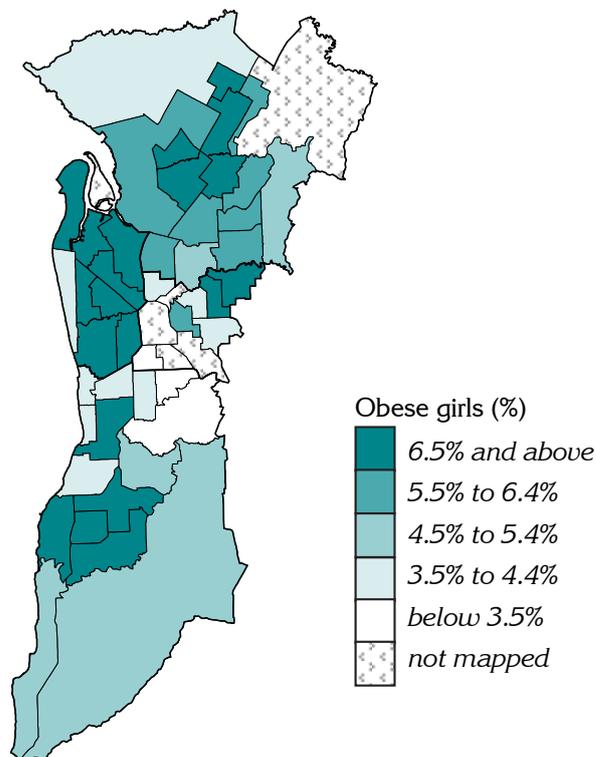
In metropolitan Adelaide, 4.7% of four year old boys were assessed as being obese. Areas with the highest percentages (and ten or more obese boys) were Port Adelaide Enfield - Port, Salisbury - Inner North and Campbelltown - East. The lowest percentages were found in areas located to the east and south of the city, including Mitcham - Hills, Mitcham - West and Burnside - South-West (**Map 86**).

The rate of obesity for girls was higher than for boys at four years of age, with 6.2% of girls assessed as obese. Girls in this category were found in a large number of SLAs in the west, north, north-west, north-east and outer north, as well as in the middle and outer south of metropolitan Adelaide (**Map 87**). The highest rates were in Port Adelaide Enfield - Park and - Port, and Charles Sturt - North-East, - Inner East and - Inner West. The inner southern SLAs of Mitcham - Hills and - North-East, and Unley - West had the fewest four year old girls assessed as obese.

Map 86: Obese four year old boys, Adelaide, 2004 to 2007



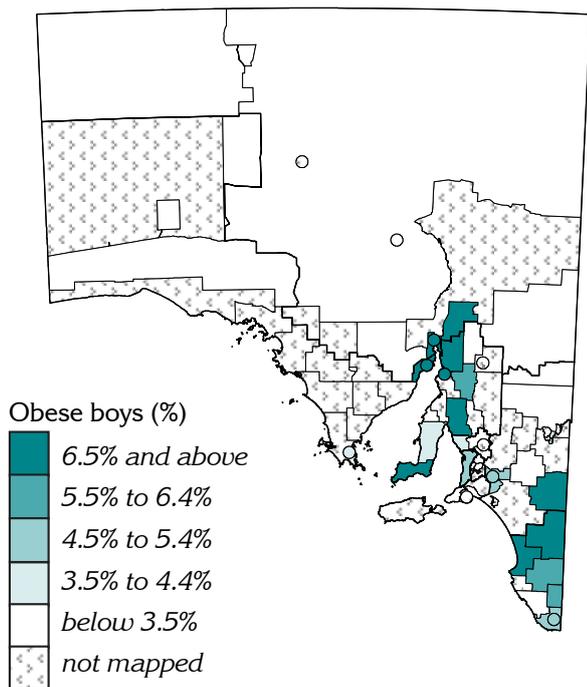
Map 87: Obese four year old girls, Adelaide, 2004 to 2007



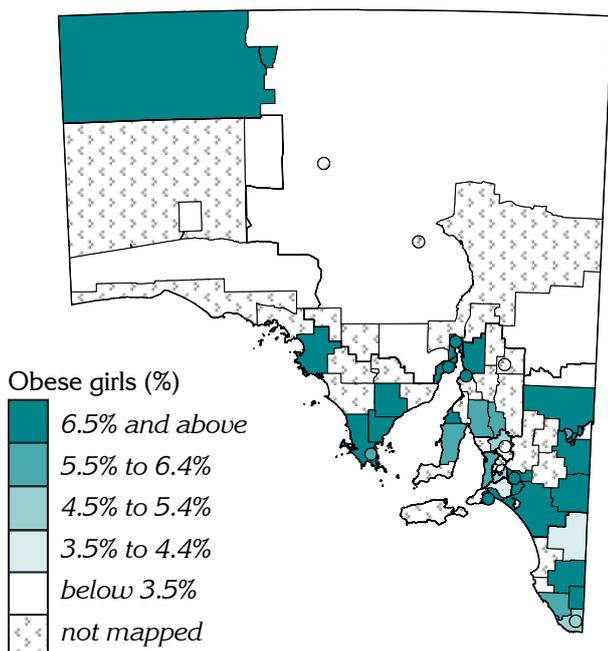
Country South Australia

In country South Australia, the highest percentages of obese four year old boys (in areas where there were ten or more obese boys) were recorded in Port August, Tatiara, Port Pirie and Wakefield (**Map 88**). The SLA of Gawler was the only area with at least ten obese boys mapped in the lowest range.

Map 88: Obese four year old boys, South Australia, 2004 to 2007



Map 89: Obese four year old girls, South Australia, 2004 to 2007



Of areas with ten or more four year old girls assessed as being obese, Naracoorte and Lucindale, Whyalla, Murray Bridge and Port Pirie had the highest percentages in country South Australia; the lowest percentages were recorded in the SLAs of Gawler, Mount Barker - Central and Mount Gambier (**Map 35**).

Regional totals

There were more obese four year old girls (**Table 42**) than boys (**Table 43**) in all metropolitan and country regions. Far North had the highest proportion of obese boys, with the next highest rate in Western Adelaide. For girls, the highest rate for was recorded in Eyre and Western, with the next highest in Western Adelaide.

Table 42: Obese four year old boys, by State Region, 2004 to 2007

Region	No.	%
Northern Adelaide	305	5.2
Western Adelaide	146	6.0
Eastern Adelaide	88	4.0
Southern Adelaide	176	3.9
Metropolitan regions	716	4.7
Adelaide Hills	37	3.3
Murray and Mallee	50	3.7
Fleurieu and Kangaroo Island	11	2.7
Limestone Coast	73	5.2
Barossa	31	3.0
Yorke and Mid North	76	5.0
Eyre and Western [#]	68	5.7
Far North [#]	28	6.4
Country SA	374	4.4
South Australia	1,104	4.6

[#] See 'Notes on the data' in the Appendix

Table 43: Obese four year old girls, by State Region, 2004 to 2007

Region	No.	%
Northern Adelaide	356	6.4
Western Adelaide	202	8.6
Eastern Adelaide	99	4.8
Southern Adelaide	224	5.2
Metropolitan regions	882	6.1
Adelaide Hills	41	3.6
Murray and Mallee	108	7.9
Fleurieu and Kangaroo Island	24	5.7
Limestone Coast	83	5.8
Barossa	34	3.6
Yorke and Mid North	97	6.8
Eyre and Western [#]	106	9.4
Far North [#]	28	7.1
Country SA	520	6.3
South Australia	1,414	6.2

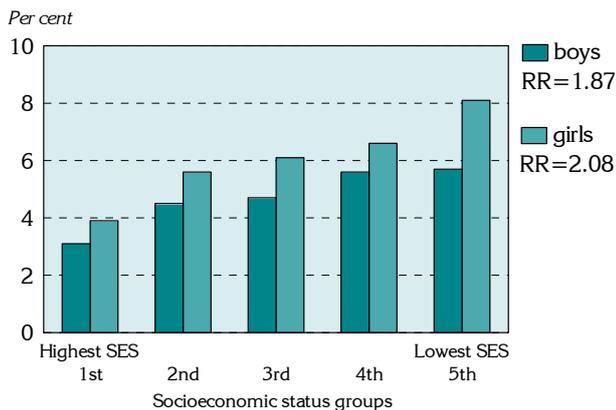
[#] See 'Notes on the data' in the Appendix

Socioeconomic status

Adelaide

In metropolitan Adelaide, the proportion of the four year old population who were assessed as being obese increases substantially with increasing socioeconomic disadvantage for both boys and girls (Figure 73). The difference in rates from those most disadvantaged (lowest SES) areas to those most advantaged (highest SES) areas is greater for girls (2.08) than for boys (1.87).

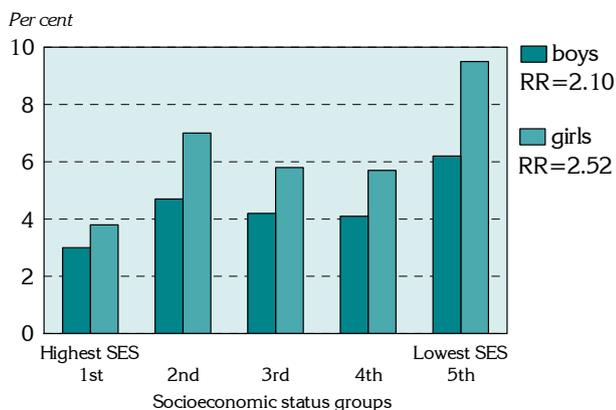
Figure 73: Obese boys and girls, by socioeconomic status, Adelaide, 2004 to 2007



Country South Australia

In country South Australia, obesity also increases with increasing socioeconomic disadvantage, although not consistently (Figure 74). However, for both boys (with a rate ratio of 2.10) and girls (2.52), the rate of obesity in the lowest SES areas was more than twice that in the highest SES areas.

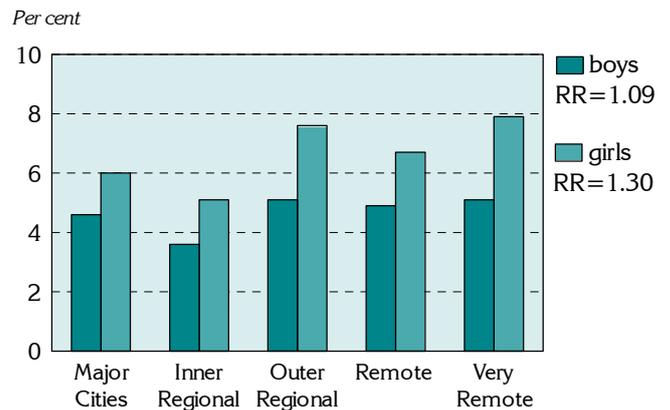
Figure 74: Obese boys and girls, by socioeconomic status, country South Australia, 2004 to 2007



Remoteness

For both boys and girls, the highest percentages of obese four year olds are in the Very Remote and Outer Regional areas, with the lowest in the Inner Regional and Major Cities classes (Figure 75). However, the overall differential in obesity rates between the most remote and least remote areas is just 9% for boys, compared to 30% for girls.

Figure 75: Obese boys and girls, by remoteness, Adelaide, 2004 to 2007



Correlations

There are strong correlations at the SLA level in metropolitan Adelaide between areas with high rates of four year old boys and girls assessed as being obese and many of the indicators of socioeconomic disadvantage, including high rates of jobless families, welfare dependency, lack of access to the Internet at home (in particular to a high-speed connection), low rates of participation in formal schooling and clients of CAMHS. Correlations with poor health outcomes (smoking during pregnancy and poor dental health at age 12) are moderate.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Substantiations of notifications of child abuse or neglect, 2008/09

The burden of complex and chronic family issues (such as low income, disability, substance abuse, mental health issue, family violence and unsupported sole parenting) may lead to children being notified to child protection authorities ⁽¹³⁾. Helping families to deal with these problems often requires sustained intervention from agencies other than child protection authorities. There is also a need for strengthened prevention and early intervention services, and better support for those children and young people with longer-term involvement in the child protection system ⁽¹³⁾. Rates of notifications for Aboriginal children are around twelve times those for non-Aboriginal children, indicating the relative socioeconomic disadvantage of Aboriginal families in South Australia.

Indicator definition: Substantiations of notifications to child protection authorities of child abuse or neglect, expressed as a rate (age standardised) per 1,000 population aged 0 to 18 years.

Key points

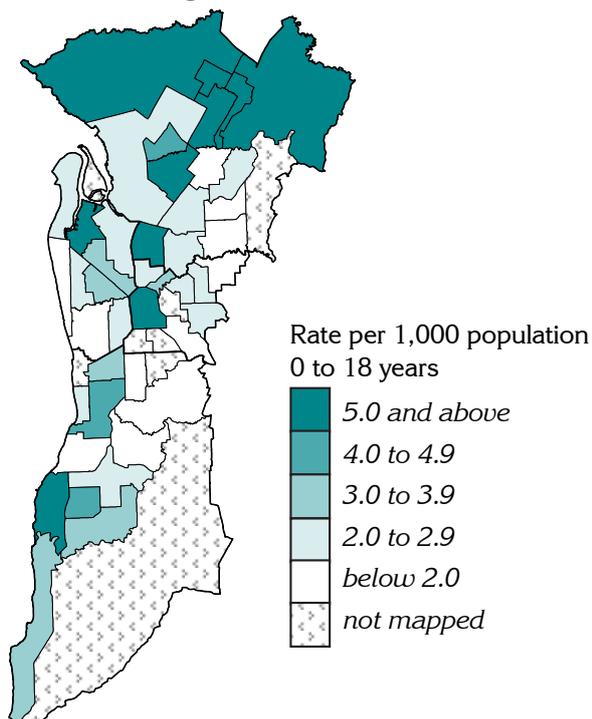
- There are clear distinctions between areas with high and those with low rates of substantiations of child abuse or neglect in both metropolitan Adelaide and country South Australia.
- Rates are highest in the most remote areas of the State, and in the most disadvantaged areas.

Geographic variation

Adelaide

The distribution at the SLA level in metropolitan Adelaide of substantiated notifications of child abuse or neglect shows a clear divide between areas with high and areas with low rates. There are highly elevated rates in a number of outer northern SLAs, as well as in a small number of SLAs dispersed across Adelaide – in the city centre, the inner north, north-west and outer south. Low rates occur across most of the remaining areas, including in the north-east, east, west and some middle southern suburbs (Map 92).

Map 90: Substantiations of notifications of child abuse or neglect, Adelaide, 2008/09

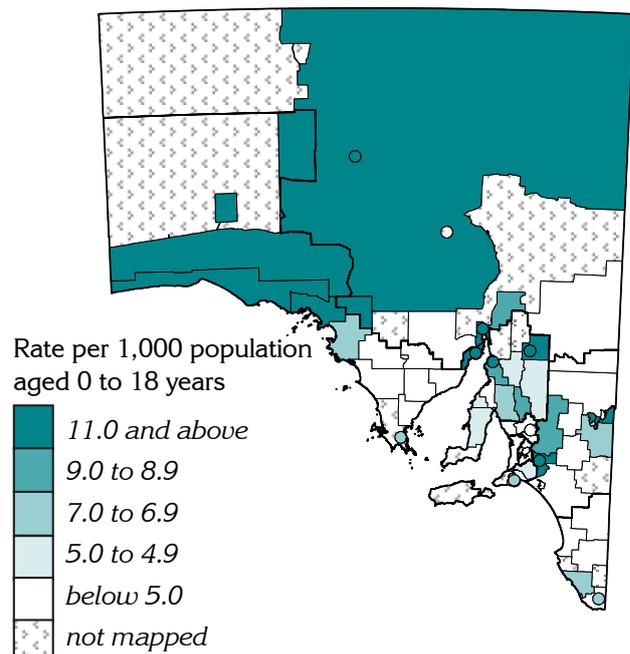


South Australia

A number of SLAs in country South Australia had fewer than five substantiated cases of child abuse or neglect (and have not been mapped) and many others had very low rates (Map 93). The highest rates were recorded in SLAs across much of the far north and west of the State, as well as in the Riverland. Murray Bridge and all of the northern towns (other than Roxby Downs) had highly elevated rates.

The SLA of Anangu Pitjantjatjara, in the far north-west of the State, had too few notifications or substantiated cases to map; this is unlikely to reflect the true situation in this area.

Map 91: Substantiations of notifications of child abuse or neglect, South Australia, 2008/09



Regional totals

At the regional level in metropolitan Adelaide, rates more than double, from 1.9 per 1,000 population aged 0 to 18 years in Eastern Adelaide to 4.5 per 1,000 in Northern Adelaide (Table 44). In country South Australia, the variation in the rates of substantiations is from 2.1 per 1,000 in Adelaide Hills to 25.5 per 1,000 in Far North.

Table 44: Substantiations of notifications of child abuse or neglect, by State Region, 2008/09

Region	No.	Rate*
Northern Adelaide	425	4.5
Western Adelaide	113	2.5
Eastern Adelaide	79	1.9
Southern Adelaide	224	2.8
Metropolitan regions	841	3.2
Adelaide Hills	39	2.1
Murray and Mallee	198	11.1
Fleurieu and Kangaroo Island	43	4.5
Limestone Coast	104	5.9
Barossa	83	4.9
Yorke and Mid North	155	8.6
Eyre and Western [#]	194	12.1
Far North [#]	206	25.5
Country SA	1,022	8.4
South Australia	1,863	4.9

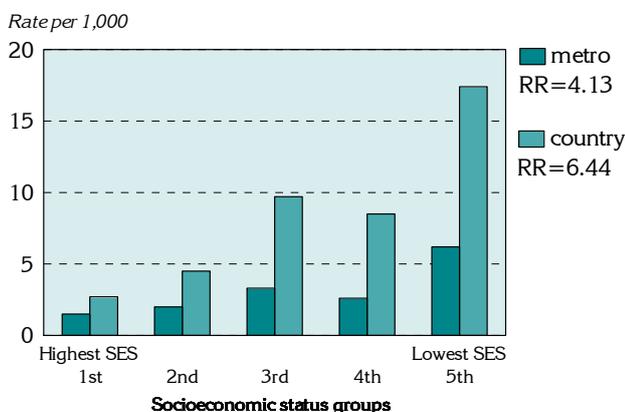
[#] See 'Notes on the data' in the Appendix

*Rate per 1,000 population 0 to 18 years

Socioeconomic status

In metropolitan Adelaide, the rate of substantiations of child abuse or neglect notifications in the most disadvantaged (lowest SES) areas were more than four times those in the most advantaged (highest SES) areas, with rates of 6.2 and 1.5 per 1000, respectively (Figure 76).

Figure 76: Substantiations of notifications of child abuse or neglect, by socioeconomic status, South Australia, 2008/09

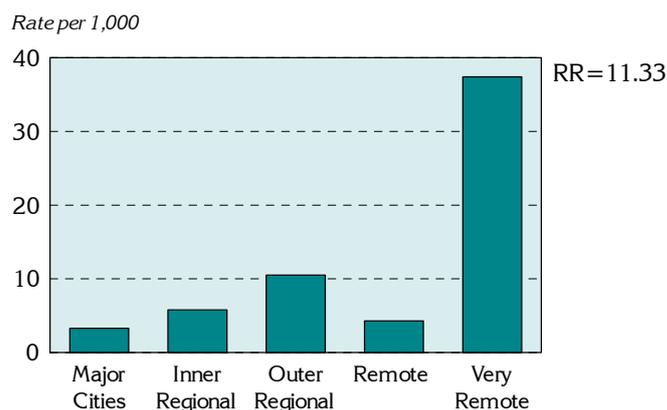


The differential in rates between the highest and lowest SES areas in country South Australia was greater than in metropolitan Adelaide (Figure 78), with over six times more substantiations in the most disadvantaged areas (17.4 per 1,000) compared to the most advantaged areas (2.5 per 1,000).

Remoteness

The rate of substantiations of child abuse or neglect notifications increase, although not consistently, with increasing remoteness, ranging from 3.3 per 1,000 in the Major Cities category to 37.4 per 1,000 in the Very Remote class (Figure 79). As noted above, there are negligible numbers reported from Anangu Pitjantjatjara, which is included in the Very Remote class. While this effectively leads to an understatement in the ratio between the rates in the most and least remote areas, it is still substantial, at over eleven.

Figure 77: Substantiations of notifications of child abuse or neglect, by remoteness, South Australia, 2008/09



Correlations

There are strong correlations at the SLA level in Adelaide in Adelaide between areas with high rates of substantiations of notifications of child abuse or neglect and many indicators of socioeconomic disadvantage, including high rates of jobless families, welfare dependency, lack of access to the Internet at home, low rates of participation in formal schooling, children developmentally vulnerable on two or more domains under the AEDI and high rates of use of public health services (admissions to public acute hospitals and clients of CAMHS). Correlations with poor health outcomes (smoking during pregnancy by young mothers and poor dental health at age 12) are also strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Poor dental health of twelve year old children

Oral health is fundamental to overall health, wellbeing and quality of life ⁽¹⁴⁾. The oral health of children in South Australia has improved markedly over several decades, as a result of changes in diet and declines in sugar consumption, exposure to fluoride and changes in disease management. However, recent trends indicate some deterioration – for example, there was a 21% increase in decay experience in five year old children between 1996 and 1999 ⁽¹⁵⁾.

Indicator definition: Twelve year old children attending the School Dental Service who had one or more decayed, missing or filled teeth.

Key points

- Almost half (45.5%) of twelve year old children attending the School Dental Service had decayed, missing or filled teeth.
- Poor dental health was more predominant among children of lower socioeconomic status and those living in remote areas.

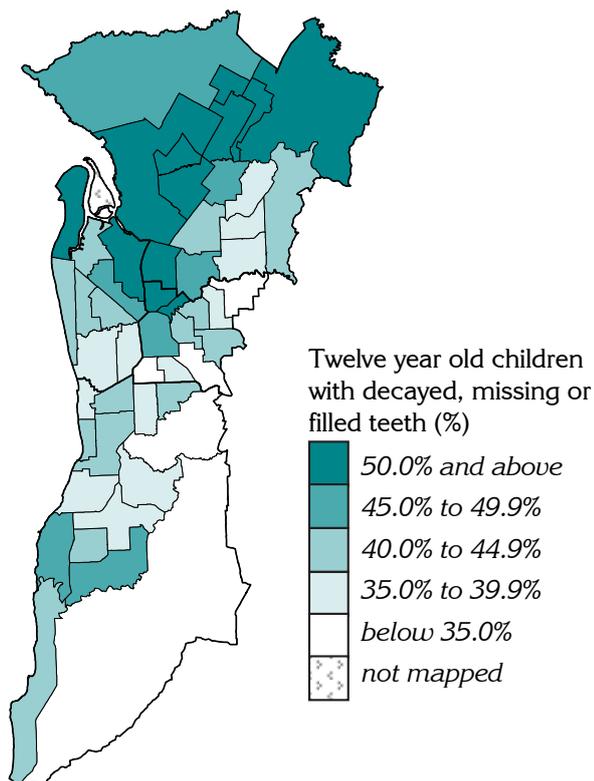
Geographic variation

Adelaide

The following data include children attending the School Dental Service (SDS); children of this age attending dental practitioners in private practice are not included.

The distribution at the SLA level in metropolitan Adelaide of children with poor dental health is striking, with highly elevated rates across much of the inner north, and north-west and outer northern suburbs, and generally low rates in the remaining areas, including the outer south (Map 92). More than half (55%) of twelve year old children in the

Map 92: Twelve year old children with poor dental health, Adelaide, 2007 to 2008

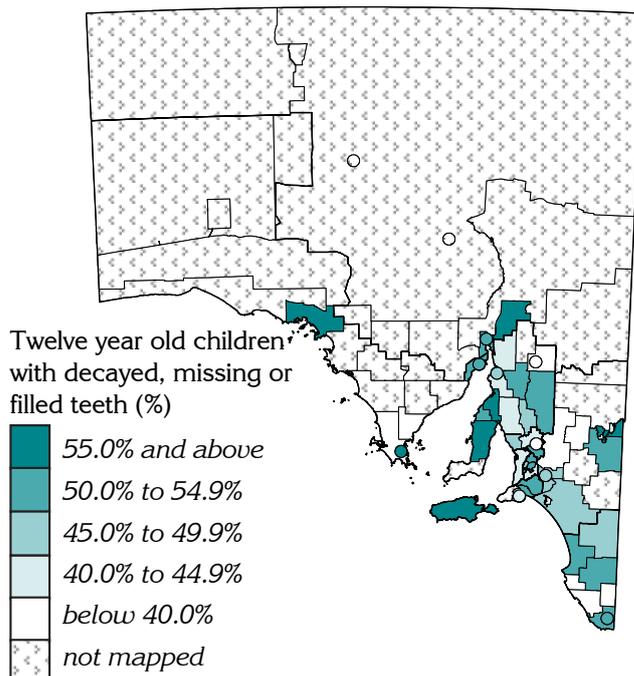


northern SLAs of Playford - Hills, - West Central and - East Central; and Salisbury - Inner North and - Central had decayed, missing or filled teeth. The lowest rates were recorded in Mitcham - Hills, Unley - West and Onkaparinga - Hills.

South Australia

Many SLAs in country South Australia had fewer than five children with poor dental health and have not been mapped (Map 93). The poorest outcomes were recorded in Ceduna, Kangaroo Island and Yorke Peninsula - North; and in the towns of Whyalla, Port Lincoln, Mount Gambier and Port Augusta. The best outcomes were found in Tanunda, Peterborough, Robe, Loxton Waikerie - West and Wattle Range - East, as well as many of the areas with fewer than five children assessed.

Map 93: Twelve year old children with poor dental health, South Australia, 2007 to 2008



Regional totals

At the regional level in metropolitan Adelaide, percentages vary from 39.0% in Eastern Adelaide to 48.6% in Northern Adelaide (Table 45). In country South Australia, the variation in the proportion of twelve year old children with decayed, missing or filled teeth is from 44.4% in Barossa - Barossa to 53.4% in Eyre and Western.

Table 45: Twelve year old children with poor dental health, by State Region, 2007 to 2008

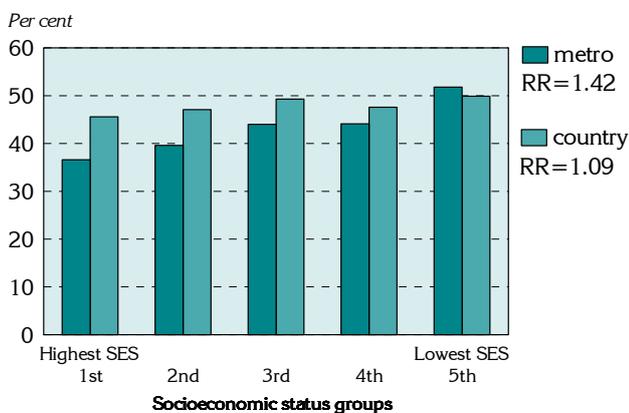
Region	No.	%
Northern Adelaide	1,094	48.6
Western Adelaide	530	44.9
Eastern Adelaide	222	39.0
Southern Adelaide	803	39.9
Metropolitan regions	2,649	44.1
Adelaide Hills	174	45.9
Murray and Mallee	208	46.4
Fleurieu and Kangaroo Island	127	49.0
Limestone Coast	388	47.5
Barossa	198	44.4
Yorke and Mid North	228	47.5
Eyre and Western [#]	237	53.4
Far North [#]	114	51.6
Country SA	1,673	47.9
South Australia	4,323	45.5

See 'Notes on the data' in the Appendix

Socioeconomic status

Over 2007 and 2008, twelve year old children living in the most disadvantaged (lowest SES) areas were 42% more likely to have decayed, missing or filled teeth than those in the most advantaged (highest SES) areas, with proportions of 51.8% and 36.6%, respectively (Figure 78).

Figure 78: Twelve year old children with poor dental health, by socioeconomic status, South Australia, 2007 to 2008

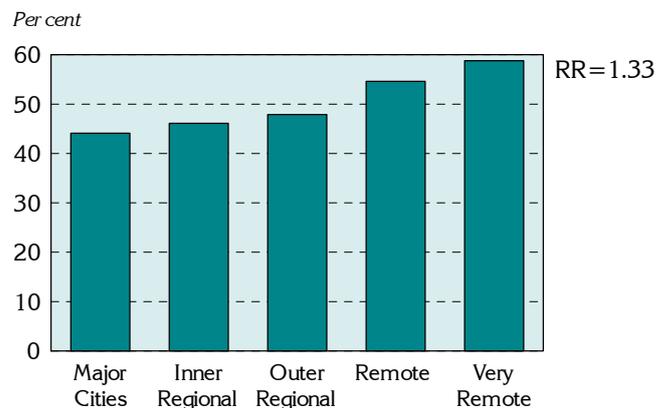


The differential in rates between the highest and lowest SES areas in country South Australia was smaller than in metropolitan Adelaide (Figure 78), with just 9% more children with poor dental health in the most disadvantaged areas (49.9%) compared to the most advantaged (45.6%).

Remoteness

The percentage of twelve year old children with poor dental health increases with increasing remoteness, ranging from 44.1% in the Major Cities category to 58.8% in the Very Remote class, an overall differential of 33% (Figure 79).

Figure 79: Twelve year old children with poor dental health, by remoteness, South Australia, 2007 to 2008



Correlations

There are moderate to strong correlations at the SLA level in metropolitan Adelaide between areas with high proportions of jobless families with young children and many of the indicators of socioeconomic disadvantage, including high rates of welfare-dependent families and jobless families, low rates of participation in formal schooling, lack of access to the Internet at home (in particular to a high-speed connection), children developmentally vulnerable on two or more domains under the AEDI, poor educational performance under NAPLAN and in secondary school, and use of public health services (admissions to a public acute hospital and clients of CAMHS). Correlations with poor health outcomes (high proportions of four year old children who were obese, and smoking during pregnancy) are also moderate to strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

Children and young people with a disability

An understanding of the number and geographic distribution of children with a profound or severe disability is important for the current and future planning for, and provision of, services to meet their needs and those of their siblings and families.

Indicator definition: Estimated number of children and young people, aged 0 to 24 years, living in the community, who had a profound or severe disability.

Key points

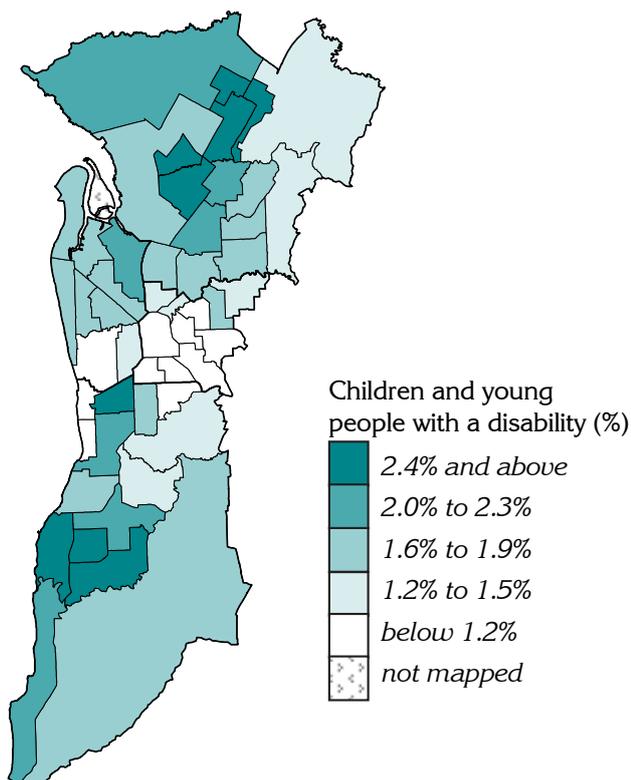
- Although the numbers of children and young people with a profound or severe disability are relatively small, their regional distribution is of importance for the provision of services.
- There is a strong association in the geographic distribution of children and young people with a profound or severe disability, and socioeconomic disadvantage in metropolitan Adelaide.

Geographic variation

Adelaide

The highest percentage of the population aged 0 to 24 years who had a profound or severe disability were largely in SLAs in the outer north and south, while lower rates were predominantly located in a band from the western coastal areas through the inner city region to the east of metropolitan Adelaide (Map 94). Rates were highest in the SLAs of Playford - Elizabeth and - West Central, Onkaparinga - Hackham, - North Coast and - Morphett, and Salisbury - Inner North; and lowest in the Burnside SLAs, Norwood Payneham St Peters - East, Holdfast Bay - North and - South, Mitcham - North-East, Unley - East and Adelaide.

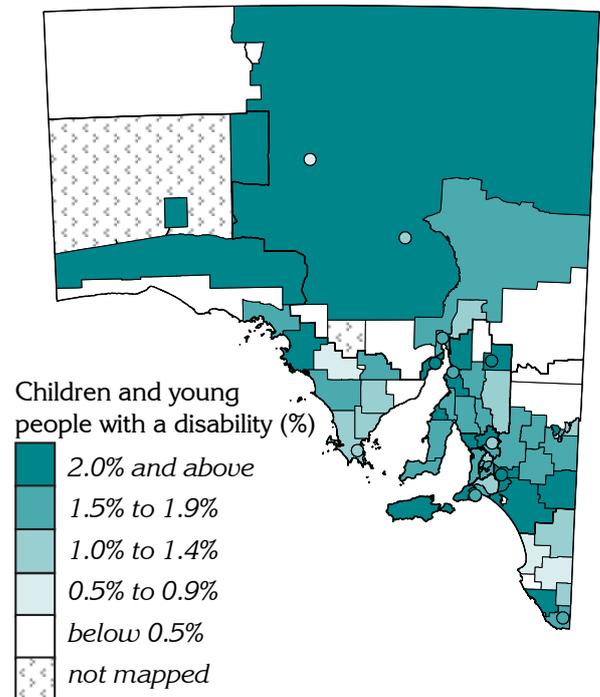
Map 94: Children and young people with a disability, Adelaide, 2006



Country South Australia

Peterborough, Unincorporated Far North, Copper Coast, Southern Mallee, Gawler, Whyalla, The Coorong and Murray Bridge recorded the highest rates of children and young people with a profound or severe disability (Map 95). There were no children with a profound or severe disability recorded as living in the low-population, Unincorporated areas of Riverland, West Coast, Whyalla and Pirie, nor in the SLAs of Robe, Franklin Harbour and Orroroo/ Carrieton. Low percentages were recorded in Kingston, Naracoorte and Lucindale, Le Hunte, Coober Pedy and Anangu Pitjantjatjara.

Map 95: Children and young people with a disability, South Australia, 2006



Regional totals

The majority of children and young people with a profound or severe disability were located in Northern (2,552 people) and Southern (1,979) Adelaide (**Table 46**). In metropolitan Adelaide, percentages ranged from 1.1% in Eastern Adelaide to 2.2% in Northern Adelaide, while in country South Australia, the percentages were higher but the range was narrower, from 1.4% in Far North to 2.0% in both Barossa - Barossa and Yorke and Mid North.

Table 46: Children and young people with a disability, by State Region, 2006

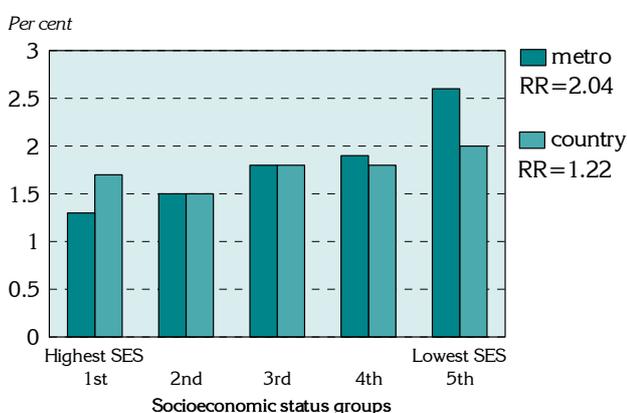
Region	No.	%
Northern Adelaide	2,552	2.2
Western Adelaide	951	1.6
Eastern Adelaide	667	1.1
Southern Adelaide	1,979	1.9
Metropolitan regions	6,149	1.8
Adelaide Hills	360	1.6
Murray and Mallee	395	1.9
Fleurieu and Kangaroo Island	180	1.7
Limestone Coast	320	1.5
Barossa	405	2.0
Yorke and Mid North	409	2.0
Eyre and Western [#]	312	1.7
Far North [#]	129	1.4
Country SA	2,510	1.8
South Australia	8,659	1.8

[#] See 'Notes on the data' in the Appendix

Socioeconomic status

There were more than twice the number of children and young people with a disability in the most disadvantaged areas (2.6%) (lowest SES) compared to those in the most advantaged areas (1.3%) (highest SES) (**Figure 80**).

Figure 80: Children and young people with a disability, by socioeconomic status, South Australia, 2006



In country South Australia, the differential between the highest SES and lowest SES areas is smaller, although still showing there to be 22% more

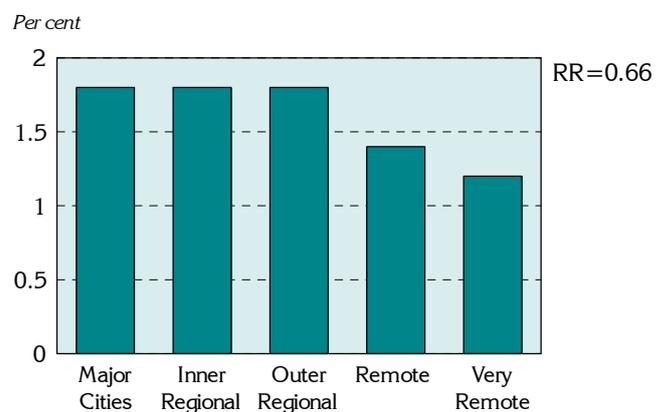
children and young people with a disability in the lowest SES areas when compared with the highest SES areas.

The socioeconomic gradient is not consistent, with the lowest rate in the second highest socioeconomic status group (1.5%).

Remoteness

Over the first three remoteness categories, 1.8% of the population aged 0 to 24 years had a profound or severe disability; the percentage decreased over the next two classes, to 1.4% in the Remote areas and 1.2% in the Very Remote class (**Figure 81**).

Figure 81: Children and young people with a disability, by remoteness, South Australia, 2006



Correlations

There are very strong correlations at the SLA level in metropolitan Adelaide between areas with high proportions of many of the indicators of socioeconomic disadvantage, including high rates of welfare-dependent families and jobless families, low rates of participation in formal schooling, lack of access to the Internet at home (in particular to a high-speed connection), children developmentally vulnerable on two or more domains under the AEDI, poor educational performance under NAPLAN and in secondary school, and use of public health services (admissions to a public acute hospital and clients of CAMHS). Correlations with poor health outcomes (poor dental health at age 12 and smoking during pregnancy) are strong.

Correlation coefficients for these and other indicators are available on the PHIDU website at www.publichealth.gov.au.

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