13 Measuring multiple disadvantage

Box 13.1 **Key messages**

- In 2004-05, Indigenous people were markedly disadvantaged when compared with non-Indigenous people against the three measured headline dimensions education, labour force and income. Different patterns of disadvantage were observed according to age, sex and remoteness areas (figures 13.1.1–13.1.3).
- Overcrowded housing is associated with most headline dimensions of disadvantage, including poor education and employment outcomes and low household and individual incomes (figure 13.3.3).
- Health risk behaviours among Indigenous people are associated with many headline dimensions of disadvantage — daily smoking is associated with poor outcomes in education, employment and income (figure 13.3.1), and illicit drug use is associated with unemployment and poor outcomes in home ownership (figure 13.3.2).

As noted across this Report, different aspects of disadvantage often seem to occur together — for example, poor education may be linked with poor employment outcomes, and both may be linked with poor income. This chapter uses comparable data from two ABS surveys to identify some aspects of disadvantage that tend to occur together. However, this information does not reveal cause and effect (that is, it does not say that disadvantage in one area is the *cause* of another poor outcome).

The ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and National Health Survey (NHS) that provided the data for this chapter do not provide information on all the indicators in this Report's framework, and some of the measures used in this chapter are proxies (not exact matches) for the framework indicators. Section 13.1 examines patterns of disadvantage against the proxy headline indicators according to age, sex and remoteness area, and compares patterns of outcomes for Indigenous and non-Indigenous people. Section 13.2 examines links between the proxy headline indicators and compares Indigenous and non-Indigenous results. Section 13.3 examines links between the proxy headline indicators and some proxy strategic change indicators. Data for this part of the analysis are available only for Indigenous people. Section 13.4 provides some technical information on how the analysis was done.

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an 'A' suffix (for example, table 13A.1.1). A list of attachment tables is in section 13.5. These tables can be found on the Review web page (www.pc.gov.au/gsp). Users can also contact the Secretariat to obtain the attachment tables.

Patterns of relative Indigenous disadvantage 13.1

In 2004-05, Indigenous people were markedly disadvantaged when compared with non-Indigenous people against all the proxy indicators. The following sections examine how this disadvantage varied according to age, sex and remoteness. This section analyses six measures from the NATSIHS and NHS that are closely aligned with some of this Report's headline indicators. Box 13.1.1 lists the measures used and the corresponding headline indicators.

Box 13.1.1 Measuring relative Indigenous disadvantage

The following measures for Indigenous and non-Indigenous populations from the 2004-05 National Aboriginal and Torres Strait Islander Health Survey and the National Health Survey are proxies for some of the Report's headline indicators:

NATSIHS/NHS measure

- without a non-school qualification (without a vocational or higher education qualification)
- not in the labour force
- unemployed¹
- individual income in the lowest 20 per cent of income for the total Australian population
- · equivalised household income in the lowest 20 per cent of income for the total Australian population²
- not living in a house being owned or
 Home ownership purchased by a member of the household (data available Indigenous people only)

Headline indicator

- Post-secondary education (attainment)
- Labour force participation and unemployment
- · Household and individual income

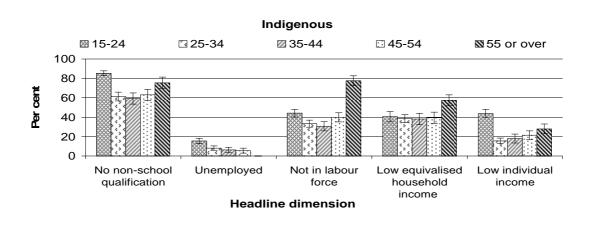
13.2 OVERCOMING INDIGENOUS **DISADVANTAGE 2007**

¹ For this analysis, unemployment figures are calculated as a proportion of the population, not of the labour force and, therefore, are different from those reported elsewhere in the Report.

² Equivalised household income adjusts the actual incomes of households to make households of different sizes and composition comparable. It results in a measure of the economic resources available to members of a standardised household.

13.1.1 Differences across age groups

Figure 13.1.1 Relative disadvantage by Indigenous status and age, 2004-05^a, b. c



Non-Indigenous ☑ 35-44 ₩ 15-24 **25-34 №**55 or over 100 80 Per cent 60 40 20 **₩.**₹./// 0 No non-school Not in labour Unemployed Low Low individual qualification force equivalised income household income **Headline dimension**



^a Non-school qualifications include vocational or higher education qualifications. For people aged 15-24 years, 25.2 per cent of Indigenous people and 26.2 per cent of non-Indigenous people were still at school. ^b 'Low' incomes are those in the lowest quintile (20 per cent) of income (see the 2004-05 NHS/NATSIHS User Guides for details). Proportions are calculated from the total of those who stated their incomes. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS and NHS (unpublished); tables 13A.1.1 and 13A.1.2.

Patterns of relative disadvantage between different age groups within the Indigenous and non-Indigenous populations were very similar, but Indigenous people in all age groups experienced greater relative disadvantage (figure 13.1.1). Box 13.1.2 explains how 'relative' Indigenous disadvantage is measured.

Box 13.1.2 Measuring 'relative' Indigenous disadvantage

'Relative' Indigenous disadvantage is measured by comparing the rate of Indigenous disadvantage (for example, the proportion of Indigenous people reporting they do not have a non-school qualification) with the rate for the non-Indigenous population. The 'rate ratio' is the rate for the Indigenous population divided by the rate for the non-Indigenous population. A rate ratio value greater than one (above the solid horizontal black line in some charts) implies that Indigenous people are disadvantaged compared to non-Indigenous people.

Non-school qualifications

In both the Indigenous and non-Indigenous populations, older people are less likely to have a non-school qualification than those in younger age groups (apart from those aged 15 to 24 years, of whom more than a quarter were still at school) (figure 13.1.1).

- Indigenous people in all age groups were less likely than their non-Indigenous counterparts to have a non-school qualification. The overall 'Indigenous to non-Indigenous rate ratio' for those without a non-school qualification was 1.4.
- Indigenous people aged 25 to 34 years were almost twice (1.8 times) as likely as their non-Indigenous counterparts to be without a non-school qualification.

Labour force participation and unemployment

Involvement in the workforce varies according to life stages. Participation typically increases with age, as young people move from education and training to full-time jobs. Participation remains relatively high for people in their thirties and forties, then declines towards retirement age. Labour force participation rates for both Indigenous and non-Indigenous populations reflect this pattern, but participation rates for Indigenous people are much lower than those for non-Indigenous people at all age ranges (although data are not available for Indigenous people over 55 years) (figure 13.1.1).

• Indigenous people were more likely to be unemployed than non-Indigenous people, regardless of age. The age standardised employment rate ratio between Indigenous and non-Indigenous people was 2.3.

- The 'Indigenous to non-Indigenous rate ratio' for unemployment was highest for those aged 35 to 54 years (2.6).
- Indigenous people aged 45 to 54 years were 2.3 times as likely as their non-Indigenous counterparts to be out of the labour force.

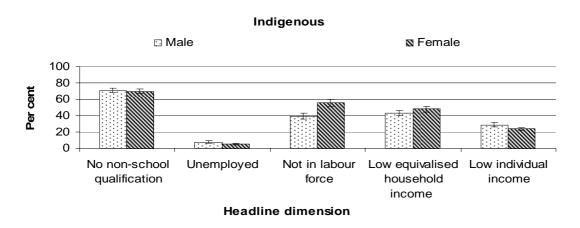
Low income

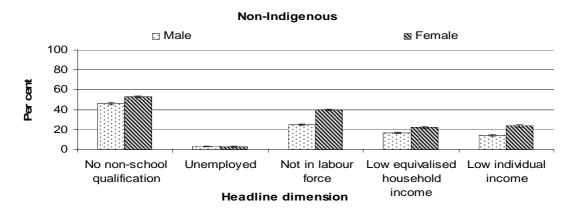
Age-related patterns in income tend to follow patterns in labour force participation (and employment). In both Indigenous and non-Indigenous populations, those aged 15 to 24 years were most likely to have *individual* incomes in the lowest 20 per cent, and those aged 55 years and over were most likely to have equivalised *household* incomes in the lowest 20 per cent (figure 13.1.1).

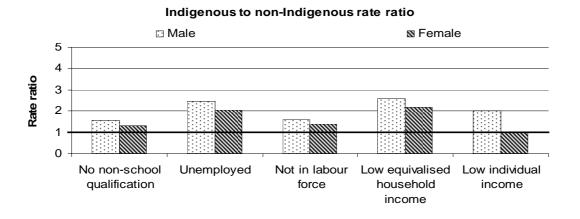
- In all age groups, Indigenous people were more likely to have low equivalised household incomes than non-Indigenous people. The overall age standardised Indigenous to non-Indigenous rate ratio was 2.4.
- Indigenous people aged 25 to 34 years were more than four times as likely as their non-Indigenous counterparts to have equivalised household incomes in the lowest 20 per cent.
- Indigenous people aged 45 to 54 years were nearly twice as likely as their non-Indigenous counterparts to have individual incomes in the lowest 20 per cent.

13.1.2 Differences between women and men

Figure 13.1.2 Relative disadvantage of people aged 15 years and over, by Indigenous status and sex, 2004-05^{a, b}







 $^{^{\}mathbf{a}}$ Labour force data have been age standardised. For data related to education, labour force and income, please refer to notes in figure 13.1.1. $^{\mathbf{b}}$ Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS and NHS (unpublished); tables 13A.1.1 and 13A.1.2.

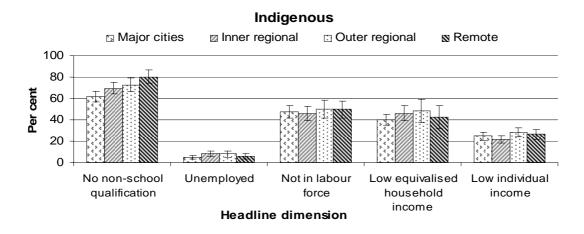
Unlike non-Indigenous people, there were no statistically significant differences between Indigenous women and men in poor educational attainment, low income, and unemployment. In the non-Indigenous population, women were more likely than men to be without a non-school qualification, and also more likely to have lower incomes (figure 13.1.2).

• The Indigenous to non-Indigenous rate ratios for not having a non-school qualification, unemployment, not participating in the labour force, and having low incomes were all higher for men than women. In particular, Indigenous men were twice as likely as non-Indigenous men to have low individual incomes, while there was no difference between the proportions of Indigenous and non-Indigenous women with low individual incomes (figure 13.1.2).

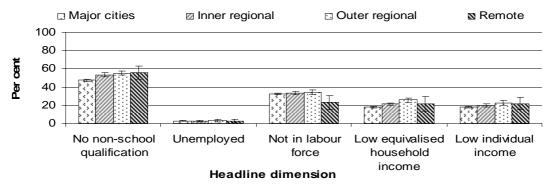
13.1.3 Differences by remoteness area

Both Indigenous and non-Indigenous populations have been grouped into subgroups based on the ABS Australian Standard Geographic Classification (ASGC) of remoteness areas: major cities, inner regional, outer regional, remote, and very remote. Non-Indigenous comparisons are not possible for very remote areas or for home ownership, as these data were not collected in the 2004-05 NHS.

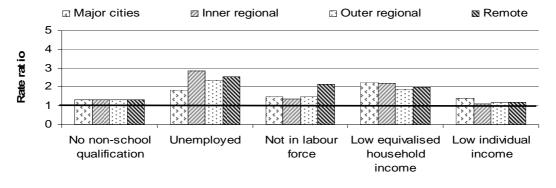
Figure 13.1.3 Relative disadvantage of people aged 15 years and over, by Indigenous status and remoteness, 2004-05^{a, b}



Non-Indigenous



Indigenous to non-Indigenous rate ratio



^a Labour force data have been age standardised. For data related to education, labour force and income, please refer to notes in figure 13.1.1. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS and NHS (unpublished); tables 13A.1.1 and 13A.1.2.

Non-school qualifications

- In the four remoteness areas for which comparable data were available, Indigenous people were about 1.3 times as likely as their non-Indigenous counterparts to be without a non-school qualification (figure 13.1.3).
- For both Indigenous and non-Indigenous people, those living in more remote areas were less likely to have a non-school qualification.

Labour force participation and unemployment

- There were no statistically significant differences across the four remoteness areas in the proportions of Indigenous people not in the labour force or unemployed. The pattern was different for non-Indigenous people, where those living in remote areas were less likely than those living in other areas to be out of the labour force (figure 13.1.3).
- The rate ratio between Indigenous and non-Indigenous people not in the labour force was highest for those living in remote areas (2.2), and lowest for those living in inner regional areas (1.4).
- The rate ratio for unemployment was highest for those living in inner regional areas (2.8) followed by those in the remote areas (2.5). For those living in the major cities the ratio was 1.8.

Low income

- Indigenous people living in major cities were less likely than those living in the regional and remote areas to have low equivalised household incomes. The difference between major cities (39.9 per cent) and outer regional areas (48.5 per cent) was statistically significant (figure 13.1.3).
- Indigenous people living in outer regional areas were significantly more likely than those living in the inner regional areas to have low individual incomes (28.2 per cent compared with 21.6 per cent).
- The rate ratio between Indigenous and non-Indigenous people did not vary much according to remoteness.

Home ownership (Indigenous people only)

• Indigenous people in remote areas were least likely to be living in a house that was owned or being purchased by a member of their household (there are no comparable data on home ownership for non-Indigenous people from the 2004-05 NHS).

13.2 Associations between headline indicators

This section examines the associations between disadvantage in one dimension and disadvantage in another. For example, to what extent is a low level of educational attainment associated with a high level of unemployment, and do the Indigenous and the non-Indigenous populations follow different patterns?

The approach to measuring associations between the proxy headline indicators of disadvantage is described in box 13.2.1.

Box 13.2.1 Measuring associations between the proxy headline indicators

This analysis is based on the proxy headline indicators defined in box 13.1.1, using data from the 2004-05 NATSIHS and NHS.

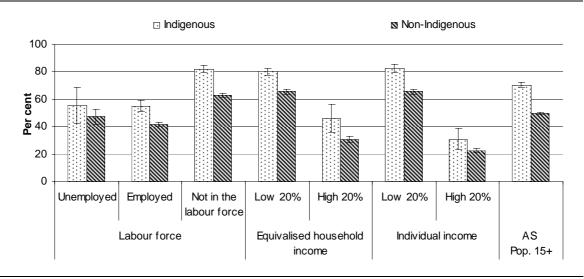
Associations between the headline indicators are identified by measuring the rate at which disadvantage in one headline indicator occurs together with disadvantage in other headline indicators.

For example, to examine whether poor education outcomes are associated with poor outcomes in employment and income, this study:

- classifies the population into various subgroups based on their employment and income status (for example, labour force characteristics — unemployed, employed and not in the labour force — and income
- compares the proportions of people in each population subgroup who have poor education outcomes (for example, no non-school qualification)
- identifies the population subgroups that have higher rates of poor education outcomes, when compared to other subgroups and the total population.

Although Indigenous people experience higher rates of disadvantage for all the headline dimensions, the patterns of association between the headline dimensions of disadvantage are similar for Indigenous and non-Indigenous people. For both Indigenous and non-Indigenous people, poor education outcomes, low levels of labour force participation and employment, and low incomes are interrelated (figures 13.2.1–13.2.5).

Figure 13.2.1 People aged 15 years and over with no non-school qualifications, as a proportion of populations with certain labour force and income characteristics, 2004-05^{a, b}

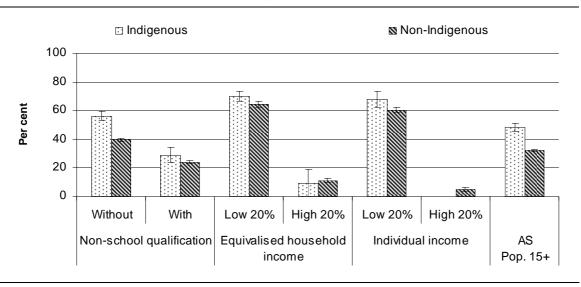


^a Labour force data have been age standardised. For data related to education, labour force and income, please refer to notes in figure 13.1.1. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS and NHS (unpublished); table 13A.2.1.

- Among those aged 15 years and over, 70.3 per cent of Indigenous people had no non-school qualifications, compared with 49.5 per cent of non-Indigenous people (figure 13.2.1).
- Indigenous people who were not in the labour force or who had low incomes were more likely than other Indigenous people to lack non-school qualifications. They were also more likely than non-Indigenous people with the same characteristics to lack non-school qualifications (figure 13.2.1).

Figure 13.2.2 People aged 15 years and over not in the labour force as a proportion of populations with certain educational and income characteristics, 2004-05^{a, b, c}



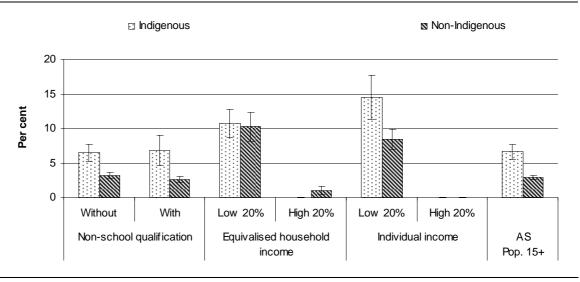
AS Age standardised.

a Labour force data have been age standardised. For data related to education, labour force and income, please refer to notes in figure 13.1.1. b Indigenous data for high equivalised household income has a relative standard error greater than 50 per cent and is considered too unreliable for general use. c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS and NHS (unpublished); table 13A.2.1.

- The age standardised proportion of Indigenous people aged 15 years and over who were not in the labour force was 1.5 times as high as the non-Indigenous rate (48.1 per cent compared with 32.4 per cent). In both populations, being out of the labour force was positively related to a lack of non-school qualifications and low income (figure 13.2.2).
- High proportions of Indigenous people with low incomes were out of the labour force (70.0 per cent of those with low equivalised household incomes and 67.8 per cent of those with low individual incomes). More than half (56.1 per cent) of Indigenous people who lacked non-school qualifications were out of the labour force (figure 13.2.2).

Figure 13.2.3 People aged 15 years and over not employed, as a proportion of populations with certain educational and income characteristics, 2004-05^{a, b, c}

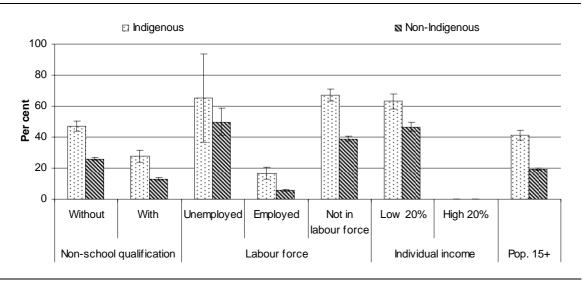


a Labour force data have been age standardised. For data related to education, labour force and income, please refer to notes in figure 13.1.1. b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information). c Indigenous data for high equivalised household income has a relative standard error greater than 50 per cent and is considered too unreliable for general use.

Source: ABS 2004-05 NATSIHS and NHS (unpublished); table 13A.2.1.

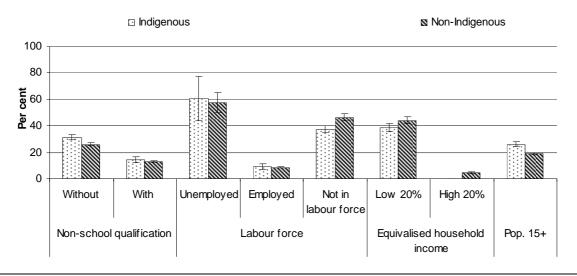
• Indigenous people were more than twice as likely as non-Indigenous people to be unemployed (6.6 per cent compared with 2.9 per cent, age standardised). In both the Indigenous and non-Indigenous populations, those with low incomes were most likely to be unemployed (figure 13.2.3).

Figure 13.2.4 People aged 15 years and over with low equivalised household incomes, as a proportion of populations with certain educational, labour force and individual income characteristics, 2004-05^{a, b}



^a For data related to education, labour force and income, please refer to notes in figure 13.1.1. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).
Source: ABS 2004-05 NATSIHS and NHS (unpublished); table 13A.2.1.

Figure 13.2.5 People aged 15 years and over with low individual incomes, as a proportion of populations with certain educational, labour force and household income characteristics, 2004-05^{a, b}



^a For data related to the education, labour force and income, please refer to notes in figure 13.1.1. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information). *Source:* ABS 2004-05 NATSIHS and NHS (unpublished); table 13A.2.1.

• In both the Indigenous and non-Indigenous populations, the unemployed and those not in the labour force were more likely than others to have low incomes (both equivalised household income and individual income) (figure 13.2.5).

13.3 Associations between headline indicators and strategic change indicators

The approach to measuring associations between the proxy headline indicators and strategic change indicators is described in box 13.3.1.

Box 13.3.1 Measuring associations between headline indicators and strategic change indicators

In addition to the proxy headline indicators described in box 13.1.1, this section uses the following measures from the 2004-05 NATSIHS which are closely linked to strategic change indicators in the Report framework:

NATSIHS measure

- the proportion of the population who were current daily smokers
- the proportion of the population who consumed alcohol at risky to high risk levels in the seven days prior to the interview
- the proportion of the population who used illicit drugs in the 12 months prior to the interview
- the proportion of the population living in crowded housing conditions
- the proportion of the population Proportion of Indigenous people living on traditional lands

Strategic change indicator

- Tobacco consumption and harm
- Alcohol consumption and harm
- · Drug and other substance use and harm
- Overcrowding in housing
- with access to their traditional lands

Comparisons between Indigenous and non-Indigenous populations are not possible, as many of the above measures were not collected for the non-Indigenous population.

Associations between headline indicators and strategic change indicators are identified by measuring the rate at which disadvantage in the strategic change areas occurs together with disadvantage in the headline indicators.

(Continued next page)

Box 13.3.1 (continued)

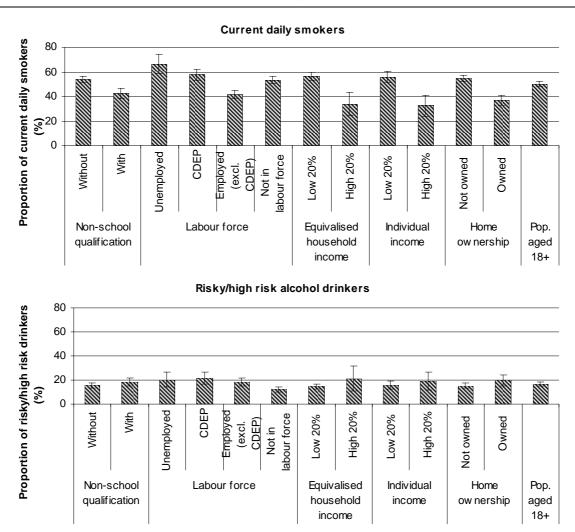
For example, to examine whether a health risk behaviour, such as smoking, is related to poor education, employment and income outcomes, this study:

- classifies the population into various subgroups based on their education, employment and income characteristics
- compares the proportion of current daily smokers in the various population subgroups

identifies the population subgroups with higher proportions of current daily smokers, when compared to other subgroups and the total population.

Overall, health risk behaviours among Indigenous people appear to be associated with many headline dimensions of disadvantage. In particular, those who smoke daily often also have poor outcomes in education, employment and income. Those who use illicit drugs often have poor outcomes in home ownership (not living in a house being owned or purchased by a member of the household). Poor housing conditions (overcrowded housing) are associated with most headline dimensions of disadvantage, including poor education and employment outcomes as well as low household and individual incomes (figures 13.3.1–13.3.3).

Figure 13.3.1 Prevalence of tobacco and alcohol use among Indigenous people aged 18 years and over, by educational, labour force and income characteristics, 2004-05^{a, b, c, d}



a 'Current daily smokers' are people who smoked one or more cigarettes (or pipes or cigars) per day at the time of interview. b The alcohol risk levels are based on average daily intake of alcohol over the 7 days of the reference week prior to the interview, which follow the Australian Alcohol Guidelines (NHMRC 2001) outlining drinking patterns associated with risk of alcohol related harm. The average daily consumption of alcohol associated with the risky/high risk levels are: risky for males - more than 50ml, up to 75ml, for females - more than 25ml, up to 50ml; high risk for males - more than 75ml, and for females - more than 50ml. c For data related to education, labour force and income, please refer to notes in figure 13.1.1. d Error bars present 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS (unpublished); tables 13A.3.1 and 13A.3.2.

Smoking appears to be associated with most headline dimensions of disadvantage. In 2004-05, daily smoking was:

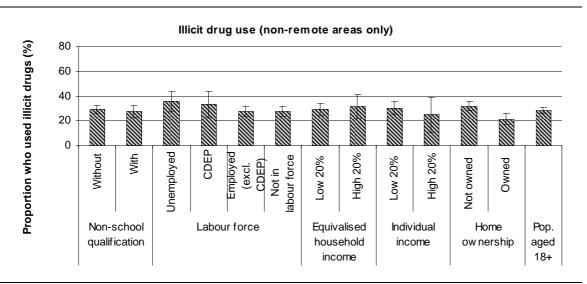
• more common among Indigenous people without non-school qualifications than among those with a non-school qualification

- more common among unemployed people, CDEP participants and those not in the labour force, than among the employed
- more common among people with low incomes than those with high incomes
- more common among people living in a house not owned or being purchased by a member of their household than among those living in a house that was owned or being purchased by a member of their household (figure 13.3.1).

In 2004-05 risky to high risk drinking was least common among Indigenous people who were not in the labour force (figure 13.3.1). Both these indicators are strongly associated with age — labour force participation and risky drinking both decline with age. There were no statistically significant differences in the prevalence of risky to high risk consumption across other characteristics (figure 13.3.1).

Other research has found strong correlations between alcohol consumption and health outcomes for Indigenous Australians (see section 8.1 on Alcohol consumption and harm).

Figure 13.3.2 Indigenous people aged 18 years and over living in non-remote areas who used illicit drugs as a proportion of populations with certain educational, labour force and income characteristics, 2004-05a, b, c, d



a Illicit drugs Include heroin, cocaine, petrol, LSD/synthetic hallucinogens, naturally occurring hallucinogens, ecstasy/designer drugs, methadone and other inhalants.
b Data are based on those who responded to substance use questions (22 per cent did not respond).
c For data related to education, labour force and income, please refer to notes in figure 13.1.1.
d Error bars present 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

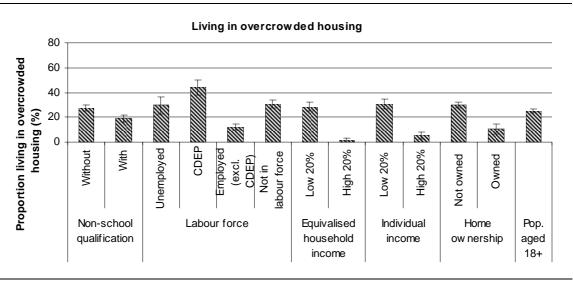
Source: ABS 2004-05 NATSIHS (unpublished); tables 13A.3.1 and 13A.3.2.

In 2004 05, for Indigenous people living in non-remote areas:

• Illicit drug use was highest among unemployed people (35.4 per cent).

• Indigenous people living in a house not owned or being purchased by a member of their household were significantly more likely to report illicit drug use (31.8 per cent) than those living in a house that was owned or being purchased by a member of their household (21.3 per cent) (figure 13.3.2).

Figure 13.3.3 Indigenous people aged 18 years and over living in overcrowded housing, as a proportion of populations with certain educational, labour force, income and home ownership characteristics, 2004-05^{a, b, c, d}



a Data on overcrowded housing are based on the Canadian National Occupancy Standard for housing appropriateness, which specifies the number of bedroom(s) required for households of different sizes and compositions. Households that require two or more additional bedrooms to meet the standard are considered to be overcrowded b For data related to education, labour force and income, please refer to notes in figure 13.1.1. Data for high equivalised household income has a relative standard error greater than 50 per cent and is considered too unreliable for general use. Data for high individual income has a relative standard error of 25 to 50 per cent and should be used with caution. Determine the per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS (unpublished); tables 13A.3.1 and 13A.3.2.

Overcrowded housing appears to be associated with most headline dimensions
of disadvantage. In 2004-05, high proportions of Indigenous people with low
income, or who were without non-school qualifications, unemployed, CDEP
participants or not in the labour force lived in overcrowded housing conditions
(figure 13.3.3).

13.4 Notes on methodology

The analysis in this chapter is built on the Overcoming Indigenous Disadvantage indicator framework. It aims to:

- identify differences in patterns of disadvantage within the Indigenous population and between the Indigenous and non-Indigenous populations against proxy measures for selected headline indicators
- explore associations between indicators of disadvantage, including:
 - associations between selected headline indicators
 - associations between selected headline indicators and strategic change indicators.

The Report framework covers a wide range of socioeconomic dimensions, but the analysis in this chapter is limited to where comparable data items were available from two ABS surveys:

- for Indigenous data, the 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)
- for non-Indigenous data, the 2004-05 National Health Survey (NHS).

Definitions of indicators and associated data have been kept as consistent as possible with those used elsewhere in this Report.

The output categories of this analysis are kept to a relatively broad level to produce statistically significant (meaningful) results. More disaggregated data could potentially give more detailed information, but would often be unusable due to the high standard errors associated with these disaggregated estimates in the surveys.

The 2004-05 NATSIHS was conducted by face-to-face interviews and only in private dwellings (excluding people in institutions such as hospitals, prisons and hotels). This will have an impact on data measuring substance use issues, which may be subject to under estimation. The lack of confidentiality/privacy of face-to-face interviews, which may be conducted with other household members present, may affect the responses to particular questions, such as those on substance use (including alcohol and tobacco use).

13.5 Attachment tables

Attachment tables are identified in references throughout this chapter by an 'A' suffix (for example, table 13A.1.2 is table 2 in the attachment tables for section 13.1). The files containing the attachment tables can also be found on the

Review web page (www.pc.gov.au/gsp). Users without access to the Internet can contact the Secretariat to obtain the attachment tables (see contact details on the inside front cover of the Report).

13.1 Patterns of relative Indigenous disadvantage

 Table 13A.1.1
 Disadvantage among different subgroups by Indigenous status

 Table 13A.1.2
 Disadvantage among different subgroups by Indigenous status

13.2 Associations between headline indicators

Table 13A.2.1 Associations between different headline indicators of disadvantage, people aged 15 years and over

13.3 Associations between headline indicators and strategic change indicators

 Table 13A.3.1
 Associations between headline indicators and strategic areas for action

(Indigenous population only)

 Table 13A.3.2
 Associations between headline indicators and strategic areas for action

(Indigenous population only)

13.6 References

ABS (Australian Bureau of Statistics) 2006, *Measuring Australia's Progress*, Cat. no. 1370.0, Canberra.

NHMRC (National Health and Medical Research Council) 2001, *Australian Alcohol Guidelines, Health Risks and Benefits, Australian Government, Canberra*, http://www.nhmrc.gov.au/publications/synopses/ds9syn.htm, (accessed 30 March 2005).