Reported Gambling Problems in the Indigenous and Total Australian Population

Commissioned by Gambling Research Australia for the Ministerial Council on Gambling
The Ministerial Council on Gambling is comprised of the Ministers responsible for gambling in each State and Territory Government and the Australian Government. The objective of the Council is to minimise the adverse consequences of problem gambling via the exchange of information on responsible gambling measures and by acting as a forum for discussion and facilitation of the development of an effective interventions framework.

The Ministerial Council on Gambling established Gambling Research Australia (GRA) to administer its research program. The Secretariat is provided by the Office of Gaming and Racing, Department of Justice, Victoria. Further information about the national research program may be obtained from www.gamblingresearch.org.au

Gambling Research Australia commissioned Charles Darwin University, Northern Territory to undertake a national study into gambling problems in the Indigenous and Total Australian Population.

This project has been funded as part of the Research Program of the Ministerial Council on Gambling and was commissioned under research priority six of the National Gambling Research Program. This priority involves:

“Conducting research into patterns of gambling and consider strategies for harm reduction in specific communities and populations, such as Indigenous, rural, remote or culturally and linguistically diverse communities, young people or older people”.

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South Australia: Government of South Australia

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Victoria: Victorian Government through the Community Support Fund

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Reported Gambling Problems in the Indigenous and Total Australian Population

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Executive Summary

Chapter 1  Introduction

• This chapter sets out the scope the report and provides an outline of each chapter. Specifically, the report conducts a literature review on gambling and Indigenous people, examines the extent to which gambling problems are related to experience of other negative life events (stressors), and identifies the independent correlates of reported gambling problems among the Indigenous population of Australia by jurisdiction and remoteness.

Chapter 2  Demographic, socioeconomic and social profile of the Indigenous population

• Key demographic, socioeconomic and social indicators for the Indigenous population indicate a high level of disadvantage within the Indigenous, compared with the non-Indigenous, population.

• These statistics also reveal significant diversity in circumstances between states and territories and between people living in remote versus non-remote areas.

• Specifically, all socioeconomic indicators for Indigenous people shows a clear increasing trend in disadvantage when moving from major cities to remote and very remote localities.

• The variation is significant because there is considerable variation between jurisdictions in the proportion of the population living in remote and very remote localities. Indigenous people make up 30% of the Northern Territory’s population and the Northern Territory also has the highest proportion of the total Indigenous population living in remote and very remote locations (approximately 12%).

• This imbalance has a direct bearing on the demands for service provision, but is also likely to affect the vulnerability of the population to potentially problematic activities, such as gambling.

Chapter 3  Literature review: Gambling and Indigenous Australians

Indigenous gambling: Card games pre 1985

• The literature review suggested that gambling was not an activity that Indigenous people participated in traditionally. From all accounts sourced, Indigenous Elders (i.e. initiated men or men of high degree) viewed gambling (and alcohol) as a danger to Indigenous Law.

• As early as the 1950s in central Australia, gambling was beginning to displace Indigenous ceremony and ritual as a community activity (Berndt & Berndt, 1946-47; Tonkinson, 1974).

• The card games prior to self-determination, by and large, given by one of the only Indigenous accounts (i.e. Dodd & Vaughn, 1985), indicates that gambling was an activity played by families or when relatives visited and was an enjoyable social interaction, where winners redistributed money back to losers to stay in the game.

• Anthropological research conducted during the 1980s also tended to emphasise the positive aspects of gambling by Indigenous people. Specifically, gambling was viewed as a form of hunting and gathering with men playing higher stakes games and women playing smaller
Indigenous gambling (though more regularly) respectively (Altman, 1985; Goodale, 1987). The redistributive function of gambling was highlighted by these studies.

- Other anthropological studies noted significant negative social outcomes associated with gambling. For example, Martin (1993), researching in a north Queensland Aboriginal community in the mid 1980s, noted that nearly all winnings from male gamblers were used to buy alcohol or to travel (e.g. by chartering a plane) to a town to buy alcohol. Martin identifies a redistribution of money from the women (who were primarily responsible for feeding and nurturing of children), to men, and from non-drinkers to drinkers.

- Furthermore, Hunter (1993), McKnight (2002), and Hunter and Spargo (1988) in contextualising gambling within broader community processes noted that problems were more common where alcohol was a significant problem in the community.

Indigenous gambling post 1985: Regulated and unregulated gambling

- Research in the 1990s in NSW, Victoria, Queensland, and the Northern Territory indicated that Indigenous people were engaging in regulated forms of gambling more heavily, mostly on horse race betting (TAB) and EGMs (Brady, 1998; Dickerson et al., 1996; Foote, 1996; Holden, Dickerson, Boreham, Harley, & Hogan, 1996; McMillen & Togni, 2000; Phillips, 2003).

- This research suggests that increased accessibility of regulated forms of gambling, particularly EGMs, is a cause for concern. Where regulated gambling was made available to people in remote settings, these opportunities were taken up, with one study finding mean EGM expenditure as high as 20% of income.

- The literature reviewed supported the notion that Indigenous people are going through a transition from participating in unregulated gambling (i.e. card games) to more regular participation in regulated forms of gambling (i.e. EGMs).

- Unregulated gambling (i.e. card games) are still largely perceived as being less problematic than regulated gambling, due to the redistributive function, although there is some evidence to suggest that large winning from card games are being spent outside the community (i.e. not necessarily of food and essentials) and in some instances nearly all larger winning are spent by men on alcohol (McDonald and Wombo, 2006; Phillips, 2003; Martin, 1993).

- The literature makes clear that gambling causes significantly more problems within the Indigenous population compared with the non-Indigenous population. Problems include lack of money for essentials, children not being cared for adequately (i.e. physically through poor nutrition and emotionally through lack of nurturing), increased family and community tensions (particularly between gamblers and non-gamblers), and the more indirect opportunity cost of lowered engagement in other productive activities.

Chapter 4  Correlates of gambling related problems within the Indigenous Population of Australia

- The factor analyses of the Negative Life Events Scale (NLES) indicated that gambling problems situated with other events of social transgression including witness to violence, abuse and violent crime, alcohol and drug related problems, and having trouble with the
police. This finding was consistent for the remote and non-remote analyses for the Indigenous population.

• Significantly, the same pattern of associations occurred for the general population as the Indigenous population, so gambling problems fall within this domain (social transgression and breakdown) for the entire population and is not specific to Indigenous or non-Indigenous people.

• There is substantial variation in reported gambling problems by jurisdiction and remoteness for the Indigenous population. The NT, Qld and SA have highest reported gambling problems while WA had the lowest estimates.

<table>
<thead>
<tr>
<th>2002 NATSISS1</th>
<th>2004/5 NATSIHS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote</td>
<td>Non-remote</td>
</tr>
<tr>
<td>% (SE)</td>
<td>% (SE)</td>
</tr>
<tr>
<td>Western Australia</td>
<td>13.2 (2.9)</td>
</tr>
<tr>
<td>New South Wales</td>
<td>8.7 (2.3)</td>
</tr>
<tr>
<td>Victoria</td>
<td>-</td>
</tr>
<tr>
<td>Queensland</td>
<td>37.1 (10.7)</td>
</tr>
<tr>
<td>South Australia</td>
<td>19.3 (5.4)</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>31.9 (4.1)</td>
</tr>
<tr>
<td>ACT/Tasmania</td>
<td>-</td>
</tr>
<tr>
<td>Australia</td>
<td>26.4 (3.2)</td>
</tr>
</tbody>
</table>

1 NATSISS estimates sourced from Australian Bureau of Statistics publications (data cubes), except for ACT/Tasmania which were derived from the NATSISS CURF accessed via the ABS RADL.
2 NATSIHS estimates obtained from a customised Australian Bureau of Statistics tables

• Estimates of reported gambling problems were also significantly higher (three to four times) amongst the Indigenous population living in non-remote regions, compared with the general population.

• Respondents living in remote regions in all jurisdictions except NSW reported more gambling problems than people living in non-remote regions.

• The significant correlates of reported gambling problems for the Indigenous population fall under six domains: a) regional, b) demographic (household structure and crowding, and gender), c) socioeconomic (household/personal income and cash flow problems), d) social networks (attendance and participation in social and cultural activities), e) social and community safety (youth gang problems, alcohol problems, physical assault problems for remote and family violence and theft and break-ins for non-remote), and f) health (self-reported health).

• Indigenous people living in remote areas reported gambling problems were higher in more crowded households, lower for people with a land line telephone (more a measure of socioeconomic status for Indigenous people in remote areas), higher for people who participated/attended in community activities, sporting events and carnivals, for people attending a funeral. Reported gambling problems were also more common where people reported community youth gang problems, alcohol problems and physical assault problems. Lastly, people who had been a victim of threatened or physical violence reported more gambling problems.

• For Indigenous people living in non-remote areas, females and people living in households where all residents were Indigenous reported more gambling problems, as did people that
were renting or purchasing their home. Gambling problems were higher for people on higher personal income and those living in households in the upper household income quintile. Being involved in an Indigenous organisation and attending sporting events was associated with more gambling problems. People who identified community problems (theft and break-ins and family violence) reported more gambling problems.

- Socioeconomic factors were less important in remote areas compared with non-remote regions for the Indigenous population. For example, individual income and household income were independently associated with gambling problems in non-remote regions for the 2002 and 2004/5 Indigenous surveys respectively, but not for the remote analysis.

- Participation in social and cultural activities was more important for people living in remote areas, but was still independently correlated with gambling problems in non-remote areas with participation in these activities associated with higher levels of reported gambling problems.

- Socioeconomic variables were more important in the analyses of the general population with the variables household income, educational attainment and tenure type all having independent associations with reported gambling problems.

- Participation in social and cultural events were significant factors for the general population as with the Indigenous population, highlighting the social nature of gambling as an activity or form of entertainment.

**Chapter 5 Discussion and conclusions**

**Reducing gambling-related harm**

- These findings illustrate that gambling is closely tied to a range of social domains and environmental domains that need to be considered when considering harm-reduction strategies. In other words, simply considering gambling as an isolated phenomenon that is causal of social problems is somewhat limited and inaccurate.

- Harm reduction strategies, to be effective, may need to include these broader contexts. For example, the finding that crowded households experienced more gambling-related problems suggests that a reduction in crowding would in turn lead to a reduction in gambling problems.

- In addition, the association between gambling problems and social breakdown/transgression suggest that gambling-related harm could be reduced through initiatives aimed at promoting community cohesion and wellbeing.

- The association between gambling problems and attending or participating in community events and activities would suggest that places where people meet socially would be good places to promote awareness about the harms associated with gambling. Additionally, there appears to be a need to create more public education surrounding gambling problems which would help to alleviate any stigma associated with acknowledging personal gambling problems.

- The following table summarises variables that showed a significant independent association with reported gambling problems for the Indigenous population, and strategies that need to be considered when developing policy aimed at reducing harm associated with gambling.
<table>
<thead>
<tr>
<th>Significant independent correlates</th>
<th>Policy implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-family households</td>
<td>Crowded housing increases the chance of someone being affected by another persons gambling. High levels of overcrowding in remote communities may undermine other efforts to reduce gambling related harm.</td>
</tr>
<tr>
<td>Income</td>
<td>Improving employment and educational outcomes will increase disposable income, lessen time available for gambling, and improve individual ability to make an informed choice. Differences in the association between income and gambling problems in remote and non-remote areas may require different policy approaches for public health messages.</td>
</tr>
<tr>
<td>Social connectedness (participation and attendance at social/cultural events)</td>
<td>Places where people gather provide good exposure for information and posters on gambling related harm and availability of counselling services, and also raise awareness about harm associated with gambling.</td>
</tr>
<tr>
<td>Community problems and victim of physical or threatened violence</td>
<td>Community cohesion and wellbeing programs and improved policing of communities, while improving safety may also increase the community’s capacity to manage problems associated with gambling.</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

1.1 Purpose of report

The 2004-2008 National Framework on Problem Gambling identified four priority areas for research. These were (1) prevention, (2) early intervention and continuing support, (3) building effective partnerships, and (4) national research and evaluation. The current report provides a nationwide assessment of the correlates of reported gambling problems amongst the Indigenous population. More specifically, it advances Gambling Research Australia’s fourth priority research area by:

1. conducting a literature review on gambling and Indigenous people,
2. examining the extent to which gambling problems are related to experience of other negative life events (stressors), and
3. identifying the independent correlates of reported gambling problems.

In a general sense then, the current research project conceptualises the ‘problem of gambling’ rather than the ‘individual problem gambler’. This approach concentrates on the problems and other lifestyle issues faced by Indigenous people to ensure interventions are as holistic as possible rather than dealing with one small part of a more widespread predicament. The perspective presented here acknowledges that the social, economic, cultural, and geographic contexts that Indigenous people operate in, indeed that ‘frame’ gambling behaviour, need to be addressed from a substantive perspective (i.e. understanding gambling ethnographically), but also a policy perspective (i.e. developing appropriate regulation and interventions). Within this framework the project will specifically investigate the contextual factors that are associated with variations in the level of gambling-related problems across the Australian Indigenous population.

Therefore, the project broadly falls under the GRA objective four: national research and data collection - to inform the implementation and further development of the national framework and its strategies (GRA, 2004). Given this content, the project specifically contributes to the National Gambling Research Program research priority six: to research patterns of gambling and consider strategies for harm reduction in specific communities and populations, such as Indigenous, rural, remote or culturally and linguistically diverse communities, young people or older people (GRA, 2004).

1.2 Outline of the report

Chapter 2 presents a summary of the demographic and socioeconomic characteristics of the Indigenous population. The Chapter consists of three sections: demographic profile, socioeconomic characteristics, and law and justice issues. The chapter sources data primarily from Australian Bureau of Statistics (ABS) publications. This chapter provides important contextual information which provides a foundation for the discussion in Chapter 5 which discusses the findings of the literature review (Chapter 3) and empirical analysis (Chapter 4).

Chapter 3 summarises literature from the past 70 years to identify common themes associated with the introduction of gambling into the Indigenous population as well as the extent of our current knowledge about gambling and gambling-related problems amongst this population.

---

1 Indigenous refers to Aboriginal and Torres Strait Islander people of Australia. However, Aboriginal is used when summarising articles that used this terminology.
The review is presented in two sections that broadly correspond to phases in Australian Indigenous policy. The first examines literature from pre 1985 while the second examines more contemporary research.

Chapter 4 first presents an overview of the ABS module known as the Negative Life Events Scale (NLES) which contains the item “reported gambling problems”. Second, an empirical analysis of the NLES through a factor analysis identifies how reported gambling problems situate relative to other negative life events (e.g. alcohol or drug problems, witness to violence, trouble with police, chronic disability), is conducted. Third, estimates of reported gambling problems by remoteness for each state and territory are presented. Lastly, multivariable adjusted logistic regression models that display explanatory variables showing an independent correlation with reported gambling problems for both the Indigenous and general populations are presented. These empirical analyses are based on the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS), the 2004/5 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), and the 2002 and 2006 General Social Surveys (GSS).

Chapter 5 discusses the findings from the empirical analyses making reference to the background information provided in Chapter 2 (demographic and socioeconomic profile of Indigenous people) and Chapter 3 (literature review of Indigenous people and gambling). Specifically it discusses (1) estimates of reported gambling problems by state and territory and remoteness, (2) gambling problems relationship to measures of health and wellbeing, (3) independent correlates of reported gambling problems, (4) limitations to the analyses, (5) policy strategies to reduce gambling related harm, and (6) areas for further research.
Chapter 2: Demographic, Social and Economic Profile of the Australian Indigenous Population

2.1 Introduction

This chapter presents demographic and social indicators for the Australian Indigenous population. Comparisons are presented with the total or non-Indigenous population where available. The Chapter consists of three sections: (2.2) demographic profile, (2.3) socioeconomic characteristics and (2.4) law and justice issues. The chapter sources data primarily from Australian Bureau of Statistics (ABS) publications and, unless otherwise stated, data pertains to Census counts of population which are lower than estimated usual residence population counts (Australian Bureau of Statistics, 2007c). The purpose of the Chapter is to provide a comprehensive description of the demographic, social and economic conditions of Indigenous people, as it is these characteristics that will be explored for their independent correlations with reported gambling problems identified in Chapter 4. The current Chapter thus contextualises the gambling-specific analysis which is the primary focus of the current report.

2.2 Demographic profile

2.2.1 Population size and composition

Australia’s Indigenous population has been increasing rapidly since census counts were first collected by the ABS in the 1971 Census of Population and Housing. In 2001, the census population count was approximately 420,000 and had increased to 455,000 in 2006 (Figure 2.1).

![Figure 2.1](image)

**Figure 2.1** Population increase from 1986 to 2006. ABS census of population and housing

Source: *(Australian Bureau of Statistics, 2008) Cat. No 4713.0*

The Indigenous population is considerably younger than the non-Indigenous population. The median age for the Indigenous population is 21 years, compared with non-Indigenous of 37 years (Australian Bureau of Statistics, 2008). Some 38% of the Indigenous population is under 15 years, compared with 19% for the non-Indigenous population.
2.2.2 Population distribution

The geographic distribution of the Indigenous population differs from that of non-Indigenous Australians, in that a much larger proportion of the Indigenous population lives in rural and remote locations across Australia (see below and Australian Bureau of Statistics, 2008). Figure 2.2 maps the distribution of Indigenous people across Australia with each dot representing 100 people. The highest concentrations of the Indigenous population occur down the east coast of Australia, though a significant number of people living in very remote parts of Australia, particularly in the North Queensland, Northern Territory and Western Australia.

Figure 2.3 displays the remoteness of areas for Australia as defined by the ABS Australian Standard Geographical Classification Remoteness Structure (Australian Bureau of Statistics 2008). The remoteness areas provide an indication of people’s access to services based on distance to nearest larger cities. Comparing Figure 2.2 and 2.3 it is clear that a larger proportion of the Indigenous population have a more limited access to goods and services.

Figure 2.2 Distribution of the Indigenous population (ERP) across Australia, 2006
Source: ABS, 2008, Cat. No 4713.0
Figure 2.3 Australian Bureau of Statistics Remoteness Structure for Australia, 2006
The geographic dispersal of the Indigenous population is also reflected in the differing population proportions for each state and territory (see Table 2.1). The Northern Territory has by far the highest proportion of Indigenous people at 30% (far right column of Table 2.1). Surprisingly Tasmania (3.5%) had the next highest proportion Indigenous, followed by Queensland (3.3%) and Western Australia (3.0%). However, these figures are relative to the distribution of the non-Indigenous population. If the distribution of the Indigenous population as a total of the Indigenous population is examined, then a different picture emerges. In this context, New South Wales contains the highest proportion of Indigenous population out of the total Indigenous population (30%), followed by Queensland (28%), Western Australia (13%) and the Northern Territory (12%). These figures indicate the Indigenous population is highly spatially dispersed, far more so then the more spatially-concentrated non-Indigenous population.

Table 2.1 Indigenous and non-Indigenous population\(^1\) for states and territories

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<tbody>
<tr>
<td>New South Wales</td>
<td>138,507</td>
<td>30.4</td>
<td>6,019,395</td>
<td>33.0</td>
<td>6,549,176</td>
<td>2.1</td>
</tr>
<tr>
<td>Victoria</td>
<td>30,143</td>
<td>6.6</td>
<td>4,636,251</td>
<td>25.4</td>
<td>4,932,422</td>
<td>0.6</td>
</tr>
<tr>
<td>Queensland</td>
<td>127,580</td>
<td>28.0</td>
<td>3,552,043</td>
<td>19.4</td>
<td>3,904,532</td>
<td>3.3</td>
</tr>
<tr>
<td>South Australia</td>
<td>25,556</td>
<td>5.6</td>
<td>1,419,464</td>
<td>7.8</td>
<td>1,514,338</td>
<td>1.7</td>
</tr>
<tr>
<td>Western Australia</td>
<td>58,710</td>
<td>12.9</td>
<td>1,773,047</td>
<td>9.7</td>
<td>1,959,085</td>
<td>3.0</td>
</tr>
<tr>
<td>Tasmania</td>
<td>16,768</td>
<td>3.7</td>
<td>436,810</td>
<td>2.4</td>
<td>476,481</td>
<td>3.5</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>53,661</td>
<td>11.8</td>
<td>122,734</td>
<td>0.7</td>
<td>192,900</td>
<td>27.8</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>3,875</td>
<td>0.9</td>
<td>305,136</td>
<td>1.7</td>
<td>324,036</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td><strong>455,028</strong></td>
<td><strong>100.0</strong></td>
<td><strong>18,266,813</strong></td>
<td><strong>100.0</strong></td>
<td><strong>19,855,887</strong></td>
<td><strong>2.3</strong></td>
</tr>
</tbody>
</table>

\(^1\) Place of enumeration census population counts  
\(^2\) Total includes “not stated” responses on the census form  
Source: ABS, 2007, Cat. No. 4705.0

The proportional distribution of the Indigenous and non-Indigenous population by state/territory and remoteness is presented in Table 2.2. This distribution clearly differs from that of the non-Indigenous population, with 24% of Indigenous people living in remote and very remote areas compared with less than 2% of the non-Indigenous population. Maps of the distribution for the Indigenous and non-Indigenous population by jurisdiction and remoteness provided in Figures 2.4 and 2.5 (i.e. a visual representation of the data in Table 2.2). Darker shades represent regions with a high percentage of the total population for the Indigenous and non-Indigenous populations.

The largest share of the remote and very remote Indigenous population is located in the Northern Territory (9.5%, followed by Queensland (6.3%), and Western Australia (5.4%), which together accounts for 21% of the remote/very remote Indigenous population. However, around 50% the total Indigenous population lives in non-remote locations along the east coast of NSW and Queensland.
Table 2.2 Proportional distribution of the Indigenous and non-Indigenous populations by remoteness and jurisdiction, 2006

<table>
<thead>
<tr>
<th>State/Territory</th>
<th>Remoteness</th>
<th>Indigenous</th>
<th></th>
<th>Non-Indigenous</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Across regions</td>
<td>Within region</td>
<td>Across regions</td>
<td>Within region</td>
</tr>
<tr>
<td></td>
<td></td>
<td>no.</td>
<td>%</td>
<td>no.</td>
<td>%</td>
</tr>
<tr>
<td>New South Wales</td>
<td>Major city</td>
<td>59,263</td>
<td>13.1</td>
<td>42.9</td>
<td>4,380,477</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>71,753</td>
<td>15.8</td>
<td>52.0</td>
<td>1,602,605</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>7,040</td>
<td>1.6</td>
<td>5.1</td>
<td>27,486</td>
</tr>
<tr>
<td></td>
<td><strong>NSW total</strong></td>
<td><strong>138,056</strong></td>
<td>30.5</td>
<td>100.0</td>
<td><strong>6,010,568</strong></td>
</tr>
<tr>
<td>Victoria</td>
<td>Major city</td>
<td>14,771</td>
<td>3.3</td>
<td>49.1</td>
<td>3,453,909</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>15,246</td>
<td>3.4</td>
<td>50.7</td>
<td>1,172,183</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>39</td>
<td>0.0</td>
<td>0.1</td>
<td>4,415</td>
</tr>
<tr>
<td></td>
<td><strong>Victoria total</strong></td>
<td><strong>30,056</strong></td>
<td>6.6</td>
<td>100.0</td>
<td><strong>4,630,507</strong></td>
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<tr>
<td>Queensland</td>
<td>Major city</td>
<td>36,380</td>
<td>8.0</td>
<td>28.6</td>
<td>2,167,037</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>62,368</td>
<td>13.8</td>
<td>49.1</td>
<td>1,285,780</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>28,325</td>
<td>6.3</td>
<td>22.3</td>
<td>88,231</td>
</tr>
<tr>
<td></td>
<td><strong>QLD total</strong></td>
<td><strong>127,073</strong></td>
<td>28.0</td>
<td>100.0</td>
<td><strong>3,541,048</strong></td>
</tr>
<tr>
<td>South Australia</td>
<td>Major city</td>
<td>12,443</td>
<td>2.7</td>
<td>48.9</td>
<td>1,037,501</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>8,266</td>
<td>1.8</td>
<td>32.5</td>
<td>330,660</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>4,757</td>
<td>1.0</td>
<td>18.7</td>
<td>48,979</td>
</tr>
<tr>
<td></td>
<td><strong>SA total</strong></td>
<td><strong>25,466</strong></td>
<td>5.6</td>
<td>100.0</td>
<td><strong>1,417,140</strong></td>
</tr>
<tr>
<td>Western Australia</td>
<td>Major city</td>
<td>20,585</td>
<td>4.5</td>
<td>35.2</td>
<td>1,292,622</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>13,544</td>
<td>3.0</td>
<td>23.2</td>
<td>384,321</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>24,346</td>
<td>5.4</td>
<td>41.6</td>
<td>90,656</td>
</tr>
<tr>
<td></td>
<td><strong>WA total</strong></td>
<td><strong>58,475</strong></td>
<td>12.9</td>
<td>100.0</td>
<td><strong>1,767,599</strong></td>
</tr>
<tr>
<td>Tasmania</td>
<td>Major city</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>16,128</td>
<td>3.6</td>
<td>96.4</td>
<td>427,225</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>600</td>
<td>0.1</td>
<td>3.6</td>
<td>8,735</td>
</tr>
<tr>
<td></td>
<td><strong>Tasmania total</strong></td>
<td><strong>16,728</strong></td>
<td>3.7</td>
<td>100.0</td>
<td><strong>435,960</strong></td>
</tr>
<tr>
<td>Northern Territory</td>
<td>Major city</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>10,456</td>
<td>2.3</td>
<td>19.5</td>
<td>85,712</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>43,037</td>
<td>9.5</td>
<td>80.5</td>
<td>35,440</td>
</tr>
<tr>
<td></td>
<td><strong>NT total</strong></td>
<td><strong>53,493</strong></td>
<td>11.8</td>
<td>100.0</td>
<td><strong>121,152</strong></td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>Major city</td>
<td>3,843</td>
<td>0.8</td>
<td>99.9</td>
<td>304,051</td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td>3</td>
<td>0.0</td>
<td>0.1</td>
<td>467</td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>ACT total</strong></td>
<td><strong>3,846</strong></td>
<td>0.8</td>
<td>100.0</td>
<td><strong>304,518</strong></td>
</tr>
<tr>
<td>Australia</td>
<td>Major city</td>
<td><strong>147,285</strong></td>
<td><strong>32.5</strong></td>
<td><strong>32.5</strong></td>
<td><strong>12,635,597</strong></td>
</tr>
<tr>
<td></td>
<td>Inner &amp; outer regional</td>
<td><strong>197,764</strong></td>
<td><strong>43.6</strong></td>
<td><strong>43.6</strong></td>
<td><strong>5,288,953</strong></td>
</tr>
<tr>
<td></td>
<td>Remote/very remote</td>
<td><strong>108,144</strong></td>
<td><strong>23.9</strong></td>
<td><strong>23.9</strong></td>
<td><strong>303,942</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Australia total</strong></td>
<td><strong>453,193</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>18,228,492</strong></td>
</tr>
</tbody>
</table>

Figure 2.4 Distribution of the Indigenous population by jurisdiction and remoteness, 2006

Source: 2006 Census ABS customised CDATA table online accessed 10 November 2008. Place of enumeration counts
Figure 2.5 Distribution of the non-Indigenous population by jurisdiction and remoteness, 2006
Source: 2006 Census ABS customised CDATA table online accessed 10 November 2008. Place of enumeration counts
2.2.3 Population mobility

Population mobility plays an important role in terms of access to goods and services, including the ability of remote populations to access gambling opportunities in urban centres. Between the 2001 and 2006 an increasing number of Indigenous people moved to major cities and inner regional areas as shown in Figure 2.6. This phenomenon, known as urban drift, has been occurring for some years, though recent evidence suggests it is increasing at a faster rate for the Indigenous compared with the non-Indigenous population (Taylor, 1996). This shift consists predominantly of Indigenous people aged under 40 years moving from remote and very remote locations to less remote locations (Australian Bureau of Statistics, 2008).

![Figure 2.6](image)

**Figure 2.6** Indigenous movements in and out of remoteness areas from the 2001 to 2006 census

Source: ABS, 2008, Cat. No. 4713.0

2.2.4 Household composition and crowding

Figure 2.7 highlights the household type by remoteness for the Indigenous population. There is a strong trend towards a higher proportion of multi-family households as remoteness increases, with just under 20% of households in very remote areas consisting of multilamily households. Indigenous households were also five times more likely to be multi-family households compared with households with no Indigenous people in them (Australian Bureau of Statistics, 2008).

![Figure 2.7](image)

**Figure 2.7** Household types by remoteness for Indigenous households

Source: ABS, 2008, Cat. No. 4713.0

Levels of crowding are also considerably higher in Indigenous households, which is mostly a result of the increased number of dependents (less than 15 years) on average per
household. Overall, Indigenous households averaged 3.3 persons per house, compared with 2.5 for non-Indigenous households. The average number of dependents per household for Indigenous households is 1.1 compared with 0.5 for non-Indigenous households. Figure 2.8 highlights the difference in trends in household crowding between the Indigenous and non-Indigenous populations. Indigenous households have an average of 3.1 persons per household in major cities rising to 4.9 persons per household in very remote regions, a level that reflects the serious shortage of housing in remote areas of Australia (Bailie, 2007).

![Figure 2.8 Average persons per household by remoteness and household Indigenous status](image)

**Figure 2.8** Average persons per household by remoteness and household Indigenous status

Source: ABS, 2008, Cat. No. 4713.0

The levels of crowding for the Indigenous population by remoteness also reflected in the percentage of households requiring an extra bedroom based on the Canadian National Occupancy Standard, a measure based on the availability of bedrooms for usual residents (Figure 2.9). Over 40% of Indigenous households in very remote locations required at least one extra bedroom and this decreases to 22% for remote areas, 13% of outer regional, and to less than 10% in inner regional and major cities. The percentage of non-Indigenous households requiring an extra bedroom was steady ranging between 2% and 4%.

![Figure 2.9 Percentage of households requiring an extra bedroom by remoteness and Indigenous status](image)

**Figure 2.9** Percentage of households requiring an extra bedroom by remoteness and Indigenous status

Source: ABS, 2008, Cat. No. 4713.0

2.2.5 **Demographic profile summary**

The Indigenous population has a younger population than non-Indigenous Australians with median age for Indigenous people, 21 years compared with 37 years for non-Indigenous Australians. Thirty-eight percent of the Indigenous population is under 15 years of age.
New South Wales contains the largest share of the indigenous population, with around 30% of the population followed by Queensland with 28%. The Northern Territory has the largest share of the indigenous population living in remote and very remote regions, with 12% of the total Indigenous population living in these regions in the Northern Territory. Approximately one quarter of Indigenous people live in remote or very remote locations, compared with less than 2% for non-Indigenous Australians. Over the last few decades the Indigenous population has exhibited urban drift, with increasing numbers of younger (less than 40 years) people moving into major cities and inner regional towns. Indigenous people living in remote (to a lesser degree) and very remote are exposed to high levels of crowding with just under 20% of household in very remote regions having two or more families per house, compared with less than 5% in major cities and inner and outer regional locations. Not surprisingly, crowding as measured by average number of persons per household is 4.9 in very remote regions and drops to just over 3 persons per household for all other remoteness areas. Based on the Canadian National Occupancy Standard, just over 40% of houses located in very remote regions were classified as requiring an extra bedroom, dropping to 22% in remote areas, 13% in outer regional and less than 10% in major cities and inner regional areas.

### 2.3 Socioeconomic status

#### 2.3.1. Education

Indigenous Australians have significantly lower school completion rates to years 10 and 12 than the non-Indigenous population, although this disparity was not present for 15-17 year olds (Figure 2.10). In the 18-34 year old age bracket, less than half as many Indigenous people completed year 12 compared with non-Indigenous people. However, as with the demographic characteristics outlined in the previous section, there is considerable variation across Australia (Figure 2.11). Year 10 completions were between 30 and 35% for all areas other than very remote where they dropped to less than 25%, a statistic that partly reflects limited access to secondary schools (Bailie et al., 2002). Year 12 completion were highest in major cities at just under 30%, then dropped to just over 20% for inner and outer regional areas, and fell further to only 16% and 12% for remote and very remote areas respectively.

![Figure 2.10](source: ABS, 2008, Cat. No. 4713.0)
Non-school qualifications display a similar trend to high school completion with a declining percentage of the Indigenous population receiving a post-school qualification the more remote Indigenous people live (Figure 2.12). In major cities just over 30% of Indigenous people receive a post-school qualification compared with just under 50% of non-Indigenous people. This drops to a little over 10% for Indigenous people in very remote areas (compared to 45% for non-Indigenous people).

2.3.2 Labour force participation

Labour force participation shows opposite trends by remoteness for the Indigenous and non-Indigenous populations respectively (Figure 2.1.3). In major cities, there is little difference between Indigenous (59%) and non-Indigenous (63%) labour force participation, but the gap widens as remoteness increases. Participation rates decrease for Indigenous people as remoteness increases, while the opposite trend is apparent for the non-Indigenous population. In very remote regions, non-Indigenous labour force participation is 79%, while for the Indigenous population it is 50%.
Unemployment is between three and five times higher amongst the Indigenous population compared with the non-Indigenous population (depending on remoteness) (Figure 2.14). In major cities unemployment is 15% and increases to 18 to 17% for inner and outer regional areas respectively. It then declines to 15% and 10% for remote and very remote areas respectively. The decrease in the unemployment rate in remote and very remote areas is masked by the Community Development Employment Project (CDEP) program in which participants work for a minimal wage, with the project contributing to a person’s ability to move into the mainstream workforce (Department of Employment and Workplace Relations, 2008). In contrast, the non-Indigenous unemployment rate was 5% across major cities, inner and outer regional areas, and decreased to 3% and 2% for remote and very remote areas respectively.

2.3.3 Household and personal income

Figure 2.15 graphs mean equivalised household income for Indigenous and non-Indigenous households. Indigenous households in major cities had a mean household income of $539 per week compared with non-Indigenous households of $779. The mean income of Indigenous households decreased steadily from major cities to very remote regions, with a mean income of just $329 per week for very remote regions. This contrasts with an increase for non-Indigenous household mean income in very remote areas of $812.
Indigenous gambling

per week. The overall mean equivalised income for Indigenous households ($460) is 38% less than non-Indigenous households ($740) (Australian Bureau of Statistics, 2008).

Figure 2.15 Mean equivalised household income by remoteness and household Indigenous status

Source: ABS, 2008, Cat. No. 4713.0

Another way of comparing the disparity between Indigenous and non-Indigenous household income is to compare the distribution of Indigenous household income with that of the quintile distribution for non-Indigenous households (Figure 2.16). The lowest income quintile contains the 20% bottom household incomes for non-Indigenous households. However, 45% of Indigenous households fall in the lowest non-Indigenous household income quintile. The highest income quintile for non-Indigenous households contains only 5% of all Indigenous households. In summary, Indigenous households are over-represented in lowest income households and under-represented in the third, fourth and highest non-Indigenous household income quintiles. Again Indigenous household income varies considerably by remoteness, with 54% of households in the highest income quintile living in major cities and around 12% in very remote regions. This compares with 80% of non-Indigenous household in from the highest income quintile in major cities to less than 2% living in remote very remote areas (Australian Bureau of Statistics, 2008).

Figure 2.16 Mean equivalised household income quintiles and household Indigenous status

Source: ABS, 2008, Cat. No. 4713.0

The percentage of Indigenous people in the highest income quintile is mapped by Indigenous areas in Figure 2.17. Indigenous areas will generally have a minimum of 300 Indigenous people and generally align with Local Government Boundaries (Australian Bureau of Statistics, 2006b). Very few Indigenous areas have more than 10% of people in the highest income quintile and the distribution of these people is heavily concentrated in four or five clusters. Of significance, there is only one Indigenous area in the whole of the
Northern Territory where more than 10% of Indigenous people are in the highest income quintile.

**Figure 2.17** Percentage of Indigenous persons in an Indigenous area who are in the highest income quintile

Source: ABS, 2008, Cat. No. 4713.0

Personal income distribution for Indigenous and non-Indigenous people follows a similar pattern to household income by remoteness (Figure 2.18). Non-Indigenous incomes are high in the major cities (approximately $500 per week) decreasing slightly in inner and outer regional, then increasing in remote and very-remote regions to just over $600 per week. In contrast, personal income for the Indigenous population decreases steadily from major cities (approximately $370 per week) to very remote areas (just over $200 per week). Disparities in personal income are largest for unemployed Indigenous people, with full-time Indigenous workers earning $702 per week, compared with $889 for non-Indigenous workers, while for the income of unemployed Indigenous people was just over $500 per week compared with non-Indigenous income of approximately $700 per week (Australian Bureau of Statistics, 2008).
Indigenous gambling

2.3.4 Housing tenure

Indigenous households are more than twice as likely to rent compared with non-Indigenous households. This increases significantly by remoteness, with 89% of Indigenous households renting in very remote regions (Figure 2.19). There is little difference between owners with no mortgage and owners with a mortgagee for Indigenous households in major cities (27%) and inner (27%) and outer (26%) regional locations. However this proportion falls sharply for remote and very remote households (4%).

2.3.5 Motor vehicle ownership

Access to a registered motor vehicle is not only a measure of access to services for Indigenous households, but it also represents a measure of socioeconomic status. Figure 2.20 graphs household motor vehicle access by remoteness and shows that there is very little variation for non-Indigenous households (approximately 90%). However, while there is little difference between Indigenous and non-Indigenous in major cities, inner and outer regional (all about 80%), access to a motor vehicle declines sharply in remote (69%) and very remote (47%) locations for Indigenous households.
2.3.6 Language

Speaking an Indigenous language is a mark of cultural identity, but also has other implications with regards to the access to mainstream services and employment opportunities. Overall, 12% of the Indigenous population spoke an Australian Indigenous language at home, and 88% of these people lived in remote and very remote areas (Figure 2.21). Over 56% of Australian Indigenous language speakers lived in the Northern Territory, and out of the total Northern Territory Indigenous population, 59% spoke an Indigenous language at home (Australian Bureau of Statistics, 2008).

2.3.7 Socioeconomic status summary

This section has highlighted the large disparities that exist between the Indigenous and non-Indigenous population. However, it has also highlighted the significant diversity within the Indigenous population with regards to socioeconomic status. The significant differences between the urban and very remote Indigenous population observed for measures such as highest educational attainment, year 12 completion rates, housing ownership, income and employment, are a reflection of historical processes, the geographic distribution of economic activity, and structural barriers to the access of services. In addition to the socioeconomic gradient, language and culture differ along the urban-remote continuum, with Indigenous languages spoken by more than half the Indigenous population living in very remote areas of Australia.
2.4 Law and justice

Incarceration of Indigenous people occurs at significantly higher rates than the non-Indigenous population and is associated with a range of other social characteristics including unemployment and low educational attainment (Australian Bureau of Statistics, 2005a, 2005b). The Indigenous population has imprisonment rates more than ten times higher than the non-Indigenous population as reflected in the imprisonment rate ratios by jurisdiction presented in Figure 2.22. In 2004, the imprisonment rate for Indigenous and non-Indigenous people was 1,417 per 100,000 people compared with 129 per 100,000 people respectively. The largest disparities in imprisonment rates occur in Western Australia, followed by South Australia and New South Wales. Tasmania has consistently from 2002 to 2004 had the lowest disparities in imprisonment between Indigenous and non-Indigenous people.

![Figure 2.22 Ratio of Indigenous to non-Indigenous imprisonment rate (a), 2002-2004](image)

(a) Indigenous imprisonment rate divided by the non-Indigenous imprisonment rate, based on age standardised data.
(b) Excludes ACT prisoners held in NSW.
(c) Includes ACT prisoners held in ACT as well as ACT prisoners held in NSW.

Source: (Australian Bureau of Statistics, 2004a) Cat. No. 4102.0

The high imprisonment rate for Indigenous people is reflected in data from the 2002 NATSISS, which indicated that around 16% of Indigenous people had been arrested by the police in the last 5 years (Figure 2.23). There was considerable jurisdictional variation as well as variation by remoteness in several jurisdictions. Consistent with the imprisonment rates, Tasmania had the smallest percentage of Indigenous people stating that they had been arrested in the last 5 years (9%), while Western Australia (22%) had the highest. South Australia and Queensland had higher percentage of Indigenous people being arrested in the last 5 years in remote areas, while the opposite trend was present for the Northern Territory.
Indigenous people are also more likely to be a victim of threatened or physical violence than non-Indigenous people. Figure 2.24 shows that the percentage of the Indigenous population that had been a victim of threatened or physical violence in the last year for Australia was just under one quarter of the population. The Northern Territory and New South Wales were the only jurisdictions to display significant variation between remote and non-remote areas, with the non-remote Indigenous population being more likely to be a victim of threatened or physical violence. The highest levels of being a victim of threatened or physical violence occurred in the ACT (33%), followed by Victoria (30%) and South Australia (29%). The Northern Territory recorded the lowest rate at 17%.

2.5 Summary

This chapter has presented a selection of key socio-demographic and socioeconomic indicators for the Indigenous population (and non-Indigenous population in some instances). The statistics clearly show a high level of disadvantage within the Indigenous, compared with the non-Indigenous, population. However, the statistics also show significant diversity in circumstances between states and territories and between people
living in remote versus non-remote areas. Specifically, there is a clear upward trend in disadvantage for all socioeconomic indicators when comparing Indigenous people living in major cities compared with those living in remote and very remote localities. The variation by remoteness is significant because there is considerable variation between jurisdictions in the proportion of the population living in remote and very remote localities. For example, Indigenous people make up 30% of the Northern Territory’s population and the Northern Territory also has the highest proportion of its Indigenous population living in remote and very remote locations (approximately 12%). This has a direct bearing on the demands for service provision, but is also likely to affect the vulnerability of the population to activities, such as gambling, that are potentially problematic. The following Chapter documents in detail the engagement of the Indigenous population with gambling over the past 70 years.