Network Patient Health Survey – Aboriginal People's Health Report

2015

NSW GOVERNMENT Health
Justice Health & Forensic Mental Health Network

JUSTICE HEALTH & FORENSIC MENTAL HEALTH NETWORK
ABN 70 194 595 506

1300 Anzac Parade
Malabar NSW 2036

PO Box 150
Matraville NSW 2036

Phone: 9700 3000
Fax: 9700 3744
Email: jhadmin@justicehealth.nsw.gov.au
Website: www.justicehealth.nsw.gov.au

For queries regarding the content of this report or for a copy of the survey instrument, please contact:

Research and Evaluation Service
Justice Health & Forensic Mental Health Network
1300 Anzac Parade
Malabar NSW 2036

Phone: 9700 3833
Email: RES@justicehealth.nsw.gov.au

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Abbreviations

ABS	Australian Bureau of Statistics
ADD	Attention deficit disorder
ADHD	Attention deficit hyperactivity disorder
AH&MRC	Aboriginal Health and Medical Research Council
AIHW	Australian Institute of Health and Welfare
AUDIT	Alcohol Use Disorders Identification Test
CSNSW	Corrective Services NSW
DNA	Deoxyribonucleic acid
HIV	Human immunodeficiency virus
JH&FMHN	Justice Health and Forensic Mental Health Network
MMR	Measles, mumps and rubella
NDIA	National Disability Insurance Agency
NPHS	Network Patient Health Survey
NSW	New South Wales
STI	Sexually transmitted infection
WHO	World Health Organisation

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Data collectors

Adriane Carter, Amy Laxton, Andrew Wong, Angela Wilkinson, Anselle Realista, Ashleigh Cussen, Audrey Lazaris, Brendan Christie, Brijesh Aryal, Carly Stanley, Diane Broomhall, Eleanor Reed, Evan Freeman, Gillian Lambert, Jean Harwood, Kathleen Herbert, Kelly Hodson, Kylee Wilson, Martha Marangi, Mary Fitzsimmons, Maxwell Mutakiwa, Michelle Lawerence, Natalie Ricks, Nicole Ang, Phillipa Affleck, Prabin Chemjong, Rhonda Halpin, Sharon Jacobs, Sonya Edenden, Temptation Gahadza, Vicki Wicks, Vicki Douglas, Weller Zheng.

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Foreword

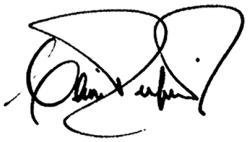
The 2015 Network Patient Health Survey (NPHS) – Aboriginal People's Health Report is the second report to highlight the different health needs of NSW's Aboriginal prison population. The report succeeds the 2009 Inmate Health Survey: Aboriginal Health Report and complements the 2015 Network Patient Health Survey. It makes for disquieting reading in many places and shows that Aboriginal patients come from more disadvantaged backgrounds and suffer from poorer health than their non-Aboriginal counterparts.

This report indicates that Aboriginal people in custody present with a unique and complex health profile and, as such, it provides a sobering justification of the Network's focus on Aboriginal health. The higher prevalence of diagnoses for serious mental illness, and the higher prevalence of alcohol misuse among Aboriginal patients, as well as the indications of familial breakdown and distress in childhood, paint a vivid picture of the extreme turbulence habitually experienced by many of those in our care.

The thorough reader will note that the health and wellbeing of Aboriginal women is a particular cause for concern. Aboriginal women were most likely to report that both their parents had been incarcerated during their childhood and were the least likely to complete their high school education. They were most likely to report being homeless prior to their incarceration and most likely to report not receiving visits from family. They were also most likely to report having a disability and receiving a head injury resulting in unconsciousness. Among Aboriginal women, there were higher prevalences of angina, hepatitis C, back problems, asthma, depression, psychotic disorders, drug use or dependence, and posttraumatic stress disorder than was seen among other groups. In many of the tables and figures you will see in this report, Aboriginal women return considerably poorer results than Aboriginal men or non-Aboriginal participants. Although accounting for a comparatively small proportion of the patients we care for, there is a clear and unambiguous case for continuing efforts to improve health outcomes for these women.

If we can at all take heart from this report, it must be in remembering that knowledge and understanding is a powerful agent for change. The Network will continue to focus on the health of the Aboriginal people we care for and the results from this study will allow us to make informed and targeted choices. As the NPHS progresses to new iterations, we look forward to seeing an improvement in the fortunes of the vulnerable population in our care.

Gary Forrest
Chief Executive



Chris Puplick AM
Board Chair

Executive Summary

Introduction

The 2015 Network Patient Health Survey (NPHS) – Aboriginal People's Health Report succeeds the 2009 NSW Inmate Health Survey – Aboriginal Health Report. It is the second time data collected as part of the NPHS/IHS project has been analyzed and reported on in a separate report to provide insight into the health status and needs of incarcerated Aboriginal and Torres Strait Islander people. The NPHS is recognized as the most comprehensive survey of inmate health undertaken within a single jurisdiction, anywhere in the world and, as such, it constitutes a valuable and much sought after resource for scholars and policy planners both nationally and internationally. The data collected as part of the survey provides the Justice Health and Forensic Mental Health Network (JH&FMHN or "the Network") with an important evidence base which I used to inform service planning for the patients in our care.

The disadvantages facing Australia's Aboriginal population are considerable and have been shown to contribute to poorer health outcomes generally for this group when compared to the rest of the Australian population (see Marmot, 2011). Results from the NPHS indicate that even among the prison population, where disadvantage is common, Aboriginal patients tend to come from less advantageous backgrounds and present with more pressing health problems than others. Though often deeply concerning, the results presented in this publication justify the Network's ongoing commitment to, and focus on, improving health outcomes for our Aboriginal patients.

A number of important innovations were made to the 2015 survey with regard to content and methodology. These changes are described briefly in this report but are detailed in the main adults' report (see Justice Health and Forensic Mental Health Network [JHFMHN], 2017). While these changes have resulted in a more comprehensive and robust survey, they have precluded immediate comparison with previous iterations of the IHS. This is unfortunate; however, the Network's Research and Evaluation Service (RES) is committed to providing a longitudinal analysis of the data collection through a series of discrete articles at a later date. In particular, the 2015 survey included a comprehensive Aboriginal health section which attempted to explore Aboriginal patients' cultural knowledge, connection to country, as well as their experiences of racism and prejudice both within the corrections system and in the wider community.

Background

In March 2015, when data collection for this report was undertaken, Aboriginal people accounted for 21.8% of NSW's prison population despite constituting only 2.5% of the general population (JHFMHN, 2017). In addition, the prison population in the state stood at 11,600 which represents an increase of 18% since the 2009 survey which preceded it (Indig, et al., 2010). The proportion of the prison population who identify as Aboriginal has remained steady since 2009, when 22% of inmates were Aboriginal. This suggests a slowing of a trend of increasing Aboriginal representation in the prison population. Over the last 20 years which has seen an increase in the Aboriginal population in prison from 12% in 1996, to 21.8% in 2015 (Indig, et al., 2010).

Methodology

The survey was conducted using a stratified random sample of all inmates across the state. A total of 1493 adult prisoners were invited to take part in the 2015 NPHS, of which 1132 (76%) agreed. This included 1066 randomly selected participants and 65 patients targeted because they had completed a previous survey. Targets were set for recruitment relating to gender and ethnicity (Aboriginal or non-Aboriginal) to ensure a sufficient sample size to facilitate comparison between groups. Only one individual reported that they were transgendered or transitioning. Due to concerns that separate analysis of this person's data may lead to their identification, they were removed from analysis. The sample was also stratified by broad age groupings (18–24 years, 25–44 years, 45 years or more) to ensure the sample accurately reflected the age profile of the prison population. In total, Aboriginal people accounted for 44.12% of the sample (n = 499).

As in 2009 Aboriginal people and women were over sampled to ensure better estimates of health issues for these populations however results were weighted to account for this over sampling in analysis. This ensures results that can be taken as indicators of population prevalence within accepted confidence levels. In 2009 the questionnaire component of the survey was undertaken using Computer Assisted Telephone Interviewing technology; 2015 saw a return to face-to-face interviews as a more prudent expenditure of resources.

Key Findings

Social Demographics

- Aboriginal participants were less likely to be raised by biological parents, but more likely to be raised by extended family
- Aboriginal participants were more likely to have spent time in care, have been placed in care at a younger age, have spent more time overall in care, and to have a single care period of over five years.
- Aboriginal participants were likely to leave school without completing year 10, and less likely to leave school after completing year 12.
- Aboriginal participants were more likely to have never had employment, more likely to have been unemployed before custody, and to have spent more years unemployed. However, similar proportions of unemployed Aboriginal and non-Aboriginal participants reported that they were looking for work before custody.

Offending Behaviour

- Aboriginal participants were likely to have spent time in juvenile detention and to have spent three or more periods in juvenile detention. However, the age of first detention was similar for Aboriginal and non-Aboriginal participants.
- Aboriginal participants likely to have been in custody on a previous occasion, and more likely to have been in custody on three or more occasions previously.

Health Status

- Aboriginal participants were about as likely as non-Aboriginal participants to assess their physical health as 'good', 'very good', or 'excellent'.
- Aboriginal participants were more likely to report ever being told they had asthma (men and women) or Hepatitis C (women only).
- Aboriginal participants were about as likely as non-Aboriginal participants to report other physical health conditions covered by the survey.
- Female Aboriginal participants were less likely to report having ever examined their breasts for lumps, but amongst those who had ever self-examined their breasts, Aboriginal women were more likely to report doing so monthly or more often.

Use of Care

- Aboriginal participants reported visiting the clinic as frequently as non-Aboriginal participants.
- Aboriginal participants were more likely to report that they would never visit the clinic for a new health problem, although this group remained a small minority.
- Aboriginal participants were as likely to report seeing a range of medical practitioners in custody or the community in the last 12 months. Aboriginal men tended to report the lowest utilisation and Aboriginal women tended to report the highest, but differences were small.

Aboriginal Health

- 90.1% of Aboriginal men and 80.9% of Aboriginal women reported identifying with a particular Aboriginal people or country, including 78.3% of men and 73.6% of women from within NSW.
- Aboriginal men were more likely than Aboriginal women to report living on their traditional country before incarceration.
- Almost all Aboriginal participants reported feeling accepted by other Aboriginal people, and being proud of their Aboriginality.

- Most Aboriginal participants reported that most or all of their peers knew they were Aboriginal, but only around half said that most or all of people meeting them for the first time knew they were Aboriginal.
- A majority of Aboriginal participants said they were satisfied with their knowledge of their Aboriginal culture and that it was important for them to be recognised as Aboriginal.
- Around a quarter of Aboriginal participants reported speaking at least a few words of an Aboriginal language, including 4.6% of men and 5% of women who spoke one well.

Mental Illness and Suicide

- The majority of participants reported having been diagnosed with a mental illness by a clinician. A higher proportion of Aboriginal participants (men, 66.3%; women, 80.5%) had a diagnosis compared to non-Aboriginal participants.
- Aboriginal participants reported higher instances of schizophrenia, psychosis, alcohol abuse or dependence, and posttraumatic stress disorder than non-Aboriginal participants.
- Rates of bipolar disorder and anxiety were lower among Aboriginal participants.
- Aboriginal participants were diagnosed at a younger age (males, 20 years; females, 21 years).
- Aboriginal women were less likely to have been admitted to a psychiatric unit than non-Aboriginal women.
- A slightly higher proportion of Aboriginal participants reported a history of suicidal ideation.
- A smaller proportion of Aboriginal participants reported contemplating suicide while incarcerated.
- Aboriginal women (26.2%) were less likely than non-Aboriginal women to have attempted suicide but a higher proportion of Aboriginal men (20.6%) had made at least one attempt in comparison with non-Aboriginal men.

Drugs and Alcohol

- Aboriginal participants were more likely to report using alcohol at hazardous levels compared to non-Aboriginal people, using the World Health Organisation's AUDIT tool.
- A score of eight or above on this tool indicates hazardous drinking. The median score for Aboriginal men was 14 and 19.5 for Aboriginal women.
- Aboriginal participants were more likely to report that they were drunk, or otherwise intoxicated, at the time of their offence than non-Aboriginal participants but were less likely to report committing and offence in order to obtain alcohol or drugs.
- Other substances most commonly misused by Aboriginal participants included: methamphetamine (77%), cannabis (75.7%), heroin (50.7%), amphetamines (46.1%), and buprenorphine (34.2%).

Conclusions

The results presented in this report generally indicate that Aboriginal people in prison in NSW have poorer health than other inmates and come from more socially disadvantaged backgrounds. There is still a way to go until we can say that we have 'closed the gap'. The Network is well placed to make an important contribution to this effort. While the results presented in this report are dismaying, the report itself constitutes a singular contribution to scholarship which attempts to better understand the needs of Australian inmates, and Aboriginal inmates in particular. The data collected as part of the NPHS informs a range of decisions regarding service provision by the Network, which will continue its commitment to improving the health and wellbeing of the Aboriginal people in its care.

Introduction

In line with NSW Health guidelines, the term 'Aboriginal' is used throughout this report in preference to 'Aboriginal and Torres Strait Islander' in recognition that Aboriginal people are the original inhabitants of NSW. The Aboriginal people of Australia have inhabited this continent in excess of 65,000 years and are widely acknowledged as keepers of the world's most enduring culture (Tonkinson, 2011). In the period since colonisation; however, Aboriginal people have become one of the most heavily incarcerated population groups anywhere in the world (Australian Bureau of Statistics [ABS], 2016). On 30 June 1988, the year the Royal Commission into Aboriginal Deaths in Custody published its initial findings, there were 385 Aboriginal prisoners in NSW, 8.2% of the total population in custody (Eyland, 1988). Exactly 26 years later, these figures had increased to 2,501 and 23.6% (Corben, 2014).

In addition, Aboriginal people experience worse health outcomes than non-Aboriginal people, culminating in the stark reality that Aboriginal people die younger (see, for example, Marmot, 2011). In NSW, estimated life expectancy at birth in 2010–2012 was 9.3 years lower for Aboriginal men and 8.5 years lower for Aboriginal women compared to the non-Aboriginal population (Australian Institute of Health and Welfare [AIHW], 2014a).

The delivery of healthcare in custody is at the forefront of both of these issues. Health conditions such as mental health and addiction are linked to offending behaviour (see, for example, Moore, et al., 2014) and the effective treatment of these conditions may form an essential component of strategies to reduce the massive over-representation of Aboriginal people in prison (Wallace & Papachristos, 2014). The concentration of Aboriginal people in custody, while a deeply concerning reflection on society, also provides a real opportunity for targeted health services that meet the needs of this population. To a far greater extent than any community providers, custodial healthcare services provide care to large numbers of Aboriginal people on an ongoing basis. There is a clear potential for these services to develop as centres of expertise in the delivery of healthcare to Aboriginal people, which could make a real difference to closing the gap between Aboriginal and non-Aboriginal health.

The Network Patient Health Survey is designed to provide an evidence base for the delivery of healthcare in custody. Building on the work of previous Inmate Health Surveys (1996, 2001, 2009), care has been taken to ensure that a representative sample of both Aboriginal men and Aboriginal women in custody was included in the survey sample. This allows for results from these demographic groups to be reported separately and compared against equivalent results in the non-Aboriginal custodial population. In doing so, this report presents clear evidence of the challenges faced by Aboriginal people in custody. While the prison population as a whole displays a high degree of socioeconomic disadvantage, high risk behaviours and complex health needs, these issues are even more apparent amongst the Aboriginal population in custody. The intention of this report is to inform targeted healthcare delivery to this exceptionally disadvantaged and vulnerable population. It is sincerely hoped that by the time of the next patient health survey, the gaps between Aboriginal and non-Aboriginal patients in key areas of health will have substantially reduced or closed entirely

Methods

Study Design

The project's aim was to describe the physical and mental health status of incarcerated adults in NSW in order to provide an evidence base for the planning of clinical services. The project was part of a wider research program covering the total patient population to which the Network provides health services. This report complements the key findings report for the whole adult population in custody, and provides an additional focus on the health of Aboriginal adults in custody. A description of the project's methodology is contained in the key findings report. The section below gives additional detail on the Aboriginal-specific elements of the methodology.

An Aboriginal Research Consultation Group was assembled to provide expert advice and recommendations on the research project. The purpose of the group was to give Aboriginal people a substantial and effective voice in governance of the research project. All core members of the group were themselves Aboriginal, comprising both Aboriginal staff members and community representatives. The group advised on all aspects of the project, including study design, survey content, interpretation of results and recommendations for practice improvements based on results. Substantive points raised by group members in or out of session were responded to in writing by the research team, with summaries of actions taken presented to the steering committee.

A large cross-sectional survey of the adult population in NSW correctional centres was undertaken, including face to face interviews, physical measures and pathology testing of blood and urine specimens. Interviews were conducted by the Network research team, assisted by other Network staff, including Aboriginal staff where available. Physical health measurements and blood/urine specimen collection were undertaken by Network Registered Nurses.

Cultural awareness was incorporated into data collector training. All data collectors were required to have completed the Network's Respecting the Difference - Aboriginal Cultural Awareness Training. The course consisted of a two-hour online learning component and a one day workshop and was designed to develop a deeper cultural awareness of issues faced by Aboriginal people, and to equip staff with skills necessary to engage with Aboriginal patients in a custodial setting. In 2014 the course won the 'Culturally safe work environments and health services' award at the NSW Aboriginal Health Awards.

In addition, data collectors received a targeted training session from the Network's Aboriginal Health Unit prior to undertaking data collection. The session was designed by Aboriginal staff, incorporated Guidelines for Ethical Research in Aboriginal Communities, and was reviewed by the Aboriginal research consultation group prior to being delivered. The session provided background on health and environmental issues faced by Aboriginal people in custody, and used scenario-based discussion to enable data collectors to engage effectively with Aboriginal patients.

Ethical approval to conduct this study was provided by the Aboriginal Health and Medical Research Council Ethics Committee [AH&MRC] (Ref: 1080/15); the Justice Health Human Research Ethics Committee (Ref: G365/14); and the Corrective Services New South Wales [CSNSW] Ethics Committee (Ref: D15/227697).

Measures

Questionnaire content and health measures were agreed following a collaborative consultation process. The Network Executive Team nominated key individuals with clinical and/or research expertise to form a steering committee. Aboriginal staff were represented on both the research team and the steering committee. Draft questions for the Aboriginal health section were formulated collaboratively between the research team and the Aboriginal Health Unit, then reviewed by the Aboriginal Research Consultation Group. This section aims to better understand Aboriginal patients' connection with their culture, their embeddedness in Aboriginal communities, and their experiences of racism both in the community and while in custody. The consultation process resulted in changes to the questionnaire content to reflect the Guidelines for Ethical Research in Aboriginal Communities, draw on existing and emerging evidence of cultural determinants of health, and ensure cultural relevance of question phrasing and terminology.

The questionnaire content was tested with Aboriginal members of staff, as well as piloted with two Aboriginal patients. One of the pilot interviews was conducted with an Aboriginal staff member present to facilitate discussion around areas of potential cultural sensitivity. The other was conducted by a non-Aboriginal data collector to reflect conditions under which most actual interviews would take place.

The draft questionnaire content and health measures were submitted to CSNSW ethics, JH&FHMN ethics and AH&MRC ethics. Further changes were made following comments received from these committees.

Sampling

For the adult population in custody, the NPHS 2015 used a cross-sectional design with random stratified sampling. Sampling targets were calculated from unpublished population data from 1 March 2015 provided to the research team by Corrective services New South Wales (CSNSW). Target sample sizes are included in Table 1 and were designed to provide a representative sample in four key demographic groups at a confidence level of 95%, a margin of error of ±5%, and an assumed response distribution of 50%. Sampling calculations were independently reviewed by the Director for the NSW Patient Survey Program, Bureau of Health Information.

Table 1 Sampling targets by demographic group, NPHS 2015

Demographic Group	Number in custody on March 2015[a]	Target Sample
Aboriginal men in custody	2,437	332
Non-Aboriginal men in custody	7,937	367
Aboriginal women in custody	264	157
Non-Aboriginal women in custody	515	221
Total	**11,153**	**1,077**

[a] CSNSW Offender Population Report 1 March 2015, unpublished

A stratified random sampling approach with proportional allocation to age strata was used to ensure representativeness of the sample for each demographic group. Setting sampling targets at necessary levels to ensure a representative sample of both Aboriginal men and Aboriginal women in custody resulted in higher targets in these demographic groups than in any of the previous Inmate Health Surveys.

Recruitment

A total of 1,382 randomly selected patients were invited to take part in the 2015 NPHS, of which 1,067 (77%) agreed. This included 323 Aboriginal men at a response rate of 71% and 155 Aboriginal women at a response rate of 80%. The relationship between response rates and demographic groups was tested using chi-square tests for interdependence. Male participants were significantly less likely to agree to participate if they were Aboriginal (71%) than if they were non-Aboriginal (83%), $c2(1) = 17.31$, $p<0.001$. Amongst female patients, the difference in response rate between Aboriginal women (80%) and non-Aboriginal women (76%) was found to be not significant, $c2(1) = 1.11$, $p=0.318$.

Anecdotal reports from data collectors suggest that the biggest single factor in engaging Aboriginal patients was the pre-existing relationship between local staff and patients, with higher response rates reported at centres where a positive operational culture was observed. It appeared that refusals were more likely when invitations were made by wing officers (a process adopted to limit disruption to staff on the wing and patients who did not wish to participate in the study), or when patients were kept in holding cells prior to seeing a data collector. A range of interview techniques were employed to increase participation of Aboriginal patients, although approaches varied between centres and individual data collectors. Interview techniques included dressing less formally, using a more conversational approach to interviewing, spending additional time explaining the project, building rapport with patients before interviewing, and asking patients for advice on how to make participation more comfortable.

In women's prisons, additional measures were taken to maximise participation amongst Aboriginal women, reflecting the challenging target sample of 59.5% of all Aboriginal women in custody. In the three largest female centres, an Aboriginal health worker facilitated discussions between Aboriginal elders or leaders in custody and the Research Team to explain the purpose of the research. An Aboriginal staff member conducted some of the early interviews. Where possible, interviews were conducted in informal settings, including outdoor spaces. After some early participants reported feeling uncomfortable answering questions about sensitive issues such as women's health or sexual history with a male data collector, female-only data collection teams were used in women's prisons.

These enhanced measures were not used in male prisons, where sampling targets equated to 13.6% of all Aboriginal men in custody. The large number of men's prisons meant that it was not possible to organise preliminary discussions with leaders in custody facilitated by Aboriginal staff, although data collectors tried to prioritise interviews with elders who had been randomly selected for the study. As the majority of the data collectors were female, it was not possible in most cases to offer male patients an interview by a data collector of the same gender. It is suggested that these differences in approach are largely responsible for the higher response rate

amongst Aboriginal women. In some cases lower response rates in male prisons were directly attributable to miscommunication, for example when rumours spread amongst Aboriginal patients that the research team were taking pathology samples for DNA testing, or when some Aboriginal patients confused the $10 incentive payment with a charge and stated they could not afford to take part.

Response rates refer to patients who agreed to participate in any part of the study. Participants could refuse to answer specific questions, skip sections, refuse the physical measures, refuse to give pathology samples, or terminate the interview. Interviews could also be terminated by officers requiring the patient to return to their cell or by centre clinicians requiring the interview room to deliver treatment. Some of the questions contained in the survey explored sensitive issues such as sexual assault, violence and drug use. The potential for distress to participants was minimised by reminders during potentially sensitive sections that participation was voluntary and that participants could skip any questions that they found uncomfortable.

Aboriginality and other demographic data used in sampling and response rate calculations were drawn from CSNSW administrative databases. Participants were also asked during the survey whether they were of Aboriginal and/or Torres Strait Islander origin. Self-reported Aboriginality did not match demographic information provided by CSNSW for 58 (5.13%) participants. More detail on the discrepancy between Aboriginality as recorded in administrative data and self-reported Aboriginality is included in Table 2. No trends were identified that would suggest a bias resulting from using administrative data for sampling and response rate calculations. For the results section, self-reported Aboriginality was used.

Table 2 Discrepancies between administrative data and self-reported Aboriginality.

	No discrepancy		Identified as Aboriginal but reported not being Aboriginal		Reported as Aboriginal but identified as non-Aboriginal	
	Men	Women	Men	Women	Men	Women
18–24 years	123	60	3	0	7	1
25–44 years	442	232	18	3	9	8
45+ years	148	68	4	0	3	2
Total	**713**	**360**	**25**	**3**	**19**	**11**

Data Analysis

Findings in the key findings report were weighted to take into account deliberate over-representation of women and Aboriginal people in the sampling methodology. In this report these population groups are reported separately so this weighting was not required.

The high proportion of participants against sampling targets in each of the demographic groups (Range: 98.9% for women to 112.8% for non-Aboriginal men) indicates that in theory the study successfully achieved a confidence level of 95% with a margin of error of ±5%, at an assumed response distribution of 50% for each demographic group. However, differences in response rates in parts of the survey increased the margin of error in specific areas, in particular for interview questions covering sensitive issues, physical checks and pathology specimens. Where low response rates were achieved, attention is drawn to this in the relevant results section. This applies in particular to interview questions covering sensitive issues, physical checks and pathology specimens.

Statistical testing for significance in the results section is by exception only, as the aim of this report is to describe the status of different demographic groups, rather than an inferential analysis of differences between the demographic groups.

In calculating averages, medians were preferred to means in most cases due to non-normal data distributions, and to avoid possible distortion to mean values resulting from data weighting calculations.

Limitations

While there are similarities with previous inmate health surveys, the methodology used for the 2015 NPHS is not identical to that used previously. In particular, there are important differences in sampling and stratification calculations, and the NPHS results are weighted to account for deliberate oversampling by gender and Aboriginality. Accordingly, the NPHS results should not be regarded as directly comparable to previous inmate health surveys.

Self-report data is rarely completely accurate. Within a health context, this may lead to under-reporting or over-reporting. In addition, retrospective assessment may be subject to recall bias and other distortions of memory (Stone & Shiffman, 2002). Nonetheless, undertaking a study of this size, would have been prohibitively time consuming and required a considerable financial investment. Self-report data should not be dismissed out of hand. A number of studies indicate that self-report data gleaned from questionnaires is reasonably accurate and provides a sound indication of prevalence (see, for example, Okura, Urban, Mahoney, Stone & Shiffman, 2002).

Previous iterations of the NPHS have shown generally poor levels of participation in the physical tests. As section 9 outlines, this trend continued in 2015. The response rate for items in this section was low and, as such, the data presented in this section shouldn't be considered representative of the general inmate population. Planning for future surveys will consider strategies to improve response rates in this section as a matter of priority.

Results

1 Social determinants

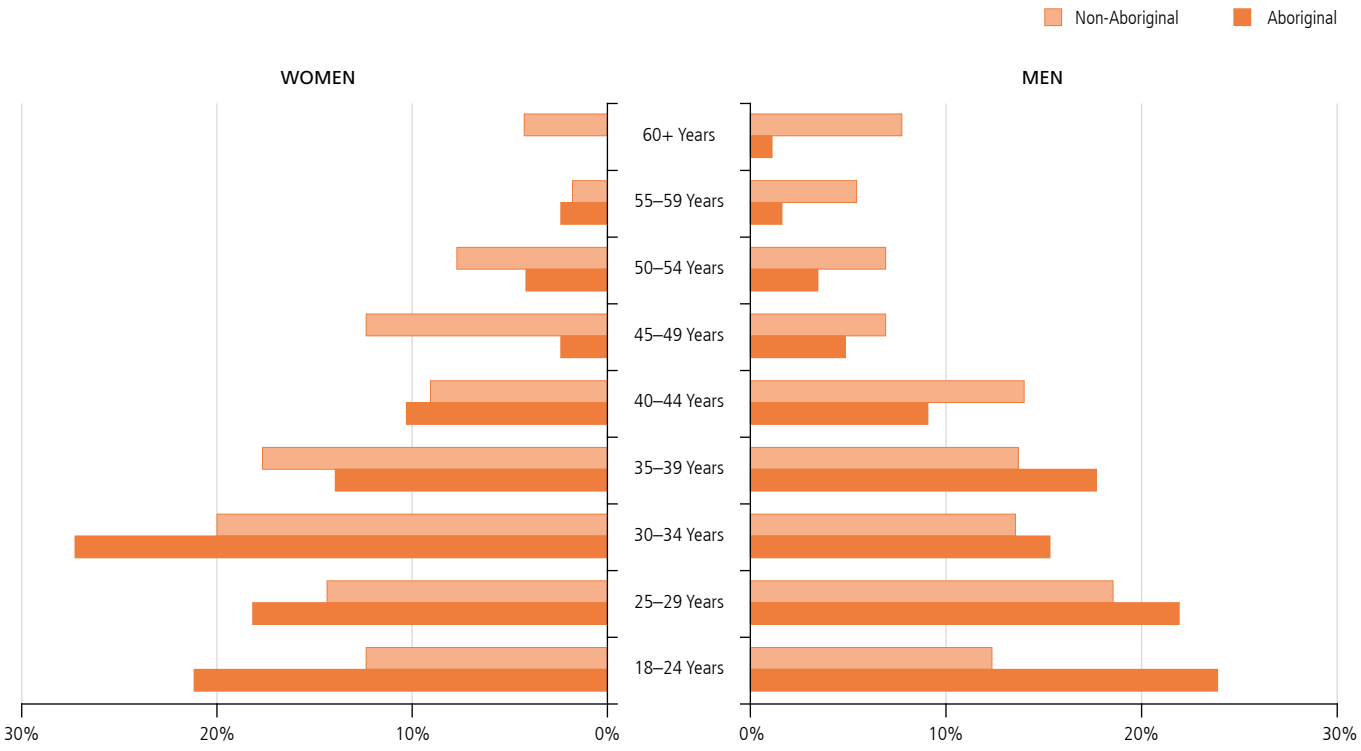
1.1 Demographics

A total of 337 men and 165 women participating in the NPHS reported that they were of Aboriginal or Torres Strait islander. Almost all of these participants (96.7% of men and 97% of women) reported they were of Aboriginal origin, with very small proportions identifying as Torres Strait Islander (0.9% of men and 1.2% of women) or both Aboriginal and Torres Strait Islander (2.4% of men and 1.8% of women). The numbers of Torres Strait Islander participants was too small to allow separate reporting of this group without creating a risk that individual participants could be identified. Their responses are included in results for Aboriginal participants. The median age of Aboriginal participants was much lower than the median age of non-Aboriginal participants, for both men (30 years versus 36.5 years) and women (31 years versus 35 years). The age profile of NPHS participants is set out in Table 1.1.1 and Figure 1.1.2.

Table 1.1.1 Participant age by age groups.

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
18–24 years	24.0%	12.4%	21.2%	12.4%
25–29 years	22.0%	18.6%	18.2%	14.4%
30–34 years	15.4%	13.6%	27.3%	20.1%
35–39 years	17.8%	13.8%	13.9%	17.7%
40–44 years	9.2%	14.0%	10.3%	9.1%
45–49 years	5.0%	7.1%	2.4%	12.4%
50–54 years	3.6%	7.1%	4.3%	7.7%
55–59 years	1.8%	5.5%	2.4%	1.9%
60+ years	1.2%	7.9%	0.0%	4.3%

Figure 1.1.2 Participant age by age groups



Almost all Aboriginal participants (99.4% of men and 99.4% of women) reported being born in Australia, with all of the remainder born in Oceania. A very small number reported one parent born overseas (6.8% of men and 9.1% of women) or both parents born overseas (0.6% of men and 1.2% of women). Substantially lower proportions of non-Aboriginal participants reported being born in Australia (75% of men and 67.9% of women), while more reported having one parent born overseas (11.1% of men and 10.1% of women), or both parents born overseas (33.1% of men and 37.3% of women).

Similarly high proportions of Aboriginal participants (99.1% of men and 96.4% of women) reported that English was the primary language spoken in the home in which they grew up, a much higher rate than reported by non-Aboriginal participants (77.6% of men and 75.1% of women). Only two participants reported that an Aboriginal language was their primary language at home when growing up.

Details on differences between Aboriginal and non-Aboriginal reported relationship status are included in Table 1.1.3. A potential explanation for most of the differences is the younger age profile of Aboriginal participants (see Table 1.1.1 and Figure 1.1.2), as higher rates of single people and lower rates of married/de facto, separated, divorced or widowed people could normally be expected amongst a younger population group. It is also possible that cultural or social factors are reflected in this finding, consistent with evidence that Aboriginal people are less likely to get married but also less likely to separate or divorce if married. An exception to the general trend is the slightly higher rates of Aboriginal women than non-Aboriginal women in married/de facto relationships.

Table 1.1.3 Legal relationship status.

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Single (never married)	65.5%	53.1%	60%	51.7%
Married / De facto	24.7%	28.7%	33.3%	28.2%
Separated	6.8%	7.9%	3.6%	5.3%
Divorced	2.4%	8.1%	1.3%	12.4%
Widowed	0.6%	2.2%	1.8%	2.4%

1.2 Childhood care experiences

Disruption of childhood care has been identified as a predictor of adult offending behaviour; however, as Farrington (2005) demonstrates, this factor should not be considered in isolation but as part of a large number of social, economic, and geographical factors. This issue may be of particular concern and interest to Aboriginal people in the context of the ongoing consequences of the forced removal of Aboriginal children from their parents known as the Stolen Generation. While under researched, evidence suggests that familial disruption in childhood plays a significant role in the development and progression of criminal careers for Aboriginal people (Hunter, 2001).

The data presented here indicates that there were a number of important differences in the childhood care experiences of Aboriginal and non-Aboriginal participants. A minority of Aboriginal participants reported being raised by both their biological parents until they were 16 (39.2% of men and 32.7% of women); much lower than the rate for non-Aboriginal participants (62.9% of men and 54.5% of women). Conversely, Aboriginal participants were around three times more likely to report being raised by neither of their biological parents before the age of 16 (24.6% of men and 30.6% of women), compared to non-Aboriginal participants (7.9% of men and 10.5% of women).

Beyond parental caregivers, a much higher proportion of Aboriginal participants reported being raised by extended family members (28.2% of men and 27.3% of women) compared to non-Aboriginal participants (11.2% of men and 9.7% of women). This is consistent with traditional Aboriginal family structures which often value an extended network of intergenerational care givers over rigid adherence to a nuclear unit (Lohoar, Butera & Kennedy, 2014). Details of childhood caregivers are set out in Figure 1.2.1 and Table 1.2.2.

Figure 1.2.1 Types of childhood carers

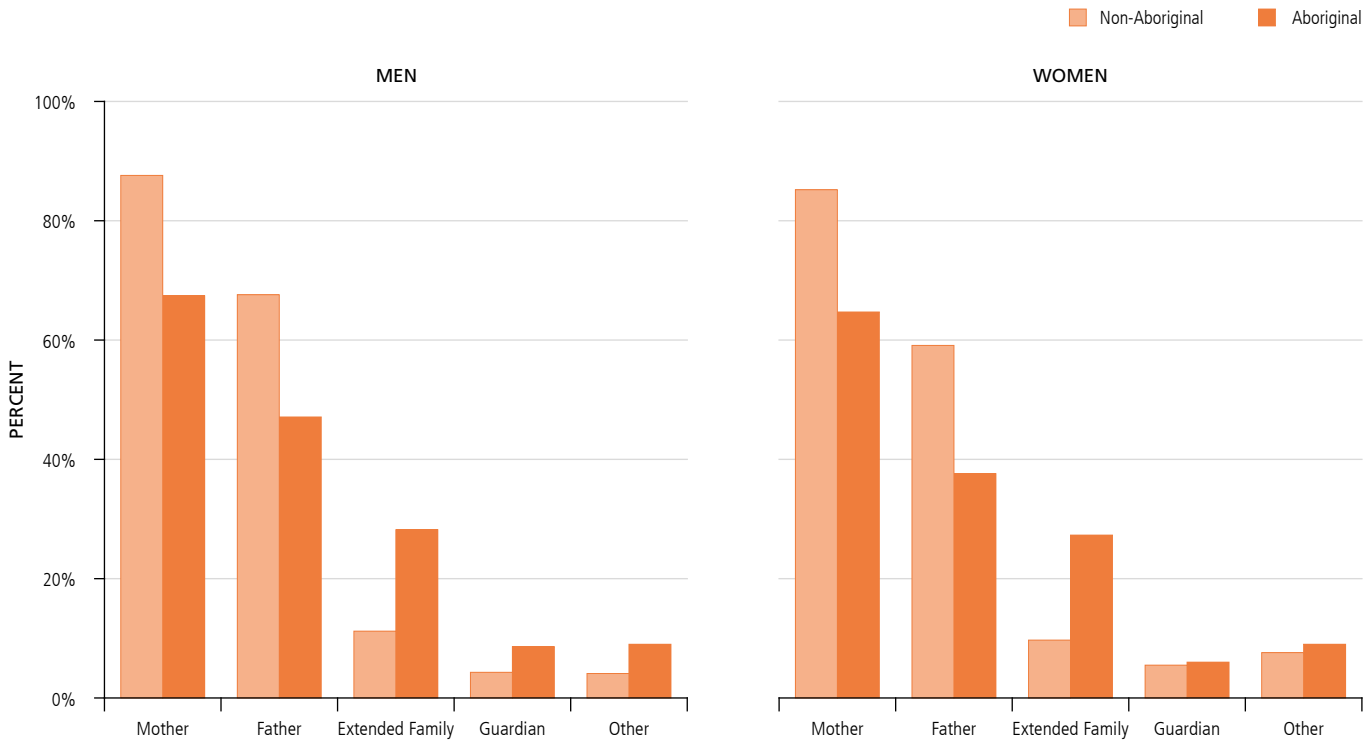


Table 1.2.2 Types of childhood carers*

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Mother	67.4%	87.6%	64.7%	85.2%
Father	47.1%	67.6%	37.6%	59.1%
Extended Family (blood relative)	28.2%	11.2%	27.3%	9.7%
Guardian (not blood relative)	8.6%	4.3%	6.0%	5.5%
Other	9.0%	4.1%	9.0%	7.6%

*More than one carer possible over childhood, column totals exceed 100%

Aboriginal participants were also over twice as likely to report being placed in formal care at least once before the age of 16 (23.3% of men and 36.0% of women), compared to non-Aboriginal participants (10.7% of men and 17.2% of women). There were no differences between Aboriginal and non-Aboriginal participants regarding total number of care placements reported. However, Aboriginal participants reported first being placed into care at younger ages and longer times spent in care, as set out in Table 1.2.3.

Table 1.2.3 Care history of participants placed in care before age of 16

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
% First placement under 10 years old	69.0%	33.0%	49.1%	38.7%
Median age at first placement	7.0	11.0	10.5	10.5
% Longest single care period >5 years	53.5%	32.6%	45.3%	29%
Median total years in care	7.0	3.0	5.0	4.0

1.3 Parents in prison or care

The overrepresentation of Aboriginal people in custody is a longstanding issue which has been well documented in NSW since at least 1974 (Dewdney, 1974). Accordingly, it is unsurprising higher rates of intergenerational imprisonment were reported by Aboriginal participants than non-Aboriginal participants, as set out in Table 1.3.1.

Table 1.3.1 Parents imprisoned when participant was aged under 16

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Mother only	3.3%	1.4%	8.5%	2.9%
Father only	25.1%	9.5%	15.8%	10.5%
Both mother and father	3.6%	1.2%	7.9%	1.4%
Total one or both parents	32.0%	12.0%	32.2%	14.8%
Unsure	4.2%	0.7%	3.6%	1.4%

A higher proportion of Aboriginal than non-Aboriginal participants also reported parents spending time in care when the parents were children, as set out in Table 1.3.2. Time 'in care' was defined as living away from birth parents, and included participants who reported that their parents were part of the Stolen Generation.

Table 1.3.2 Participants reporting parents being placed in care as children

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Mother only	5.7%	2.1%	12.7%	4.8%
Father only	3.3%	3.3%	6.7%	1.4%
Both mother and father	0.9%	0.0%	2.4%	0.5%
Total one or both parents	9.9%	5.4%	21.8%	6.7%
Unsure	13.1%	5.3%	10.9%	5.3%

1.4 Education

School attendance rates are lower for Aboriginal children than for non-Aboriginal children (AIHW, 2010) but education is recognised as a key protective factor against offending behaviour for Aboriginal people (Weatherburn, 2014). It is, perhaps, unsurprising then that education outcomes were lower for Aboriginal participants in the NPHS than for non-Aboriginal participants.

Although very few participants (<1%) in any demographic group reported never having gone to school, over half of Aboriginal participants (56% of men and 53% of women) reported leaving school before completing Year 10, compared to around a third of non-Aboriginal participants (33% of men and 29% of women). Only small minorities of Aboriginal participants had completed year 12 (6.3% of men and 5.5% of women) compared to around a quarter of non-Aboriginal participants (23.6% of men and 28.4% of women). Details of school leaving age are set out in Table 1.4.1.

Table 1.4.1 Highest year of school completed

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Year 12	6.3%	23.6%	5.5%	28.4%
Year 11	7.2%	7.2%	6.1%	11.5%
Year 10	29.4%	35.7%	35.2%	30.3%
Year 9	24.9%	18.1%	26.7%	13.0%
≤ Year 8	31.5%	14.7%	26.1%	16.3%
No schooling	0.6%	0.7%	0.6%	0.5%

A higher proportion of Aboriginal participants had been expelled from school (54.3% of men and 33.3% of women) than non-Aboriginal participants (31% of men and 22% of women). Aboriginal participants were also more likely to have attended a special school (22.4% of men and 10.4% of women) compared to non-Aboriginal participants (9.4% of men and 7.2% of women). The median number of schools attended was three for all demographic groups, although it should be noted that this figure does not account for Aboriginal participants leaving school earlier, indicating that the school moves reported by Aboriginal participants occurred over a shorter time period.

At a more fundamental level, there were substantial differences in reported literacy rates between Aboriginal and non-Aboriginal participants. Amongst Aboriginal participants, 7.1% of men and 6.1% of women reported that they could not read and write at all, and an additional 24.0% of men and 21.3% of women reported problems with reading and writing. By contrast, amongst non-Aboriginal patients 2.2% of men and 1.0% of women reported not being able to read and write at all, and an additional 11.5% of men and 12.4% of women reported problems with reading and writing.

These differences in education history translated into lower levels of academic achievement amongst Aboriginal participants. Although only a slightly smaller proportion of Aboriginal men reported holding a post-school qualification than non-Aboriginal men (56.3% versus 57.8%), there was a much larger difference between Aboriginal women and non-Aboriginal women (46.1% versus 63.6%). Details of reported qualifications are set out in Table 1.4.2 and indicate that almost all qualifications held by Aboriginal participants were trade certificates, compared to a wider range of qualifications amongst non-Aboriginal participants.

Table 1.4.2 Breakdown of post-school qualifications held

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Trade certificate (I-IV)	82.7%	67.2%	72.9%	57.2%
Diploma	4.0%	9.2%	3.5%	18.4%
Bachelor degree	3.0%	7.0%	2.4%	12.5%
Post-graduate qualification	0.5%	4.8%	0.0%	2.6%
Other	9.8%	11.8%	21.2%	9.3%

1.5 Employment

Data sourced from the ABS shows that Aboriginal people are more likely to be unemployed compared to non-Aboriginal Australians (ABS, 2016). Differences in reported employment status 30 days before detention are set out in Table 1.5.1. This shows that the proportion of participants in full or part-time employment was much lower amongst Aboriginal participants (30.0% of men and 12.1% of women) than non-Aboriginal participants (53.6% of men and 34.0% of women). Correspondingly, unemployment was much higher amongst Aboriginal participants (54.6% of men and 64.2% of women) compared to non-Aboriginal participants (33.0% of men and 45% of women). Aboriginal participants were also more likely to report that they had never been employed (8.0% of men and 10.9% of women) compared to non-Aboriginal participants (1.7% of men and 4.3% of women). By contrast, there were only minor differences between the proportions of Aboriginal and non-Aboriginal participants reporting being in full or part-time study, or being unable to work.

Of those participants who were unemployed, the reported length of unemployment was longer for Aboriginal participants (median three years for men and six years for women) than non-Aboriginal participants (median two years for men and 2.5 years for women). There were no meaningful differences in the proportions of unemployed Aboriginal participants reporting looking for work (54.3% for men and 59.4% for women) compared to unemployed non-Aboriginal participants (53.6% of men and 53.1% of women).

Table 1.5.1 Employment 30 days before incarceration*

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Employed	30.0%	53.6%	12.1%	34.0%
Studying	3.9%	2.2%	2.4%	6.2%
Unemployed	54.6%	33.0%	64.2%	45.0%
Unable to work	15.6%	17.9%	23.2%	24.1%

*More than one employment status possible, column totals exceed 100%

There were no meaningful differences between the proportions of Aboriginal participants reporting having ever served in the armed forces (1.5% of men and 2.4% of women) compared to non-Aboriginal participants (6.5% of men and 1% of women).

Aboriginal participants were also less likely to report currently having work in custody (49.3% of men and 46.3% of women) compared to non-Aboriginal participants (58.2% of men and 63.6% of women). The most likely explanation for this is the higher proportion of Aboriginal participants on remand (see section 2.2), as these prisoners would not normally be eligible to access work opportunities inside prison.

Aboriginal participants were much more likely to report being on at least one pension or benefit in the six months before custody (80.8% of men and 95.1% of women) compared to non-Aboriginal participants (45.3% of men and 29.3% of women). Regarding the time period over which benefits or pensions had been received before custody, there was no difference between Aboriginal men and non-Aboriginal men (median two years for both groups), but Aboriginal women reported having received benefits for longer than non-Aboriginal women (median five years versus 3.5 years). Similarly, the proportion of Aboriginal women who had been receiving benefits for five years or more (52%) was substantially higher than for non-Aboriginal women (42.5%), compared to a smaller difference between Aboriginal and non-Aboriginal men (34.5% versus 28.9%).

For most categories of benefits or pensions, there were no meaningful differences between demographic groups in the proportions of unemployed participants receiving these benefits. However, unemployed Aboriginal participants were much more likely to report receiving unemployment benefits (49.4% of men and 47.6% of women) than non-Aboriginal participants (27.6% of men and 34.6% of women).

1.6 Accommodation

An analysis of ABS data undertaken by the Australian Institute of Health and Welfare [AIHW] (2014b) confirms that Aboriginal people are more likely to be homeless or in unsettled accommodation. In addition, previous research indicates that Aboriginal people are less likely to live in stable familial accommodation after being released from prison and this has been identified as a factor contributing to reoffending and subsequent reincarceration (Baldry, McDonnell, Maplestone & Peeters, 2006). Homelessness is also associated with a range of detrimental health outcomes (Moore, Gerdtz & Manias, 2007) and constitutes an independent risk factor for early mortality (Morrison, 2009).

The proportion of Aboriginal participants in NPHS reporting living in their own home or a private rental in the six months prior to incarceration (60.0% of men and 41.2% of women) was much lower than for non-Aboriginal patients (74.3% of men and 64.1% of women). Conversely, more Aboriginal participants reported living in Housing NSW accommodation during the same period (22.0% of men and 30.9% of women) than non-Aboriginal participants (12.6% of men and 19.1% of women). More Aboriginal participants than non-Aboriginal participants also reported living in a range of informal or temporary accommodation types, as set out in Table 1.6.1, although the differences in individual accommodation categories were relatively small. In addition, a lower proportion of Aboriginal participants (49.3% of men and 47.2% of women) reported living in the same accommodation without moving for the six months prior to incarceration compared to non-Aboriginal participants (64.4% of men and 60.3% of women).

Table 1.6.1 Accommodation six months prior to incarceration

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Own home or with own family	30.9%	35.6%	24.2%	30.10%
Private rental	29.1%	38.7%	17.0%	34.0%
Housing NSW rental	22.0%	12.6%	30.9%	19.0%
Boarding house	4.5%	2.6%	5.5%	3.8%
Hospital	0.3%	0.0%	0.0%	0.0%
Unsettled lodgings	3.3%	3.3%	7.9%	2.4%
Supported accommodation	2.2%	1.7%	1.8%	1.7%
No fixed accommodation	7.5%	5.5%	12.7%	9.2%

Details regarding who participants reported living with in the six months before coming into custody are included in Table 1.6.2. Smaller proportions of Aboriginal participants than non-Aboriginal participants reported living alone, with partners or with their own children, while higher proportions reported living with parents, siblings or other family members.

Table 1.6.2 Accommodation six months prior to incarceration*

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Lived alone	13.4%	20.8%	17.6%	19.1%
Partner	32.6%	37.5%	26.7%	27.3%
Own children	10.7%	17.2%	20.0%	27.8%
Parent(s)	25.8%	20.0%	26.7%	10.5%
Sibling(s) / other family	32.6%	23.0%	23.0%	17.2%
Flat/house mate(s)	2.4%	3.8%	1.2%	3.3%
Friend(s)	7.4%	9.5%	7.3%	12.9%
Other	4.2%	4.1%	1.8%	1.0%

*Multiple responses possible, column totals exceed 100%

Of participants who had previously been in custody, a slightly higher rate of Aboriginal participants (31.7% of men and 44.1% of women) than non-Aboriginal participants (26.6% of men and 38.8% of women) reported having problems finding accommodation the last time they were released.

1.7 Children of participants

Aboriginal participants were more likely to report having dependent children under the age of 16 (60.3% of men and 72.7% of women) than non-Aboriginal participants (45.1% of men and 54.5% of women). Aboriginal participants were also more likely to report having three or more dependent children (23.4% of men and 27.3% of women) compared to non-Aboriginal participants.

Aboriginal participants with dependent children were less likely to report that their children were currently living with the child's other parent (79.3% of men and 38.3% of women) than non-Aboriginal participants (85.4% of men and 58.8% of women). By contrast, Aboriginal participants with children were more likely to report that their children were currently living with other relatives (16.7% of men and 52.5% of women) compared to non-Aboriginal participants (11.1% of men and 28.9% of women).

1.8 Family contact during incarceration

Aboriginal participants were more likely to report that they had received no visits from family or friends in the last four weeks (56.3% of men and 59.4% of women) compared to non-Aboriginal people (49.6% of men and 36.4% of women). However, there were no meaningful differences between Aboriginal participants and non-Aboriginal participants in reported travel time each way required for family and friends to visit them (median of two hours), or in the number of visits received by those participants who had received visits. Both Aboriginal participants and non-Aboriginal participants also reported making similar numbers of telephone calls to family members and friends, with the majority in each demographic group making more than one telephone call weekly.

2 Offending behaviour

2.1 Juvenile detention

A report published by AIHW (2012) indicates that young Aboriginal people were 24 times more likely to be in detention than their non-Aboriginal peers. This is a troubling statistic, not least because of the well-established link between juvenile detention and incarceration as an adult (see, for example, Aizer & Doyle, 2015). Aboriginal participants were around twice as likely to report having spent time in juvenile detention (52.8% of men and 31.9% of women) compared to non-Aboriginal participants (27.7% of men and 13.4% of women). The proportion of participants who reported more than three periods in juvenile detention was much higher amongst Aboriginal participants (24.9% of men and 12.7% of women) than non-Aboriginal participants (7.4% of men and 5.7% of women). Amongst participants who had spent time in juvenile detention, the median age of first detention was similar for all demographic groups (14–15 years for all groups).

2.2 Previous incarceration

Aboriginal over-representation in the Australian corrections system is well-established. In addition, a range of studies have shown that Aboriginal people released from prison are more likely to be re-incarcerated (for a summary, see Payne 2007). A large proportion of Aboriginal participants in the NPHS reported having previously been in adult custody at least once (78.2% of men and 67.7% of women), a much higher proportion than for non-Aboriginal participants (54% of men and 38.1% of women). Additional detail on number of previous incarcerations is included in Table 2.2.1. Of participants who had previously been in adult custody, Aboriginal participants were more likely to report being released and then re-imprisoned within the last 12 months (41.6% of men and 63.9% of women) compared to non-Aboriginal participants (32.5% of men and 51.8% of women).

Table 2.2.1 Number of previous adult incarcerations

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
First time in custody	21.80%	46.00%	32.30%	61.90%
1–2 previous	12.70%	17.40%	15.10%	16.30%
3–5 previous	32.80%	19.50%	32.60%	11.30%
6–10 previous	20.80%	12.40%	10.50%	8.50%
11+ previous	11.90%	4.70%	9.50%	2.00%

Including the current period of custody, the median age of first imprisonment was much younger for Aboriginal participants (23 years for men and 27 years for women) than for non-Aboriginal participants (32 years for men and 35 years for women). Additional detail on the age of first imprisonment is included in Table 2.2.2.

Table 2.2.2 Age of first adult incarceration

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
<20	64.2%	34.9%	36.2%	16.3%
20–29	26.0%	32.7%	42.3%	35.6%
30–39	6.0%	14.5%	14.1%	24.0%
40–49	2.6%	9.7%	4.3%	15.4%
50+	1.2%	8.2%	3.1%	8.7%

Over their lifetime, Aboriginal participants reported having experienced slightly more periods in adult custody (median five times for men and four times for women) than non-Aboriginal participants (median four times for men and three times for women). The differences in the total length of time spent in custody to date were substantial for men (median 4.6 years for Aboriginal men and three years for non-Aboriginal men but negligible for women (median 0.8 years for Aboriginal women and one year for non-Aboriginal women).

A higher proportion of Aboriginal participants, in particular Aboriginal women, were on remand (24.6% of men and 36.2% of women) compared to non-Aboriginal participants (21.6% of men and 26% of women). The difference in remand rates is the most likely explanation for the higher proportion of Aboriginal participants reporting being in custody on this occasion for under 12 months (55.7% of men and 81% of women) compared to non-Aboriginal participants (49.3% of men and 67% of women). Similarly the median length of time spent in custody on this occasion was lower for Aboriginal participants (nine months for men and four months for women) compared to non-Aboriginal participants (12 months for men and six months for women). Aboriginal women were more likely to report sharing a cell with other inmates than non-Aboriginal women (66.7% versus 49.3%), whereas the difference between Aboriginal men and non-Aboriginal men was negligible (72.4% versus 70.2%).

3 Health status

3.1 Self-reported health status

In terms of overall self-reported physical health, there were only minor differences between the proportions of Aboriginal participants reporting assessing their physical health as "excellent", "very good" or "good" (77% of men and 69.9% of women) compared to non-Aboriginal participants (71.9% of men and 71.3% of women). Aboriginal participants were more likely to report ever having been told they had asthma (24.4% of men and 44.8% of women) than non-Aboriginal participants (18.1% of men and 31.1% of women). A higher proportion of Aboriginal women than non-Aboriginal women (33.3% versus 19.1%) reported ever having been told they had Hepatitis C. By contrast, Aboriginal women were less likely than non-Aboriginal women (27.3% versus 37.3%) to report ever being told they had allergies. Details on the rates of self-reported health conditions are included in Table 3.3.1. and show only minor differences amongst demographic groups for other health conditions covered by the survey. These findings should be treated with caution, as self-reported information may reflect differences in diagnoses rates or participant knowledge rather than actual prevalence of conditions. Aboriginal people encounter a range of barriers to healthcare which may result in lower rates of diagnosis (Artuso, Cargo, Brown & Daniel, 2013). In addition, Aboriginal participants were on average substantially younger than non-Aboriginal participants (see section 1.1), which could make direct comparisons between the Aboriginal and non-Aboriginal participants misleading.

Table 3.3.1 Proportion of participants ever told they have conditions*

	Men		Women	
	Aboriginal	**Non-Aboriginal**	**Aboriginal**	**Non-Aboriginal**
Allergies	16.7%	18.8%	27.3%	37.3%
Arthritis	9.5%	11.4%	15.2%	18.7%
Cancer/Tumours	3.6%	4.3%	4.2%	6.2%
Epilepsy	2.7%	3.1%	6.7%	7.7%
Chest Pain/Angina	7.1%	8.1%	12.7%	8.1%
High Blood Pressure / Hypertension	11.9%	16.9%	14.5%	13.4%
Stroke	2.1%	1.4%	0.9%	2.4%
Heart Disease / Condition	3.3%	5.2%	4.8%	6.2%
Hepatitis A	1.5%	1%	1.2%	0.0%
Hepatitis B	2.4%	3.1%	1.8%	2.9%
Hepatitis C	24.4%	19.3%	33.3%	19.1%
Other liver disease	0.9%	3.1%	4.2%	4.3%
Chronic Kidney Disease	2.4%	2.6%	3.0%	3.8%
Back Problems	21.1%	23.6%	26.7%	32.1%
Prostate Problems	1.5%	2.1%	—	—
Asthma	24.4%	18.1%	44.8%	31.1%
Diabetes	5.0%	7.7%	5.4%	8.5%

* Categories are not exclusive. Totals may exceed 100%

3.2 Vaccination and screening

A range of vaccine preventable diseases are more prevalent among Aboriginal people and research indicates that Aboriginal children often receive delayed vaccination or do not receive them at all (Turnour, McIntyre, Menzies & Chiu, 2008). In the NPHS however, there were no meaningful differences between Aboriginal participants and non-Aboriginal participants in the rate reporting to have received vaccinations in the last five years for MMR (measles, mumps and rubella), polio, meningitis, chicken pox, whooping cough, or pneumococcal disease. Similarly, there were no meaningful differences in lifetime reported vaccination rates for tetanus, Hepatitis A, Hepatitis B, or Human Papillomavirus. However, Aboriginal participants (66.5% of men and 66% of women) were more likely than non-Aboriginal participants (54.1% of men and 52.7% of women) to report having received a flu vaccination in the last five years. Aboriginal participants (76% of men and 85.7% of women) were also slightly more likely than non-Aboriginal participants (68.1% of men and 79.1% of women) to report having been tested in their lifetime for HIV, Hepatitis, or a sexually transmitted infection.

3.3 Men's Health

Aboriginal men (41.5%) were slightly more likely than non-Aboriginal men (34.5%) to report having ever received information about how to properly examine their testicles for lumps. There were no meaningful differences between Aboriginal participants and non-Aboriginal participants in the frequency that they reported self-examining their testicles for lumps.

3.4 Women's Health

Aboriginal women (65.9%) were less likely than non-Aboriginal women (74.2%) to report having ever examined their breasts for lumps. Amongst women who had examined their breasts for lumps however, Aboriginal women (63.9%) were more likely than non-Aboriginal women (42.9%) to report performing self-examinations monthly or more.

There were no substantial differences in the proportions of Aboriginal and non-Aboriginal women reporting to have ever had a pap smear, the time passed since their last pap smear, or the results of last pap smear.

Most women participants had been pregnant, with only a minor difference in the proportion of Aboriginal (13.5%) and non-Aboriginal (15.3%) women reporting that they had never been pregnant. Amongst women who had been pregnant, Aboriginal women (84.5%) were much more likely than non-Aboriginal women (56%) to have been under 20 years old when they first became pregnant. The median age of first pregnancy for Aboriginal women was 17 years, compared to 19 years for non-Aboriginal women.

Amongst women who had been pregnant, Aboriginal women (33.8%) were less likely to report having had an abortion or termination than non-Aboriginal women (52.5%). The median number of abortions/terminations was zero for Aboriginal women and one for non-Aboriginal women, with 14.0% of Aboriginal women reporting multiple abortions/terminations compared to 25.9% of non-Aboriginal women. Amongst women who reported at least one abortion/termination, the median age of first abortion/termination was lower amongst Aboriginal women (18 years) than non-Aboriginal women (21 years). There was no meaningful difference in the proportion of Aboriginal women (45.4%) reporting having ever had a miscarriage compared to non-Aboriginal women (50.0%).

Differences in history of childbirth are set out in Figure 3.4.1 and Table 3.4.2. Aboriginal women (82.3%) were more likely than non-Aboriginal women (73.2%) to have given birth at least once, and much more likely (36% versus 15.8%) to have given birth four times or more. Amongst women who had given birth, the median age of first childbirth was lower for Aboriginal women (18 years) than non-Aboriginal women (21 years).

Figure 3.4.1 History of childbirth

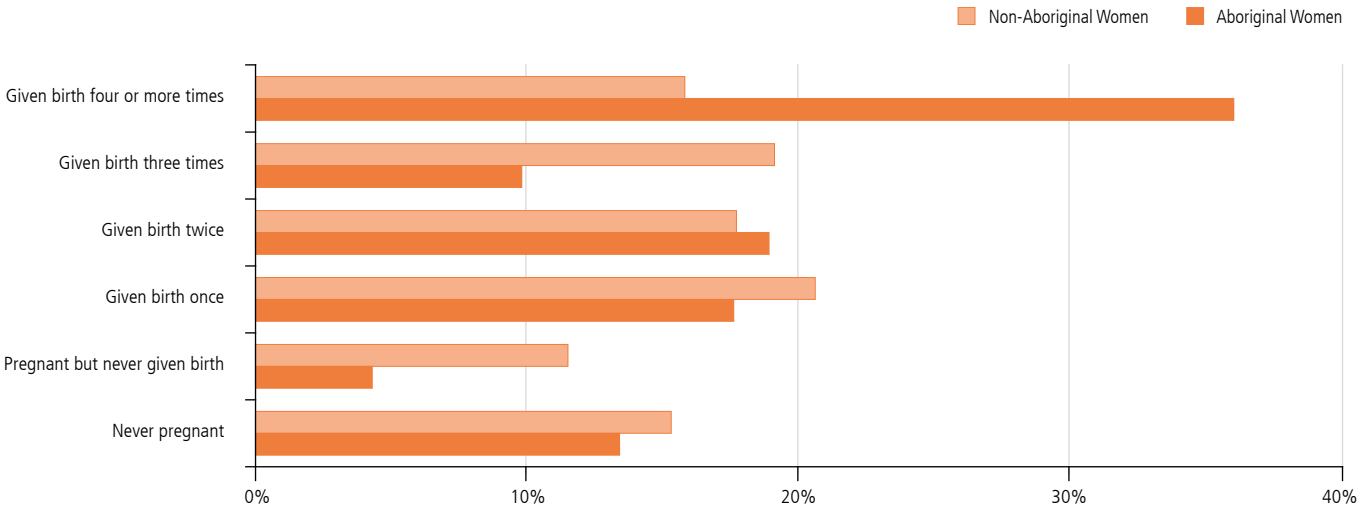


Table 3.4.2 History of childbirth

	Aboriginal	Non-Aboriginal
Never Pregnant	13.4%	15.3%
Pregnant but never given birth	4.3%	11.5%
Given birth once	17.6%	20.6%
Given birth twice	18.9%	17.7%
Given birth three times	9.8%	19.1%
Given birth four or more times	36.0%	15.8%

3.5 Use of care

Differences between Aboriginal participants and non-Aboriginal participants regarding the length of time since the last visit to the prison clinic for any reason were negligible. This is a promising finding in light of a reluctance among some Aboriginal people in the community to access health care services (see for example Durey, et al., 2016; Shahid, Finn & Thompson, 2006). In line with this research; however, the proportion of participants stating that they would never visit the clinic if they had a new health problem was small amongst all demographic groups. More than twice the proportion of Aboriginal participants (4.5% of men and 8.0% of women) reported this than non-Aboriginal participants (2.1% of men and 3.8% of women). A response bias is possible regarding these figures, as patients who would not be willing to attend the clinic for a new health problem could also be less likely to attend the clinic to participate in the NPHS.

The proportions of participants in each demographic group reporting having seen a range of medical practitioners are set out in Table 3.5.1. There were few clear trends in the differences between the groups. For most types of medical practitioners, Aboriginal men tended to be the least likely demographic group to have seen one in custody in the last 12 months, while Aboriginal women tended to be the most likely.

The differences were small and did not apply to all types of medical practitioners. For men, the biggest differences for individual practitioners were the small numbers of Aboriginal men who reported having seen a psychiatrist (3.6%) or psychologist (4.5%) in the community in the last 12 months, compared to 10.9% and 10.5% respectively for non-Aboriginal men. For women, Aboriginal women were more likely than non-Aboriginal women to have seen an alcohol and drug worker (38.7% versus 24.6%), a social worker (33.7% versus 28.0%), or a mental health nurse (49.1% versus 32.4%) in custody in the last 12 months.

Table 3.5.1 Medical professionals seen in last 12 months*

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
In custody				
GP	55.6%	55.3%	62.0%	62.6%
Nurse	79.9%	82.2%	82.1%	85.8%
Sexual health nurse	24.0%	16.9%	31.9%	34.1%
Alcohol and drug worker	25.2%	21.4%	38.7%	24.6%
Psychologist	27.0%	32.8%	47.9%	44.1%
Psychiatrist	19.2%	19.2%	37.4%	32.2%
Social Worker	15.6%	17.8%	33.7%	28.0%
Mental Health Nurse	26.2%	24.9%	49.1%	32.4%
Physiotherapist	3.3%	3.8%	6.7%	7.6%
X-rays or scans	16.8%	18.5%	21.5%	24.2%
Optometrist	11.4%	14.0%	7.4%	16.1%
Dentist	28.2%	30.9%	29.4%	28.4%
Other health professional	1.8%	1.2%	1.8%	1.4%

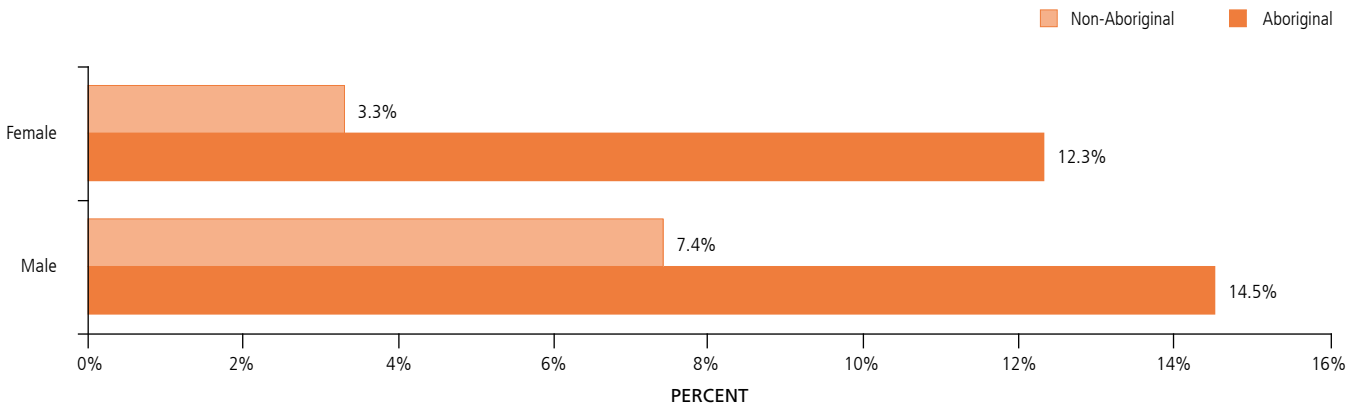
	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
In the community				
GP	25.2%	31.1%	52.8%	49.8%
Nurse	11.4%	11.2%	31.3%	19.9%
Sexual health nurse	3.9%	3.3%	11.7%	5.7%
Alcohol and drug worker	8.7%	10.5%	22.7%	17.1%
Psychologist	3.6%	10.9%	13.5%	20.9%
Psychiatrist	4.5%	10.5%	12.3%	10.4%
Social worker	3.0%	4.5%	16.0%	14.7%
Mental health nurse	3.9%	4.3%	11.7%	10.9%
Physiotherapist	1.8%	3.8%	4.3%	2.8%
X-rays or scans	9.0%	8.1%	17.8%	14.2%
Optometrist	2.7%	4.3%	8.6%	8.5%
Dentist	5.7%	8.8%	14.7%	16.1%
Other health professional	0.6%	1.2%	0.6%	1.9%

*Categories are not mutually exclusive. Totals may exceed 100%

3.6 Dental Health

Aboriginal men and women in Australia have been found to suffer from poorer oral and dental health than their non-Aboriginal counterparts (Roberts-Thomson, Spencer & Jamieson, 2008). In NPHS 2015, Aboriginal men and women were less likely to rate the quality of their teeth as excellent, very good or good. Figure 3.6.1 shows that this trend was particularly noticeable for Aboriginal women, only a third of whom (33.9%) rated their teeth in this range. In addition, a higher proportion of Aboriginal participants reported not brushing their teeth on the day before being interviewed. While only 7.4% of non-Aboriginal men reported not brushing; 14.5% of Aboriginal males did. Likewise, for women, only 3.3% of non-Aboriginal women didn't brush the day before the interview compared to 12.3% of Aboriginal women. Almost all those who reported brushing also reported using toothpaste irrespective of ethnicity.

Figure 3.6.1 Participants rating their teeth as good, very good or excellent



While a slightly higher proportion of Aboriginal men (63.5%) than non-Aboriginal men (60.7%) reported experiencing problems with their teeth and gums in the 12 months before being interviewed, a much higher proportion of Aboriginal women (73.3%) reported problems during this period than non-Aboriginal women (67.8%). Table 3.6.2 shows that a higher proportion of Aboriginal men reported frequent toothache (19.7%), tooth decay (39.1%), gum ache (6.7%), and bleeding gums (9.7%) than non-Aboriginal men. Aboriginal women reported higher instances of all problems, with the exception bleeding gums, than non-Aboriginal women and reported higher instances of frequent toothache (24.1%), tooth decay (45.1%), tooth sensitivity (22.2%), gum ache (11.7%), and other problems (20.4%) than any of the other gender and ethnicity groupings.

Table 3.6.2 Dental problems experienced in the last 12 months

	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Occasional toothache	13.0%	14.5%	12.3%	11.8%
frequent toothache	19.7%	12.6%	24.1%	17.5%
Tooth decay	39.1%	34.5%	45.1%	35.5%
Tooth sensitivity	15.5%	15.7%	22.2%	17.1%
Gum ache	6.7%	5.5%	11.7%	8.1%
Bleeding gums	9.7%	8.1%	9.9%	13.7%
Denture problems	0.6%	2.9%	4.3%	4.3%
Other	12.7%	16.9%	20.4%	17.5%

Intra-sex differences in the proportion of Aboriginal and non-Aboriginal men and women who reported receiving no dental treatment in the 12 months prior to being interviewed were negligible: Aboriginal men, 61.9%; non-Aboriginal men, 62.6%; Aboriginal women, 53.7%; non-Aboriginal women, 56.9%.

3.7 Diet and Nutrition

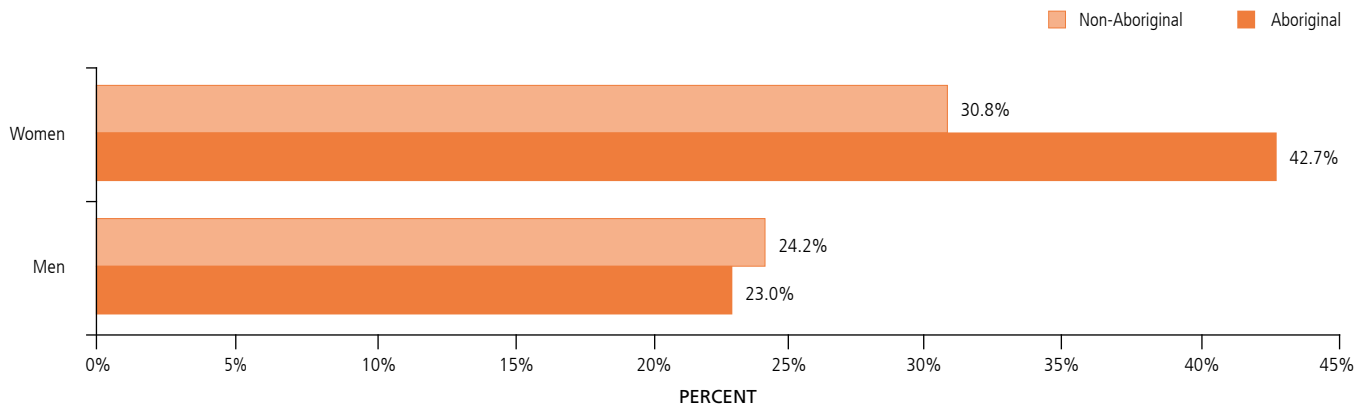
Data from the ABS indicates that less than half of Aboriginal people consume an adequate amount of fruit and vegetables on a daily basis (ABS, 2013). Similarly, in the NPHS 2015, a much higher proportion of Aboriginal women (13.7%) reported not consuming any fruit than non-Aboriginal women (7.1%) however a slightly higher proportion (17.5%) reported eating three or more serves of vegetables a day than other women (12.1%). Differences in the amount of fruit and vegetables consumed by Aboriginal and non-Aboriginal men were not meaningful: 6.7% of Aboriginal men reported not consuming any fruit compared to 6% of non-Aboriginal men, and 16.4% reported consuming no vegetables compared to 15.9%.

3.8 Disability and illness

Participants were asked a range of questions concerning the impact of any long-term health conditions or disabilities on their everyday activities. These questions measure key areas of impact identified by AIHW to develop its Standard Disability Flag (See AIHW 2016). The AIHW proposes ten domains, nine of which were included for examination in the 2015 NPHS. The remaining domain, domestic life activities, was deemed to have poor functional value for use with an incarcerated population and was omitted.

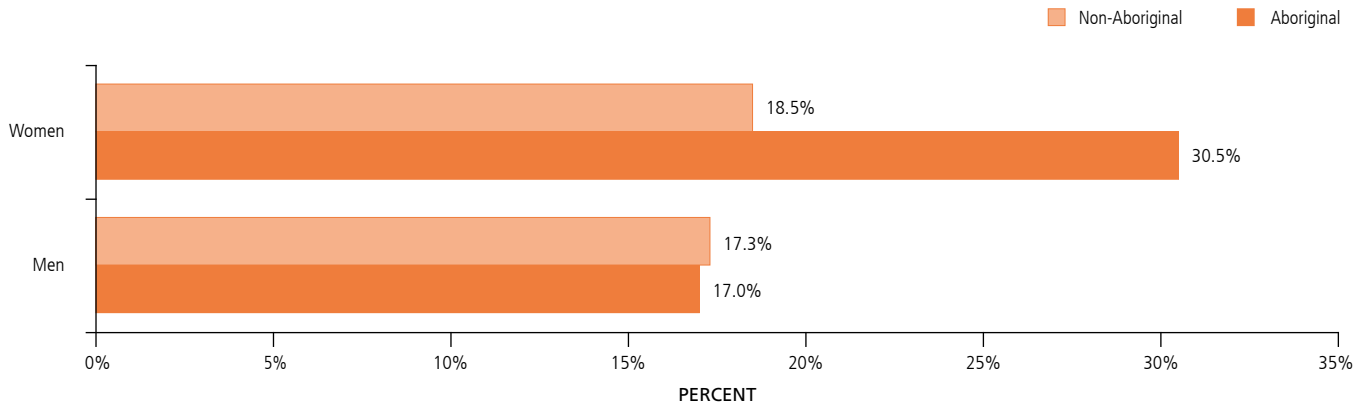
For each domain, participants are asked to indicate one of four options: they have no difficulty with related activities; they don't have difficulties but require the use of aids, equipment or medication; they have difficulties but don't require assistance or supervision; or they always require help or supervision in completing tasks. Participants who responded that they had no difficulties with any domain were considered to have no disability. Figure 3.8.1 shows the proportion of participants who reported a disability using this metric. While a slightly higher proportion of non-Aboriginal men were in this category than Aboriginal men, only 42.7% of Aboriginal women met this criteria compared to 63.8% of non-Aboriginal women.

Figure 3.8.1 Proportion of patients reporting a disability



In consultation with clinicians at the Network it was decided that if an individual reported difficulty in any of the self-care, mobility or communication domains, or in any two of the other domains then this would indicate a need to follow-up with participants in order to more effectively gauge their needs. Results from this analysis are presented in Figure 3.8.2 and show that a much higher proportion of Aboriginal women requiring additional assessment compared to either non-Aboriginal women, or men.

Figure 3.8.2 Proportion of participants requiring additional assessment of needs



3.9 Injuries

Figure 3.9.1 shows that a smaller proportion of Aboriginal men and women reported sustaining an injury in the 12 months prior to being interviewed compared to their non-Aboriginal counterparts.

Table 3.9.2 shows reported causes of injuries. While at least half of injuries reported were the result of an accident, this table shows a noticeably higher proportion of Aboriginal women reporting an assault as the cause of their injury than other participants.

Figure 3.9.1 Participants reporting an injury in previous 12 months

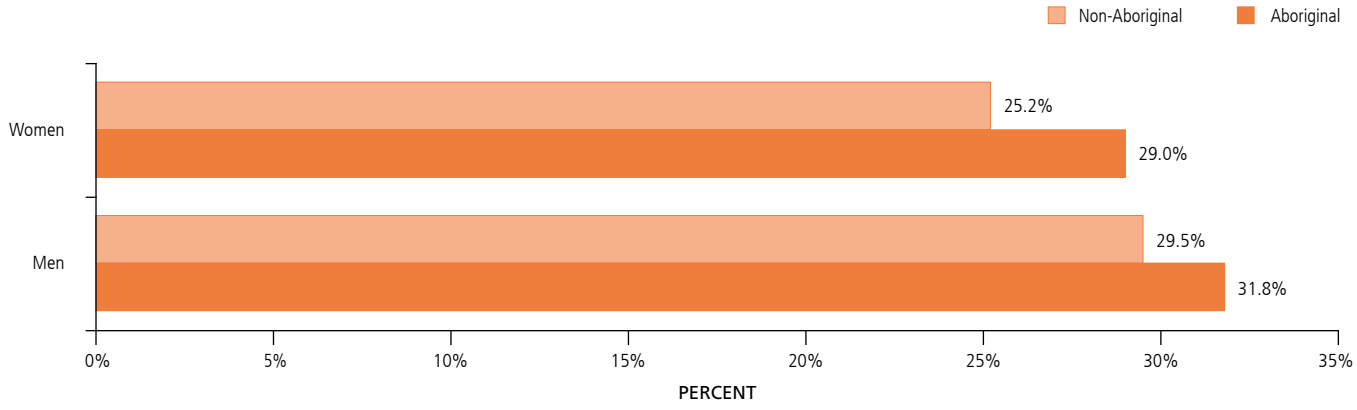
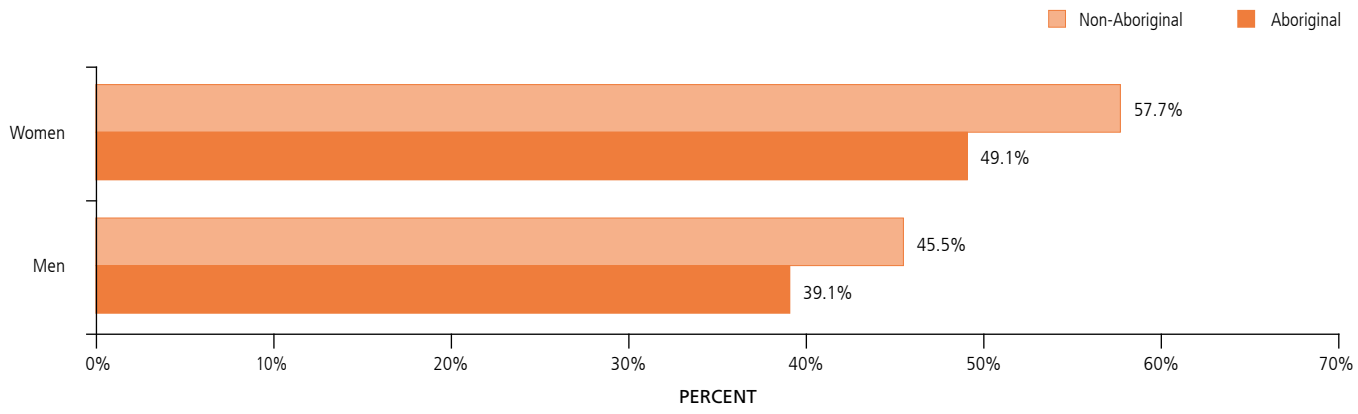


Table 3.9.2 Cause of injuries

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Accident	59.3%	58.9%	50.0%	56.8%
Intentional self-harm	4.4%	1.9%	5.4%	6.8%
Assault	23.7%	26.6%	32.1%	24.3%
Legal intervention	5.2%	3.8%	0.0%	4.1%
Complications from medical care	0.0%	0.6%	0.0%	0.0%
Late effects of earlier injury	1.5%	2.5%	3.6%	2.7%
other/undetermined	5.9%	5.7%	8.9%	5.4%

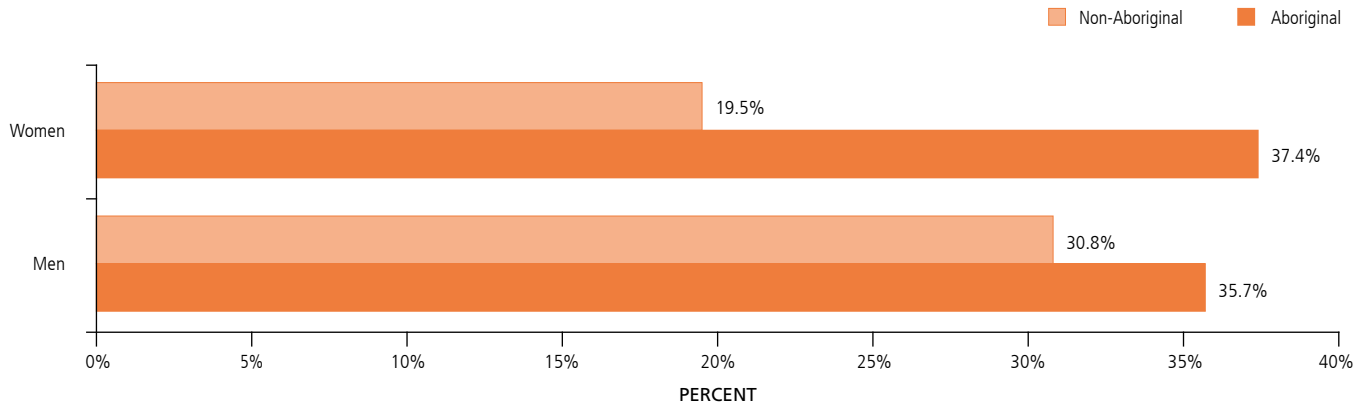
While Aboriginal men (81.5%) and women (87%) were more likely to seek medical attention as a result of their injuries or require hospitalisation (males, 68.5%; females, 75.8%), they nonetheless rated their injuries as less severe than their non-Aboriginal counterparts. Figure 3.9.3 shows the proportion of participants who reported their injury as either 'severe' or 'critical' and shows a tendency for non-Aboriginal participants of both sexes to rate their injuries as more severe than Aboriginal participants.

Figure 3.9.3 Proportion of injuries rated severe or critical



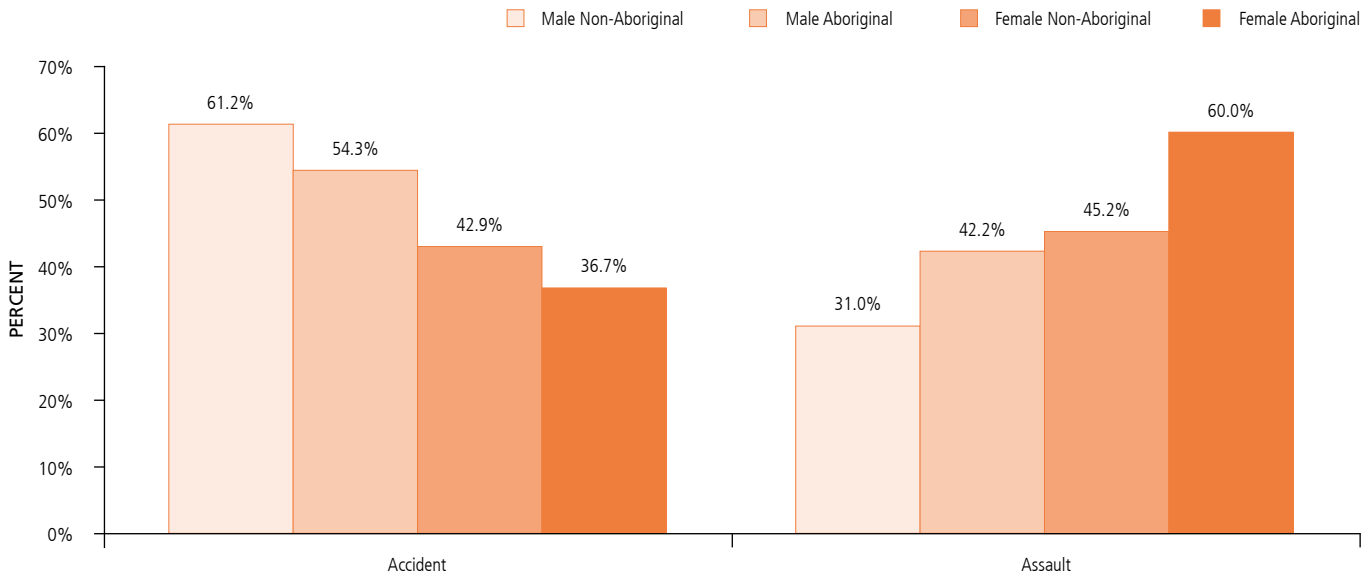
Participants were also asked specifically about any head injuries they had sustained that left them unconscious. Figure 3.9.4 shows that a higher proportion of Aboriginal men and women reported an injury of this kind than non-Aboriginal men and women. Indeed, a similar proportion of both Aboriginal men (35.7%) reported receiving at least one head injury that resulted in unconsciousness as Aboriginal women (37.4%). The proportional difference between non-Aboriginal men (30.8%) and non-Aboriginal women (19.5%) was comparatively greater.

Figure 3.9.4 Participants reporting a head injury that resulted in unconciousness



In excess of 90% of head injuries were the result of either an accident or an assault. Figure 3.9.5 shows that almost two thirds (61.2%) of head injuries to non-Aboriginal males were the result of an accident, while 31% were the result of an assault. The spread was similarly disproportionate for injuries to Aboriginal males, though slightly less extreme (accident, 54.3%; assault, 42.2%). While the spread was approximately even for non-Aboriginal women, injuries to Aboriginal women saw a reverse in the trend observed in males: a much higher proportion resulted from an assault (60%) compared to an accident (36.7%).

Figure 3.9.5 Cause of head injuries



4 Aboriginal Health

4.1 Identification with country

Connections with traditional culture and traditional country constitute a source of Aboriginal resilience which protects Aboriginal people's wellbeing (Kingsley, Townsend, Henderson-Wilson & Bolam, 2013). As such, any examination of Aboriginal health ought to examine participants' connection to, and embeddedness in, their rich cultural heritage. This section of the NPHS was directed to Aboriginal participants only in an effort to better understand their connection to Aboriginal culture; their perceptions of being an Aboriginal person; and their experiences of racism, both in the community and while incarcerated. A large majority of Aboriginal participants reported identifying with a particular Aboriginal people or country, with men (90.1%) more likely to do so than women (80.9%). Details of the breakdown of identification with people or countries are set out in Table 4.1.1.

Table 4.1.1 Recognition of traditional country or homeland

	Men	Women
No traditional country reported	9.1%	19.1%
One traditional country within NSW*	74.3%	71.1%
Multiple traditional countries within NSW	4.0%	2.5%
Multiple traditional countries across Australia	0.6%	0.0%
Traditional country in Queensland	6.8%	4.1%
Traditional country in Victoria	0.4%	0.0%
Traditional country in Western Australia	1.2%	1.3%
Traditional country in Northern Territory	1.2%	0.0%
Traditional country in South Australia	0.6%	1.3%
Other	1.8%	0.6%

Men (42.3%) were also more likely to report living in traditional country before the current incarceration than women (34.9%), as set out in Table 4.1.2.

Table 4.1.2 Recognition of and visits to traditional country or homeland

	Men	Women
No traditional country reported	14.8%	26.8%
Recognise traditional country but never visit	9.9%	8.1%
Visit less than once per year	13.9%	12.8%
Visit once per year	7.4%	5.4%
Visit more than once per year	9.3%	8.7%
Visit monthly or more	2.5%	3.4%
Live on traditional country	42.3%	34.9%

4.2 Perception of Aboriginality

Almost all Aboriginal participants reported feeling accepted by other Aboriginal people (92.6% of men and 94.3% of women). As set out in Table 4.2.1, a large majority of Aboriginal participants reported that most or all of their peers knew they were Aboriginal, but only around half reported that most or all people they met for the first time knew they were Aboriginal.

Table 4.2.1 Perception of Aboriginality

	Male	Female
Do your peers know you are Aboriginal?		
No	0.0%	0.0%
Hardly anybody	2.4%	4.4%
Not many	0.9%	1.3%
Some	5.2%	8.8%
Most	17.7%	23.9%
Everyone	72.9%	61.0%
Unsure / Don't know	0.9%	0.6%
Do the people you meet for the first time know you are Aboriginal?		
No	0.0%	0.0%
Hardly anybody	19.8%	19.7%
Not many	9.9%	12.7%
Some	15.8%	17.2%
Most	18.0%	14.0%
Everyone	36.5%	36.3%
Unsure / Don't know	0.0%	0.0%

4.3 Strength of identification and knowledge

Almost all Aboriginal participants stated they were proud of being Aboriginal (97.9% of men and 95.6% of women). As set out in Table 4.3.1, a majority of Aboriginal participants reported that it was important or very important to them to be recognised as an Aboriginal person.

Table 4.3.1 Perception of Aboriginality

	Male	Female
How important is it for you to be recognised as an Aboriginal person?		
Not at all	8.3%	5.8%
Not very	5.8%	10.9%
Neutral	19.3%	19.2%
Important	16.0%	13.5%
Very Important	50.6%	50.6%

As set out in Table 4.3.2, a majority of Aboriginal participants reported that they were satisfied or very satisfied with their knowledge of their Aboriginal culture. This finding should be interpreted carefully as it is not an indication of depth of cultural knowledge, which was not directly surveyed and indeed, may not be able to be assessed within a questionnaire format; a participant could know very little of their Aboriginal culture and report being satisfied with that knowledge.

Table 4.3.2 Satisfaction with knowledge of Aboriginal culture

	Male	Female
How satisfied are you with your knowledge of your Aboriginal culture?		
Not at all satisfied	7.9%	10.2%
Not very satisfied	19.5%	22.3%
Neutral	14.3%	10.8%
Satisfied	32.0%	29.3%
Very Satisfied	26.2%	27.4%

About a quarter of participants reported being able to speak at least some words of an Aboriginal language, as set out in Table 4.1.3. NSW participants who reported being able to speak an Aboriginal language included people identifying as Bunjalung, Dunghutti, Gandangarra, Kamilaroi, Wiradjuri, and Yuin.

Table 4.3.3 Knowledge of Aboriginal language

	Men	Women
No Aboriginal languages	73.8%	74.2%
Know a few words	21.6%	20.8%
Speak an Aboriginal language well	4.6%	5%

4.4 Aboriginal Healthcare Services

Around half of men (49.5%) and almost two thirds (62.3%) of women reported that there was an Aboriginal health worker at their current correctional centre. Around a quarter of Aboriginal participants (21.9% of men and 27.6% of women) reported having seen an Aboriginal health worker in custody in the last 12 months. By contrast, 10.2% of men and 18.4% of women reported having seen an Aboriginal health worker in the community in the last 12 months, although this should be interpreted in the knowledge that many participants would not have had the opportunity to do so due to incarceration.

For services outside custody, 52.2% of men and 56.3% of women reported that there was an Aboriginal group or organisation they could get support from in a crisis in the 12 months before coming to custody (excluding family or peer support). Of these participants, a majority (55.6% of men and 58.2% of women) had contacted the service they identified for support in the 12 months before coming into custody.

In early 2015, the Aboriginal Health Unit of the Network organised a state-wide program of health promotion 'Closing the Gap' events for Aboriginal patients. As part of the evaluation of this program, participants were asked about their involvement in these events. Around a third of Aboriginal NPHS participants (30.1% of men and 35.0% of women) reported having attended a Closing the Gap event in custody in the last six months. Table 4.4.1. sets out the reported impact of the events by Aboriginal participants who reported attending them.

Table 4.4.1 Impact of Closing the Gap Events*

	Men	Women
Made more use of available health services as a result of the event	52.0%	63.2%
Found out about a new health problem at the event but didn't get treatment afterwards	16.3%	22.4%
Found out about a new health problem at the event and received treatment afterwards	5.1%	3.4%
Made lifestyle changes based on learning from event	34.0%	38.6%

* Responses not mutually exclusive, totals may exceed 100%

Aboriginal participants were asked about their experiences of racism in a healthcare setting in the last twelve months. Details of responses are set out in Table 4.4.2. Care should be taken in interpreting this table. Some participants had been in custody for over 12 months, so would not have experienced community healthcare during this time. It is likely that community numbers would increase if participants had been asked about their last 12 month period in the community prior to incarceration. In addition, some participants may have been wary of reporting experiences of racism in a correctional centre clinic to data collectors employed by the organisation responsible for managing these clinics, potentially leading to underreporting of figures in custody. However, it should also be noted that the question asked about experiences in healthcare spaces rather than individual incidents; it is not known whether the incidents referred to involved clinicians, other healthcare staff, correctional staff, other prisoners, or others. By comparison, a 2013 survey in Victoria indicated that 29.3% of Aboriginal people in the community had experienced racism in a healthcare setting in the last 12 months (Ferdinand, Paradies & Kelaher, 2013). Further analysis of that study suggested a link between the experience of racism in a health setting and high or very high levels of psychological distress.

Table 4.4.2 Experiences of racism in a healthcare setting in the last 12 months

	Men	Women
Been a target of racist names, swearing or verbal abuse because you are Aboriginal?		
In custody	4.1%	4.4%
In the community	7.6%	12.6%
Both custody and community	2.5%	0.6%
Been treated worse or like you were inferior because you are Aboriginal?		
In custody	5.7%	3.2%
In the community	4.8%	8.9%
Both custody and community	1.6%	0.6%
Had someone spit, throw something at you, hit you or threaten to hit you because you are Aboriginal?		
In custody	2.8%	0.6%
In the community	3.8%	7.0%
Both custody and community	0.9%	0.0%

5 Mental Health

5.1 Psychiatric History

Aboriginal people are recognised as at risk populations for a range of mental illnesses. A critical example of this disparity is Aboriginal people are more likely to commit suicide than non-Aboriginal Australians (Parker, 2010). Evidence from previous studies examining the mental health of Aboriginal inmates in NSW reveal a complex range of differences between Aboriginal and non-Aboriginal men and women in relation to the prevalence of certain mental health problems (Butler, Allnut, Kariminia & Cain, 2007). The volume of mental illness that incarcerated people present with constitutes a significant burden on the resources of JH&FMHN. A large proportion of participants reported that they had seen a psychiatrist or other mental health professional prior to their current sentence. A much higher proportion of non-Aboriginal participants reported this (men, 51.3%; women, 57.1%) compared to Aboriginal participants (men, 41.6%; women, 50.9%). This should not necessarily be interpreted as evidence of lower clinical need on the part of Aboriginal participants but, rather, may point to a reluctance to consult medical professionals or the scarcity of mental health services in rural and remote locations.

Participants were asked whether they had ever received a diagnosis for a range of mental illnesses. Results for this are presented in Table 5.1.1. While a higher proportion of men reported that they had never been diagnosed with any of these illnesses than women, the differences between Aboriginal and non-Aboriginal participants were generally unremarkable although a higher proportion of non-Aboriginal men reported no diagnosis than Aboriginal men. A higher proportion of Aboriginal men and women had received a diagnosis for schizophrenia and attention deficit disorder/attention deficit hyperactivity disorder compared to non-Aboriginal participants. Additionally, Aboriginal women fared poorly in comparison to non-Aboriginal women with a higher proportion reporting diagnoses for psychotic disorders (including drug induced psychosis), personality disorders, and alcohol abuse or dependence. Indeed, Aboriginal women reported higher instances of diagnosis than all other groups for seven out of eleven illnesses.

A higher proportion of Aboriginal participants reported receiving a mental health diagnosis while in custody. Almost a quarter of Aboriginal men (23.3%) with a mental health diagnosis were diagnosed in custody compared to 17.2% of non-Aboriginal men. The difference between Aboriginal and non-Aboriginal women was small (Aboriginal 12.1%; non-Aboriginal 11.9%). A number of participants identified that they were diagnosed both in the community and in custody. While there were only small differences between male participants on this measure (Aboriginal 13%; non-Aboriginal, 12.4%) a much higher proportion of Aboriginal women (19.4%) received a diagnosis in both places compared to non-Aboriginal women (13.1%).

Aboriginal participants with a mental health diagnosis also tended to be diagnosed at a younger age than non-Aboriginal participants. While the median age of diagnosis for Aboriginal males was 21 years, for non-Aboriginal males it was 24 years. Similarly, for Aboriginal women the median age of diagnosis was 20 years but this rose to 25 years for non-Aboriginal women. It is unlikely that Aboriginal communities receive better screening for mental illness than non-Aboriginal communities and this gap is likely to be better explained by other factors including the tendency for Aboriginal participants to be incarcerated at a younger age.

Table 5.1.1 Diagnosis with mental illness

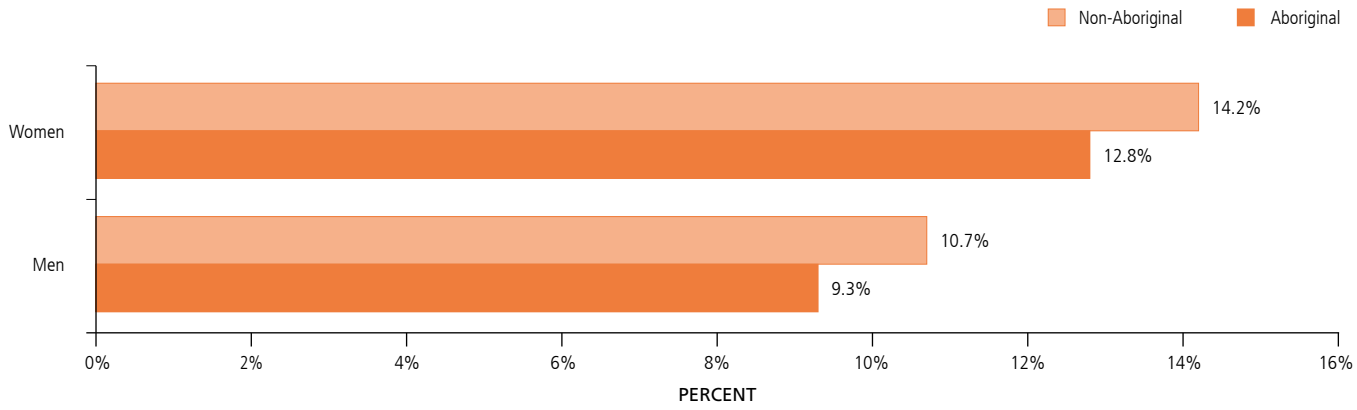
	Men		Women	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
None	34.3%	39.3%	20.1%	23.8%
Depression	35.6%	36.7%	61.6%	61.0%
Schizophrenia	16.7%	8.1%	11.9%	7.6%
Bipolar disorder	12.2%	11.0%	14.5%	17.6%
Psychotic disorder	8.2%	7.2%	9.4%	4.3%
Anxiety	21.9%	23.2%	50.3%	51.4%
Personality disorder	4.0%	4.3%	15.7%	11.9%
Alcohol abuse or dependence	14.3%	12.4%	18.9%	12.9%
Drug abuse or dependence	21.0%	19.2%	32.7%	29.5%
ADD or ADHD	14.0%	11.0%	11.9%	5.2%
Developmental disorder	0.9%	1.4%	0.6%	1.4%
PTSD	7.0%	9.8%	22.7%	20.0%
Other	4.6%	4.8%	4.4%	5.7%

5.2 Suicide and self-harm

Aboriginal Australians both contemplate and commit suicide at higher rates than the rest of the community. In 2017, Cousins described the ongoing high prevalence of suicide among Aboriginal people, and the apparent failure of suicide prevention programs directed towards this population as a 'catastrophic crisis'. Between 2001 and 2010, suicide accounted for 4.2% of Aboriginal deaths compared to only 1.6% of non-Aboriginal deaths (ABS, 2012). During this period, 992 Aboriginal people committed suicide which accounted for approximately 5% of all suicide deaths. The reasons for this higher prevalence among Aboriginal people are complex but appear to be associated with an overall poorer mental health among this population when compared to other segments of the community (Parker & Milroy, 2014). Given the outline presented in section 5.1 of this report, indicating a higher prevalence of mental health diagnoses among Aboriginal participants, the successful identification and treatment of incarcerated people suffering from suicidal ideation remains a clear priority for the Network.

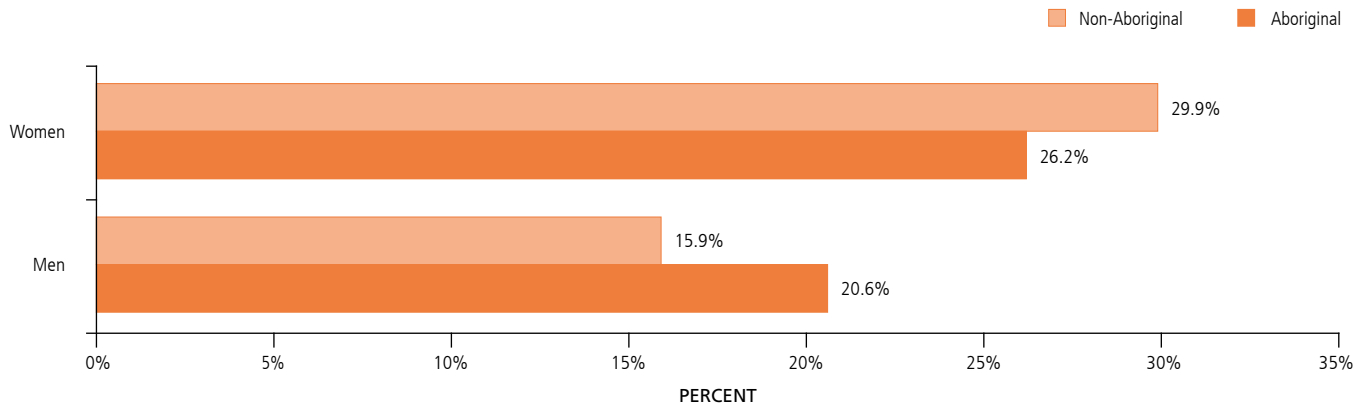
A higher proportion of female participants (Aboriginal, 45.6%; non-Aboriginal, 42.1%) reported a history of suicidal ideation than male participants (Aboriginal, 30.6%; non-Aboriginal, 29.3%) but while Aboriginal participants reported slightly higher rates, these did not appear to be as large when compared within sexes. Of those who reported ever having contemplated suicide, a higher proportion of Aboriginal participants (men, 35%; women, 43%) reported having such thoughts during the 12 months prior to being interviewed than non-Aboriginal participants (men, 30.7%; women, 36.6%). Nonetheless, Figure 5.8.1 shows that a smaller proportion of Aboriginal participants of either sex reported suicidal thoughts since coming into prison than their non-Aboriginal counterparts. Figures for this measure reflect prevalence in the entire sample (rather than the proportion of those who had ever engaged in suicidal ideation) to better reflect the extent of suicidal ideation across the prison population.

Figure 5.8.1 Proportion of all participants who have contemplated suicide while in prison



Non-Aboriginal women had the highest proportion (29.9%) of participants who had attempted suicide at least once. This was followed by Aboriginal women (26.2%), Aboriginal men (20.6%) and non-Aboriginal men (15.9%)

Figure 5.8.2 Proportion of all participants who have attempted suicide at least once



Participants were also asked how likely they were to attempt suicide while incarcerated. Four Aboriginal men, but no Aboriginal women, responded that they were either likely or very likely to do so. This compares to only one non-Aboriginal male and two non-Aboriginal females. In accordance with JH&FMHN policy, all of these cases were referred to clinical staff for follow up.

6 Alcohol Use

Explanations for the misuse of alcohol by some Aboriginal people are multifaceted and require a range of approaches to ensure the problem is successfully addressed (Gray, et al. 2014). In particular, Doyle, et al (2015) found that problematic alcohol use was common among both Aboriginal and non-Aboriginal men entering prison in NSW. While they found no significant differences with regards to the misuse of alcohol, they nonetheless raise the lack of alcohol misuse treatment programs which are specific to the needs of, and culturally appropriate for, Aboriginal people. It should be noted that while Doyle, et al did not find a significant difference in prevalence rates, the literature is far from settled. For example, Dolan, Rodas & Bode (2015) found that 65% of Aboriginal inmates drank at risky levels compared to 47% of non-Aboriginals. While these figures relied on data collected from prison staff, a number of other studies seem to suggest a link between patterns of alcohol consumption among Aboriginal people and contact with the criminal justice system (see, for example, Weatherburn, Snowball & Hunter, 2008)

The use of alcohol among people participating in the NPHS was assessed using the Alcohol Use Disorders Identification Test (AUDIT) which is a 10 item screening tool developed by the World Health Organisation to assess the problematic use of alcohol (Saunders, Aasland, Babor, De La Fuente & Grant, 1993). The AUDIT allows for a range of scores between zero and 40 with a score of eight or more considered to demonstrate hazardous or harmful alcohol use. The AUDIT asks participants to respond with regards to their current alcohol consumption; however, the possession or consumption of alcohol is prohibited in NSW corrections centres and, as such, items were amended to address participants' drinking habits in the 12 months prior to incarceration.

Table 6.1.1 Consumption of alcohol in 12 months prior to incarceration

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Never	29.8%	31.6%	51.3%	52.4%
Monthly or less	17.7%	12.5%	12.0%	13.9%
2–4 times per month	10.2%	14.0%	5.1%	7.7%
2–3 times per week	15.2%	14.5%	11.4%	12.5%
4+ times per week	27.0%	27.5%	20.3%	13.5%

The first item of this amended AUDIT asked participants to indicate how often they had consumed a beverage containing alcohol in the 12 months prior to being incarcerated. Results for this item are presented in Table 6.1.1 and show generally similar drinking patterns between Aboriginal and non-Aboriginal participants. In a notable exception to this trend, a higher proportion of Aboriginal women (20.3%) reported consuming four or more alcoholic beverages in a week compared to non-Aboriginal women (13.5%).

Median scores for the AUDIT are presented in Table 6.1.2. This figure shows generally higher scores for Aboriginal participants compared to non-Aboriginal participants indicating riskier drinking behaviours in this population. This is especially true when comparing females: The score for Aboriginal women (19.5) is more than ten points higher than that of non-Aboriginal women (9.0).

Figure 6.1.2 Median AUDIT scores

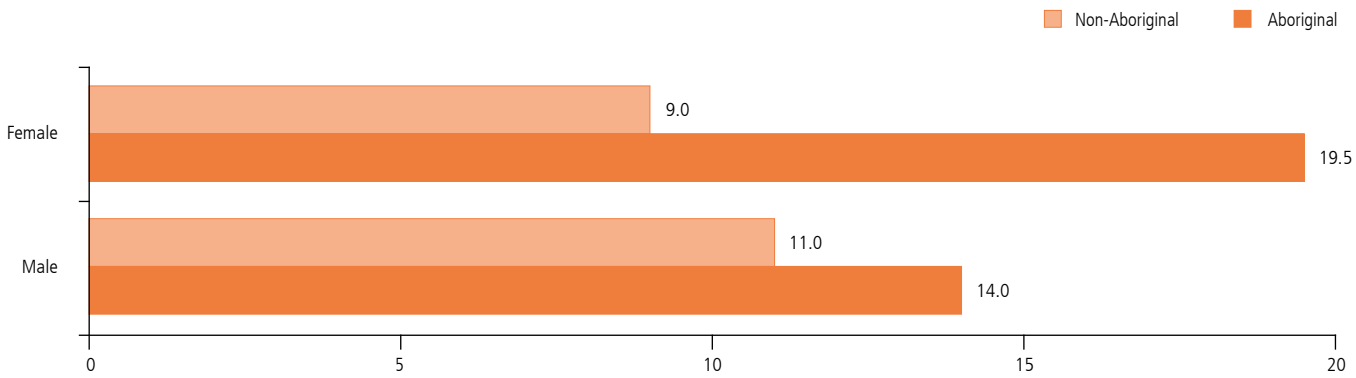
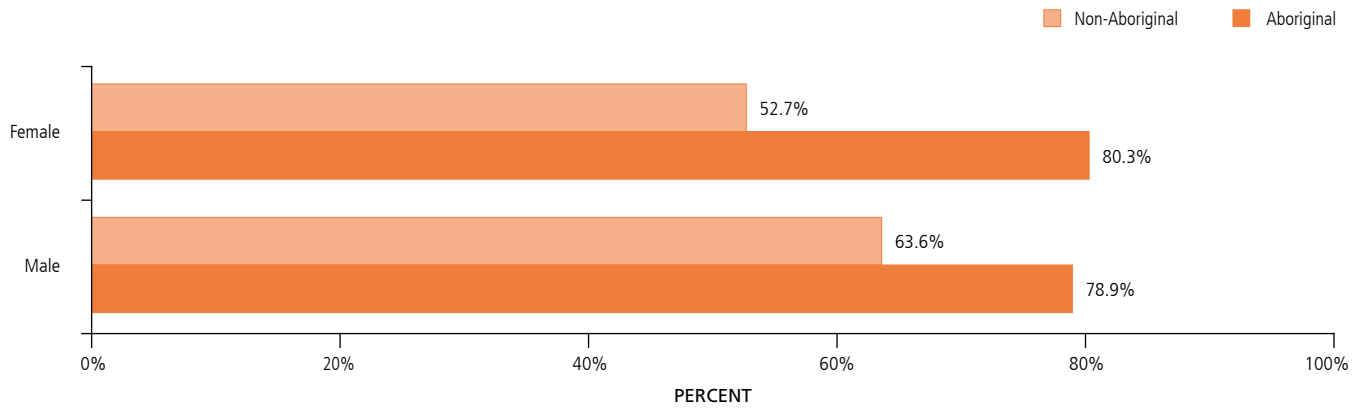


Figure 6.1.3 shows that more than half of all participants drank at harmful or hazardous levels, but a considerably higher proportion of Aboriginal participants, and Aboriginal women in particular, exhibited concerning patterns of alcohol consumption.

Figure 6.1.3 Proportion of participants drinking at hazardous levels



Participants were also asked whether any of their family members had experienced problems as a result of the misuse of alcohol. Responses to this item are included in Table 6.1.4 and show a higher proportion of Aboriginal participants reporting family members of all kinds with alcohol problems than non-Aboriginal participants. Similarly, a lower proportion of Aboriginal participants reported having no family members with alcohol problems than non-Aboriginals.

Table 6.1.4 Family with alcohol problems

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Mother	23.2%	11.7%	37.6%	21.1%
Father	39.9%	29.0%	43.2%	29.7%
Spouse	4.4%	3.3%	11.2%	9.4%
Children	1.7%	1.4%	1.6%	0.8%
Other	31.7%	17.2%	33.6%	19.5%
None	35.8%	56.0%	29.6%	48.4%

7 Drug Use and Treatment

7.1 Drug Use

The misuse of drugs has been identified as a pressing health problem in Australia, particularly for Aboriginal people (Haber & Day, 2014). For Aboriginal people, as with the non-Aboriginal population in Australia, substance abuse is often associated with poor mental and physical health outcomes (See, for example, Whitbeck, et al., 2014). The generally higher prevalence of substance abuse among Aboriginal people has been explained in terms of the social inequality they experience and the transgenerational impact of colonisation and successive governmental policies such as the Stolen Generation (Lee, et al., 2014).

Aboriginal participants (men, 68.1%; women, 69.5%) were more likely than non-Aboriginal participants (men, 58%; women, 48.2%) to report that they were drunk, or otherwise intoxicated, when they committed the offence for which they were currently in custody. They were less likely (men, 77.7%; women, 65.6%) to report that they were committing a crime in order to obtain alcohol or drugs than non-Aboriginal participants (men, 81.5%; women, 80.1%).

Participants were asked about their use of a range of substances. Responses to a question asking if each substance had ever been used are presented in Table 7.1.1. Aboriginal men were more likely than Aboriginal women to have used seven out of 15 substances and Aboriginal women were more likely to have used four out of 15. The most common substances used by Aboriginal men were: cannabis (87.1%), methamphetamine (71.5%), amphetamines (59%), heroin (49.5%), and ecstasy (48.1%). For Aboriginal females, the most common substances were methamphetamine (77%), cannabis (75.7%), heroin (50.7%), amphetamine (46.1%), and methadone / buprenorphine (34.2%).

Table 7.1.1 Ever used drugs

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Simple analgesics	20.7%	31.3%	17.8%	38.7%
Prescribed analgesics	35.6%	31.6%	27.0%	39.9%
Tranquilizers	32.2%	36.8%	30.3%	38.0%
Methadone / Buprenorphine	44.7%	31.9%	34.2%	35.6%
Heroin	49.5%	38.2%	50.7%	43.6%
Cannabis	87.1%	81.0%	75.7%	66.9%
Methamphetamine	71.5%	64.9%	77.0%	65.6%
Amphetamine	59.0%	57.8%	46.1%	50.9%
Cocaine	45.1%	53.4%	29.6%	42.3%
Ecstasy	48.1%	52.0%	23.0%	39.3%
Barbiturates	7.5%	10.1%	2.6%	9.8%
Ketamine	9.8%	17.5%	5.9%	13.5%
Petrol / volatile solvents	11.5%	3.4%	7.9%	4.3%
Amyl nitrate / butyl nitrate	3.7%	7.2%	2.0%	8.6%
Other Inhalants	3.7%	4.6%	2.6%	4.3%
Steroids	10.2%	15.5%	0.7%	2.5%
GHB	9.2%	16.1%	11.2%	12.9%
LSD	26.1%	32.8%	15.8%	20.2%
Other hallucinogen	20.0%	24.1%	8.6%	12.3%
Synthetic drugs	18.3%	22.4%	17.1%	13.5%
Other	0.7%	0.9%	0.0%	0.0%
Unknown substance	5.8%	6.9%	7.9%	4.3%

Participants who replied that they had ever tried a substance were asked a number of follow up questions regarding their use. Firstly they were asked whether they had used the substance daily or almost daily in the 12 months prior to being incarcerated. Results for this item are presented in Table 7.1.2. Results in this table are presented as a proportion of the total population and show cannabis and methamphetamine to be the substances most commonly used on a daily basis by all groups. From more than a quarter to nearly half of participants reported using either of these substances daily.

Table 7.1.2 Proportion of total sample using drugs daily prior to incarceration

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Simple analgesics	2.7%	3.3%	4.3%	7.6%
Prescribed analgesics	12.2%	6.9%	9.1%	13.3%
Tranquilizers	9.6%	9.0%	12.2%	12.8%
Methadone / Buprenorphine	11.9%	7.8%	17.1%	11.4%
Heroin	18.2%	12.8%	23.8%	15.6%
Cannabis	48.7%	31.8%	47.6%	28.4%
Methamphetamine	38.8%	30.9%	48.8%	37.0%
Amphetamine	14.6%	11.9%	14.0%	13.7%
Cocaine	9.9%	8.6%	8.5%	5.2%
Ecstasy	5.7%	4.0%	4.3%	3.8%
Barbiturates	1.5%	1.7%	0.6%	0.9%
Ketamine	0.6%	0.7%	0.6%	1.4%
Petrol / volatile solvents	0.3%	0.0%	1.2%	0.0%
Amyl nitrate / butyl nitrate	0.3%	0.0%	0.0%	0.5%
Other Inhalants	0.0%	0.5%	0.0%	0.0%
Steroids	2.1%	1.7%	0.0%	0.0%
GHB	1.2%	1.4%	3.0%	1.9%
LSD	2.4%	1.7%	2.4%	0.9%
Other hallucinogen	2.4%	1.7%	0.6%	0.0%
Synthetic drugs	2.1%	2.1%	4.3%	1.9%
Unknown substance	0.9%	0.7%	2.4%	0.0%

Participants were then asked if they had used the substance while in prison. Results for this item are presented in Table 7.1.3 and, once again, present results as a proportion of the entire sample in order to better illustrate the extent of drug use in prison. Cannabis was the most commonly used drug in prison for non-Aboriginal men and Aboriginal women, while methadone or buprenorphine was most common for Aboriginal men and non-Aboriginal women. Between 4.7% and 11.6% of participants reported consuming alcohol that had been brewed in prison.

Table 7.1.3 Proportion of total sample reporting using drugs while incarcerated

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Simple analgesics	9.0%	16.4%	5.5%	13.3%
Prescribed analgesics	9.6%	9.7%	3.0%	7.1%
Tranquilizers	9.3%	7.8%	5.5%	7.6%
Methadone / Buprenorphine	30.7%	17.8%	17.7%	14.2%
Heroin	17.0%	12.1%	9.2%	7.6%
Cannabis	28.7%	20.9%	17.8%	11.8%
Methamphetamine	22.1%	14.3%	12.9%	9.0%
Amphetamines	6.6%	3.8%	1.2%	3.3%
Cocaine	4.2%	4.3%	1.2%	3.3%
Ecstasy	3.6%	1.7%	0.6%	0.9%
Barbiturates	1.5%	0.5%	0.0%	0.0%
Ketamine	0.0%	0.2%	0.0%	0.5%
Petrol / volatile solvents	0.6%	0.0%	0.6%	0.0%
Steroids	0.6%	1.4%	0.0%	0.0%
GHB	0.6%	0.0%	0.6%	0.0%
LSD	0.9%	1.0%	0.0%	0.5%
Other hallucinogen	0.3%	1.0%	0.0%	0.5%
Synthetic drugs	2.1%	2.1%	1.2%	0.5%
Prison brewed alcohol	11.6%	9.5%	3.7%	4.7%
Unknown	0.3%	0.2%	0.6%	0.0%

The next question prompted participants to disclose whether they had used the substance in the four weeks prior to being interviewed. Results are reported in Table 7.1.4. The most common substance used during this period was methadone or buprenorphine which are commonly used for opioid substitution treatment in prisons. Non-Aboriginal females reported the misuse of simple analgesics equally in common with opioid substitutes.

Table 7.1.4 Proportion of total sample using drugs in the last 4 weeks

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Simple analgesics	7.5%	8.8%	3.0%	9.0%
Prescribed analgesics	2.7%	1.9%	0.6%	1.9%
Tranquilizers	2.1%	1.7%	1.8%	2.4%
Methadone / Buprenorphine	16.7%	10.2%	10.4%	9.0%
Heroin	2.1%	2.1%	3.7%	1.4%
Cannabis	9.6%	3.6%	6.1%	2.4%
Methamphetamine	5.1%	3.3%	6.1%	2.4%
Amphetamines	0.9%	1.2%	0.0%	1.9%
Cocaine	0.6%	0.2%	1.8%	0.5%
Ecstasy	0.0%	0.0%	0.6%	0.0%
GHB	0.0%	0.0%	0.6%	0.0%
Other hallucinogen	0.0%	0.0%	0.6%	0.0%
Synthetic drugs	0.0%	0.7%	0.0%	0.5%
Prison brewed alcohol	0.3%	0.2%	0.0%	0.0%
Unknown	0.3%	0.0%	0.0%	0.0%

Injecting behaviour, both in the community and in prisons, has been linked to increase incidence of blood borne viruses such as Hepatitis C and HIV (see, for example Bretaña, et al., 2015). The transmission of hepatitis C in prison, as well as its treatment is a major health concern for correctional centres domestically and internationally (Hajarizadeh, et al., 2016). Monitoring the prevalence of injecting drug users in the prison population is, thus, an important starting point in the assessment of risk of the transmission of blood borne viruses in prison. Participants were asked whether they had ever injected the substance and results are presented in Table 7.1.5. The most commonly reported drug injected for all groups was heroin with more than three quarters of Aboriginal females reporting injecting this substance. Fifty per cent or more of Aboriginal men reported injecting heroin, methadone or buprenorphine, methamphetamine, and steroids. Fifty per cent or more of Aboriginal females reported injecting heroin, prescribed analgesics, methamphetamine and barbiturates.

Table 7.1.5 Proportion of total sample ever injecting drugs

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Simple analgesics	8.2%	2.8%	0.0%	3.2%
Prescribed analgesics	42.9%	31.8%	53.7%	33.8%
Tranquilizers	12.6%	7.8%	8.7%	11.3%
Methadone / Buprenorphine	57.6%	41.4%	38.5%	37.9%
Heroin	64.4%	64.7%	77.9%	63.4%
Methamphetamine	52.4%	43.4%	62.4%	51.9%
Amphetamines	47.1%	41.3%	45.7%	51.8%
Cocaine	34.6%	22.6%	40.0%	39.1%
Ecstasy	12.0%	9.9%	20.0%	10.9%
Barbiturates	27.3%	11.4%	50.0%	12.5%
Ketamine	24.1%	13.1%	33.3%	18.2%
Steroids	50.0%	33.3%	0.0%	0.0%
GHB	11.1%	7.1%	5.9%	4.8%
Other Hallucinogen	1.7%	1.2%	0.0%	0.0%
Synthetic drugs	5.6%	2.6%	26.9%	22.7%
Other	0.0%	66.7%	0.0%	0.0%
Unknown	23.5%	4.2%	16.7%	0.0%

Participants were also asked explicitly about injecting behaviours while in prison with results presented in Table 7.1.6. These results show that methadone or buprenorphine were most commonly injected by men in prison, with a considerably higher proportion of Aboriginal men reporting this than non-Aboriginal men. The most common substance for women was heroin (equal with methamphetamine for non-Aboriginal women).

Table 7.1.6 Proportion of total sample reporting injecting drugs in prison

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Simple analgesics	0.6%	0.5%	0.0%	0.5%
Prescribed analgesics	6.6%	4.0%	2.4%	2.8%
Tranquilizers	1.2%	1.2%	0.0%	0.9%
Methadone / Buprenorphine	18.2%	8.3%	6.1%	6.6%
Heroin	14.3%	7.4%	9.2%	8.1%
Methamphetamine	15.5%	7.8%	8.6%	8.1%
Amphetamines	4.8%	4.3%	1.2%	2.8%
Cocaine	2.7%	2.4%	1.2%	2.8%
Ecstasy	0.3%	0.2%	0.0%	0.5%
Barbiturates	0.3%	0.2%	0.0%	0.0%
Ketamine	0.0%	0.5%	0.0%	0.5%
Steroids	0.6%	1.0%	0.0%	0.0%
GHB	0.0%	0.2%	0.0%	0.0%
Synthetic drugs	0.3%	0.0%	0.0%	0.5%
Unknown	0.3%	0.0%	0.6%	0.0%

7.1.1 Injecting drug use

Participants who reported injecting drug use were subsequently asked a number of follow-up questions. The median age at which participants reported first injecting drugs was 18 for all groups. A higher proportion of both Aboriginal men (48.4%) and Aboriginal women (60.4%) reported having injected drugs at some stage in their lives than non-Aboriginal men (36.3%) and women (39.8%).

Table 7.1.7 shows the proportion of participants who acknowledged injecting drugs who first injected in an adult prison, a juvenile detention centre, and the community. This table shows a higher proportion of Aboriginal men and women reporting first injecting drugs in an adult prison compared to their non-Aboriginal counterparts.

Table 7.1.7 Place drugs first injected

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Adult Prison	15.3%	5.9%	4.0%	1.2%
Juvenile detention centre	0.6%	0.7%	0.0%	0.0%
Community	84.0%	93.5%	96.0%	98.8%

Those who reported injecting heroin or amphetamines were also asked specifically whether they had first done so in the community, in a juvenile detention centre, or in an adult prison. Twelve percent of Aboriginal men with a history of injecting drug use reported that they first injected heroin in an adult prison and only 0.8% of this group reported first injecting heroin in a juvenile centre. This is comparable to the rate of 13.4% in adult prisons (0.8% in juvenile centres) for non-Aboriginal male drug injectors. Among female injecting drug users, 11.8% of both Aboriginal and non-Aboriginal females reported first injecting heroin in an adult prison; 1.3% of Aboriginal women, and no non-Aboriginal women, in this group reported first injecting heroin in a juvenile detention centre.

The majority of participants who reported injecting amphetamines first did so in the community. Few of these participants reported first injecting amphetamines in a juvenile detention centre (only 0.5% of non-Aboriginal males). A higher proportion of Aboriginal men (6.4%) reported first injecting amphetamines in an adult prison compared to non-Aboriginal men (2.6%) while differences between Aboriginal (3.1%) and non-Aboriginal (3.9%) women were small.

Participants with a history of injecting drug use were asked to reflect on the last time they injected drugs and whether they had used a clean needle. Responses are presented in Table 7.1.8 and show that in excess of 60% of injecting drug users reported using a new needle with the exception of Aboriginal men where the rate was 54.7%. Alternatively, a higher proportion of Aboriginal men reported using a needle that had been cleaned compared to other groups. Rates of using an uncleaned, second-hand needle were negligible among men but a higher proportion of Aboriginal women (4.2%) reported this compared to non-Aboriginal women (2.4%).

Table 7.1.8 Needle hygiene at last use

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Needle not cleaned	0.6%	0.7%	4.2%	2.4%
Cleaned needle	44.7%	29.3%	26.0%	33.7%
New needle	54.7%	70.0%	69.8%	63.9%

Participants who responded that they had cleaned the needle the last time they injected drugs were asked to outline the method they had used to do so. A higher proportion of Aboriginal participants (men, 64.8%; women, 41.7%) reported using the most comprehensive cleaning method available to incarcerated people compared to non-Aboriginal participants (men, 48.7%; women, 34.8%). This method involves repeated flushing of the needle and syringe with water before and after repeated flushing with the cleaning agent Fincol. While only a small proportion of men (Aboriginal, 0%; non-Aboriginal, 2.6%) reported that they didn't know how the needle was cleaned or that they left it to someone else, a noticeably higher proportion of women reported this (Aboriginal, 16.7%; non-Aboriginal, 17.4%).

Aboriginal men (50%) and Aboriginal women (28.6%) most commonly reported a lack of time as the main reason they did not clean a needle. Non-Aboriginal males who did not clean a needle reported that no one else needed it (50%) or were sharing with a trusted partner (50%). Non-Aboriginal women were also most likely to report no one else needing to use the needle as the main reason for not cleaning it (40%).

Table 7.1.9 shows that the majority of injecting drug users reported that they did not share needles the last time they injected. Non-Aboriginal men and Aboriginal women were the most likely to report this, with Aboriginal men the least likely. Aboriginal men, followed by Aboriginal women, were also the most likely to report that they did not know how many people shared the needle they used. Indeed, the majority of injecting drug users did not share any equipment at all the last time they injected. This was most commonly reported by Aboriginal women (78.8%), followed by non-Aboriginal males (77.8%), non-Aboriginal females (72.6%), and Aboriginal males (67.9%).

Table 7.1.9 Number of people sharing needle

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
None	60.5%	77.0%	76.8%	69.5%
One Person	7.4%	5.3%	7.1%	12.2%
Two people	4.3%	5.3%	2.0%	4.9%
Three to five people	9.9%	2.6%	1.0%	2.4%
More than five people	1.9%	3.9%	2.0%	2.5%
Don't know	16.0%	5.9%	11.1%	8.5%

A slightly higher proportion of non-Aboriginal men (23.2%) than Aboriginal men (20.7%) reported that they had overdosed or become unconscious as a result of taking drugs. Women generally reported higher rates of overdose than men with a higher proportion of Aboriginal women (34.9%) than non-Aboriginal women (29.5%) reporting this. Although in excess of 90% of overdoses reportedly occurred in the community, a higher proportion of Aboriginal participants (8.5%, men; 7.5% women) had overdosed or become unconscious in prison than non-Aboriginal participants (7.7% men; 6%, women).

Participants with a history of injecting drug use were also asked about their participation in Opioid Substitution Treatment (OST). Results, presented in Table 7.1.10, show that OST using methadone was by far the most common treatment, having been used by more than half of Aboriginal participants with a history of injecting drug use, as well as almost half (46.7%) of non-Aboriginal men and more than half (57%) of non-Aboriginal women.

Table 7.1.10 Use of Opioid Substitution Treatment

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Ever treated				
Methadone	51.5%	46.7%	50.5%	57.0%
Buprenorphine	19.0%	18.4%	18.6%	22.1%
Suboxone	12.3%	17.1%	12.4%	15.1%
Naltrexone	0.6%	3.3%	2.1%	2.3%
LAAM	0.0%	0.0%	1.0%	0.0%
Currently using				
Methadone	57.1%	56.3%	42.9%	51.0%
Buprenorphine	6.5%	7.1%	11.1%	15.8%
Suboxone	5.3%	15.4%	8.3%	23.1%

8 Sexual Health

Aboriginal participants reported first having consensual sex at an earlier age than non-Aboriginal participants. Median ages for both Aboriginal men (15 years) and women (17 years) were both one year lower than their non-Aboriginal counterparts.

A clear problem in this data becomes evident when considering the number of participants who reported having 'consensual' sexual relations while under age. When examining cases in which the participant reported having consensual sex at the age of 12 or less, 34.3% of Aboriginal men 15.2% of Aboriginal women fit this criteria. Table 8.1 provides a categorical breakdown of the age of first consensual sex for each group.

Table 8.1 Age of first consensual sex

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
< 13 years	34.3%	23.3%	15.2%	13.0%
14 years	20.9%	17.8%	18.4%	16.3%
15 years	19.9%	19.2%	17.1%	12.5%
16 years	11.8%	16.6%	20.3%	13.9%
17 years	3.7%	8.2%	13.3%	16.8%
18–24 years	4.0%	11.1%	8.2%	22.6%
25+ years	5.3%	3.8%	7.6%	4.8%

The sample was predominantly heterosexual. Among Aboriginal men, only 2.9% reported that they were gay or bisexual compared to 4.2% of non-Aboriginal men. A higher proportion of Aboriginal women (26.7%) reported that they were gay or bisexual, with an additional 1.3% identifying as asexual, while 22.6% of non-Aboriginal women identified as gay or bisexual.

Aboriginal participants had fewer sexual partners over the course of their lifetime than non-Aboriginal participants. The median number of partners for Aboriginal men was 12 compared to 17 for non-Aboriginal men while Aboriginal women reported a median of five partners compared to six partners for non-Aboriginal women. Only 3.9% of non-Aboriginal men reported not having had any sexual partners compared to 9.7% of Aboriginal men. Similarly, 3.5% of non-Aboriginal women reported the same compared to 10.1% of Aboriginal women.

A range of studies have reported that some Aboriginal people are more likely to contract sexually transmitted infections than their non-Aboriginal counterparts (see, for example, Ward, et al., 2016). In NPHS, a slightly higher proportion of Aboriginal participants reported having been diagnosed with a sexually transmitted infection (STI). Just over one in five (20.3%) of Aboriginal men reported an STI diagnosis compared to 17.6% of non-Aboriginal men. A higher proportion of women reported STIs with 23.6% of Aboriginal women and 23.2% of non-Aboriginal women. Table 8.2 details the STIs that were reported and shows that chlamydia was the most commonly reported for all groups with a higher proportion of both Aboriginal men and women having received a diagnosis. Aboriginal women were less likely than non-Aboriginal women to have been diagnosed with a range of STI that affect women only, with the exception of trichomaniasis.

Table 8.2 Sexually transmitted infections

	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Gonorrhoea	14.3%	19.4%	11.4%	4.3%
Genital warts	7.9%	9.7%	8.6%	10.6%
Genital herpes	6.3%	9.7%	5.7%	8.5%
Chlamydia	68.3%	51.4%	57.1%	51.1%
Pubic lice	7.9%	6.9%	2.9%	0.0%
Syphilis	11.1%	8.3%	0.0%	4.3%
NSU	1.6%	4.2%	2.9%	0.0%
Other	3.2%	2.8%	2.9%	2.1%
PID	—	—	5.7%	8.5%
Candida	—	—	20.0%	25.5%
Vaginosis	—	—	2.9%	10.6%
Trichomaniasis	—	—	8.6%	4.3%

Conclusions

The Network takes pleasure in being able to, again, use the data collected as part of the Network Patient Health Survey to publish a separate Aboriginal People's Health Report. While the results presented in this volume may often give cause for concern, we firmly believe that the surest and most effective pathway to combat them is through unflinchingly shining a light on these issues to more completely understand the depth and breadth of Aboriginal people's health needs.

The NPHS dataset is recognised as having great value to scholars, both locally and internationally. While this is something of which the Network takes a measure of justifiable pride, for us the value is greater; NPHS is an important and authoritative source of information which is used to inform service provision and against which we assess the success of our efforts.

Very few inmates are incarcerated forever; while very many spend only short periods at a time in prison. Most will return to the communities they came from. It is true that the carceral space is not an ideal clinical space in many regards but the Network sees a crucial opportunity to address the needs of a population that often does not have reliable access to healthcare and are less likely to seek out what is available. This opportunity is perhaps even more pressing for our Aboriginal patients. This report clearly illustrates that the health needs of Aboriginal and non-Aboriginal patients can be markedly divergent. It is consistent with research from across the country which shows Aboriginal people are particularly vulnerable to range of diseases and experience an enduring social and economic disadvantage. The Network is in a unique position to provide healthcare to those who have had little contact with the health system previously which may reduce the demand on local health districts and Aboriginal medical services all over the state.

Despite the often dispiriting findings contained in this report, the Network retains its commitment to improving the lives of all of our patients. This includes addressing the particular needs so often seen in our Aboriginal patients. We hope that this work will bear fruit and lead to discernible improvement in the lives of a vulnerable population.

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