Australian Government
Australian Institute of
Health and Welfare

# The health of Australia's prisoners 2015

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Australian Institute of Health and Welfare
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**Please note that there is the potential for minor revisions of data in this report. Please check the online version at <www.aihw.gov.au> for any amendments.**

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# Abbreviations

| | |
|---|---|
| ABI | acquired brain injury |
| ABS | Australian Bureau of Statistics |
| ACCHO | Aboriginal Community Controlled Health Organisation |
| ACT | Australian Capital Territory |
| AIDS | acquired immune deficiency syndrome |
| AIHW | Australian Institute of Health and Welfare |
| AMS | Aboriginal Medical Service |
| AUDIT | Alcohol Use Disorder Identification Test |
| AUDIT-C | Alcohol Use Disorder Identification Test—Consumption |
| CMR | crude mortality rate |
| GP | general practitioner |
| HIV | human immunodeficiency virus |
| IDU | injecting drug user |
| K10 | Kessler Psychological Distress Scale |
| NDICP | National Deaths in Custody Program |
| NDSHS | National Drug Strategy Household Survey |
| NPEBBV&RBS | National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey |
| NPHDC | National Prisoner Health Data Collection |
| NSP | needle and syringe exchange program |
| NSW | New South Wales |
| NT | Northern Territory |
| OST | opioid substitution treatment |
| Qld | Queensland |
| SA | South Australia |
| STI | sexually transmissible infection |
| Tas | Tasmania |
| TBI | traumatic brain injury |
| UK | United Kingdom |
| USA | United States of America |
| Vic | Victoria |
| WA | Western Australia |
| WHO | World Health Organization |

# Symbols

| | |
|---|---|
| — | nil or rounded to zero |
| . . | not applicable |
| n.a. | not available |
| n.p. | not publishable because of small numbers, confidentiality, or other concerns about the quality of the data |

# Summary



*The health of Australia's prisoners 2015* is the 4th report on the National Prison Health Indicators, which were developed to help monitor the health of prisoners, and to inform and evaluate the planning, delivery and quality of prison health services. It includes data from 1,011 prison entrants, 437 prison dischargees, over 9,500 prisoners who visited a prison health clinic and about 9,400 prisoners who took medications. These data were provided by prisons in all states and territories in Australia except New South Wales, which provided data on prison entrants only. Participation was not complete—84% of prisons participated, with about 49% of prison entrants and 42% of sentenced dischargees in those prisons taking part. Accordingly, the information in this report needs to be interpreted with some caution. AIHW is working with the states and territories to improve the coverage of this collection.

This report includes, for the first time, data on the smoke-free status of prisons, disabilities and long-term health conditions experienced by prisoners, and self-assessed health status. Mental health issues and risky health behaviours, including tobacco smoking, excessive alcohol consumption and illicit use of drugs, continue to be the main areas of concern. The health of Indigenous prisoners (over-represented at 27% of the prison population) is also a continuing concern.

## Tobacco smoking

Prisoners in Australia continue to have high smoking rates compared with the general population. Almost three-quarters (74%) of prison entrants were current smokers, with 69% of entrants indicating they smoked daily. One-half (50%) of entrants who smoked on entry to prison reported that they would like to quit.

Smoking bans are in varying stages of implementation in Australian prisons. Almost three-quarters (74%) of prison dischargees in prisons allowing smoking currently smoked, with one-in-six (16%) indicating that they smoked more now than they did on entry to prison. Dischargees from prisons with smoking bans were more likely to use quit smoking assistance in prison. Of those who smoked on entry to prison, dischargees from prisons with smoking bans were less likely to intend to smoke after release (59%) than those from prisons in which smoking is allowed (73%).

## Disability

Almost one-third (30%) of entrants reported a long-term health condition or disability that limited their daily activities and/or affected their participation in education or employment. Limitations to daily activities were the most common (24%), followed by restrictions in employment (16%) and education (12%). About 2% of prison entrants needed help and/or supervision in the areas of self-care, mobility and/or communication. Entrants aged between 35 and 54 years were more likely to have some form of limitation or restriction than their general community counterparts.

## Self-assessed physical and mental health

Prisoners being discharged from prison were more likely than those entering prison to report their mental health as generally good or better (78% compared with 67% respectively) and less likely to report it as poor (4% compared with 8%). A similar pattern was seen in self-reported physical health, with dischargees slightly more likely to report their physical health as generally good or better than entrants (78% compared with 73%).

# Indicators of the health of Australia's prisoners

**Key**

= Sourced from discharge form
= Sourced from entrant form
= Sourced from repeat medication form
= Sourced from clinic form
= Sourced from establishment form
= Other sources: National Prison Entrants Bloodborne Virus and Risky Behaviours Survey (NPEBBV&RBS); National Deaths in Custody Monitoring Program (NDICP); Department of Human Services.

| Indicator | Proportion or number | Indigenous: Non-Indigenous | Page |
|---|---|---|---|
| **Socioeconomic factors** | | | |
| Proportion of prison entrants whose highest year of completed schooling was below Year 10 | 32% | 40% : 29% | 21 |
| Proportion of prison dischargees whose highest year of completed schooling was below Year 10 | 36% | 47% : 30% | 21 |
| Proportion of prison dischargees who completed qualifications while in prison | 9% | 8%:10% | 22 |
| Proportion of prison entrants who were unemployed in the 30 days prior to imprisonment | 48% | 60%:43% | 24 |
| Proportion of prison dischargees who on release have organised paid employment which will start within 2 weeks of leaving prison | 24% | 24%:25% | 25 |
| Proportion of prison dischargees who on release are expecting to receive government payment through Centrelink | 79% | 85%:76% | 26 |
| Proportion of prison entrants who were homeless in the 4 weeks prior to imprisonment (including short-term and emergency accommodation) | 25% | 27%:24% | 28 |
| Proportion of prison dischargees who on release are expecting to be homeless (including short-term and emergency accommodation) | 31% | 38%:28% | 29 |
| Proportion of prison entrants who had one or more of their parents/carers imprisoned while they were a child | 17% | 26%:13% | 31 |
| Proportion of prison entrants who have children who depend on them for their basic needs | 46% | 53%:43% | 32 |
| Proportion of prison dischargees who in the last 4 weeks had contact with family, friends and/or elders | 79% | 76%:81% | 33 |
| **Mental health** | | | |
| Proportion of prison entrants who have ever been told by a doctor, psychiatrist, psychologist or nurse that they have a mental health disorder (including drug and alcohol abuse) | 49% | 44%:51% | 37 |

| Indicator | Proportion or number | Indigenous: Non-Indigenous | Page |
|---|---|---|---|
| Proportion of prison dischargees who have ever been told they have a health condition—mental health, including drug and alcohol abuse | 44% | 43%:45% | 37 |
| Proportion of prison dischargees reporting that their mental health improved or stayed the same in prison | 84% | 86%:84% | 38 |
| Proportion of prison entrants with high or very high level of psychological distress as measured by the Kessler 10 (K10) scale | 31% | 20%:34% | 39 |
| Proportion of prison dischargees with high or very high level of psychological distress as measured by the Kessler 10 (K10) scale | 19% | 17%:20% | 39 |
| Proportion of prison entrants who rate their mental health as generally good or better | 67% | 71%:65% | 43 |
| Proportion of prison dischargees who rate their mental health as generally good or better | 78% | 78%:78% | 43 |
| Proportion of prison entrants who are currently taking medication for a mental health disorder | 27% | 25%:27% | 44 |
| Proportion of prisoners in custody who received medication for mental health issues | 23% | 18%:24% | 45 |
| Proportion of prison entrants, who, at reception, were referred to mental health services for observation and further assessment | 22% | 23%:22% | 48 |
| **Self-harm** | | | |
| Proportion of prison entrants who have ever intentionally harmed themselves | 23% | 26%:21% | 49 |
| Proportion of prison entrants who have thought of harming themselves in the last 12 months | 13% | 11%:14% | 49 |
| Proportion of prison dischargees who have intentionally harmed themselves in prison | 4% | 4%:4% | 51 |
| Proportion of prison entrants identified as currently at risk of suicide or self-harm | 7% | 7%:7% | 51 |
| **Communicable diseases** | | | |
| Rate of notifications of sexually transmitted infections for prisoners in custody during 2014 (Source: Jurisdictions) | 3 per 100 prisoners received | n.a. | 54 |
| Proportion of prison entrants testing positive to Hepatitis C virus (Source: NPEBBV&RBS) | 31% | 31%:30% | 55 |
| Proportion of prison entrants testing positive to Hepatitis B virus (Source: NPEBBV&RBS) | 18% | 25%:15% | 55 |
| Proportion of prison entrants testing positive to HIV (Source: NPEBBV&RBS) | 0% | n.a. | 55 |
| Proportion of prison dischargees who were tested for a bloodborne virus or a sexually-transmissible infection | 69% | 77%:67% | 58 |
| Rate of courses of treatment for Hepatitis C commenced during 2014 (Source: Jurisdictions) | 8 per 1,000 prisoners received | n.a. | 60 |
| **Chronic conditions** | | | |
| Proportion of prison entrants who have ever been told they have a chronic condition | 32% | 24%:34% | 61 |

| Indicator | Proportion or number | Indigenous: Non-Indigenous | Page |
|---|---|---|---|
| **Activity and health changes** | | | |
| Proportion of prison entrants who rate their physical health as generally good or better | 73% | 74%:72% | 67 |
| Proportion of prison dischargees who rate their physical health as generally good or better | 78% | 85%:76% | 67 |
| Proportion of prison dischargees who report that while in prison their level of physical activity increased or stayed the same | 73% | 71%:74% | 71 |
| Proportion of prison dischargees who report that while in prison their weight increased or stayed the same | 78% | 79%:78% | 72 |
| Proportion of prison dischargees reporting that their physical health improved or stayed the same in prison | 83% | 84%:82% | 73 |
| **Aspects of women's health** | | | |
| Proportion of female prison entrants who have ever been pregnant | 84% | 79%:87% | 75 |
| Mean age at first pregnancy for female prison entrants | 19 years | 18 years:19 years | 75 |
| Rate of pregnant prisoners in custody during 2014 | 4.6 per 100 prisoners received | n.a. | 76 |
| Proportion of female prison dischargees who report that they were pregnant while in prison | 3% | n.a. | 76 |
| Proportion of female prison entrants who have had a cervical cancer screening in the last two years | 56% | 56%:56% | 77 |
| Proportion of female prison dischargees who had a cervical cancer screening in prison | 24% | 24%:24% | 77 |
| Proportion of female prison dischargees who had a mammogram in prison | 1 of 68 | n.p. | 77 |
| **Disability status** | | | |
| Proportion of prison entrants with limitations in activities or restrictions in education or employment | 30% | 25%:32% | 80 |
| Proportion of prison entrants with profound or severe core activity limitations | 2% | 2%:2% | 82 |
| **Tobacco smoking** | | | |
| Proportion of prison entrants who currently smoke tobacco | 74% | 82%:72% | 86 |
| Mean age at which prison entrants smoked their first full cigarette | 14 years | 14 years:14 years | 86 |
| Proportion of prison dischargees who smoked tobacco on entry to prison | 73% | 80%:73% | 88 |
| Proportion of prison dischargees who currently smoke tobacco (in prisons allowing smoking) | 74% | 87%:74% | 89 |
| Proportion of prison entrants who currently smoke and would like to quit | 50% | 54%:49% | 91 |
| Proportion of prison dischargees who intend to smoke upon release from prison | 51% | 54%:51% | 93 |
| **Illicit drug use and needle sharing** | | | |
| Proportion of prison entrants who engaged in illicit drug use in the last 12 months | 67% | 60%:69% | 96 |
| Proportion of prison entrants who have ever injected drugs (Source: NPEBBV&RBS) | 45% | 46%:44% | 100 |

| Indicator | Proportion or number | Indigenous: Non-Indigenous | Page |
|---|---|---|---|
| Proportion of prison dischargees who reported using illicit drugs while in prison | 10% | 9%:11% | 102 |
| Proportion of prison dischargees who reported injecting drugs while in prison | 6% | 4%:6% | 102 |
| Proportion of prison entrants who have shared injecting equipment (Source: NPEBBV&RBS) | 18% | n.a. | 103 |
| Proportion of prison dischargees who reported using a needle that had been used by someone else while in prison | 4% | 3%:4% | 103 |
| Proportion of prison dischargees who accessed a needle and syringe exchange program in the community | 16% | 8%:20% | 103 |
| Proportion of prison entrants who report being on pharmacotherapy medication for opioid dependence | 7% | 5%:7% | 105 |
| Proportion of prisoners in custody who received medication for opioid dependence | 3% | 2%:3% | 105 |
| Proportion of prison dischargees on an opiate substitution program while in prison with a plan to continue after release | 8% | 9%:9% | 106 |
| Proportion of prison dischargees who reported receiving a tattoo while in prison | 2% | n.p. | 106 |
| Proportion of prison dischargees who reported receiving a body or ear piercing while in prison | <1% | n.p. | 106 |
| **Risky alcohol consumption** | | | |
| Proportion of prison entrants who report a high risk of alcohol-related harm in the last 12 months (as measured by the AUDIT-C) | 39% | 54%:33% | 107 |
| Proportion of prison dischargees who report a high risk of alcohol-related harm prior to current incarceration (as measured by the AUDIT-C) | 58% | 71%:51% | 108 |
| Proportion of prison dischargees who reported consuming alcohol in prison | 3% | n.p. | 110 |
| Proportion of prison dischargees who accessed an alcohol treatment program in prison | 8% | 9%:8% | 111 |
| **Injuries, assaults and unprotected sex** | | | |
| Proportion of prison entrants who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness | 13% | 14%:13% | 112 |
| Proportion of prison dischargees who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness while in prison | 2% | 2%:2% | 113 |
| Proportion of prison dischargees who had to see a doctor or nurse due to an accident or injury while in prison | 26% | 30%:25% | 113 |
| Proportion of prison dischargees who reported being physically assaulted or attacked by another prisoner while in prison | 8% | 8%:9% | 114 |
| Proportion of prison dischargees who reported being sexually assaulted by another prisoner while in prison | 3% | n.p. | 114 |
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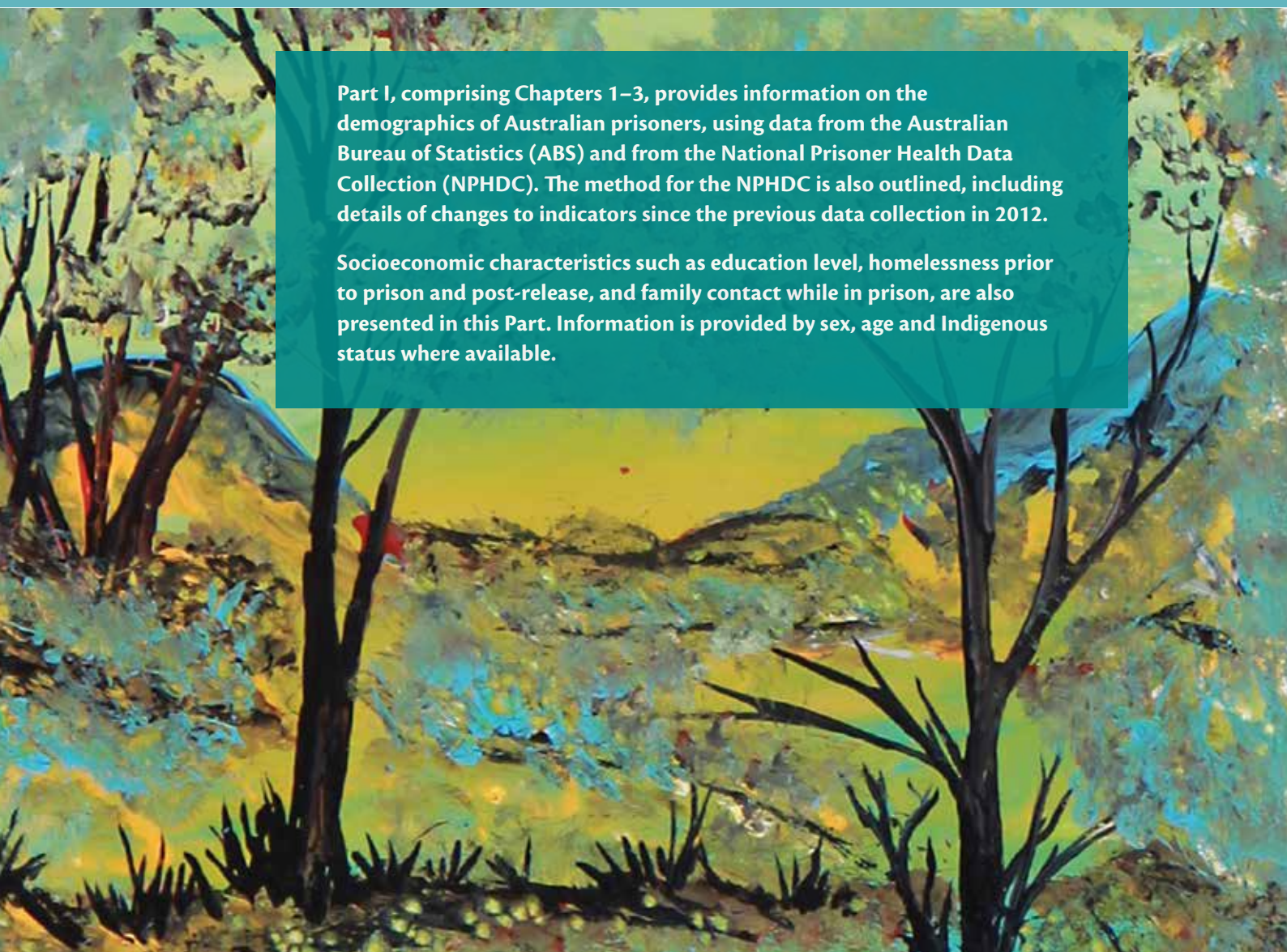
| Indicator | Proportion or number | Indigenous: Non-Indigenous | Page |
|---|---|---|---|
| Proportion of prison entrants who were in prison in the last 12 months and consulted with a medical professional for their own health in prison | 57% | 58%:57% | 118 |
| Proportion of prison entrants who, in the last 12 months, needed to consult a health professional in the community but did not | 34% | 33%:34% | 122 |
| Proportion of prison entrants who were in prison in the last 12 months and needed to consult with a health professional while in prison, but did not | 15% | 12%:15% | 122 |
| **Prison clinic** | | | |
| Proportion of prison dischargees who received a health assessment upon entry to prison | 92% | 92%:92% | 125 |
| Proportion of prison dischargees who could easily see a medical professional (GP or nurse) in prison if they had a health problem | 91% | 92%:90% | 126 |
| Proportion of prison dischargees who visited the prison clinic | 84% | 76%:88% | 127 |
| Proportion of prisoners in custody who used the prison clinic during the 2-week data collection period | 44% | 41%:43% | 128 |
| Proportion of prison dischargees who were diagnosed with a health condition in prison | 26% | 28%:25% | 130 |
| Proportion of prison dischargees who received treatment for a medical condition in prison | 57% | 54%:57% | 130 |
| Proportion of prisoners in custody who had a problem managed in the prison clinic during the 2-week data collection period, by problem managed | 12% medication issues | 10%:12% | 132 |
| Proportion of clinic visits during the 2-week data collection period, by service received | Treatment 62% | 58%:64% | 137 |
| Proportion of clinic visits initiated by prisoners | 34% | 27%: 37% | 138 |
| Proportion of prison dischargees' clinic visits by type of health professional seen | Nurse 82% | 75%:85% | 139 |
| Proportion of clinic visits by type of health professional seen | Nurse 71% | 72%:70% | 140 |
| Proportion of prison dischargees who were satisfied with the amount of information on their condition received at a clinic visit | 90% | 90%:89% | 141 |
| Proportion of prison dischargees who received answers they could understand at the prison clinic | 94% | 97%:93% | 141 |
| Proportion of prison dischargees who were able to be involved in their treatment decision at a clinic visit | 83% | 88%:80% | 141 |
| Proportion of prison dischargees who had enough time at a clinic visit | 79% | 82%:80% | 141 |
| Proportion of prison dischargees who rated the health care they received in the prison clinic as excellent | 27% | 31%:27% | 142 |
| **Medication** | | | |
| Proportion of prison dischargees who were prescribed medication for a health condition in prison | 56% | 52%:58% | 144 |
| Proportion of prisoners in custody who received prescribed medication during the data collection period | 43% | 41%:41% | 145 |
| **Prison health services** | | | |
| Ratio of full-time equivalent doctors and nurses working within the correctional system to the total number of prisoners | 2.98 per 100 prisoners | .. | 152 |

| Indicator | Proportion or number | Indigenous: Non-Indigenous | Page |
|---|---|---|---|
| Proportion of prison dischargees who received an immunisation while in prison | 36% | 36%:38% | 153 |
| Number of vaccinations provided by prison clinics during the 2-week data collection period | 1,230 | n.a. | 154 |
| Proportion of prison dischargees who went to a medical appointment outside the prison | 25% | 23%:25% | 155 |
| Proportion of prison dischargees who were admitted to a general or psychiatric hospital | 10% | 8%:11% | 155 |
| Proportion of prison dischargees who visited an emergency department | 11% | 11%:10% | 155 |
| Number of hospital transfers for prisoners in custody during the 2-week data collection period | 540 non-acute and 198 acute | n.a. | 155 |
| Proportion of Indigenous prison dischargees who received treatment or consultation from an Aboriginal Community Controlled Health Organisation (ACCHO) or Aboriginal Medical Service (AMS) | 13% | .. | 156 |
| Proportion of Indigenous prison dischargees who always received culturally appropriate health care in prison | 70% | .. | 156 |
| Frequency of visits by an Aboriginal Community Controlled Health Organisation or an Aboriginal Medical Service to a prison facility | Never: 58% of prisons | .. | 157 |
| **Release procedures** | | | |
| Proportion of prisoners who had a health-related discharge summary in place at the time of their release | 95% of sentenced prisoners with planned exit | n.a. | 158 |
| Proportion of prison dischargees on treatment or taking medication for a health condition who have a plan to continue after release | 83% | 79%:84% | 160 |
| Proportion of prison dischargees who on release have a referral or appointment to see a health professional | 50% | 48%:50% | 161 |
| Proportion of prison dischargees who have a valid Medicare card available on release | 75% | 62%:79% | 161 |
| Proportion of prison dischargees who felt prepared for their upcoming release from prison | 88% | 87%:90% | 162 |
| **Deaths** | | | |
| Number of deaths in prison custody in 2012–13 (Source: NDICP) | 53 | 9:44 | 167 |
| Crude mortality rate of prisoners within 4 weeks of release from prison (Source: Department of Human Services) (2013) | 13.4 per 1,000 person years | n.a. | 168 |
| Crude mortality rate of prisoners within 365 days of release from prison (Source: Department of Human Services) (2013) | 8.9 per 1,000 person years | 9.1:8.8 | 168 |

# Part I: Overview



**Part I, comprising Chapters 1–3, provides information on the demographics of Australian prisoners, using data from the Australian Bureau of Statistics (ABS) and from the National Prisoner Health Data Collection (NPHDC). The method for the NPHDC is also outlined, including details of changes to indicators since the previous data collection in 2012.**

**Socioeconomic characteristics such as education level, homelessness prior to prison and post-release, and family contact while in prison, are also presented in this Part. Information is provided by sex, age and Indigenous status where available.**

# 1 Introduction

This report presents the results of the 4th National Prisoner Health Data Collection (NPHDC) in Australia, and reports against the National Prisoner Health Indicators (Appendix A). It provides information on the health of people entering prison (prison entrants), conditions and problems managed by prison health clinics, medications taken by prisoners, the health and prison health clinic experiences of people due to be released from prison (prison dischargees) and the operation of the prison health clinics.

The indicators and data collection were developed by the Australian Institute of Health and Welfare (AIHW), with assistance and advice from the National Prisoner Health Information Committee (NPHIC). This Committee includes representatives from each state and territory department responsible for prisoner health, and other experts in the field. It is important to note that the indicators are designed solely to provide information about the *health of Australian prisoners*—they are not official or agreed 'performance indicators' for the *prisoner health system*.

The information offered by the NPHDC and the 116 National Prisoner Health Indicators, which are aligned to the National Health Performance Framework (AIHW 2009), help ensure that appropriate health services are in place to meet the needs of the prisoner population.

According to the World Health Organization (WHO 1948), health can be defined as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity'. For this reason, indicators about aspects of prisoners' lives, including homelessness, contact with family and friends while in prison, and education, were included in the data collection.

## 1.1 Background

Prisoners have higher levels of mental health problems, risky alcohol consumption, tobacco smoking, illicit drug use, chronic disease and communicable diseases than the general population (AIHW 2013a). This means that prisoners have significant and complex health needs, which are often long-term or chronic in nature. The health of prisoners is sufficiently poorer than in the general community such that prisoners are often considered to be geriatric at the age of 50–55 (Williams et al. 2014).

The United Nations Commission on Crime Prevention and Criminal Justice on 22 May 2015 adopted updated standard minimum rules on the treatment of prisoners, to be known as the 'Mandela Rules'. This update to the original 1955 rules details the provision of health care to prisoners, and includes principles of equivalence (to the community standard); independence;

multidisciplinary care including psychological and psychiatric, and dental; and continuity of care back to the community upon release from prison (United Nations 2015). These rules, launched by the General Assembly of the UN in October 2015, are reflected in the Australian context. The Corrective Services Administrators' 2012 Standard Guidelines for Corrections in Australia specifically reference health care provision in prisons, including equivalence of care, access to both primary and specialist health professionals, medical examination within 24 hours of being received into prison, continuity of care between the community and prison, care for pregnant female prisoners, mental health and disability (AIC 2012).

Prison stays are usually temporary. On 30 June 2014, about one-quarter (24%) of prisoners were on remand while awaiting trial or sentencing. For those who were sentenced, the median time expected to serve was 1.8 years (ABS 2014e). As a result, the prison population is fluid, with prisoners constantly entering prison and being released from prison, and the health issues and concerns of prisoners therefore become those of the general community.

## 1.2 Prisoner health services in Australia

In Australia there are several differences in the way health services are provided to prisoners compared with the general community, including funding arrangements and models of service delivery.

In the general community, health services are provided through both the Australian Government and the relevant state or territory government. However, health services for prisoners are the responsibility of state and territory governments only, and the manner in which these services are delivered varies among jurisdictions.

In some states and territories the local Department of Health provides health services in prisons, while in others it is the responsibility of the Department of Justice or Corrections. Most jurisdictions use a mix of directly-provided services, community health services and contracted health services. The provision of mental health services and alcohol and other drug services can be particularly complex, both in the services delivered and the method of delivery.

In prisons, primary health care, or the first level of contact with the health care system, is predominantly delivered by nurses. In the general community, however, most primary care is provided by general practitioners.

Specialist medical care can be provided to prisoners within the prison system or through non-prison-based services—such as general hospital inpatient and emergency care—depending on the prison, jurisdiction and service required. For example, some prison clinics have the capacity to deliver dental services and perform X-rays, whereas other smaller clinics are staffed by a single nurse only.

Medicare enables residents of Australia to have access to free or subsidised health care by health professionals such as doctors and nurses, including free treatment and accommodation in public hospitals. Medicare is funded by the Australian Government and does not apply to services provided directly by state and territory governments. This means that prisoner health services are effectively excluded from Medicare. The Pharmaceutical Benefits Scheme (PBS), which enables access to medicines at lower cost for Australian residents, is also funded by the Australian Government. Prisoners are therefore excluded from the PBS as well, except for Schedule 100 of the PBS, known as the Highly Specialised Drugs Program.

## 1.3 Healthcare in the prison environment

For prisoners who may underuse health services in the general community, prison may provide an opportunity to access treatment to improve their health. Many types of health care are accessed less often in the community than in prison (see section 15.1) for a variety of reasons, including cost, work or family commitments, and alcohol and drug issues (see section 15.2). The stability and regimentation of the prison environment may provide opportunities for prisoners to reflect on and seek treatment for their health concerns. However, the provision and operation of health services in a prison environment is not always straightforward. For example:

- Regimes and processes in place in a prison environment may make the goal of equivalence and continuity of care between the community and prison difficult to achieve, especially upon entry.
- Delays in being able to establish communication with a prisoner's community-based general practitioner or psychiatrist, or to confirm existing prescriptions, may in turn lead to disruptions to regular medications or changes to established medication practices. Such issues may leave prisoners at increased risk of mental instability at the particularly difficult time of transition into prison (Bowen et al. 2009).
- Uncertainty surrounding exact discharge dates, which can be affected by, for example, applications for bail and parole, increases the difficulties associated with continuity of care into the community following release.

Tobacco smoking is a significant health issue in the prison environment, with around 75% of prisoners entering as current smokers in 2015, and prison being a particularly difficult environment in which to successfully quit (AIHW 2013b). Smoking is banned in all enclosed public places and most outdoor public areas in Australia, and bans are increasingly being introduced to prisons (see Chapter 11 'Tobacco smoking').

The prison population in Australia is increasing both in overall numbers and in the rate of imprisonment (see section 2.1 'Australia's prisoners'), and many prisons are at or over capacity. Prisons in Australia were operating during 2013-14 at 104.4% of design capacity, meaning that there were more prisoners than the prisons were designed to accommodate (excludes Victoria and South Australia, who did not provide data) (Productivity Commission 2015). One of the strategies used to manage this over-capacity is an increase in movements of prisoners between prisons, making continuing health service provision more difficult (Grace et al. 2013).

For more detail on the delivery of prisoner health services in Australia, see *Prisoner health services in Australia* (AIHW 2014j).

## 1.4 Method

Most data in this report are sourced from the NPHDC, which was conducted over a 2-week period in early 2015. Data were collected in the 2–15 March 2015 period from prisons in Queensland, South Australia, Western Australia and the Australian Capital Territory; and from 27 April to 10 May 2015 from prisons in Victoria, Tasmania and the Northern Territory. New South Wales provided data for selected entrants data items separately, sourced from their Inmate Health Survey 2015, conducted 18–31 May 2015.

Some data for indicators concerning communicable diseases, injecting drug use and unprotected sex are sourced from the National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (Butler et al. 2015). Data for deaths in custody were sourced from the Australian Institute of Criminology's Deaths in Custody Monitoring Program reports (Baker & Cussen 2015). The denominator for the indicators sourced from the clinic and medications data is the total number of prisoners in custody at 30 June 2014 (within the prisons included in the NPHDC). These data were sourced from the ABS. More information about data sources and denominators can be found in Appendix D.

Numbers in this report represent the numbers from the sample in this data collection, rather than the number from the total prison population. The collection is designed to be a census, capturing data on the entire population of interest. To date, this has not been achieved because, in practice, some prisoners (especially prison entrants and dischargees), for various reasons, are not able to be approached for involvement in the data collection. Of those who are, some do not provide consent to participate. The sample is therefore convenience-based and not necessarily representative of the total prison population.

The majority of the data collected for the entrants and dischargee sections are self-reported data. This is a simple and efficient method of collecting data. Advantages include not needing specialised training for interviewers, being generally quicker than diagnostic interviewing (for health conditions), and that it provides the direct perspective of the person being interviewed. The main disadvantage of self-reported data is that there is no independent validation of the responses. This may lead, for example, to deliberate under-reporting of illegal activities. Self-reported data may be compared with other self-reported data (provided where possible throughout this report), but may not be directly comparable with reports and studies that use other data collection methods.

As a longer-term aim, the data would ideally be collected as a by-product of jurisdictional administrative systems, rather than as a separate data collection as occurs now. That would allow for the samples to be increased, thereby expanding the options for analysis, especially for entrants and dischargees data. This would take some time to achieve because the data requirements for the NPHDC would need to be built into the administrative data systems in each jurisdiction.

Further information on the data collection methods used in this report is available in Appendix B (Data Quality Statement).

## Changes since the last data collection

### New since 2012

The method of data collection has changed since the last report in 2012, with the introduction of electronic data collection. Previously, all data were collected using paper forms. In 2015, these were replaced with a purpose-designed application for tablet computers. The electronic data collection system has several advantages over paper forms, including increased efficiency and higher data quality. In-built checks for logical consistency of responses, and automatic skipping of irrelevant questions meant that the forms were quicker to administer, with more accurate and logical data being collected. We expect that the NPHDC will continue to use electronic data collection methods in the future.

Some of the differences in results between 2015 and previous NPHDC reports may be attributable to the change in the method of data collection, rather than an actual change in the health of prisoners. For this reason, caution should be used in comparing the results in this report with those of previous years, noting that the change in method of data collection is an addition to the other existing reasons for differences in the data. Direct comparisons are made in this report only when the change is consistent with other data and does not seem to have been affected by the data collection method.

New data items added since 2012 were:

- Letters of name (collected on forms relating to: entrants, dischargees, clinic and medication)—specific letters of name, along with other data items already in the collection, facilitate the creation of a Statistical Linkage Key (SLK). Collection of this data item will allow for the creation of the SLK for this collection and enable the possibility of future data linkage between prisoner health and other relevant collections such as youth justice, homelessness, and alcohol and other drug treatment services.
- Standardised disability flag (entrants)—this series of questions aims to identify people with disabilities or long-term health conditions who experience difficulties and/or need assistance in various areas of their life.
- Self-assessed health status (entrants and dischargees)—this has been divided into self-assessed mental health status, and self-assessed physical health status. Self-assessed health status is a widely used data item in Australia, and is included to provide a point of comparison for the health of prisoners with that of the general community.
- Consultation type (clinic)—this question distinguishes clinic consultations as being either in person or via teleconference/telemedicine.
- Smoke-free status (establishments)—these questions gather information on whether the prison is smoke-free and if so, when that began.

### Changed since 2012

Some existing data items were amended for 2015, to improve data quality and consistency, and interpretation of the data. The significant changes were:

- Current distress (entrants and dischargees)—in 2012, there was an open text question asking what any current distress was related to. Using the responses from 2012, categories were created to make this question multiple-choice for 2015.
- Head injury (entrants and dischargees)—to provide contextual information to assist in the interpretation of the head injury data, additional questions were added in 2015 to gather information on whether any previous head injuries resulting in a loss of consciousness had led to ongoing symptoms.
- Smoking (dischargees)—in recognition of the increasing number of prisons in Australia with a no-smoking policy, a question regarding plans to quit smoking while in prison was replaced with a new question on intentions to smoke after release from prison.
- Analgesic medications categories (medications)—the previous category of 'analgesics' has been separated into 'S8 controlled opioid analgesics not including for opioid-dependence', and 'S4 and over-the-counter analgesics'.
- Full-time equivalent staffing (establishments)—in recognition of the variable staffing and contractual arrangements among jurisdictions (AIHW 2014j), the staffing question has been reduced to just Doctors and Nurses, to improve comparability.

### Removed since 2012

Some dischargee indicators were identified as having limited relevance to health, and were removed from the collection for 2015: participation in correctional programs, working in a prison industry, registration with Advance2Work or a similar program, and participation in Indigenous-specific programs.

The non-participation forms for entrants and dischargees were also discontinued for the 2015 collection, due to inconsistencies in the 2012 data.

## Participation rates

Rates of participation in the data collection for entrants and dischargees have been calculated from data provided by the jurisdictions on the overall number of prisoners received into prison, and released from prison, during the 2-week data collection period. New South Wales was excluded from the calculations of participation rates because of methodological differences in their collection of entrants data, and they did not provide dischargee data.

In Western Australia, Acacia Prison was unable to participate fully in the data collection due to resourcing constraints, so no data from that prison has been included in this report.

For the entrant data, there were usable completed forms for 809 entrants from a total of 1,644 entrants into prisons during the 2-week period—a participation rate of 49%. Among dischargees, participation rates were calculated for all dischargees, and also for sentenced dischargees, who were the focus of data collection. During the data collection period, there were 445 usable dischargee forms completed, from a total of 1,740 prisoners discharged—resulting in a participation rate of 26% overall. Of the discharged prisoners, 1,059 were sentenced, giving a 42% participation rate among sentenced dischargees. The indicative participation rates among entrants and the target population group of sentenced dischargees were therefore similar.

## Scope and coverage of the NPHDC

The NPHDC collected data from 76 out of 91 public and private prisons in all states and territories in Australia (data collection in New South Wales focused on prison entrants located in 'reception prisons'). In contrast to the ABS's *Prisoners in Australia 2014* report, periodic detention centres and court cells administered by corrective services were excluded, as were juvenile detention centres, immigration detention centres and secure psychiatric facilities.

During the data collection period, prison entrants, prison dischargees, prisoners in custody visiting the prison clinic, and prisoners taking prescribed medication were invited to participate in the data collection, with the option to refuse to give consent. A prison clinic visit was defined as any consultation for which an entry was made in the health service record. This excluded routine treatment such as adhesive plasters or paracetamol. The services provided within clinics vary among states and territories. Data for prison entrants, prison dischargees, and prisoners in custody visiting their clinic were collected over a 2-week period. Data for medications taken by prisoners were collected on 1 day only. Depot medications (which are medications that are injected so absorption occurs over a prolonged period) were included, whether or not they were administered on the data collection day.

## Prisoners

Prisoners were defined as adults aged 18 years or over held in custody, whose confinement was the responsibility of a corrective services agency. This definition includes sentenced prisoners and prisoners held in custody awaiting trial or sentencing (remandees). Juvenile offenders, people in psychiatric custody, police cell detainees, people held in immigration detention centres, or Australians held in overseas prisons, were not included. Queensland detains prisoners aged 17 in adult prisons, but they were excluded from the NPHDC.

A prison entrant is classed as a person aged at least 18 years, entering full-time custody, either on remand or on a sentence. Prisoners who have been transferred from one prison to another were not included as entrants.

A prison dischargee is a full-time prisoner aged at least 18 years who expects to be released from prison within the 4 weeks following the time of interview. Prisoners who were being transferred from one prison to another were not included as dischargees.

Prisoners aged at least 18 years, held in full-time custody in correctional facilities in Australia were in scope for the clinic and medication components of the NPHDC.

## NPHDC forms

There were 5 forms completed for the NPHDC:

- Prison entrants form—completed for prisoners entering prison during the data collection period. Included questions relating to demographics of the prison entrants, mental health, chronic diseases, disability, substance and alcohol use, use of health services and pregnancy.
- Prison discharge form—completed for prisoners who were scheduled to be released from prison within 4 weeks from the data collection period. Included questions relating to demographics of the prison dischargee, mental health, chronic diseases, substance and alcohol use, use of prison health services, injuries in prison, and preparation for release.
- Clinic form—completed for all visits to the clinic during the data collection period. Included questions about demographics of the prisoner, who initiated the visit, the problems managed at the visit, and the type of health professional involved.
- Medications form—completed for all prisoners in custody who were administered prescribed medications. Included questions on the demographics of the prisoner and medication types administered.
- Prison establishments form—completed once for each prison clinic. Included questions about whether health services were provided by Aboriginal Community Controlled Health Organisations (ACCHOs) or Aboriginal Medical Services (AMSs), discharge planning, immunisation, full-time equivalent staffing, and hospital transfers.

## Supplementary electronic data

Jurisdictions were also asked to complete a data request to report notifications of sexually transmissible infections and the number of prisoners received into and released from prison during 2014.

## Ethics

Initial ethics clearance for this project was obtained from the AIHW's Ethics Committee on 4 March 2008, with updated clearances for the dischargee component obtained on 20 April 2012 and for the electronic data collection method and new data items on 25 November 2014. Each jurisdiction was then responsible for ensuring that, where required, ethics approval was gained from the relevant jurisdictional ethics committee(s).

## Confidentiality

Where a cell in a table is able to identify an entity and reveals other details, it results in attribute disclosure. In instances where the attribute disclosed is sensitive, the table is confidentialised according to AIHW confidentiality policies. Cells with 0 are reported as 0.

Where the response of the participant was unknown, these have been included in totals, but not individual rows and columns in Tables and Figures, unless directly relevant to the indicator.

## Interpretation of the entrant and dischargee data

This collection is cross-sectional in design, with data from each of the different groups of participants being collected over the same 2-week period within each jurisdiction. This means that the prison entrants and prison dischargees from whom data were collected are not the same individuals. The data therefore do not represent a 'before' and 'after' picture of the prison experience, but rather represent two different groups of prisoners. Data for some indicators for which it may be expected that there would be a difference between those entering and those about to leave prison are sometimes presented side-by-side in a table or figure. However, caution should be used in comparing these groups, since any differences do not represent changes for individuals.

## General community comparisons

Where data are available, comparisons are made between the health of prisoners and that of the general community. Because the demographic profile of prisoners is quite specific and differs from that of the general community (see Chapter 2 'Demographic information'), comparisons are made by age group, sex and Indigenous status wherever possible. This reduces the likelihood that any differences seen are due to demographic factors rather than being true differences between prisoners and the general population.

# 1.5 Report structure

This report is made up of eight Parts:

- **Part I: Overview**—presents an introduction (Chapter 1); demographic information about prisoners in Australia and an overview of participants in the NPHDC (Chapter 2); and data relating to socioeconomic factors such as education, employment, homelessness and family for both prison entrants and prison dischargees (Chapter 3).
- **Part II: Mental health**—focuses on mental health history, changes to mental health while in prison, current medication and current psychological distress for both prison entrants and dischargees (Chapter 4); and looks at self-harm, including history and recent self-harming behaviour or thoughts for prison entrants and dischargees (Chapter 5).

- **Part III: Physical health**—looks at communicable diseases, including Hepatitis B and C, human immunodeficiency virus (HIV) (Chapter 6); chronic conditions for prison entrants including asthma, arthritis, cardiovascular disease, diabetes and cancer (Chapter 7); activity and health changes since entering prison for prison dischargees (Chapter 8); and aspects of women's health, including pregnancy in custody, and cancer screening (Chapter 9).
- **Part IV: Disability**—looks at limitations on participation in everyday activities, employment and education for entrants (Chapter 10).
- **Part V: Risky behaviours**—focuses on alcohol and other drug use, needle sharing in prison and in the community, and use of treatment programs (Chapters 11–13); and looks at injuries, assaults in prison, head injuries for both prison entrants and dischargees, and unprotected sex for prison entrants (Chapter 14).
- **Part VI: Health service use**—focuses on the use of health services both in the community and in prison, including recent use of community health services by prison entrants, the use of the prison clinic by prisoners in custody, and satisfaction of prison dischargees with prison clinic services (Chapters 15–16); and medications prescribed in prison (Chapter 17).
- **Part VII: Prison health services**—looks at the operations of prison health services, including staffing, use of community health services by prisoners in custody, Indigenous-specific health services, and immunisations (Chapter 18); and provides information on preparation for release from prison, including provisions for continuation of care after release (through care) of ongoing health issues, and how prepared dischargees feel for release (Chapter 19).
- **Part VIII: Deaths**—includes information on deaths in custody and post–release (Chapter 20).

Most indicators are reported at a national level, with breakdowns for age, sex and Indigenous status as appropriate. Indicators are reported at the jurisdictional level in Supplementary Tables available online at <http://www.aihw.gov.au/publication-detail/?id=60129553527>.

Appendixes to this report are:

- Appendix A: List of indicators
- Appendix B: Data quality statement
- Appendix C: Tables
- Appendix D: Data sources
- Appendix E: Prisoner health services in Australia
- Appendix F: Key policy directions
- Appendix G: Prisoner health legislation in Australia
- Appendix H: List of prisons in Australia.

# 2 Demographic information

## 2.1 Australia's prisoners

Australia's prison population is increasing in both numbers and rate, with an imprisonment rate of 187.3 per 100,000 adults during 2013–14, up from 172.4 in 2012–13 (Productivity Commission 2015). The imprisonment rate in 2014 was the highest since at least 2004 (ABS 2014e). The 30 June snapshot prison population increased by 10% between 2013 and 2014, compared with an increase of less than 2% in the Australian general population during 2014 (ABS 2015a).

The prison population is fluid, with many prisoners entering and leaving each year. Prisoners may be either sentenced, or on remand while awaiting trial and sentencing. Those on remand represent about one-quarter of the prison population on an average day (ABS 2015b), but comprise over one-half of prison entrants (people being received into prison custody) (see Table 2.2). This flow of prisoners means that the number of prisoners in custody on any given day is not the same as the number in prison over the course of a year. During 2013, the number of people released from prisons in Australia was estimated at 125% of the number in prison on 30 June (Avery & Kinner 2015).

Table 2.1 compares the number of people in prison on a snapshot day (30 June 2014) with the number of people who entered or left prison during a 12-month period (calendar year 2014). The number of prisoners who entered or left prison in a year is difficult to ascertain, with some jurisdictions not routinely counting individuals, only reception and release events. (In Table 2.1, New South Wales provided data for events rather than individuals.)

On 30 June 2014 there were 33,170 prisoners in Australia, but throughout the entire year, more than 50,000 prisoners moved through the prison system (Table 2.1). This is a flow of around 50% more prisoners throughout the year than the number in prison on the 30 June snapshot day.

Different denominators are used for different indicators. More details are provided in Appendix D (data sources).

**Table 2.1:** Number of prisoners, states and territories, 2014

| | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Total |
|---|---|---|---|---|---|---|---|---|---|
| Number in prison custody 30 June 2014 | 10,521 | 6,109 | 6,970 | 5,233 | 2,172 | 435 | 327 | 1,403 | 33,170 |
| Number received into prison 2014 | 15,504 | 7,192 | 12,531 | 6,614 | 4,201 | 1,262 | 543 | 3,133 | 50,980 |
| Number released from prison 2014 | 15,087 | 6,801 | 12,073 | 7,602 | 4,855 | 1,268 | 508 | 3,115 | 51,309 |

*Notes*

1. Number received into prison was defined as the number of people received into the prison within the year. The number of people rather than the number of receptions was counted, so persons received into prison more than once within the one year were only counted once.
2. Number released from prison was defined as the number of people released within the year. The number of people rather than the number of releases was counted, so persons released from prison more than once within the one year were only counted once.
3. Reception and releases data from Queensland include prisoners aged 17 and over.
4. Reception and releases data from New South Wales counts events rather than individual people.
5. Number in prison custody on 30 June 2014 differs from published ABS data because the NPHDC excludes police cells and court cells administered by Corrective Services, periodic detention centres, and those aged under 18, and due to ABS randomisation for confidentiality purposes.
6. Number in prison custody from customised data report provided by ABS.

*Sources:* Number received into prison 2014 and number released from prison 2014—Supplementary data, 2015 NPHDC; number in prison custody 30 June 2014—AIHW analysis of ABS 2014e.

The prisoner population is predominantly male (92% compared with 49% of the general adult population) and relatively young, with over two-thirds (68%) being aged under 40 years, compared with approximately 38% of the general adult population (ABS 2014e; ABS 2015c). Aboriginal and Torres Strait Islander people are significantly over-represented in the prison system. Indigenous people represent approximately 2% of the general adult population, but on 30 June 2014, represented 27% of the prisoner population. Indigenous Australians were imprisoned at an age-standardised rate of 1,857 per 100,000 of the adult population, 13 times that of the non-Indigenous population (144 per 100,000) (ABS 2014e).

The over-representation of Indigenous people in prison (and youth detention) in Australia is well established. Some of the recognised pathways into prison for Indigenous people include poor schooling and employment, social exclusion and isolation, poor physical and mental health, drug and alcohol issues, unstable housing, family history of incarceration, being a member of the Stolen Generation, and a lack of support during childhood, including child neglect and abuse (The SPRINT Project Team 2013; Weatherburn & Holmes 2010).

As discussed earlier (see section 1.4), the demographic profile of prisoners differs from that of the general community in terms of age, sex and Indigenous status. Therefore, where comparisons are made in this report between the health of prisoners and that of the general community, the populations are matched on these demographic variables wherever possible.

## 2.2 Prison entrants

There were a total of 1,011 prison entrants in the data collection, of whom 85% were men and 28% Indigenous, and over one-half (56%) were on remand, awaiting trial or sentencing (Table 2.2). The median age of prison entrants was 32, with the oldest being 76 years. Just over one-fifth (21%) had been in juvenile detention previously, and two-thirds (66%) had been in prison before, including 40% in the last 12 months. There were variations among the state and territories in the prison history and remand status of prison entrants. Among the larger jurisdictions, Victoria had the lowest proportion of entrants having previously been in juvenile detention (17%), and Western Australia the highest (28%), with wider variations among the smaller jurisdictions. Fewer differences were seen in the proportion having previously been in prison. With differing legislation among jurisdictions regarding bail, the proportion of entrants on remand varied from a low of 32% in Queensland to over 80% in South Australia and Tasmania. (Data comparing prison entrants and dischargees with the whole prison population are in Table 2.4.)

Male entrants were slightly more likely to be younger than women, with 61% of men aged 18–34 compared with 58% of women (Appendix Table C2.1).

**Table 2.2:** Characteristics of prison entrants, states and territories, 2015

| Characteristics | NSW[(a)] | Vic | Qld | WA | SA | Tas | ACT | NT | Total |
|---|---|---|---|---|---|---|---|---|---|
| Prison entrants (number) | 206 | 206 | 319 | 78 | 122 | 43 | 19 | 18 | 1,011 |
| Male (per cent) | 60 | 96 | 92 | 83 | 95 | 91 | 100 | 56 | 92 |
| Indigenous (per cent) | 43 | 11 | 24 | 45 | 25 | 21 | 11 | 100 | 24 |
| Median age (years) | 33 | 32 | 31 | 33 | 30 | 35 | 35 | 31 | 32 |
| Age range (years) | 18–69 | 18–67 | 18–67 | 18–75 | 19–76 | 18–54 | 18–68 | 20–49 | 18–76 |
| Been in juvenile detention (per cent) | 26 | 17 | 20 | 28 | 24 | 12 | 37 | 6 | 21 |
| Been in prison before (per cent) | 54 | 63 | 75 | 62 | 69 | 70 | 68 | 61 | 66 |
| Been in prison in previous 12 months (per cent) | 32 | 36 | 50 | 24 | 40 | 53 | 37 | 17 | 40 |
| Currently on remand (per cent) | 44 | 71 | 32 | 78 | 83 | 91 | 79 | 44 | 56 |

(a) Totals for males and Indigenous exclude New South Wales because the Inmate Health Survey in New South Wales, from which these data are taken, over-sampled women and Indigenous entrants.

*Notes*

1. Totals include 6 prison entrants with unknown age, 5 with unknown Indigenous status, and 16 whose prison/detention history was unknown.
2. There were 6 transgender entrants.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## 2.3 Prison dischargees

Conducting health assessments on prisoners who are leaving prison is more difficult than for those entering prison for a number of reasons. All prison entrants arrive from court or police cells and routinely undergo a health assessment on entry to prison. However, prison releases occur in a variety of ways, including being released at the end of a sentence, being released from a parole hearing, being released from a court hearing, or being granted bail from a court hearing. These options for prison release mean that it is more difficult for prison authorities and health professionals to know ahead of time that a prisoner is going to be released, and often make it difficult to schedule a pre-release health assessment and plan for discharge and throughcare.

As a result of the different processes and systems in place in each state and territory, there were varying degrees of success in capturing information about dischargees. Prison clinics focused on collecting information on sentenced prisoners expecting to be released, rather than remandees, who make up over one-half of prison entrants (Table 2.2). For these reasons, the participation rate for dischargees can be expected to be lower than that of entrants—therefore the two groups are not directly comparable.

Overall, there were 437 prison dischargees from whom data were collected, across all states and territories except New South Wales (Table 2.3). The proportions of dischargees who were men (84%) and who were Indigenous (30%) were similar to that of entrants. The median age of dischargees was 34, with the oldest being 84. The length of stay varied among jurisdictions, with just over one-third overall having been in prison for less than 3 months.

**Table 2.3:** Characteristics of prison dischargees, states and territories, 2015

| Characteristics | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Total |
|---|---|---|---|---|---|---|---|---|---|
| Prison dischargees (number) | n.a. | 95 | 175 | 38 | 54 | 37 | 5 | 33 | 437 |
| Male (per cent) | n.a. | 91 | 78 | 97 | 93 | 76 | 100 | 82 | 84 |
| Indigenous (per cent) | n.a. | 12 | 25 | 42 | 41 | 19 | 0 | 97 | 30 |
| Median age (years) | n.a. | 36 | 32 | 35 | 35 | 33 | 33 | 33 | 34 |
| Age range (years) | n.a. | 20–84 | 19–74 | 19–58 | 21–61 | 20–62 | 28–40 | 19–57 | 19–84 |
| Been in prison/juvenile detention before (per cent) | n.a. | 67 | 66 | 74 | 72 | 78 | 80 | 58 | 68 |
| Length of most recent prison stay less than 3 months (per cent) | n.a. | 18 | 40 | 8 | 49 | 62 | 40 | 48 | 36 |
| Length of most recent prison stay more than 2 years (per cent) | n.a. | 11 | 9 | 21 | 7 | 3 | 0 | 6 | 9 |

*Notes*

1. Excludes New South Wales, as data were not provided for dischargees.
2. There was 1 transgender dischargee.
3. Totals include 4 prison dischargees of unknown age, 14 whose Indigenous status was unknown, 4 whose juvenile detention and prison history was unknown and 5 whose length of stay in prison was unknown.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

Similar to entrants, male dischargees were more likely than women to be aged 18–24 (16% and 10% respectively) (Appendix Table C2.2). Women were more likely to be aged at least 35 years (51%) than men (46%).

## 2.4 Profiles of different prison populations

Table 2.4 highlights the differences between the prison populations of entrants and dischargees from the NPHDC and the general daily population of prisoners in custody on 30 June 2014. A higher proportion of dischargees (16%) were women compared with entrants and prisoners in custody (both 8%). The age profiles were broadly similar among the three groups, although prisoners in custody is the population containing the highest proportion of prisoners aged at least 45 (20%). Detailed data for this table are available in Appendix Table C2.3.

These differences reflect the fact that entrants and dischargees are more likely to be on shorter sentences or remand, while prisoners in custody on any single day are more likely to be on longer sentences. The focus of this report is on those cycling through the prison system, rather than those in prison at a particular point in time—the focus of much prisoner health literature.

**Table 2.4:** Prison entrants (2015), dischargees (2015) and prisoners in custody (2014), by sex, age group and Indigenous status, 2014 and 2015 (per cent)

| | Prison entrants[(a)] | Prison dischargees[(a)] | Prisoners in custody[(b)] |
|---|---|---|---|
| **Sex** | | | |
| Male | 92 | 84 | 92 |
| Female | 8 | 16 | 8 |
| **Age group (years)** | | | |
| 18–24 | 19 | 15 | 18 |
| 25–34 | 42 | 37 | 36 |
| 35–44 | 27 | 30 | 27 |
| 45+ | 12 | 17 | 20 |
| **Indigenous status** | | | |
| Indigenous | 24 | 30 | 27 |
| Non-Indigenous | 75 | 67 | 72 |
| **Total** | **100** | **100** | **100** |

(a) Percentage of prison entrants/dischargees (see Note 3) sourced from the 2015 NPHDC.

(b) Percentage of prisoners in custody sourced from ABS 2014e.

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Percentages may not add exactly to 100, due to unknown demographic information, prisoners in custody aged under 18 and rounding.
3. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.
4. Totals include 6 entrants and 1 dischargee who identified as transgender, 5 entrants and 4 dischargees of unknown age, and 5 entrants and 14 dischargees of unknown Indigenous status.
5. The proportions for sex and Indigenous status for prison entrants exclude New South Wales because the Inmate Health Survey, from which NSW entrants data are taken, over-sampled females and Indigenous prisoners.

Studies suggest that transgender prisoners are more likely to experience problems in prison than the general prison population, including sexual assault, blackmail, contraction of sexually transmissible infections, mental health issues, lack of social support, denial of hormone therapy and mortality. Despite this, there are few estimates of the proportion of inmates requiring transgender or transsexual treatment (von Dresner et al. 2013). In 2015, there were 6 entrants (<1%) and 1 dischargee (<1%) who identified as being transgender.

# 3 Socioeconomic factors

Socioeconomic factors that may affect the health of prison entrants and dischargees include cultural background, detention status, education, employment and parental imprisonment.

## 3.1 Cultural background

At least 90% of entrants and dischargees were born in Australia, compared with 81% of prisoners in custody, suggesting more cultural diversity among the daily prisoner-in-custody population (Table 3.1).

**Table 3.1:** Prison entrants, prison dischargees (2015) and prisoners in custody (2014), country of birth and main language spoken at home, 2014 and 2015

| | Proportion of prison entrants[a] | Proportion of prison dischargees[a] | Proportion of prisoners in custody[b] |
|---|---|---|---|
| **Country of birth** | | | |
| Australia | 90 | 94 | 81 |
| New Zealand | 2 | 2 | 3 |
| Vietnam | 1 | 1 | 2 |
| England/United Kingdom | <1 | <1 | 2 |
| Other | 6 | 3 | 11 |
| **Total** | **100** | **100** | **100** |
| **Main language spoken at home** | | | |
| English | 91 | 89 | n.a. |
| Australian Indigenous languages | 2 | 7 | n.a. |
| Vietnamese | 1 | 1 | n.a. |
| Arabic/Lebanese | 1 | <1 | n.a. |
| Other | 5 | 2 | n.a. |
| **Total (number)** | **1,011** | **437** | **33,786** |
| **Total (Per cent)** | **100** | **100** | **n.a.** |

(a) Percentage of prison entrants/dischargees sourced from the 2015 NPHDC (Appendix Table C3.1).

(b) Percentage of prisoners in custody sourced from the ABS 2014e.

Notes

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 54 prison entrants of unknown country of birth, 40 prison entrants whose main language was unknown; and 6 prison dischargees whose main language was unknown.
3. England/United Kingdom includes England for entrant/discharge data and United Kingdom for ABS prisoners-in-custody data.
4. Details of 'other' countries of birth and languages are available in Appendix Tables C3.1 and C3.2.
5. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.

*Sources:* Entrant and Dischargee forms, 2015 NPHDC; AIHW analysis of ABS 2014e.

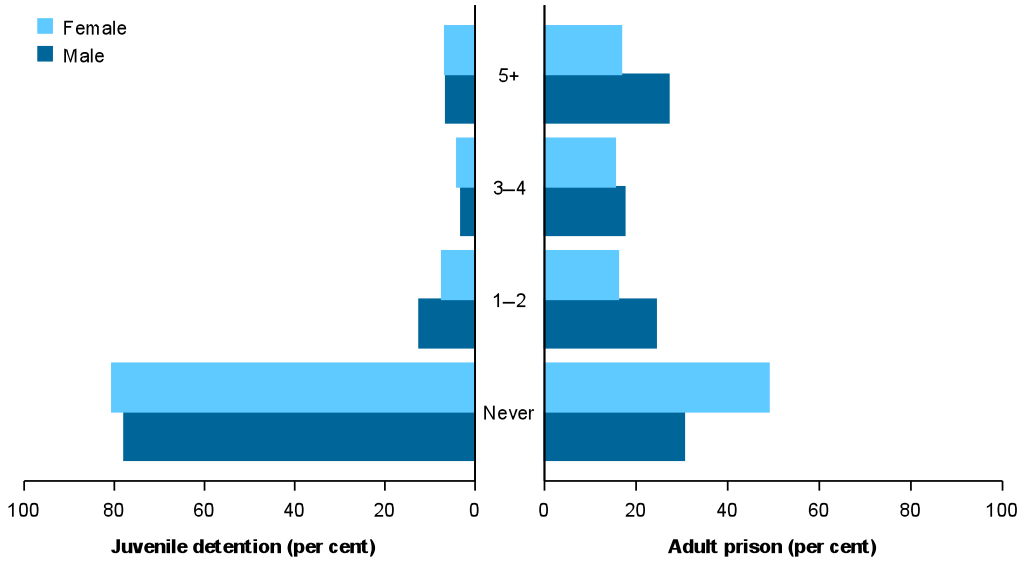
## 3.2 Detention history

Just over two-thirds (68%) of both entrants and dischargees had been previously in prison or juvenile detention, or both, either on remand or a sentence.

Among prison entrants, 21% (217 entrants) had previously been in juvenile detention, with 7% having been there at least 5 times. One-third (66%) of entrants had been in prison before, with just over one-quarter (26%) of them having been in prison at least 5 times before.

Men were more likely to have extensive prison histories than female entrants (Figure 3.1). Almost one-half (45%) of male entrants had been in prison 3 or more times, including 27% who had been in prison at least 5 times, compared with 17% of women. Just under one-half (49%) of female entrants had never been in prison before, compared with 31% of male entrants. There was less difference in the juvenile detention histories of male and female prison entrants. (Detailed data for Figure 3.1 are available in Appendix Tables C3.3 and C3.4.)

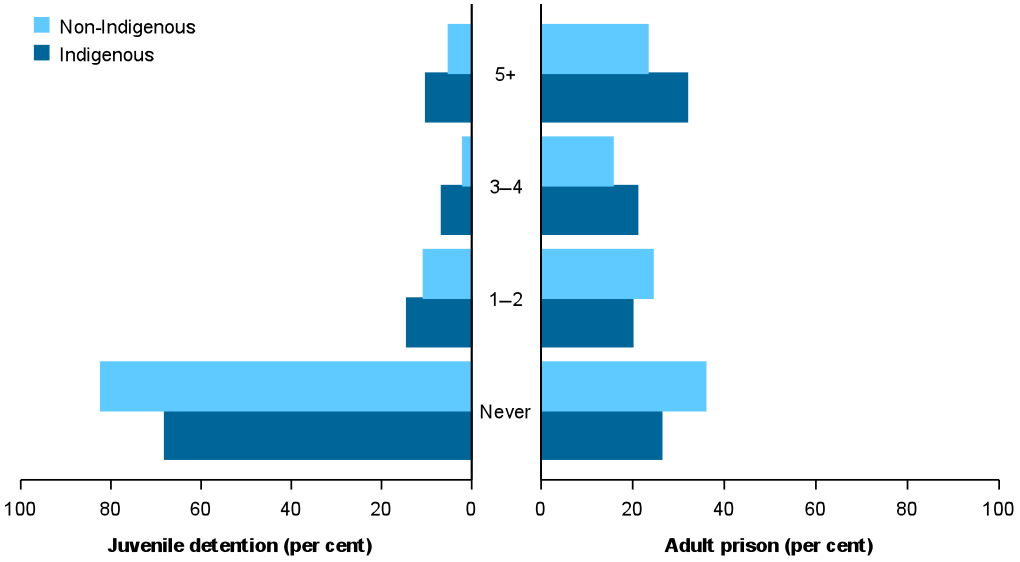
**Figure 3.1:** Prison entrants, history of previous incarceration, by sex, 2015




*Note:* Excludes entrants whose sex or history of previous incarceration was unknown.
*Source:* Entrant form, 2015 NPHDC.

Indigenous prison entrants were more likely than non-Indigenous entrants to have an extensive prison history (Figure 3.2). Around one-third (32%) of Indigenous entrants had been in prison at least 5 times before, compared with 23% of non-Indigenous entrants. Non-Indigenous entrants were more likely than Indigenous entrants to have never been in prison before (36% compared with 26%). The same was seen in previous history of juvenile detention, with 82% of non-Indigenous entrants reporting they had never been in detention, compared with 68% of Indigenous entrants. (Detailed data for Figure 3.2 are available in Appendix Tables C3.3 and C3.4.)

**Figure 3.2:** Prison entrants, history of previous incarceration, by Indigenous status, 2015




*Note:* Excludes entrants whose Indigenous status or history of previous incarceration was unknown.
*Source:* Entrant form, 2015 NPHDC.

## 3.3 Education level

Education is one of the recognised social determinants of health, with lower levels of education being strongly associated with poorer health (Mitrou et al. 2014). This is particularly relevant for prisoners, who often have lower levels of formal education than the general population (AIHW 2013a). While links such as ability to understand and use health information in order to form healthier lifestyle habits are important (Li & Powdthavee 2015), education-related determinants can be more complex than that. For example, educational inequalities in smoking have been found to be related to social networks, school experiences and mortality expectations in adolescence (Maralani 2014).

**INDICATOR:** Proportion of prison entrants whose highest year of completed schooling was below Year 10: 32%

**INDICATOR:** Proportion of prison dischargees whose highest year of completed schooling was below Year 10: 36%

Both prison entrants and dischargees were asked about the highest level of schooling that they had completed. Around one-third (32% of entrants and 36% of dischargees) had not completed Year 10, while 15% of entrants and 18% of dischargees had Year 8 or below as their highest level of education completed (Table 3.2).

**Table 3.2:** Prison entrants and prison dischargees, highest level of completed schooling, 2015

| | Prison entrants | | Prison dischargees | |
|---|---|---|---|---|
| **Level of schooling** | **Number** | **Per cent** | **Number** | **Per cent** |
| Year 12 | 158 | 16 | 64 | 15 |
| Year 11 | 120 | 12 | 41 | 9 |
| Year 10 | 368 | 36 | 124 | 28 |
| Year 9 | 170 | 17 | 79 | 18 |
| Year 8, below or none | 156 | 15 | 77 | 18 |
| **Total** | **1,011** | **100** | **437** | **100** |

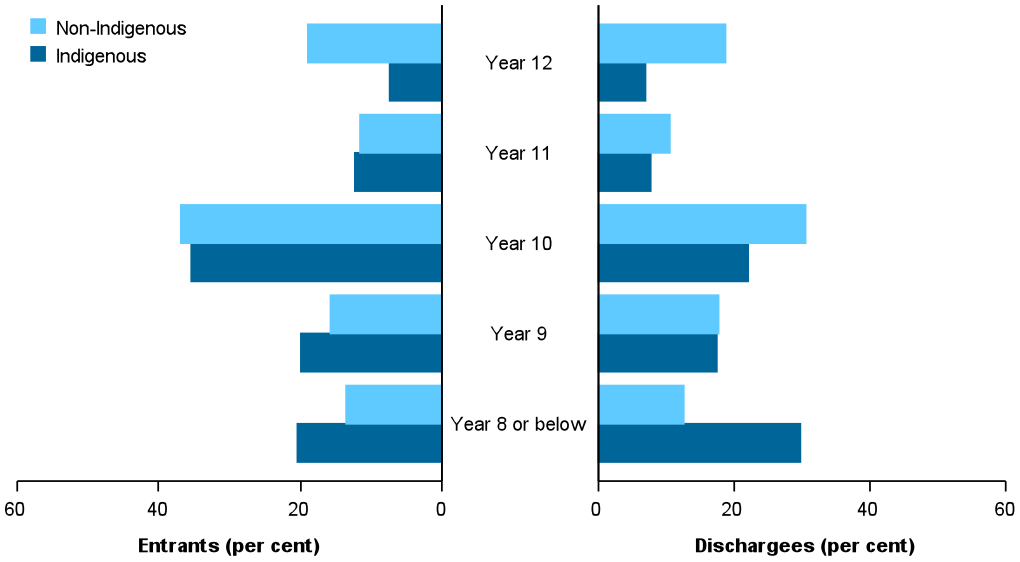
*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 39 prison entrants and 52 prison dischargees for whom the highest level of completed schooling was unknown.
3. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.
4. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Entrant and Dischargee forms, 2015 NPHDC.

Indigenous entrants and dischargees showed lower levels of educational attainment than non-Indigenous entrants and dischargees (Figure 3.3). Only 20% of Indigenous prison entrants had completed Year 11 or 12 at school, compared with 31% of non-Indigenous entrants. Similarly, twice the proportion of non-Indigenous dischargees had completed Year 11 or 12 compared with Indigenous dischargees (30% and 15% respectively). Indigenous entrants were more likely than non-Indigenous entrants to have their highest level of completed schooling as Year 8 or below (20% compared with 14%). Indigenous dischargees were more than twice as likely as non-Indigenous dischargees to have completed Year 8 or below as their highest level of education (30% compared with 13%). (Detailed data for Figure 3.3 are available in Appendix Tables C3.5 and C3.6.)

**Figure 3.3:** Prison entrants and dischargees, highest level of completed schooling, by Indigenous status, 2015




*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Excludes prisoners with unknown education status.

*Sources:* Entrant and Dischargee forms, 2015 NPHDC.

One-third (34%) of prison entrants had completed a trade certificate, and over one-half (54%) had no formal education other than schooling. Education at the tertiary level was not common, with the highest level of completed education for entrants being a Diploma (4%) followed by a Bachelor degree (2%) and a postgraduate qualification (1%).

**INDICATOR:** Proportion of prison dischargees who completed qualifications while in prison: 9%

Prisoners may undertake education while in prison. Dischargees were asked whether they had started or continued any qualifications in prison, and also whether they had completed any qualifications while in prison.

Almost 1 in 10 prison dischargees (8%) finished a trade qualification while in prison, with a further 1% completing school. Younger dischargees aged 18–24 were more likely to complete any qualification than older dischargees aged 45 and over (11% compared with 7%) (Appendix Table C3.7).

A small proportion (7%) of dischargees started or continued any form of qualification while in prison, with 3% starting or continuing school and another 3% starting or continuing a trade qualification (Appendix Table C3.8). Indigenous prisoners were more likely to start or continue school than non-Indigenous prisoners (5% and 2% respectively). (These data exclude New South Wales as data were not provided for NSW dischargees.)

## Comparison with the general community

Among the general Australian population, 46% of 20–24 year olds have a non-school (that is, other than school) qualification, as do over 70% of 25–44 year olds (ABS 2014c).

Both Indigenous (2–4%) and non-Indigenous (6–11%) prison entrants aged 20–44 were less likely than their general community counterparts to have completed Year 12 or equivalent (10–26% and 13–36% respectively) (Table 3.3). Indigenous entrants (9–11%) were less likely than their general community counterparts (22–26%) to have completed a Certificate III or IV; however non-Indigenous entrants (25–28%) were more likely to have completed a Certificate III or IV than their general community counterparts (20–22%).

**Table 3.3:** Prison entrants and general community, highest level of completed education, 2015 (per cent)

| | | General community | | | Prison entrants | | |
|---|---|---|---|---|---|---|---|
| **Highest level of educational attainment** | **Indigenous status** | **20–24** | **25–34** | **35–44** | **20–24** | **25–34** | **35–44** |
| Certificate III or IV | Indigenous | 22 | 26 | 24 | 11 | 7 | 9 |
| | Non-Indigenous | 22 | 21 | 20 | 25 | 28 | 26 |
| Year 12 or equivalent | Indigenous | 26 | 14 | 10 | 4 | 2 | 2 |
| | Non-Indigenous | 36 | 15 | 13 | 6 | 8 | 11 |
| Year 11 or equivalent | Indigenous | 12 | 11 | 7 | 6 | 3 | 1 |
| | Non-Indigenous | 5 | 3 | 4 | 3 | 9 | 10 |
| Year 10 or equivalent | Indigenous | 22 | 20 | 19 | 19 | 10 | 8 |
| | Non-Indigenous | 8 | 6 | 11 | 19 | 23 | 25 |
| Below Year 10 | Indigenous | 13 | 17 | 19 | 19 | 21 | 13 |
| | Non-Indigenous | 1 | 2 | 4 | 25 | 24 | 25 |

*Sources:* Entrant form, 2015 NPHDC; ABS 2014b.

## 3.4 Employment and government support

Unemployment is another social determinant of health, being linked with a number of poor psychosocial outcomes including mental health issues, alcohol and other drug misuse, and criminal offending (Fergusson et al. 2014). Securing employment is one of the many challenges faced by prisoners after release. Prisoners come from a group of people who already face difficulties in gaining employment, with poor education, lower socioeconomic status, high levels of drug and alcohol misuse, high levels of mental health issues, and poor work histories. Imprisonment adds to this mix, making it even more difficult to find a job, particularly for those who have been in prison for longer than 6 months (Ramakers et al. 2014). A linkage study in the United Kingdom found that 2 years after release from prison, around two-thirds of ex-prisoners were on unemployment benefits (Wingfield & Trenell 2014).

## Entrants

**INDICATOR:** Proportion of prison entrants who were unemployed in the 30 days prior to imprisonment: 48%

Almost one-half (48%) of entrants were unemployed immediately prior to prison, and a further 14% reported being unable to work due to disability, age or health conditions (Table 3.4). More than one-half of those who were unemployed were looking for work. The likelihood of being unemployed decreased with age from 62% of the youngest entrants aged under 25, to 28% of the oldest entrants aged at least 45 years. Conversely, almost one-third (32%) of the oldest entrants were unable to work, compared with 5% of the youngest. Indigenous entrants were more likely to be unemployed than non-Indigenous entrants, but less likely to be unable to work. Just over one-third (35%) of entrants were working, either full-time (20%) or part-time (15%). Men (37%) were more often in work than women (21%), who were the group most likely to report being unemployed and not looking for work (28%). There were 18 entrants who were studying either full- or part-time.

**Table 3.4:** Prison entrants, employment/education status in last 30 days, by sex, age group and Indigenous status 2015 (per cent)

| | Full-time work | Part-time or casual work | Study (full-time and part-time) | Unemployed, looking for work | Unemployed, not looking for work | Unable to work due to disability, age or health condition |
|---|---|---|---|---|---|---|
| **Sex** | | | | | | |
| Male | 22 | 15 | 1 | 29 | 18 | 13 |
| Female | 9 | 12 | 5 | 29 | 28 | 17 |
| **Age group (years)** | | | | | | |
| 18–24 | 13 | 16 | 1 | 37 | 25 | 5 |
| 25–34 | 21 | 16 | 2 | 34 | 19 | 8 |
| 35–44 | 23 | 12 | 1 | 21 | 19 | 21 |
| 45+ | 22 | 14 | 2 | 15 | 13 | 32 |
| **Indigenous status** | | | | | | |
| Indigenous | 13 | 15 | 2 | 36 | 24 | 9 |
| Non-Indigenous | 23 | 15 | 2 | 26 | 17 | 15 |
| **Total (number)** | **203** | **150** | **18** | **292** | **192** | **137** |
| **Total (Per cent)** | **20** | **15** | **2** | **29** | **19** | **14** |

*Notes*

1. Totals include 5 prison entrants of unknown age and 5 of unknown Indigenous status.
2. Percentages may not add exactly to 100 because prison entrants could select more than one option for education/employment status.
3. Detailed data available in Appendix Table C3.9.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## Dischargees

**INDICATOR:** Proportion of prison dischargees who on release have organised paid employment which will start within 2 weeks of leaving prison: 24%

Just under one-quarter (24%) of prison dischargees reported having paid employment that would begin within 2 weeks of release from prison (Table 3.5). There were 15% of dischargees who did not know what their employment situation would be on release from prison, and 61% who did not have any paid employment organised. Those most likely to have organised paid employment were men (27%, compared with 10% of women) and the youngest dischargees (35% of those aged 18–24 years compared with 22–24% of older dischargees). A higher proportion of Indigenous dischargees said they did not have any work organised (67%, compared with 59% for non-Indigenous), and non-Indigenous dischargees were proportionally more likely to say they did not know (16% compared with 8%).

**Table 3.5:** Prison dischargees, paid employment within 2 weeks of release, by sex, age group and Indigenous status, 2015

| | Paid employment | | No paid employment | | Don't know | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No | Per cent | No | Per cent | No | Per cent |
| **Sex** | | | | | | | | |
| Male | 99 | 27 | 219 | 59 | 51 | 14 | 369 | 100 |
| Female | 7 | 10 | 46 | 68 | 15 | 22 | 68 | 100 |
| **Age group (years)** | | | | | | | | |
| 18–24 | 23 | 35 | 34 | 52 | 9 | 14 | 66 | 100 |
| 25–34 | 38 | 24 | 97 | 60 | 26 | 16 | 161 | 100 |
| 35–44 | 29 | 22 | 85 | 64 | 19 | 14 | 133 | 100 |
| 45+ | 16 | 22 | 45 | 62 | 12 | 16 | 73 | 100 |
| **Indigenous status** | | | | | | | | |
| Indigenous | 32 | 24 | 88 | 67 | 11 | 8 | 131 | 100 |
| Non-Indigenous | 73 | 25 | 173 | 59 | 46 | 16 | 292 | 100 |
| **Total** | **106** | **24** | **265** | **61** | **66** | **15** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 prison dischargees of unknown age, and 14 of unknown Indigenous status.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

**INDICATOR:** Proportion of prison dischargees who on release are expecting to receive government payment through Centrelink: 79%

Most dischargees (79%) were expecting to receive some form of financial assistance from Centrelink upon release from prison (Table 3.6). Around one-third expected to receive income support including disability support (32%); one-third expected to receive a crisis payment (32%); and a further 15% expected to receive both payments. Those dischargees most likely to say they would not receive any payment were men (11% compared with 3% of women) and aged 18–24 years (17% compared with 5–6% of those aged at least 35).

There were differences between those expecting to receive income or disability support and those expecting to receive the crisis payment. The oldest dischargees were the most likely to be expecting to receive income or disability support, and the least likely to expect to receive the crisis payment. The proportion of dischargees aged at least 45 years expecting income support was approaching one-half (45%) compared with around one-quarter to one-third (25–34%) of younger dischargees. However, only 15% of the oldest age group expected the crisis payment compared with 29–39% of younger dischargees. Similarly, Indigenous dischargees were more likely than non-Indigenous dischargees to be expecting income support (44% and 25% respectively), but less likely to be expecting the crisis payment (22% compared with 37%).

**Table 3.6:** Prison dischargees, expected government income support upon release, by sex, age group and Indigenous status, 2015

| | Income support, including disability | | Crisis payment | | Both | | None | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent |
| **Sex** | | | | | | | | | | |
| Male | 114 | 31 | 119 | 32 | 52 | 14 | 39 | 11 | 369 | 100 |
| Female | 25 | 37 | 19 | 28 | 15 | 22 | 2 | 3 | 68 | 100 |
| **Age group (years)** | | | | | | | | | | |
| 18–24 | 19 | 29 | 19 | 29 | 9 | 14 | 11 | 17 | 66 | 100 |
| 25–34 | 41 | 25 | 62 | 39 | 28 | 17 | 17 | 11 | 161 | 100 |
| 35–44 | 45 | 34 | 46 | 35 | 17 | 13 | 8 | 6 | 133 | 100 |
| 45+ | 33 | 45 | 11 | 15 | 12 | 16 | 4 | 5 | 73 | 100 |
| **Indigenous status** | | | | | | | | | | |
| Indigenous | 57 | 44 | 29 | 22 | 25 | 19 | 10 | 8 | 131 | 100 |
| Non-Indigenous | 74 | 25 | 108 | 37 | 41 | 14 | 31 | 11 | 292 | 100 |
| **Total** | **139** | **32** | **138** | **32** | **67** | **15** | **41** | **9** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 prison dischargees of unknown age, 14 of unknown Indigenous status, and 52 whose payment expectations were unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

## Comparison with the general community

Table 3.7 provides a comparison of the employment status of prison entrants with those in the general community. In this table, 'unemployed' equates to the NPHDC category of 'unemployed and looking for work'. 'Not in the labour force' includes the NPHDC categories of 'unemployed and not looking for work' and 'unable to work'.

Prison entrants were much more likely to be unemployed than those in the general community, with overall less difference among the Indigenous than non-Indigenous groups (Table 3.7). Over 2 in 5 Indigenous entrants (44%) aged 25–34 were unemployed in the 30 days prior to entering custody, compared with 15% of Indigenous people of the same age in the general community. Similarly, almost one-quarter (24%) of Indigenous entrants aged 35–44 were unemployed, compared with 10% of Indigenous people within the same age group in the general community. This pattern was also seen for non-Indigenous entrants, with almost one-third (30%) aged 25–34 and 21% aged 35–44 unemployed compared with 3% and 2% of non-Indigenous people in the general community, respectively.

Indigenous entrants aged 25–34 were less likely to not be in the labour force than their general community counterparts (27% compared with 37%); however older Indigenous entrants (aged 35–44) were more likely to not be in the labour force than Indigenous people of the same age in the general community (45% compared with 31% respectively). Non-Indigenous entrants aged 25–44 were more likely to not be in the labour force compared with those in the general community (27–40% and 14–15% respectively).

**Table 3.7:** Prison entrants and general community, labour force status, 2015 (per cent)

| | | General community | | Prison entrants | |
|---|---|---|---|---|---|
| **Labour force status** | **Indigenous status** | **25–34** | **35–44** | **25–34** | **35–44** |
| Employed full-time | Indigenous | 32 | 40 | 14 | 15 |
| | Non-Indigenous | 63 | 60 | 24 | 26 |
| Employed part-time | Indigenous | 16 | 19 | 15 | 12 |
| | Non-Indigenous | 20 | 23 | 17 | 13 |
| Unemployed | Indigenous | 15 | 10 | 44 | 24 |
| | Non-Indigenous | 3 | 2 | 30 | 21 |
| Not in the labour force | Indigenous | 37 | 31 | 27 | 45 |
| | Non-Indigenous | 14 | 15 | 27 | 40 |

*Sources:* Entrant form, 2015 NPHDC; ABS 2014b.

## 3.5 Homelessness

Homelessness does not simply refer to those sleeping on the streets, but also includes those with unstable housing such as improvised dwellings or tents, supported accommodation for the homeless, living temporarily with other households, staying in boarding houses or other temporary lodging. Data from the 2011 Australian Census of Population and Housing show that that an estimated 50 out of every 10,000 people in the general Australian population were homeless on Census night (ABS 2012b).

There are clear links between homelessness and health, with homeless people having an estimated 2–5 times higher mortality rates than the general population, especially from suicide and unintentional injuries. Homeless people also have higher rates of infectious diseases, chronic conditions, mental health issues and substance misuse, and accelerated ageing compared with the general population (Fazel et al. 2014).

Homelessness is a familiar issue for prisoners, and affects both their offending and their health. A longitudinal survey in the United Kingdom found that 15% of new prisoners reported being in temporary accommodation or sleeping rough immediately prior to prison. This was related to recidivism, with more than three-quarters (79%) of those who were homeless before prison being re-convicted in the first year after release, compared with less than one-half (47%) of those who had more stable accommodation prior to prison (Williams et al. 2012). Contact with the criminal justice system also affects experience of homelessness. In Australia, homelessness is more common among those with a history of contact with the criminal justice system, it lasts for longer, and is more likely to re-occur than for other homeless people (Bevitt et al. 2015). Further, clients of community needle and syringe exchange programs with a history of unstable housing were more likely than other clients to have been in prison (Topp et al. 2013).

## Entrants

**INDICATOR:** Proportion of prison entrants who were homeless in the 4 weeks prior to imprisonment (including short-term and emergency accommodation): 25%

One-quarter (25%) of prison entrants reported being homeless in the 4 weeks immediately prior to imprisonment, including 19% who were in short-term or emergency accommodation and another 6% who were in unconventional housing or sleeping rough (Table 3.8). This is a decrease since 2012 from 35%, mainly due to a decrease in the proportion of entrants having come from short-term or emergency accommodation. In 2015, the oldest entrants, aged at least 45 years, were the group most likely to have been in their own accommodation (78% compared with 71–74% of others), and the least likely to have been in short-term or emergency accommodation (14%). Indigenous entrants were slightly more likely than their non-Indigenous counterparts to be in short-term or emergency accommodation (22% compared with 18% respectively). The results for men and women were similar.

**Table 3.8:** Prison entrants, housing in last 4 weeks, by sex, age group and Indigenous status, 2015

| | Sleeping rough | | Short-term/ emergency accommodation | | Own accommodation | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent |
| **Sex** | | | | | | | | |
| Male | 49 | 6 | 165 | 19 | 627 | 73 | 862 | 100 |
| Female | 9 | 6 | 28 | 19 | 108 | 72 | 149 | 100 |
| **Age group (years)** | | | | | | | | |
| 18–24 | 12 | 6 | 36 | 19 | 133 | 71 | 188 | 100 |
| 25–34 | 29 | 7 | 88 | 21 | 302 | 71 | 425 | 100 |
| 35–44 | 11 | 4 | 51 | 19 | 199 | 74 | 268 | 100 |
| 45+ | 6 | 5 | 18 | 14 | 98 | 78 | 125 | 100 |
| **Indigenous status** | | | | | | | | |
| Indigenous | 13 | 5 | 63 | 22 | 204 | 72 | 285 | 100 |
| Non-Indigenous | 44 | 6 | 130 | 18 | 528 | 73 | 721 | 100 |
| **Total** | **58** | **6** | **193** | **19** | **735** | **73** | **1,011** | **100** |

*Notes*

1. Totals include 37 entrants whose housing status was unknown, 5 of unknown age, and 5 of unknown Indigenous status.
2. Prison entrants could select multiple responses therefore totals may not sum.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## Dischargees

Finding suitable stable accommodation is a major concern for prisoners about to be released back into the community, especially for those with no family support. Prisoners also recognise that where and with whom they live immediately after release from prison will affect their likelihood of engaging in drug and alcohol misuse, and criminal activities (Woodall et al. 2013).

In 2013–14, 3% of all clients of specialist homelessness services had exited from a custodial setting, including prison, youth justice detention centres and immigration detention centres. The majority of them were men (79%) and aged between 25 and 44 (60%), and were more likely than other homelessness services clients to require assistance with drug and alcohol counselling (13% compared with 4% of all clients) (AIHW 2014k).

**INDICATOR:** Proportion of prison dischargees who on release are expecting to be homeless (including short-term and emergency accommodation): 31%

Most prison dischargees had a plan for where they were going to sleep on their first night out of prison. Almost one-third (30%) had plans for short-term or emergency accommodation, and 60% had their own stable accommodation arranged, where they were either the owners or named on a lease agreement (Table 3.9).

One-in-ten (10%) dischargees either did not know where they would be sleeping on their first night of release (9%) or were expecting to be sleeping rough (1%). The likelihood of sleeping rough or not having any plans for accommodation after release increased with age, from 2% of dischargees aged under 25 to 14–15% of those aged 35 or older. The reverse was true of short-term or emergency accommodation, which was the plan for 34–35% of those aged less than 35, and 21% of the oldest dischargees.

Among men and women, men were more likely to be planning for short-term accommodation (31% and 22% respectively), while women were more likely to have stable accommodation (69% compared with 59% of men).

It was more likely among Indigenous (37%) than non-Indigenous (28%) dischargees to have plans for short-term accommodation, and correspondingly less likely for Indigenous than non-Indigenous dischargees to have stable accommodation organised (56% compared with 62%).

**Table 3.9:** Prison dischargees, expected housing on release, by sex, age group and Indigenous status, 2015

| | Sleeping rough/ don't know | | Short-term/ emergency accommodation | | Own accommodation | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent |
| **Sex** | | | | | | | | |
| Male | 37 | 10 | 115 | 31 | 217 | 59 | 369 | 100 |
| Female | 6 | 9 | 15 | 22 | 47 | 69 | 68 | 100 |
| **Age group (years)** | | | | | | | | |
| 18–24 | 1 | 2 | 23 | 35 | 42 | 64 | 66 | 100 |
| 25–34 | 12 | 7 | 55 | 34 | 94 | 58 | 161 | 100 |
| 35–44 | 18 | 14 | 35 | 26 | 80 | 60 | 133 | 100 |
| 45+ | 11 | 15 | 15 | 21 | 47 | 64 | 73 | 100 |
| **Indigenous status** | | | | | | | | |
| Indigenous | 9 | 7 | 49 | 37 | 73 | 56 | 131 | 100 |
| Non-Indigenous | 30 | 1 | 81 | 28 | 181 | 62 | 292 | 100 |
| **Total** | **43** | **10** | **130** | **30** | **264** | **60** | **437** | **100** |

*Notes*

1. Totals include 4 prison dischargees of unknown age, and 14 of unknown Indigenous status.
2. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## 3.6 Family

Being in prison has a ripple effect back into the community, with most prisoners leaving a family, often including children. This may be intergenerational, with prisoners having themselves experienced parental imprisonment during their own childhood.

A study in Queensland estimated that 0.8% of children experience paternal imprisonment in any one year, and 4% during their lifetime. For an Indigenous child, this is 9 and 4 times as likely respectively (Dennison et al. 2013). Almost one-half of the children in the Queensland study were living with their fathers prior to the father's imprisonment, and almost 90% of the fathers expected to live with their children again after release.

There are many effects on children of having a parent in prison, and these effects may be long-lasting. A significant association has been found between parental incarceration and substance use and criminal behaviour reported by adolescents, regardless of the emotional health of the adolescent (Midgley & Lo 2013).

Visiting a prison can be a difficult experience, both practically and emotionally, especially for children visiting their imprisoned parents. Often it is considered too difficult, and visits occur either rarely or never. Some of the issues affecting children visiting imprisoned parents include pre-prison custody arrangements, the supportiveness of the carer, distance and transport, and fear of guards, the environment, random strip searches and lack of privacy, particularly in maximum security prisons (Flynn 2014).

Phone contact, which can be expensive for a prisoner, is important in maintaining normal interactions as part of a daily routine, with updates on daily occurrences, and reassurance for the family that the imprisoned parent is safe and well (Sharratt 2014).

The stress of having a family member in prison can impact the family's mental health. Adults in Australia who had a close family member in prison in the past year, have shown high levels of psychological distress, similar to those of prison entrants (Baker 2014).

Visits from family can be beneficial for prisoners, and are associated with reduced re-offending up to 5 years later (Duwe & Clark 2011).

**INDICATOR:** Proportion of prison entrants who had one or more of their parents/carers imprisoned while they were a child: 17%

The experience of having a parent or carer imprisoned was not uncommon during the childhoods of the entrants (17%) in this collection (Table 3.10). A further 7% of entrants did not know if their parents or carers had been in prison. It was more common among the youngest (28%) than the oldest entrants (4%) to have experienced parental imprisonment.

Indigenous entrants were more likely than non-Indigenous entrants to report having had parents or carers in prison during their childhood (26% compared with 13% respectively). Around one-sixth (17%) of Indigenous entrants said their father had been in prison, compared with 10% of non-Indigenous entrants. A higher proportion of non-Indigenous than Indigenous entrants reported having had no parents in prison (81% compared with 65%).

**Table 3.10:** Prison entrants, parental imprisonment, 2015 (per cent)

| | Father imprisoned | Mother imprisoned | Other carer imprisoned | Any parent/ carer imprisoned | None imprisoned | Don't know | Total |
|---|---|---|---|---|---|---|---|
| **Sex** | | | | | | | |
| Male | 12 | 3 | 3 | 16 | 77 | 6 | 100 |
| Female | 10 | 5 | 3 | 18 | 71 | 11 | 100 |
| **Age group (years)** | | | | | | | |
| 18-24 | 19 | 5 | 6 | 28 | 65 | 7 | 100 |
| 25-34 | 15 | 3 | 3 | 20 | 73 | 7 | 100 |
| 35-44 | 8 | 3 | 1 | 10 | 84 | 7 | 100 |
| 45+ | 1 | 1 | 2 | 4 | 88 | 8 | 100 |
| **Indigenous status** | | | | | | | |
| Indigenous | 17 | 5 | 6 | 26 | 65 | 9 | 100 |
| Non-Indigenous | 10 | 3 | 2 | 13 | 81 | 6 | 100 |
| **Total** | **12** | **3** | **3** | **17** | **76** | **7** | **100** |

*Notes*

1. Entrants data for New South Wales did not include the option 'Other carer imprisoned'.
2. Entrants could have more than one parent/carer in prison, so 'father imprisoned', 'mother imprisoned' and 'other carer imprisoned' may not sum to 'any parent/carer imprisoned'.
3. Detailed data can be found in Appendix Table C3.10.

*Source:* Entrant form, 2015 NPHDC.

**INDICATOR:** Proportion of prison entrants who have children who depend on them for their basic needs: 46%

The 1,011 prison entrants in this data collection had a total of 1,117 children between them who were dependent on them for their basic needs, which is the equivalent of 1.1 child per prison entrant. About one-quarter (26%) of the youngest entrants aged less than 25 had dependent children, compared with about one-half (49–51%) of older entrants. Indigenous entrants (54%) were more likely than non-Indigenous entrants (43%) to have dependent children. The proportions for men and women were similar.

While just over one-half (54%) of entrants did not have any dependent children, 9% had at least four. Indigenous entrants had more dependent children than non-Indigenous entrants, but the group most likely to have at least 4 were those aged at least 45 years (15%). Some of these dependent children may have been the grandchildren of the entrants. (Detailed data for this indicator are available in Appendix Table C3.11.)

Note that for the NPHDC dependent children were defined as being under the age of 15, or dependent students. In New South Wales, children under 16 were included.

**INDICATOR:** Proportion of prison dischargees who in the last 4 weeks had contact with family, friends and/or elders: 79%

Most dischargees (79%) reported having had contact with family, friends or elders in the previous 4 weeks (Table 3.11). Phone contact was most common (72%), followed by visits (33%) and receiving letters (20%). Around 12% of dischargees reported having had no recent contact. Women were the most likely group to report receiving letters (32% compared with 18% of men), followed by the oldest dischargees (25%, compared with 14% of those aged 24 or less). Indigenous dischargees were the most likely to report having had no recent contact (19% compared with 9% for non-Indigenous). They were also less likely to have phone contact (64% compared with 75%) or visits (25% and 37%) than non-Indigenous dischargees.

**Table 3.11:** Prison dischargees, recent contact with family and friends, by sex, age group and Indigenous status, 2015

| | None | | Received letters | | Phone contact | | Visits | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent |
| **Sex** | | | | | | | | | | |
| Male | 42 | 11 | 65 | 18 | 263 | 71 | 124 | 34 | 369 | 100 |
| Female | 10 | 15 | 22 | 32 | 51 | 75 | 19 | 28 | 68 | 100 |
| **Age group (years)** | | | | | | | | | | |
| 18–24 | 10 | 15 | 9 | 14 | 46 | 70 | 23 | 35 | 66 | 100 |
| 25–34 | 20 | 12 | 34 | 21 | 120 | 75 | 51 | 32 | 161 | 100 |
| 35–44 | 13 | 10 | 26 | 20 | 98 | 74 | 43 | 32 | 133 | 100 |
| 45+ | 8 | 11 | 18 | 25 | 48 | 66 | 25 | 34 | 73 | 100 |
| **Indigenous status** | | | | | | | | | | |
| Indigenous | 25 | 19 | 25 | 19 | 84 | 64 | 33 | 25 | 131 | 100 |
| Non-Indigenous | 27 | 9 | 61 | 21 | 219 | 75 | 108 | 37 | 292 | 100 |
| **Total** | **52** | **12** | **87** | **20** | **314** | **72** | **143** | **33** | **437** | **100** |

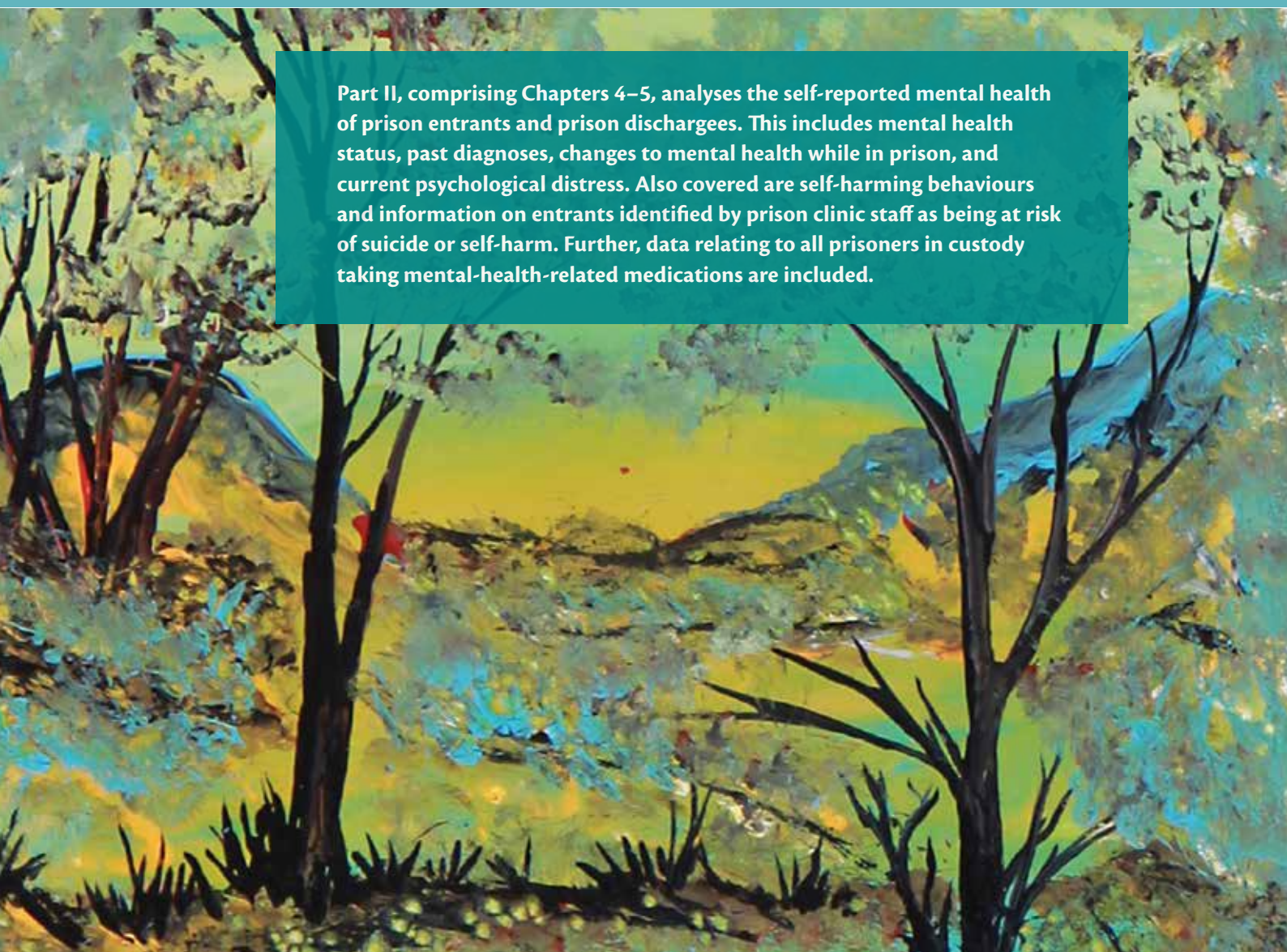
*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Dischargees could nominate more than one type of contact, so rows may not sum to total.
3. Totals include 4 prison dischargees of unknown age, 14 of unknown Indigenous status, and 39 whose recent contacts were unknown.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

II

# Part II: Mental health



**Part II, comprising Chapters 4–5, analyses the self-reported mental health of prison entrants and prison dischargees. This includes mental health status, past diagnoses, changes to mental health while in prison, and current psychological distress. Also covered are self-harming behaviours and information on entrants identified by prison clinic staff as being at risk of suicide or self-harm. Further, data relating to all prisoners in custody taking mental-health-related medications are included.**

# 4 Mental health before and while in prison

The term 'mental health' refers to emotional, psychological and social wellbeing, and affects thoughts, feelings, actions, stress, relationships and decision-making. Mental health conditions include depression, anxiety disorders, psychotic disorders, and alcohol and other drug misuse.

A population-based linkage study in Australia of adults in their 20s and 30s found that around one-third (32%) of those with a psychiatric illness had been arrested during a 10-year period, and the first arrest often occurred before first contact with mental health services (Morgan et al. 2013).

Prisoners have a high prevalence of self-reported mental health issues (AIHW 2013a), which continue to affect prisoners after release. Prisoners ever-diagnosed with a mental health disorder have been found to be more likely to experience substance use issues, crime, and poor health outcomes, up to six months post-release from prison (Cutcher et al. 2014).

Self-reported information on mental health is quite different to a clinical diagnosis or research using diagnostic tools. For example, in a culturally sensitive research study involving Indigenous respondents, a higher prevalence of mental health issues could be found by using Indigenous mental health clinicians specially trained for the data collection (see Heffernan et al. 2012).

The data relevant to mental health presented in this report are based on self-reported responses to specific questions that were part of the NPHDC.

## 4.1 Mental health history

Prison entrants were asked whether they had ever been told that they had a mental health disorder by a doctor, psychiatrist, psychologist or nurse; and whether they were currently taking medication for a mental health disorder. Disorders included those relating to drug and alcohol abuse. A nurse was included in this list of health professionals in recognition of the high proportion of entrants with a history of imprisonment, and the nurse-led health care provided in prisons, including mental health nurses (see Chapter 15 'General health services').

Prison dischargees were also asked whether they had ever been told they had a mental health disorder and whether it was diagnosed while they were in prison this time. Prison dischargees were also asked a separate question about whether they had ever been told that they had alcohol or drug use problems. To make the data comparable with data from the entrants' question, responses to these two questions were combined to create one variable that indicated whether the dischargee had been diagnosed with both or either of these problems.

Caution should be used in comparing the entrant and dischargee groups—because they comprise different individuals, they are not directly comparable.

**INDICATOR:** Proportion of prison entrants who have ever been told by a doctor, psychiatrist, psychologist or nurse that they have a mental health disorder (including drug or alcohol abuse): 49%

**INDICATOR:** Proportion of prison dischargees who have ever been told they have a health condition—mental health, including drug or alcohol abuse: 44%

Almost one-half (49%) of entrants and 44% of dischargees reported ever having been told they have a mental health disorder, including alcohol and drug misuse (Table 4.1). This is an increase from 38% of entrants in 2012. In 2015, among both entrants and dischargees, women (62% and 63% respectively) were more likely than men (40% and 47%) to report a history of mental health issues. There were fluctuations by age, although the youngest were the least likely to report a history, for both entrants (40%) and dischargees (30%). Fewer Indigenous (44%) than non-Indigenous (51%) entrants reported a history, but among dischargees the difference was less apparent.

**Table 4.1:** Prison entrants and dischargees, ever told they have a mental health disorder including drug and alcohol misuse, by sex, age group and Indigenous status, 2015

| | Prison entrants | | | Prison dischargees | | |
|---|---|---|---|---|---|---|
| | Number | Per cent | Total | Number | Per cent | Total |
| **Sex** | | | | | | |
| Male | 403 | 47 | 862 | 149 | 40 | 369 |
| Female | 93 | 62 | 149 | 43 | 63 | 68 |
| **Age group (years)** | | | | | | |
| 18–24 | 76 | 40 | 188 | 20 | 30 | 66 |
| 25–34 | 210 | 49 | 425 | 69 | 43 | 161 |
| 35–44 | 155 | 58 | 268 | 67 | 50 | 133 |
| 45+ | 54 | 43 | 125 | 35 | 48 | 73 |
| **Indigenous status** | | | | | | |
| Indigenous | 126 | 44 | 285 | 56 | 43 | 131 |
| Non-Indigenous | 370 | 51 | 721 | 131 | 45 | 292 |
| **Total** | **496** | **49** | **1,011** | **192** | **44** | **437** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. There were 36 prison entrants whose mental illness history was unknown, 5 whose Indigenous status was unknown, and 5 whose age was unknown; there were 4 dischargees whose age was unknown and 14 dischargees of unknown Indigenous status.
3. Proportions are calculated from the total number of entrants and dischargees.
4. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.
5. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Entrant and Discharge forms, 2015 NPHDC.

## 4.2 Changes to mental health while in prison

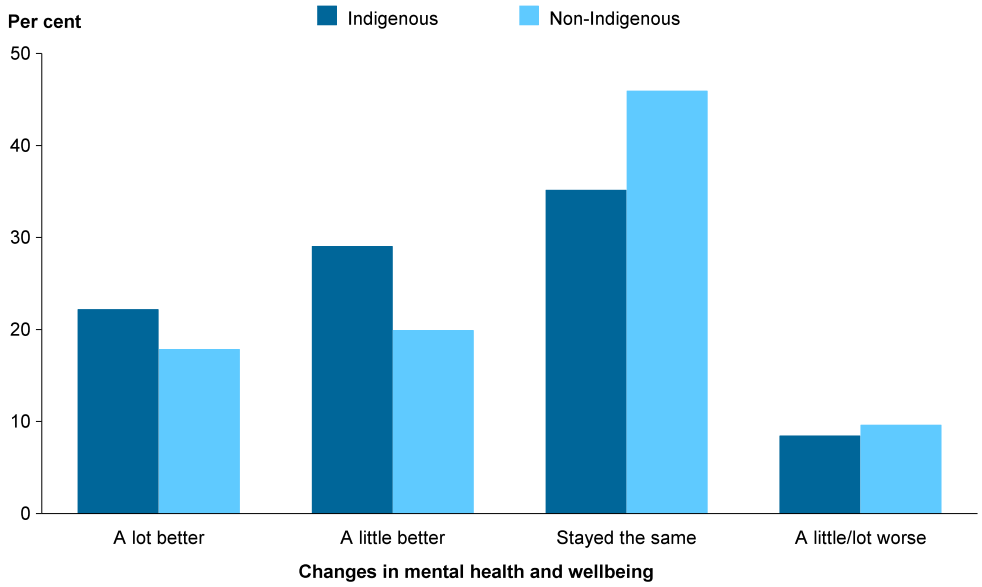
In a study with dischargees in United States of America (USA) prisons, about one-third (32%) said their mental health had improved since being in prison, while 28% thought it had deteriorated. Those who perceived their mental health prior to prison as being poor were more likely to report an improvement since being in prison (Yu et al. 2015).

**INDICATOR:** Proportion of prison dischargees reporting that their mental health improved or stayed the same while in prison: 84%

In the current data collection, 41% of dischargees thought that their mental health had improved since being in prison, with 19% reporting that it is 'a lot better' and 22% 'a little better'. Less than 10% (9%) of dischargees thought their mental health had deteriorated while in prison, and 44% reported no change. Male dischargees were less positive than women, with 10% of men reporting that their mental health had become a little or a lot worse since being in prison, compared with 4% of women. Almost half (45–47%) of dischargees aged 25–44 reported an improvement in their mental health, compared with around one-third (30–33%) of the youngest and oldest dischargees.

Indigenous dischargees were more positive than non-Indigenous dischargees in their responses. Just over one-half (51%) of Indigenous dischargees reported that their mental health was either a lot better (22%) or a little better (29%), compared with a combined 38% for non-Indigenous dischargees. Almost one-half (46%) of non-Indigenous dischargees reported no change in their mental health and wellbeing compared with 35% of Indigenous dischargees (Figure 4.1). (Detailed data for Figure 4.1 are available in Appendix Table C4.1.)

**Figure 4.1:** Prison dischargees, changes in mental health and wellbeing since entry to prison, by Indigenous status, 2015




*Note:* Excludes New South Wales which did not provide dischargee data.
*Source:* Discharge form, 2015 NPHDC.

## 4.3 Recent psychological distress

Both entering and leaving prison are times that may be highly stressful for prisoners. The experience of being in prison, the prison environment, relationships with other prisoners, family, housing and employment, and alcohol and other drug issues, may all be potential causes of concern and distress for prisoners.

The NPHDC asked both entrants and dischargees about their recent distress levels, and also about what particular concerns were causing distress.

The Kessler 10 (K10) scale was used as part of the NPHDC to measure the levels of psychological distress felt by prison entrants prior to entry to prison, and by prison dischargees leading up to release. The K10 is a 10-item screening questionnaire intended to yield a global measure of 'psychosocial distress' based on questions about the level of anxiety and depressive symptoms in the most recent 4-week period (ABS 2003; Andrews & Slade 2001). The K10 scale has been shown to be accurate and sensitive in predicting serious mental illness (Kessler et al. 2003).

The categories of psychological distress used in this report are the same as used in ABS surveys—this enables comparisons between the prisoner and general Australian populations. The categories are:

- Low—indicated by a K10 score of 10–15
- Moderate—indicated by a K10 score of 16–21
- High—indicated by a K10 score of 22–29
- Very high—indicated by a K10 score of 30–50.

Slightly different scoring for the K10 is often used in other surveys and research (low 10–19, moderate 20–24, high 25–29, very high 30–50), so caution should be used when interpreting the results. The 'very high' category is identical in both scoring systems.

**INDICATOR:** Proportion of prison entrants with a high or very high level of psychological distress as measured by the Kessler 10 (K10) scale: 31%

**INDICATOR:** Proportion of prison dischargees with a high or very high level of psychological distress as measured by the Kessler 10 (K10) scale: 19%

Overall, entrants (31%) were more likely than dischargees (19%) to have a high or very high level of psychological distress (Table 4.2). Similar proportions of entrants and dischargees reported low (49% and 52% respectively) or moderate (16% each) levels of distress. While these are not the same individuals, the difference may reflect differences in distress when entering versus when leaving prison. A relatively high proportion of dischargees had unknown or invalid scores for psychological distress (13%), which should be taken into account when interpreting these results.

Experience with prior imprisonment was related to higher distress for prison entrants, with high or very high levels of distress for one-third (34%) of entrants who had previously been in prison or juvenile detention centres, compared with one-quarter (25%) of those coming to prison for the first time (Appendix Table C4.2).

**Table 4.2:** Prison entrants and dischargees, level of psychological distress, 2015

| | Prison entrants | | Prison dischargees | |
|---|---|---|---|---|
| | Number | Per cent | Number | Per cent |
| Low | 396 | 49 | 229 | 52 |
| Moderate | 125 | 16 | 70 | 16 |
| High | 134 | 17 | 48 | 11 |
| Very high | 112 | 14 | 35 | 8 |
| *High/very high* | *246* | *31* | *83* | *19* |
| **Total** | **805** | **100** | **437** | **100** |

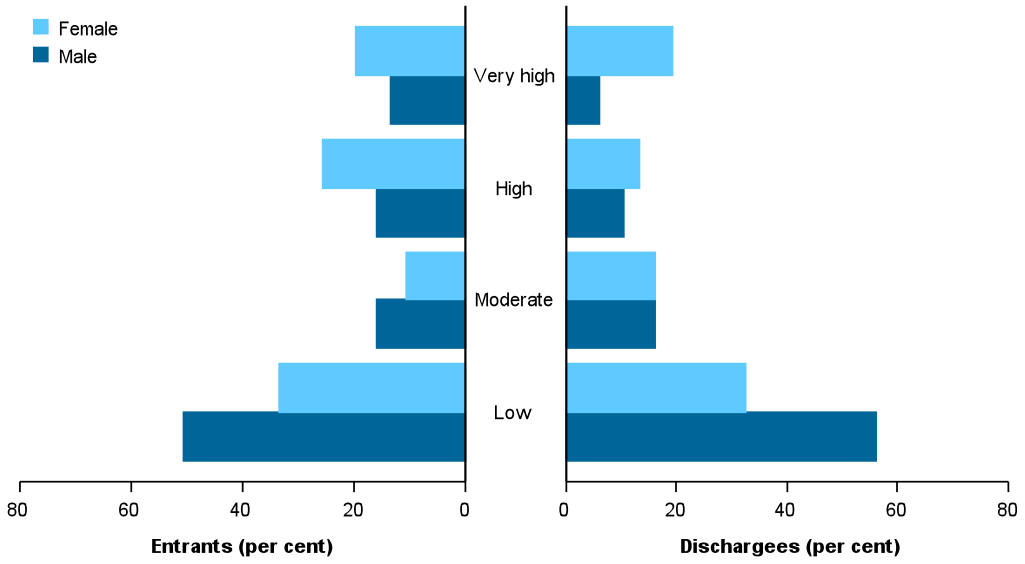
*Notes*

1. Excludes New South Wales which did not provide entrant or dischargee data for this indicator.
2. Levels of psychological distress were calculated using the K10 scale: low (10–15), moderate (16–21), high (22–29), and very high (30–50).
3. Totals include 38 prison entrants and 55 prison dischargees for whom K10 score of psychological distress was invalid or unknown.
4. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.
5. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Entrant and Discharge forms, 2015 NPHDC.

Women were more likely than men to report high or very high levels of distress—45% of female entrants and 29% of male entrants and a corresponding 32% and 17% of dischargees (Figure 4.2).

**Figure 4.2:** Prison entrants and dischargees, level of psychological distress, by sex, 2015



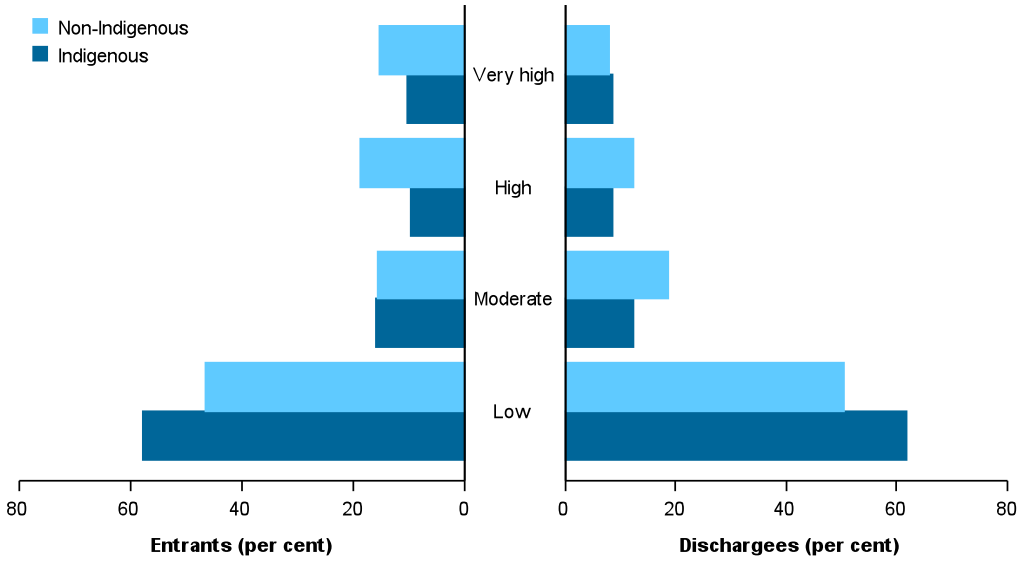

*Note:* Excludes New South Wales which did not provide entrant or dischargee data for this indicator.

*Source:* Entrant and Discharge forms, 2015 NPHDC.

Female dischargees were around three times as likely as male dischargees to report very high levels of distress (19% compared with 6%). Over one-half of male entrants (51%) and dischargees (56%) reported low levels of distress, compared with about one-third of women entrants (33%) and dischargees (32%). (Detailed data for Figure 4.2 are available in Appendix Tables C4.3 and C4.4.)

Indigenous prisoners consistently reported lower levels of distress than non-Indigenous prisoners (Figure 4.3). Low levels of distress were reported by 58% of Indigenous entrants and 62% of Indigenous dischargees, compared with around half of non-Indigenous entrants (47%) and dischargees (50%). The difference by Indigenous status in reporting high or very high levels of distress was more apparent among entrants (20% of Indigenous and 34% of non-Indigenous) than dischargees (17% and 20%). (Detailed data for Figure 4.3 are available in Appendix Tables C4.3 and C4.4.)

**Figure 4.3:** Prison entrants and dischargees, level of psychological distress, by Indigenous status, 2015




*Note:* Excludes New South Wales which did not provide entrant or dischargee data for this indicator.
*Source:* Entrant and Discharge forms, 2015 NPHDC.

Entrants and dischargees reported different reasons for the distress they were experiencing (Table 4.3). The most common issues entrants were experiencing a lot of distress about were family or relationships in the community (34%), their current imprisonment (19%) and alcohol, tobacco and other drug issues (18%). Dischargees reported lower levels of distress on these three issues. Their upcoming release, and family or relationships in the community (13% each) were the issues most likely to be causing 'a lot' of worry or concern. Relationships in prison, physical health and mental health issues were of some concern to around 20–30% of both entrants and dischargees.

**Table 4.3:** Prison entrants and dischargees, reasons for distress, 2015 (per cent)

| | Prison entrants | | | | Prison dischargees | | | |
|---|---|---|---|---|---|---|---|---|
| | A lot | A little | Not at all | Total | A lot | A little | Not at all | Total |
| Current imprisonment | 19 | 29 | 48 | **100** | 5 | 20 | 65 | **100** |
| Upcoming release | 11 | 14 | 64 | **100** | 13 | 26 | 51 | **100** |
| Family or relationships in the community | 34 | 24 | 35 | **100** | 13 | 21 | 54 | **100** |
| Relationships in prison | 8 | 19 | 65 | **100** | 4 | 15 | 69 | **100** |
| Mental health issues | 9 | 22 | 62 | **100** | 8 | 17 | 63 | **100** |
| Physical health issues | 6 | 22 | 65 | **100** | 8 | 22 | 59 | **100** |
| Alcohol, tobacco and other drug issues | 18 | 22 | 54 | **100** | 9 | 19 | 61 | **100** |
| Other | 5 | 10 | 65 | **100** | 4 | 9 | 65 | **100** |

*Notes*

1. Excludes New South Wales which did not provide entrant or dischargee data for this indicator.
2. Totals include entrants and dischargees for whom the reasons for distress were unknown.
3. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.
4. See Appendix Table C4.5 for more details.

*Sources:* Entrant and Discharge forms, 2015 NPHDC.

## 4.4 Self-assessed mental health status

Self-assessed health status is collected in a variety of health and social sciences research. It is considered a simple and easy-to-collect measure, and is often included in the absence of more detailed, objective health data. It therefore appears in data collections on a wide variety of topics, making it useful for comparisons between different population groups.

Self-assessed health status is associated with the prevalence of disease and social determinants of health, and is considered a useful global measure of health status in the general population (Wu et al. 2013). It has been found to be related to future health service use, including general practitioners, and both inpatient and outpatient hospital services, and that this association is stronger for more serious illnesses. However, self-assessed health status has less predictive power than more objective health measures such as administrative health records or more detailed health status surveys (Doiron et al. 2014).

The usual form of self-assessed health status is generic; however, in acknowledgement of the high proportion of prisoners with mental health issues, the NPHDC split the measure into mental health and physical health components. These components will be reported on separately—in this chapter for self-assessed mental health, and in section 8.1 for self-assessed physical health.

**INDICATOR:** Proportion of prison entrants who rate their mental health as generally good or better: 67%

**INDICATOR:** Proportion of prison dischargees who rate their mental health as generally good or better: 78%

Dischargees (78%) were more likely than entrants (67%) to rate their mental health as generally good or better (Table 4.4). Among both entrants and dischargees, men were more likely than women to assess their own mental health as being very good or excellent. Just over one-third (35%) of male entrants compared with 17% of female entrants gave this rating, as did 44% of male and 25% of female dischargees. Similarly, younger entrants and dischargees were more likely than older entrants and dischargees to give a positive mental health self-assessment. Just over one-quarter (25–29%) of entrants aged at least 35 rated their mental health as very good or excellent, compared with 34–36% of younger entrants. Among dischargees, about one-third (32–36%) of those aged at least 35 years gave this rating, compared with 59% of the youngest dischargees, aged 18–24 years. Detailed data can be found in Appendix Tables C4.6 and C4.7.

Among Indigenous prisoners, however, entrants and dischargees showed different patterns in their self-assessment. Similar proportions of Indigenous (33%) and non-Indigenous (32%) entrants rated their mental health as being very good or excellent. But Indigenous dischargees (38%) were less likely than non-Indigenous (44%) dischargees to give this rating. The apparent conflict between this result and the finding that Indigenous dischargees were more likely to rate their mental health as having improved while in prison (see Figure 4.1) highlights the complexities involved in both assessing and understanding the mental health of Indigenous prisoners.

**Table 4.4:** Prison entrants and dischargees, self-assessed mental health, 2015

| | Prison entrants | | Prison dischargees | |
|---|---|---|---|---|
| | Number | Per cent | Number | Per cent |
| Excellent | 97 | 10 | 55 | 13 |
| Very good | 230 | 23 | 124 | 28 |
| Good | 349 | 35 | 161 | 37 |
| Fair | 220 | 22 | 55 | 13 |
| Poor | 84 | 8 | 18 | 4 |
| **Total** | **1,011** | **100** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 31 prison entrants and 24 prison dischargees for whom self-assessed mental health status was unknown.
3. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.
4. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Entrant and Discharge forms, 2015 NPHDC.

## 4.5 Mental health medication

Medications for mental health issues, known as psychotropic medications, include antidepressants and mood stabilisers, anti-anxiety medications, antipsychotics and sedatives. Medication prescribing, particularly for mental health conditions, is complex and difficult, with challenges specific to the prison environment (Bartlett et al. 2014). These include drug and alcohol issues, stresses associated with being in prison, and medication trading among prisoners.

A study of prisoners in the USA found that 18% were taking psychotropic medication at the time of their admission to prison (Gonzalez & Connell 2014).

Rates of psychotropic medication prescribing in prisons in England were found to be 5.5 times as high for men and 5.9 times as high for women than the general population of a similar age (Hassan et al. 2014).

### Entrants

**INDICATOR:** Proportion of prison entrants who are currently taking medication for a mental health disorder: 27%

Over one-quarter (27%) of prison entrants reported that they were taking medication prescribed for mental-health-related purposes, including 25% of male and 37% of female entrants (Table 4.5). Consistent with the increase since 2012 in entrants reporting a history of mental health issues, the proportion taking medication for these issues has increased from 21%. In 2015, the youngest entrants, aged under 25, were the least likely to be taking any mental-health-related medication (18% compared with 28–31% of older entrants). The proportions of Indigenous and non-Indigenous entrants were similar.

**Table 4.5:** Prison entrants currently taking mental-health-related medication, by sex, age group and Indigenous status, 2015

| | Number | Per cent | Total prison entrants |
|---|---|---|---|
| **Sex** | | | |
| Male | 214 | 25 | 862 |
| Female | 55 | 37 | 149 |
| **Age group (years)** | | | |
| 18–24 | 33 | 18 | 188 |
| 25–34 | 118 | 28 | 425 |
| 35–44 | 82 | 31 | 268 |
| 45+ | 36 | 29 | 125 |
| **Indigenous status** | | | |
| Indigenous | 72 | 25 | 285 |
| Non-Indigenous | 196 | 27 | 721 |
| **Total** | **269** | **27** | **1,011** |

*Notes*

1. Totals include 13 prison entrants whose current medication status was unknown, 5 whose Indigenous status was unknown, and 5 whose age was unknown.
2. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## Prisoners in custody

**INDICATOR:** Proportion of prisoners in custody who received medication for mental health issues: 23%

Almost one-quarter (23%) of prisoners in custody were taking prescribed medication for mental-health-related issues (Table 4.6), including 38% of female and 22% of male prisoners. Antidepressants and mood stabilisers were the most common, taken by 29% of female and 18% of male prisoners, followed by antipsychotics (13% and 8% respectively). Note that medications may be used for a variety of health conditions, so the data should be interpreted as reflecting prescribed medication types, not diagnosed conditions. For example, some antipsychotics may be used in low doses to treat insomnia.

**Table 4.6:** Prisoners taking mental health related prescribed medication, by sex, 2015

| | Men | | Women | | Total | |
|---|---|---|---|---|---|---|
| **Medication type** | **Number** | **Per cent** | **Number** | **Per cent** | **Number** | **Per cent** |
| Antidepressants/mood stabilisers | 3,659 | 18 | 527 | 29 | 4,224 | 20 |
| Antipsychotics | 1,679 | 8 | 240 | 13 | 1,929 | 9 |
| Anti-anxiety (Anxiolytics) | 263 | 1 | 87 | 5 | 350 | 2 |
| Hypnotics and sedatives | 108 | <1 | 15 | <1 | 123 | <1 |
| **Total taking any mental health medication** | **4,351** | **22** | **688** | **38** | **5,041** | **23** |

*Notes*

1. Excludes New South Wales as NSW did not provide medications data.
2. A prisoner taking more than one type of medication may be counted more than once except in the total.
3. Total includes 2 medications taken by prisoners whose sex was unknown.
4. Percentages are calculated from the 1,832 female and 19,828 male prisoners in custody excluding New South Wales (21,660 total).
5. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Medication form, 2015 NPHDC.

Indigenous prisoners were less likely than non-Indigenous prisoners to be taking mental-health-related medications, with the difference between the groups decreasing with age (Table 4.7). Among the youngest prisoners aged 18–24 years, 11% of Indigenous prisoners were taking these medications, compared with 18% of non-Indigenous prisoners. Among the oldest prisoners, the proportions were more similar, at 21% and 24% respectively.
These differences were mainly due to more non-Indigenous than Indigenous prisoners taking antidepressants and mood stabilisers.

**Table 4.7:** Prisoners taking mental-health-related prescribed medication, by age group and Indigenous status, 2015

| Mental-health-related medication type | 18–24 years | | 25–34 years | | 35–44 years | | 45+ years | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent |
| | | | | | Indigenous | | | | | |
| Antidepressants/mood stabilisers | 121 | 8 | 308 | 13 | 246 | 15 | 111 | 17 | 1,060 | 17 |
| Antipsychotics | 74 | 5 | 186 | 8 | 143 | 9 | 52 | 8 | 521 | 8 |
| Anti-anxiety (Anxiolytics) | 5 | <1 | 14 | 1 | 15 | 1 | 8 | 1 | 45 | 1 |
| Hypnotics and sedatives | 3 | <1 | 11 | <1 | 7 | <1 | 4 | 1 | 26 | <1 |
| **Total taking any mental-health-related medication** | **174** | **11** | **429** | **18** | **326** | **21** | **141** | **21** | **1,092** | **18** |
| | | | | | Non-Indigenous | | | | | |
| Antidepressants/mood stabilisers | 320 | 15 | 1,000 | 18 | 863 | 20 | 701 | 20 | 2,949 | 19 |
| Antipsychotics | 162 | 7 | 459 | 8 | 396 | 9 | 232 | 7 | 1,274 | 8 |
| Anti-anxiety (Anxiolytics) | 15 | 1 | 86 | 2 | 82 | 2 | 62 | 2 | 245 | 2 |
| Hypnotics and sedatives | 13 | 1 | 37 | 1 | 30 | 1 | 17 | <1 | 97 | 1 |
| **Total taking any mental-health-related medication** | **406** | **18** | **1,265** | **23** | **1,072** | **25** | **820** | **24** | **3,638** | **24** |
| | | | | | Total | | | | | |
| Antidepressants/mood stabilisers | 467 | 12 | 1,376 | 18 | 1,184 | 20 | 849 | 21 | 4,224 | 20 |
| Antipsychotics | 259 | 7 | 696 | 9 | 574 | 10 | 306 | 7 | 1,929 | 9 |
| Anti-anxiety (Anxiolytics) | 26 | 1 | 124 | 2 | 113 | 2 | 84 | 2 | 350 | 2 |
| Hypnotics and sedatives | 16 | <1 | 48 | 1 | 37 | 1 | 21 | 1 | 123 | 1 |
| **Total taking any mental-health-related medication** | **625** | **16** | **1,798** | **23** | **1,492** | **25** | **1,018** | **25** | **5,041** | **23** |

*Notes*

1. Excludes New South Wales which did not provide medication data.
2. A prisoner taking more than one type of medication will be counted more than once except in the totals.
3. Percentages are calculated from the total number of prisoners in custody excluding NSW (21,660).
4. Totals include 312 medications taken by prisoners of unknown Indigenous status and 108 of unknown age.
5. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Medication form, 2015 NPHDC.

## 4.6 Prison entrants referred to prison mental health services

The initial health assessment prisoners receive on entry to prison is similar to a screening assessment. From this, prisoners may be referred to various health professionals for further assessment, observation or treatment. Referral may not happen in every instance, with a review in one Australian prison finding that 23% of those identified as acutely mentally ill were not referred following their reception assessment (Schilders & Ogloff 2014).

**INDICATOR:** Proportion of prison entrants who, at reception, were referred to mental health services for observation and further assessment: 22%

Overall, 22% of prison entrants were referred to prison mental health services following their initial reception screening assessment (Table 4.8). Women were more likely to be referred than men (29% compared with 21%), and the youngest entrants (aged 18–24) were the least likely age group to be referred (15% compared with 22–24% of those aged 25 and over). Broadly consistent with the findings on having a history of mental health issues (see section 4.1), similar proportions of Indigenous (23%) and non-Indigenous (22%) entrants were referred.

**Table 4.8:** Prison entrants, referral to prison mental health service, by sex, age group and Indigenous status, 2015

| | Referred to prison mental health service | | Total | |
|---|---|---|---|---|
| | Number | Per cent | Number | Per cent |
| **Sex** | | | | |
| Male | 158 | 21 | 739 | 100 |
| Female | 19 | 29 | 66 | 100 |
| **Age group (years)** | | | | |
| 18–24 | 22 | 15 | 151 | 100 |
| 25–34 | 82 | 24 | 341 | 100 |
| 35–44 | 50 | 24 | 209 | 100 |
| 45+ | 22 | 22 | 99 | 100 |
| **Indigenous status** | | | | |
| Indigenous | 45 | 23 | 196 | 100 |
| Non-Indigenous | 131 | 22 | 606 | 100 |
| **Total** | **177** | **22** | **805** | **100** |

*Notes*

1. Excludes New South Wales which did not provide data for this indicator.
2. Totals include 5 entrants whose age was unknown, 3 whose Indigenous status was unknown, and 21 for whom referral status was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

# 5 Self-harm

Self-harm is a broad term that refers to a person intentionally inflicting physical harm to their own body. The act may or may not have been intended to cause death. Where suicide is not intended, self-harm is sometimes referred to as self-injury or self-mutilation (Harrison & Henley 2014).

Suicide rates in Australia from 1921 to 2010 have fluctuated around 20 per 100,000 per year for men, and 5 per 100,000 per year for women. By contrast, rates of self-harm leading to hospitalisation during the period 1999–00 to 2011–12 were at least 40% higher for women than men (Harrison & Henley 2014).

Some of the key predictors of a history of self-harm among prisoners include being single, experience of childhood abuse, impulsivity, antisocial personality disorder and mental health disorders (Barton et al. 2014). A study in the United Kingdom (UK) found that 17% of prison entrants had a history of self-harm (Hayes et al. 2014).

Reasons for self-harming while in prison include depression and other mental health issues, a history of alcohol and other drug misuse, stressful events related to imprisonment such as isolation from your family and children, and boredom (Bennett & Dyson 2014). The UK Safety in Custody statistics for 2014 report that 91 per 1,000 prisoners were involved in self-harm incidents during a 12-month period, with an average of 2.9 incidents by each self-harming man, and 6.1 for women (Ministry of Justice 2015).

## 5.1 Self-harm behaviour

### Entrants

**INDICATOR:** Proportion of prison entrants who have ever intentionally harmed themselves: 23%

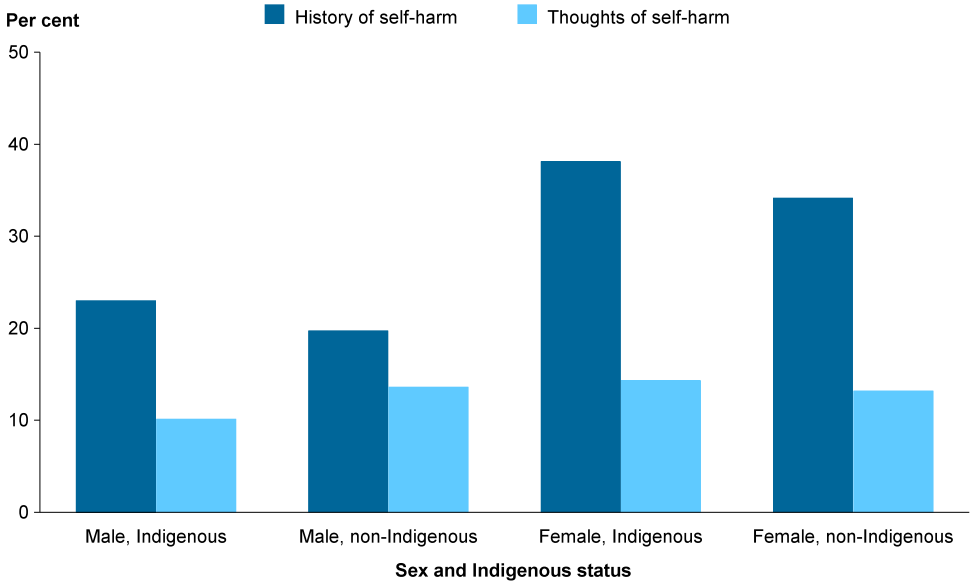
**INDICATOR:** Proportion of prison entrants who have thought of harming themselves in the last 12 months: 13%

Almost one-quarter (23%) of entrants reported ever having intentionally harmed themselves, an increase from 16% since 2012 (Appendix Table C5.1). For female entrants in 2015, the proportion rose to 36%. Among the various age groups, the oldest entrants aged at least 45 were the group least likely to have self-harmed (18%). A slightly higher proportion of Indigenous (26%) than non-Indigenous (21%) entrants had ever intentionally harmed themselves.

Similar proportions of male (13%) and female (14%) entrants reported having thoughts of harming themselves during the previous 12 months. Recent thoughts of self-harm were slightly less likely to be reported by Indigenous (11%) than non-Indigenous (14%) entrants. Association with age varied, with 35–44 year olds being the most likely to report self-harming thoughts (17%), and people aged 45 and over the least likely (10%). New South Wales did not provide data for recent thoughts of self-harm by prison entrants—NSW data cover self-harm history only.

Comparing Indigenous and non-Indigenous male and female entrants, Indigenous women were the most likely group to report a history of self-harm (Figure 5.1). More than one-third of this group (38%) had a history of self-harm, while 14% had recent thoughts of self-harm. Non-Indigenous men were least likely to report a history of self-harm (20%), while Indigenous men were least likely to report thoughts of self-harm (10%). (Detailed data for Figure 5.1 are available in Appendix Table C5.2.)

**Figure 5.1:** Prison entrants, history and thoughts of self-harm, by sex and Indigenous status, 2015




*Notes:* Excludes New South Wales which did not provide 'Thoughts of self-harm' data for this indicator.
*Source:* Entrant form, 2015 NPHDC.

## Dischargees

**INDICATOR:** Proportion of prison dischargees who have intentionally harmed themselves in prison: 4%

While 19% of dischargees reported having ever intentionally harmed themselves, only 4% reported doing so while in prison. There were no differences seen by sex or Indigenous status—however, for age, younger prisoners aged 18–24 were slightly more likely than those aged at least 35 years to report harming themselves intentionally while in prison (5% compared with 3%) (Appendix Table C5.3).

## 5.2 Identification of self-harm or suicide risk

As a result of the initial health assessment on entering prison, a prison entrant may be identified as being currently at risk of suicide or self-harm. Such identification triggers further action such as arrangements for close observation of that prisoner.

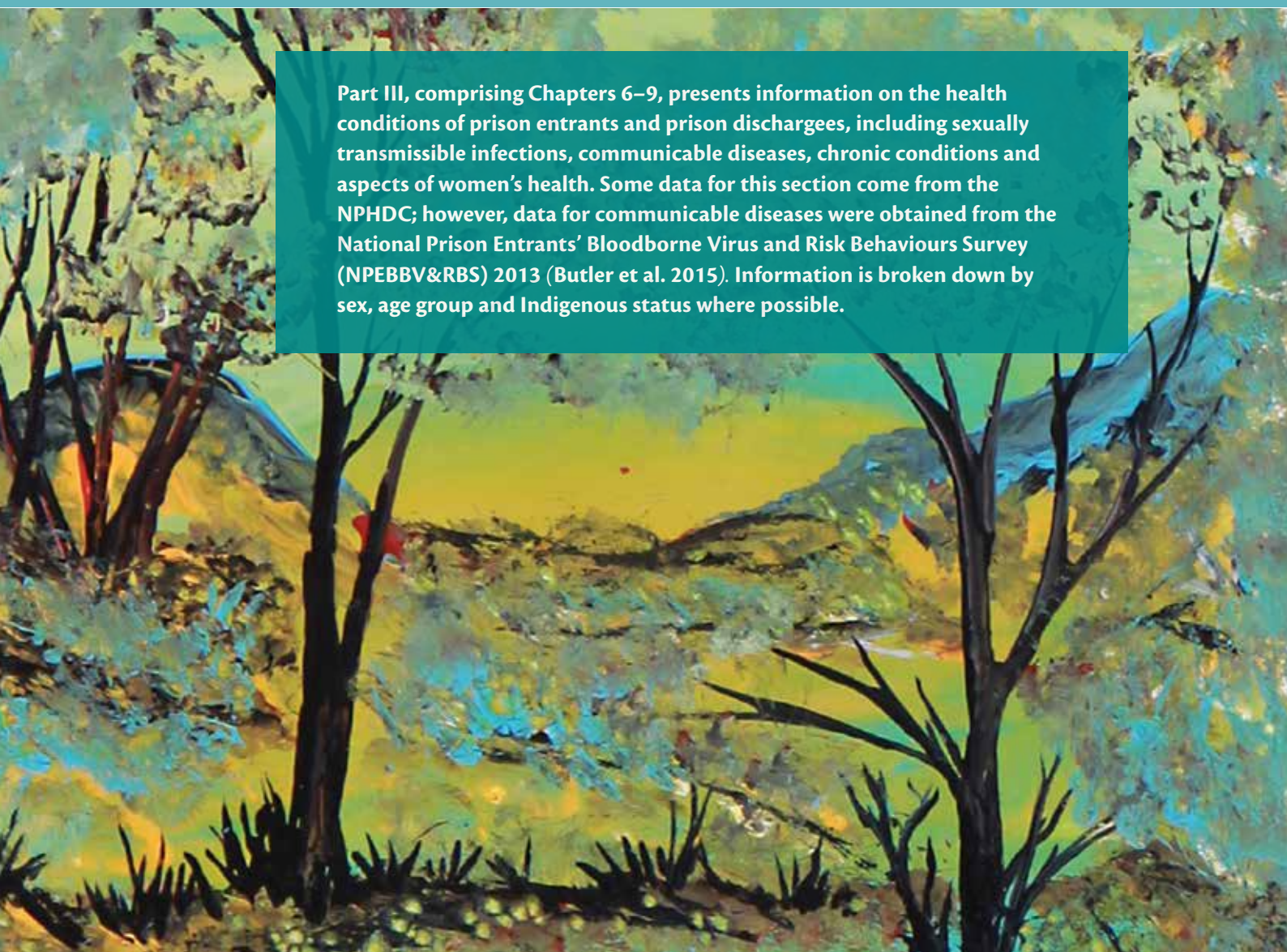
A study in the UK found that 3% of prison entrants were identified as having current suicidal ideas (Hayes et al. 2014).

**INDICATOR:** Proportion of prison entrants identified as currently at risk of suicide or self-harm: 7%

There were 56 entrants (7% of 805) who were identified by clinic staff as being currently at risk of suicide or self-harm, as a result of the initial reception screening assessment (Appendix Table C5.4). Consistent with the results for dischargees reporting intentionally harming themselves while in prison, there were no differences by sex or Indigenous status in the proportions of entrants being identified as at risk. The youngest (18–24) and oldest (45 and over) entrants were slightly less likely than those in the middle age groups to be identified (4–5% compared with 8–9% respectively). (These results do not include New South Wales which did not provide data for this indicator.)

III

# Part III: Physical health



Part III, comprising Chapters 6–9, presents information on the health conditions of prison entrants and prison dischargees, including sexually transmissible infections, communicable diseases, chronic conditions and aspects of women's health. Some data for this section come from the NPHDC; however, data for communicable diseases were obtained from the National Prison Entrants' Bloodborne Virus and Risk Behaviours Survey (NPEBBV&RBS) 2013 (Butler et al. 2015). Information is broken down by sex, age group and Indigenous status where possible.

# 6 Communicable diseases

Communicable diseases, also known as infectious diseases, are spread from one person to another, or from an animal to a person. The method of transmission may be through viruses or bacteria in the air, or through blood or other bodily fluids. Examples of communicable diseases include acquired immune deficiency syndrome (AIDS), Hepatitis C, Hepatitis B, malaria, meningitis and vaccine-preventable diseases such as chickenpox and influenza.

The Australian Government monitors communicable diseases through the National Notifiable Diseases Surveillance System, which coordinates the surveillance of more than 50 communicable diseases (DoHA 2010). Due to high levels of sanitation and the use of antibiotics and immunisation programs in Australia, communicable diseases are not among the leading contributors to the overall burden of disease in the community.

Very close relationships exist between imprisonment, illicit and injecting drug use, and the prevalence of bloodborne virus infections in prisoners—notably Hepatitis B and Hepatitis C. People who inject drugs have high rates of imprisonment, predominantly due to the illegal nature of their drug use, and the imperative to fund drug dependence through crime. Indeed, 45% of prison entrants report injecting drug use (Table 12.4) and almost three-quarters of police detainees tested positive to at least one drug in 2013–14 (Coghlan et al. 2015). Given this nexus, Hepatitis C virus infection is very common among prisoners, with an overall prevalence of 29%, and 57% among people who inject drugs (Butler et al. 2015).

In the USA, 21% of prisoners reported having had an infectious disease such as tuberculosis, Hepatitis B and Hepatitis C, and a range of sexually transmitted infections (Maruschak & Berzofsky 2015).

## 6.1 Sexually transmissible infections

In recent years, rates of some sexually transmissible infections (STIs) such as human papillomavirus (HPV) have declined, while others have increased, including gonorrhoea, chlamydia and syphilis. Prisoners are recognised in the 3rd National Sexually Transmissible Infections Strategy 2014–2017 as a priority population due to their high-risk behaviours (DoH 2014c).

**INDICATOR:** Rate of notifications of sexually transmissible infections for prisoners in custody during 2014: 3 notifications per 100 prisoners received into custody.

As part of the NPHDC, jurisdictions were asked to provide the number of notifications of STIs during the 2014 calendar year. Notifications were defined as cases of chlamydial infection, donovanosis, gonococcal infection and syphilis to the National Notifiable Diseases Surveillance System.

During 2014, there were 1,084 notifications of sexually transmissible infections for prisoners in custody in New South Wales, Queensland, Western Australia, Tasmania and the Northern Territory. This represents 3 notifications per 100 prisoners received into custody during the year in those jurisdictions. (Data for this indicator were not available from Victoria, South Australia and the Australian Capital Territory.)

## 6.2 Bloodborne viruses

**INDICATOR:** Proportion of prison entrants testing positive to a bloodborne virus: 31% Hepatitis C; 18% Hepatitis B; 0% HIV.

### Hepatitis C

Hepatitis C is one of the most commonly reported notifiable diseases, with an estimated 230,000 Australians living with chronic Hepatitis C infection in 2012. It can result in progressive liver inflammation, which can lead to liver disease and failure, as well as cancer. The Fourth National Hepatitis C Strategy 2014–2017 lists people in custodial settings as a priority population because of their increased risk of infection due to non-sterile injecting equipment, sharing of tattooing and piercing equipment, and other blood-to-blood contact (DoH 2014a).

Acute Hepatitis C virus (HCV) infection is often asymptomatic, making the timing and source of transmission difficult to determine. In one study of 79 prisoners in New South Wales prisons with HCV, 3 of 4 likely in-custody transmission events identified were related to drug injecting and equipment (Bretana et al. 2015).

In June 2015, the Australian Federal Parliamentary Standing Committee on Health Inquiry into Hepatitis C in Australia made a number of recommendations, including:

- Recommendation 2—The Australian Government, in collaboration with the states and territories, work to develop well-informed Hepatitis C awareness campaigns targeted at:
  - Populations at high-risk of Hepatitis C infection (includes prisoners), informing them of transmission risks, prevention strategies, and the availability of voluntary testing.
- Recommendation 8—The Department of Health work with state and territory health and corrections agencies to:
  - Develop a standard approach to data collection and reporting of prisoner health in custodial settings; and
  - Give consideration to the provision of support for safe tattooing, barbering and any other legal practices which may present a risk of Hepatitis C transmission in custodial settings.
- Recommendation 9—A national strategy for bloodborne viruses and sexually transmissible infections in prisons be developed. The strategy should accompany and support the five existing jurisdictional strategies and be developed, implemented, reviewed and assessed in the same way.

- Recommendation 10—The Australian Government raise the issue of Hepatitis C in prisons, and the establishment of national standards of prison health delivery as part of the Council of Australian Governments (COAG) Health Council processes (Commonwealth of Australia 2015).

The Australian Government has not yet responded to this Inquiry report.

Data on the prevalence of Hepatitis C in prisons were obtained from the 2013 NPEBBV&RBS (see Appendix D for further details). The survey screened 536 prison entrants for Hepatitis C antibody.

Overall, just under one-third (31%) of entrants tested positive for Hepatitis C (Table 6.1). This was more common among women (41%) than men (29%), with no difference by Indigenous status. Generally, prevalence increased with age, from 12% of those aged 20–24 years to 37% of those entrants aged 30 years or older. This is consistent with the association between Hepatitis C and injecting drug use and number of years of injecting. In 2013 there was a spike for the youngest entrants, with almost one-quarter (23%) of those aged less than 20 testing positive for Hepatitis C. This was not seen in previous years and it is not clear whether this reflects an actual increase in Hepatitis C among the youngest entrants or if it is due to the relatively low number of entrants in this age group who were tested (40).

**Table 6.1:** Prison entrants who tested positive for Hepatitis C antibody, by sex, age group and Indigenous status, 2013

| | Tested positive for Hepatitis C antibody | | Total prison entrants tested |
|---|---|---|---|
| | Number | Per cent | Number |
| **Sex** | | | |
| Male | 131 | 29 | 454 |
| Female | 34 | 41 | 82 |
| **Age group** | | | |
| <20 | 9 | 23 | 40 |
| 20–24 | 11 | 12 | 95 |
| 25–29 | 31 | 28 | 112 |
| 30+ | 117 | 37 | 313 |
| **Indigenous status** | | | |
| Indigenous | 52 | 31 | 170 |
| Non-Indigenous | 115 | 30 | 385 |
| **Total** | **165** | **31** | **536** |

*Notes*

1. Excludes equivocal test results and missing values.
2. Numbers represent the number in the data collection, not the whole prison population.

*Source:* NPEVBBV&RBS 2013, Tables 9, 36 and 43.

Among both men and women, injecting drug users (IDU) were more likely than non-IDU to test positive to Hepatitis C. More than one-half (56%) of male IDU and two-thirds (67%) of female IDU tested positive, compared with 4% of male and 6% of female non-IDU (Butler et al. 2015). This association holds over time, with the prevalence of Hepatitis C increasing with the length of time an IDU has been injecting. Among IDU who have been injecting for at least 3 years, 75% of daily injectors tested positive to Hepatitis C (Butler et al. 2015).

## Hepatitis B

Hepatitis B is the world's most common liver infection, affecting an estimated 225,000 people in Australia, although many of those may not know they have the infection (MacLachlan et al. 2013). While a vaccination exists, prisoners are recognised in the Second National Hepatitis B Strategy as being at increased risk due to low vaccination rates (DoH 2014b).

Data on Hepatitis B prevalence were obtained from the 2013 NPEBBV&RBS (Butler et al. 2015), which tested 456 prison entrants for the Hepatitis B core antibody. Overall, 18% of entrants tested positive (Table 6.2). Men (18%) were slightly more likely than women (15%) to test positive. The likelihood of testing positive increased as age increased, from 3% of the youngest entrants aged under 20, to almost one-quarter (24%) of the oldest entrants. One-quarter (25%) of Indigenous entrants tested positive, compared with 15% of non-Indigenous entrants.

**Table 6.2:** Proportion of prison entrants testing positive for Hepatitis B core antibody, by sex, age group and Indigenous status, 2013

| | Tested positive for Hepatitis B core antibody | | Total prison entrants tested |
|---|---|---|---|
| | Number | Per cent | Number |
| **Sex** | | | |
| Male | 75 | 18 | 407 |
| Female | 7 | 15 | 48 |
| **Age group** | | | |
| <20 | 1 | 3 | 35 |
| 20–24 | 4 | 5 | 81 |
| 25–29 | 16 | 18 | 88 |
| 30+ | 61 | 24 | 251 |
| **Indigenous status** | | | |
| Indigenous | 35 | 25 | 142 |
| Non-Indigenous | 47 | 15 | 308 |
| **Total** | **82** | **18** | **456** |

*Notes*

1. Excludes equivocal test results and missing values.
2. Numbers represent the number in the data collection, not the whole prison population.

*Source:* AIHW analysis of NPEBBV&RBS 2013 Tables 52 and 59.

Among men and women, IDU were only slightly more likely than non-IDU to test positive to Hepatitis B. For men, 20% of IDU and 17% of non-IDU tested positive, and among women, the rates were 13% and 11% respectively (Butler et al. 2015).

### HIV

The Human Immunodeficiency Virus or HIV, which weakens the immune system, is a virus that has no cure, and is therefore carried for life. Treatment can keep the level of the virus low, but if it progresses, the final stage is Acquired Immunodeficiency Syndrome (AIDS) (aids.gov 2014). There were an estimated 26,800 people in Australia living with HIV in 2013. After decreasing from 1988, rates of new infections in Australia have been slowly increasing again since 2000, with 2013 rates similar to 1992 levels (Kirby Institute 2014).

HIV prevalence rates greater than 10% have been found in prisons in some low and middle income countries (Dolan et al. 2007). In many countries around the world, rates of HIV infection among prisoners are significantly higher than those in the general population (Jürgens 2007).

Data on HIV prevalence were obtained from the 2013 NPEBBV&RBS (Butler et al. 2015), which tested 501 prison entrants for the HIV antibody.

There were no prison entrants in 2013 who tested positive to HIV, a result unchanged since 2010. This suggests that while HIV rates in prisoners in some countries may be higher than the general population, this may not be the case in Australia.

## 6.3 Surveillance

**INDICATOR:** Proportion of prison dischargees who were tested for a bloodborne virus or a sexually-transmissible infection: 69%

Over two-thirds (69%) of dischargees were tested for a bloodborne virus or sexually transmissible infection while in prison (Table 6.3). Indigenous dischargees (77%) were more likely than non-Indigenous dischargees (67%) to have been tested. There was no difference by sex, and the proportion of dischargees tested fluctuated by age group from a high of 76% of 25–34 year olds, to a low of 62% of 35–44 year olds.

Most commonly, if a dischargee was tested, it was for multiple communicable diseases, with 59% (or 86% of those tested) having been tested for HIV, Hepatitis B and C, and other sexually transmissible infections, while just 4% of all dischargees reported having only one of these tests.

**Table 6.3:** Prison dischargees, tested for a bloodborne virus or sexually transmissible infection, by sex, age group and Indigenous status, 2015

| | Tested for a bloodborne virus or sexually transmissible infection | | Total prison dischargees |
|---|---|---|---|
| | Number | Per cent | Number |
| **Sex** | | | |
| Male | 255 | 69 | 369 |
| Female | 46 | 68 | 68 |
| **Age group (years)** | | | |
| 18–24 | 46 | 70 | 66 |
| 25–34 | 122 | 76 | 161 |
| 35–44 | 83 | 62 | 133 |
| 45+ | 48 | 66 | 73 |
| **Indigenous status** | | | |
| Indigenous | 101 | 77 | 131 |
| Non-Indigenous | 195 | 67 | 292 |
| **Total** | **301** | **69** | **437** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 dischargees of unknown age and 14 whose Indigenous status was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

## 6.4 Medication for Hepatitis C

The uptake of treatment for Hepatitis C is low in both the community and in prison, with around 5% of Hepatitis C positive prisoners treated (Yap et al. 2014). The reasons for this are multiple and complex, including lack of awareness and knowledge about the infection and treatment side effects, fear of the disease, and stigma. Other issues make treatment within a prison difficult, including treatment length of 24–48 weeks, treatment not being available in all prisons, bureaucracy and process issues with needing to attend a hospital in the community, fear of losing prison employment, and fears of losing weight and looking sick while in prison (Yap et al. 2014). Chronic Hepatitis C requires monitoring for response and adverse effects both during and after treatment (Post et al. 2013).

New treatment options are becoming available, with high cure rates, fewer side-effects and shorter treatment times, and a number of these new medications are currently being assessed by the Pharmaceutical Benefits Scheme in Australia (Hepatitis Australia 2014). At the time of writing, it was unclear how access for prisoners to these new treatment options would be facilitated.

**INDICATOR:** Rate of courses of treatment for Hepatitis C commenced during 2014: 8 per 1,000 prisoners received into custody

There were 244 prisoners who commenced on treatment for Hepatitis C during 2014, at a rate of 8 per 1,000 prisoners received into custody. (These data exclude New South Wales as NSW did not provide data for this indicator.)

# 7 Chronic conditions

Chronic conditions are complex, with multiple factors causing them. They often develop over a long period, are prolonged, and sometimes lead to other health complications. Risk factors for chronic conditions include poor diet, physical inactivity, obesity, tobacco smoking and risky alcohol consumption (AIHW 2012b). Australia's National Health Priority Areas include the chronic conditions reported on here: asthma, arthritis, cardiovascular disease, diabetes and cancer.

In the USA, 50% of prisoners reported having had a chronic condition including cancer, high blood pressure, stroke-related problems, diabetes, heart-related problems, kidney-related problems, arthritis, asthma, and cirrhosis of the liver. For most (80% of those ever diagnosed or 40% overall) the condition was still current, and over one-quarter (27%) of those with a current chronic condition were diagnosed in prison (Maruschak & Berzofsky 2015).

This chapter reports findings from prison entrants and prison dischargees relating to self-reported chronic conditions. Information about the use of prison clinics and prisoners taking prescribed medication for chronic conditions can be found in Part VI 'Health service use'.

## Entrants

**INDICATOR:** Proportion of prison entrants who have ever been told that they have a chronic condition: 32%

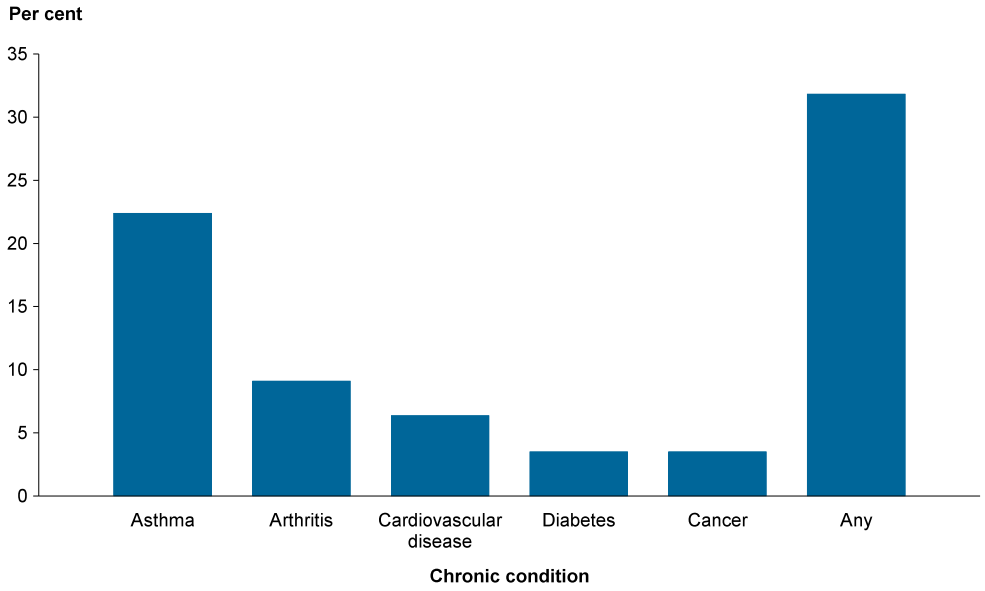
As part of the NPHDC, prison entrants were asked whether they had ever been told by a doctor or nurse that they had any of the following chronic health conditions: arthritis, asthma, cancer, cardiovascular disease (CVD) or diabetes.

(Note that self-reported data such as those concerning chronic conditions inherently rely on the respondents' accurate recall and are likely to be an underestimate of the true prevalence. Further, some prison entrants may have existing health conditions that have yet to be diagnosed because they have not accessed health services. This may be especially true for Indigenous entrants and those living in remote areas where access to health services may have been limited.)

Almost one-third (32%) of entrants had ever been told they had a chronic condition (Figure 7.1), the most common being asthma. One-quarter (25%) of entrants, or 78% of those ever told, reported still having a current chronic condition. Similar proportions of men and women, and Indigenous compared with non-Indigenous entrants reported having a current chronic condition. Among the age groups, the proportion increased with age from 9% of the youngest entrants (aged 18-24) to 46% of the oldest entrants (aged 45 and over).

Non-Indigenous entrants (34%) were more likely than Indigenous entrants (24%) to report ever having been told they have a chronic condition, but, as stated above, there was no difference between the groups in reporting having a current chronic condition. (Detailed data for Figure 7.1 are available in Appendix Table C7.1.)

**Figure 7.1:** Prison entrants who had ever been told they had a chronic condition, selected chronic conditions, 2015




*Notes*

1. Excludes New South Wales which did not provide complete data for this item.
2. 'Any' does not represent a sum of the conditions, as some prison entrants may report having been told of more than one condition.

*Source:* Entrant form, 2015 NPHDC.

## 7.1 Asthma

Asthma is a common chronic inflammatory condition of the airways—it can be controlled, but not cured. It affects people of all ages, and the symptoms vary over time, and may be present or absent at any point in time. Symptoms include episodes of wheezing, shortness of breath, cough and chest tightness due to narrowing of the airways. In 2011–12, 10.2% of Australians had asthma (ABS 2012c). During 2013, medications to treat respiratory conditions including asthma and chronic obstructive pulmonary disease were dispensed to 9% of the general population in Australia (Correll et al. 2015).

### Entrants

Almost one-quarter (23%) of entrants reported ever having been diagnosed with asthma (Table 7.1). Women (31%) were more likely to have been diagnosed compared with men (22%). There were variations with age, from 15% of the youngest entrants aged under 25, to 29% of those aged 25–34 years. Results for Indigenous and non-Indigenous entrants were similar.

For the 70% of those who had ever been diagnosed with asthma, the condition was current at the time of entry to prison (17% of all entrants).

**Table 7.1:** Prison entrants ever diagnosed with asthma, by sex, age group and Indigenous status, 2015

| | Ever diagnosed | | Total prison entrants |
|---|---|---|---|
| | Number | Per cent | Number |
| **Sex** | | | |
| Male | 191 | 22 | 862 |
| Female | 46 | 31 | 149 |
| **Age group (years)** | | | |
| 18–24 | 28 | 15 | 188 |
| 25–34 | 123 | 29 | 425 |
| 35–44 | 57 | 21 | 268 |
| 45+ | 29 | 23 | 125 |
| **Indigenous status** | | | |
| Indigenous | 70 | 25 | 285 |
| Non-Indigenous | 166 | 23 | 721 |
| **Total** | **237** | **23** | **1,011** |

*Notes*

1. Totals include 5 entrants of unknown age, 5 of unknown Indigenous status, and 13 with unknown asthma history.
2. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## 7.2 Arthritis

Arthritis comes in many forms, and affects many Australians, from 19% of 35–64 year olds to 51% of those aged 80 and over.

Rheumatoid arthritis is marked by inflammation of the joints, usually in the hands and on both sides of the body at the same time. The immune system attacks the tissues lining the joints, causing pain, swelling and stiffness. Progressive and irreversible joint damage over time can result in deformities and disability. Rheumatoid arthritis can occur at any age, but the most common age of onset is between 30 and 55.

Osteoarthritis is a degenerative joint condition affecting the hands, spine and joints such as the hip, knee and ankle. It most commonly develops in people over 45, and features the breakdown of the cartilage overlying the ends of the bones in the joints.

Juvenile arthritis, found in children under 16 years, typically has an unpredictable pattern of activity, with symptoms coming and going. Symptoms include joint swelling, tenderness, heat, stiffness and pain (AIHW 2014c).

## Entrants

In the 2015 data, 1-in-10 entrants (10%) reported ever having been diagnosed with arthritis (Table 7.2). Arthritis was twice as common among female entrants (18%) as male entrants (9%). Its prevalence among entrants increased steadily with age, from 3% of the youngest entrants aged under 25 to 26% of those aged 45 years and over. Non-Indigenous entrants (12%) were more likely than Indigenous entrants (7%) to report having had a diagnosis of arthritis.

Arthritis was still current for 91% of those ever diagnosed with the condition (9% of all entrants).

**Table 7.2:** Prison entrants diagnosed with arthritis, by sex, age group and Indigenous status, 2015

| | Ever diagnosed | | Total prison entrants |
|---|---|---|---|
| | Number | Per cent | Number |
| **Sex** | | | |
| Male | 77 | 9 | 862 |
| Female | 27 | 18 | 149 |
| **Age group (years)** | | | |
| 18–24 | 5 | 3 | 188 |
| 25–34 | 31 | 7 | 425 |
| 35–44 | 35 | 13 | 268 |
| 45+ | 33 | 26 | 125 |
| **Indigenous status** | | | |
| Indigenous | 19 | 7 | 285 |
| Non-Indigenous | 84 | 12 | 721 |
| **Total** | **104** | **10** | **1,011** |

*Notes*

1. Totals include 5 entrants of unknown age, 5 of unknown Indigenous status, and 16 with unknown arthritis history
2. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

# 7.3 Cardiovascular disease

Cardiovascular disease includes many different conditions affecting the heart and blood vessels. The main cause is a slow build-up of abnormal deposits of fat, cholesterol and other substances in the inner lining of the arteries, which may reduce or block the blood supply to the heart or brain. Risk factors include overweight and obesity, tobacco smoking, high blood pressure, high blood cholesterol, physical inactivity, poor diet and diabetes. In 2011–12, 22% of Australian adults reported having one or more cardiovascular diseases, including hypertensive disease, heart disease, stroke or heart failure (AIHW 2014g).

## Entrants

There were 51 entrants (6%) who reported ever having been told they had cardiovascular disease (Appendix Table C7.1). Female entrants (12%) were twice as likely as male entrants (6%) to report this. The youngest entrants to report ever being diagnosed with cardiovascular disease were in the 25–34 years age group (4%); those in the oldest age group (aged 45 and over) were more than 4 times as likely as this group to report ever being diagnosed (18%). The proportions of Indigenous (5%) and non-Indigenous (7%) entrants were similar.

Just over one-half (51%) of those ever-diagnosed reported still having cardiovascular disease. The groups most likely to still have the disease were Indigenous entrants (7 of 10 ever diagnosed) and entrants aged 45 years and over (14 of 18 ever diagnosed). (These data exclude New South Wales which did not provide data for this indicator.)

# 7.4 Diabetes

Diabetes mellitus (diabetes) is marked by high levels of glucose in the blood and is caused by either the inability to produce insulin, the body not being able to use insulin effectively, or both. The main types of diabetes are Type 1, which is an autoimmune disease with usual onset in childhood or early adulthood, and Type 2, which has a later onset and is largely preventable, being associated with lifestyle factors. Gestational diabetes involves higher than normal blood glucose levels during pregnancy. Diabetes increases the risk of other illnesses, including heart disease, stroke, kidney disease, loss of vision, heart failure and limb amputation. The risk factors for developing diabetes are similar to those for cardiovascular disease—physical inactivity, poor diet, overweight and obesity, tobacco smoking, high blood pressure and high blood lipids. In 2011–12, an estimated 5% of Australian adults had diabetes (AIHW 2014g). Aboriginal and Torres Strait Islander people are over 3 times as likely as non-Indigenous Australians to have diabetes (AIHW 2014d).

## Entrants

A diagnosis of diabetes had been received by 4% of entrants (Appendix Table C7.1). This was more likely for women than men (7% compared with 3%), Indigenous entrants compared non-Indigenous entrants (7% compared with 3%), and entrants aged at 45 years or more (14% compared with 1–5% of younger entrants). The condition was reported as being current for 88% of those who had ever been diagnosed (4% overall).

## Comparisons with general community

There were virtually no differences in current diabetes levels between Indigenous entrants aged 25–34 and 35–44 and their general community counterparts in the same age groups (6% and 5%, and 9% and 10% respectively) (Table 7.3). Similarly, there was little difference between non-Indigenous entrants and their general community counterparts in the same age group (1% and 1% respectively for ages 25–34 and 35–44, and 3% compared with 2% for those aged 35–44).

**Table 7.3:** Prison entrants and general community, current diabetes, 2015 (per cent)

| | | General Australian | | Prison entrants | |
|---|---|---|---|---|---|
| **Chronic condition** | **Indigenous status** | **25–34** | **35–44** | **25–34** | **35–44** |
| Diabetes mellitus | Indigenous | 5 | 10 | 6 | 9 |
| | Non-Indigenous | 1 | 2 | 1 | 3 |

*Sources:* Entrant form, 2015 NPHDC; ABS 2014b, Table 6.3.

## 7.5 Cancer

An estimated 123,920 Australians were diagnosed with cancer during 2014, with the most common being prostate cancer, bowel cancer, breast cancer (in women), melanoma of the skin and lung cancer. Over 45,000 Australians will have died from cancer during 2014, accounting for about 3 in 10 deaths. There are many different types of cancer, and although for most the causes are not fully understood, each cancer type has associated risk factors. These include smoking, risky alcohol consumption, poor diet and physical inactivity, chronic infections, family history, occupational exposure to chemicals and dust, and environmental pollution (AIHW 2014f).

The type and stage of the cancer determines the treatment required. Common treatments are chemotherapy (such as oral, injection or intravenous), radiation therapy, biological therapy and surgery.

### Entrants

Cancer affected 3% of entrants, with differences by demographics similar to diabetes—5% of female entrants compared with 3% of male entrants, and the oldest entrants (aged 45 and over) being most likely to have ever had cancer out of all age groups (9% compared with 1–4% of younger entrants) (Appendix Table C7.1). However, in contrast to diabetes, non-Indigenous entrants were more likely than Indigenous entrants to have ever been told they had cancer (4% and 1% respectively). Cancer was current for 28% of those ever diagnosed (1% of all entrants).

# 8 Activity and health changes

## 8.1 Self-assessed physical health

This section presents the results of NPHDC questions on self-assessed physical health. Self-assessed health status is usually a generic health question, but the NPHDC splits it into physical and mental health components, in recognition of the high proportion of prisoners with mental health issues. For self-assessed mental health results, please see section 4.4.

**INDICATOR:** Proportion of prison entrants who rate their physical health as generally good or better: 73%

**INDICATOR:** Proportion of prison dischargees who rate their physical health as generally good or better: 78%

Dischargees gave more positive self-assessments of their general health than entrants. More than three-quarters (78%) of dischargees rated their physical health as 'good' or better, compared with 73% of entrants (Table 8.1). At the other end of the rating scale, 25% of entrants rated their general health as 'fair' or 'poor' compared with 16% of dischargees. While these are not the same individuals being asked before and after prison, the results may indicate that prisoners perceive their general health to be better after than before prison.

Among both groups, more favourable ratings were provided by young male prisoners, and less favourable ratings by older female prisoners.

Male dischargees were more likely than female dischargees to rate their health as 'very good' or 'excellent' (40% compared with 24%) (Figure 8.1). The youngest age group (18–24) was more likely than the oldest (45 and over) to rate their health as 'very good' or 'excellent' (59% compared with 30%) (Figure 8.2).

About 20% of female dischargees compared with 16% of male dischargees rated their health as 'fair' or 'poor'. Older dischargees were more likely than younger dischargees to also rate themselves 'fair' or 'poor' (20% of those aged 35 or over, compared with 6% of those aged18–24). A higher proportion of non-Indigenous dischargees than Indigenous dischargees rated themselves poorly (19% compared with 13%) (Figure 8.3).

Similar patterns were found among entrants, with 37% of men compared with 19% of women rating themselves as 'very good' or 'excellent', and the youngest entrants (44% of those aged 18–24 compared with 25% of those aged at least 45) most likely to provide those same favourable ratings. Conversely, almost one-third (32%) of female entrants compared with 24% of men, and 40% of the oldest entrants compared with 16% of the youngest, rated their general health as 'fair' or 'poor'. (Details of these data are available in Appendix Tables C8.1 and C8.2.)

**Table 8.1:** Prison entrants and dischargees, self-assessed physical health, 2015

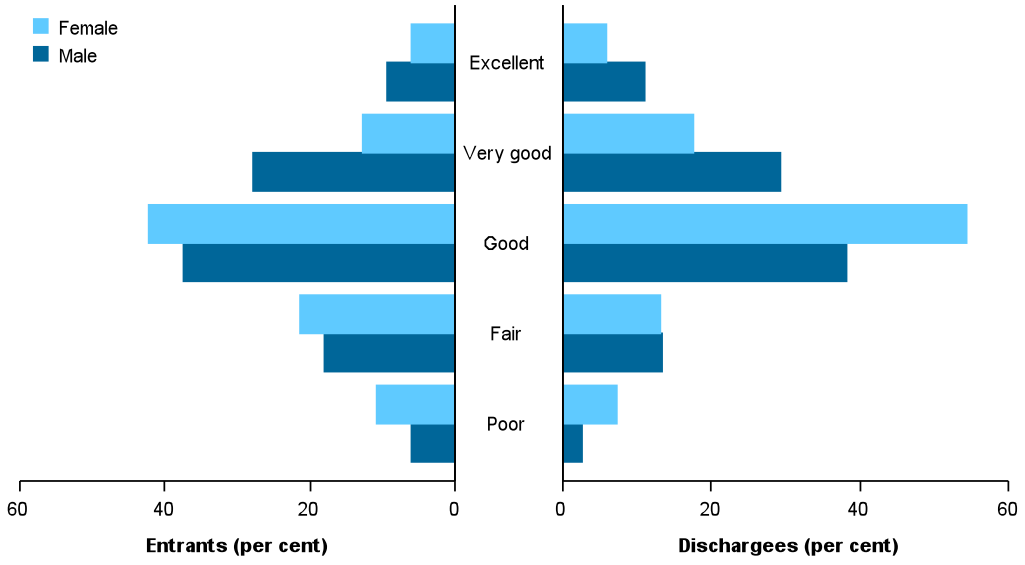
| | Prison entrants | | Prison dischargees | |
|---|---|---|---|---|
| | Number | Per cent | Number | Per cent |
| Excellent | 90 | 9 | 45 | 10 |
| Very good | 259 | 26 | 120 | 27 |
| Good | 385 | 38 | 178 | 41 |
| Fair | 186 | 18 | 58 | 13 |
| Poor | 68 | 7 | 15 | 3 |
| **Total** | **1,011** | **100** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 23 prison entrants and 21 prison dischargees for whom self-assessed health status was unknown.
3. Prison entrant and prison dischargee data should not be directly compared because they do not relate to the same individuals. See Section 1.4 for details.
4. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Entrant and Discharge forms, 2015 NPHDC.

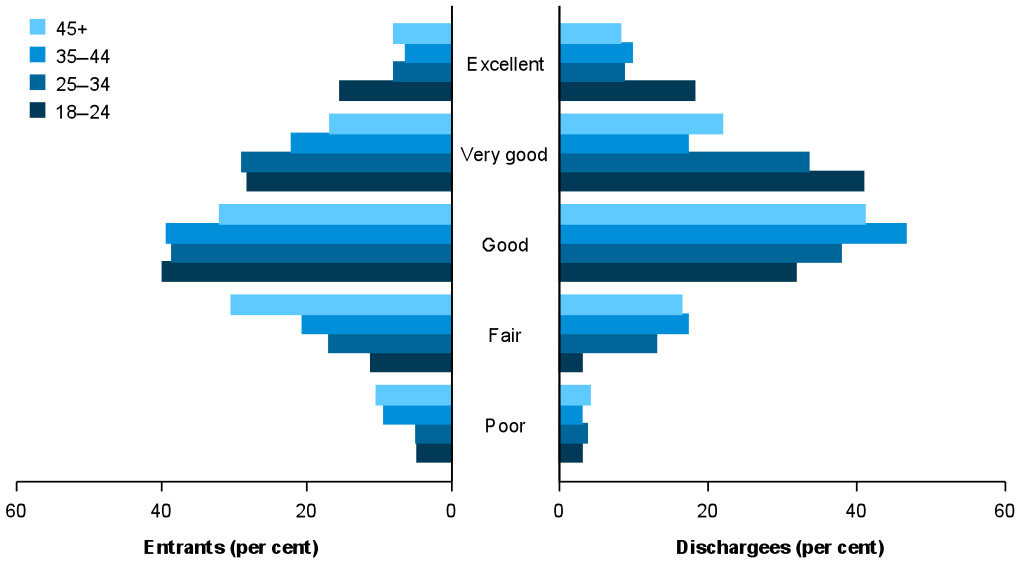
**Figure 8.1:** Prison entrants and dischargees, self-assessed physical health, by sex, 2015




*Note:* Excludes New South Wales which did not provide dischargee data.

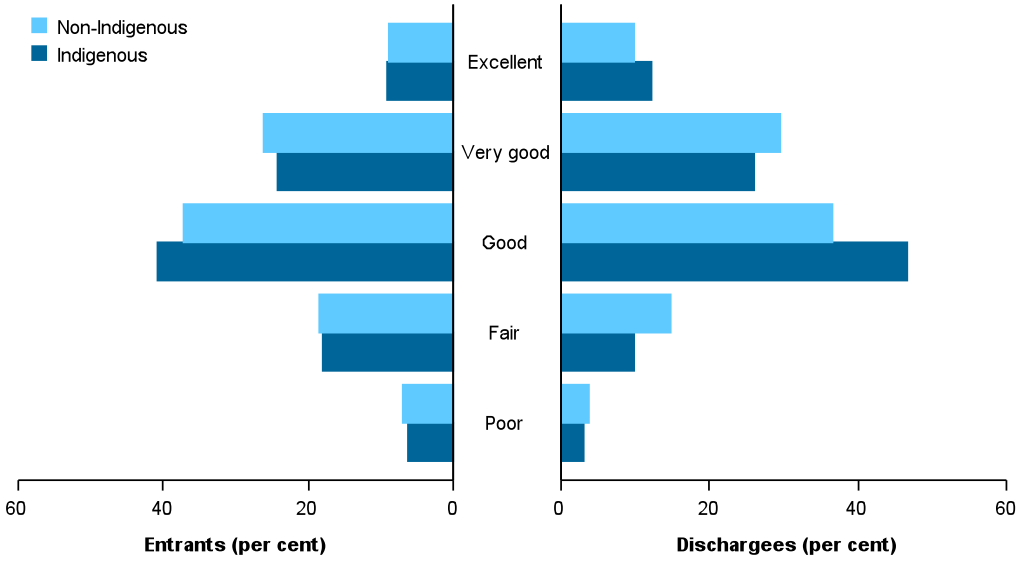
*Sources:* Entrant and Dischargee forms, 2015 NPHDC.

**Figure 8.2:** Prison entrants and dischargees, self-assessed physical health, by age group, 2015




*Note:* Excludes New South Wales which did not provide dischargee data.
*Sources:* Entrant and Dischargee forms, 2015 NPHDC.

**Figure 8.3:** Prison entrants and dischargees, self-assessed physical health, by Indigenous status, 2015



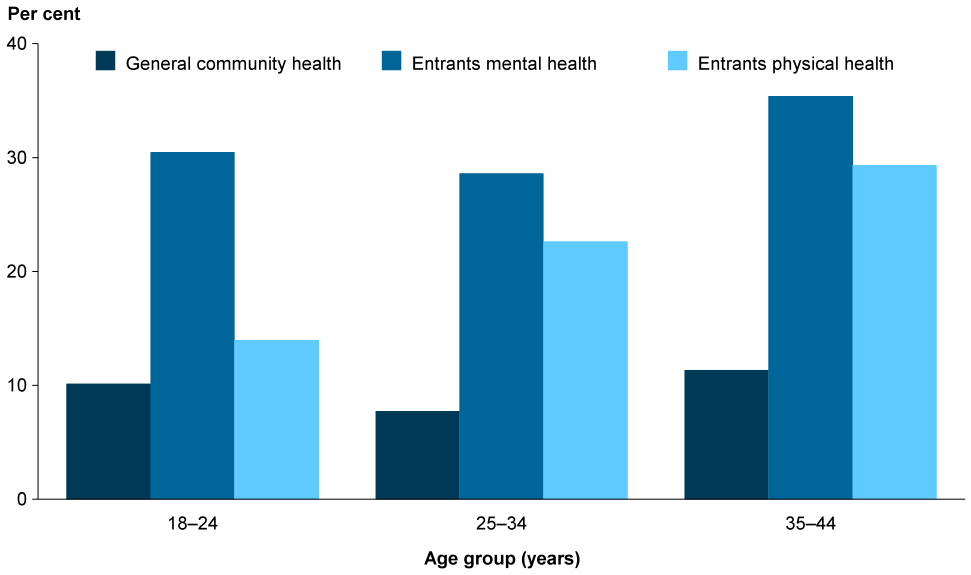

*Note:* Excludes New South Wales which did not provide dischargee data.
*Source:* Entrant and Dischargee forms, 2015 NPHDC.

## Comparison with general community

In this section, self-assessed health status of prison entrants is compared with that of their general community counterparts, the latter taken from the Australian Health Survey (AHS) 2011–12 data (ABS 2012a). As stated earlier in this report, while the AHS asks one question regarding self-assessed health generally, the NPHDC has mental and physical health as 2 separate questions. The results of all 3 questions are presented in Figure 8.4, for ratings of 'fair' or 'poor', for non-Indigenous Australians only for age groups 18–24, 25–34 and 35–44. This comparison is restricted to non-Indigenous entrants only because the Australian Health Survey data does not contain sufficient Indigenous data.

Non-Indigenous prison entrants were much more likely than their general community counterparts to rate both their mental and physical health status as fair/poor (Figure 8.4). Of the three age groups entrants aged 35–44 were most likely to rate both their mental (35%) and physical health (29%) status as fair/poor, compared to their general community counterparts (11%).

**Figure 8.4:** Non-Indigenous prison entrants and general community, self-assessed physical health and mental health as fair/poor, by age group, 2015




*Sources:* Entrant form, 2015 NPHDC; ABS 2012a, Table 12.3.

Non-Indigenous female entrants aged 25–44 (38–40%) were more likely to report having fair/poor physical health than non-Indigenous male entrants (21–28%) or people in the general community (23–29%) in the same age range. Non-Indigenous entrants were less likely to report excellent physical health than people in the general community (7–17% compared with 19–22%), with female entrants (0–8%) being much less likely to report excellent physical health than their general community counterparts (15–22%). Non-Indigenous female entrants were more likely than women in the general community to rate their physical health as good (38–39% compared with 27–35%).

Similarly, non-Indigenous women (39–56%) were more likely than men (27–36%) to report fair or poor mental health. Male entrants were more likely to report very good mental health than women (17–28% compared with 6–18%). Older men aged at least 35 were more likely to report fair/poor mental health than men less than 35 years old (35–36% compared with 27–28%). (Detailed data for Figure 8.4 are available in Appendix Tables C8.3, C8.4 and C8.5.)

## 8.2 Activity and weight changes

Dischargees were asked to report on changes in their weight and activity levels since being in prison, including whether or not they were trying to gain weight while in prison.

**INDICATOR:** Proportion of prison dischargees who report that while in prison their level of physical activity increased or stayed the same: 73%

More than one-half of all dischargees thought that their activity levels changed while in prison, compared with when they were in the community (Table 8.2). About one-third (34%) reported an increase, while 20% reported a decrease, and 39% thought there had been no change. The proportions of dischargees reporting a decrease were similar across all groups, but there were differences among the groups in reports of an increase in activity levels. The most noticeable difference was by age, with being more active more common among younger than older dischargees (41% of those aged under 25, 27% of those aged 45 or more). An increase in activity was reported more often among Indigenous (41%) than non-Indigenous (32%) dischargees, and was slightly more likely for women (38%) than men (33%).

**Table 8.2:** Prison dischargees, changes in physical activity level in prison, by sex, age group and Indigenous status, 2015

| | More active | | Same level | | Less active | | Total prison dischargees |
|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number |
| **Sex** | | | | | | | |
| Male | 123 | 33 | 145 | 39 | 72 | 20 | 369 |
| Female | 26 | 38 | 26 | 38 | 15 | 22 | 68 |
| **Age group (years)** | | | | | | | |
| 18–24 | 27 | 41 | 20 | 30 | 14 | 21 | 66 |
| 25–34 | 58 | 36 | 66 | 41 | 30 | 19 | 161 |
| 35–44 | 44 | 33 | 51 | 38 | 28 | 21 | 133 |
| 45+ | 20 | 27 | 32 | 44 | 13 | 18 | 73 |
| **Indigenous status** | | | | | | | |
| Indigenous | 54 | 41 | 39 | 30 | 30 | 23 | 131 |
| Non-Indigenous | 94 | 32 | 122 | 42 | 56 | 19 | 292 |
| **Total** | **149** | **34** | **171** | **39** | **87** | **20** | **437** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 30 dischargees whose changes in activity levels were unknown, 4 whose age was unknown and 14 whose Indigenous status was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Dischargee form, 2015 NPHDC.

**INDICATOR:** Proportion of prison dischargees who report that their weight increased or stayed the same while in prison: 78%

Consistent with the results for changes in activity levels, more than one-half (55%) of dischargees reported changes in their weight since being in prison (Table 8.3). An increase in weight was reported by 43% (compared with 57% in 2012), and a decrease by 12%. Just over one-third (35%) reported no change in their weight.

Reports of weight change fluctuated with age. The youngest dischargees (aged less than 25) were the least likely to report an increase in weight (33%), and the most likely to report a decrease (18%). The next age group, 25–34 years, were the most likely to report an increase (53%) and the least likely to report a decrease (9%). A slightly higher proportion of Indigenous (48%) than non-Indigenous (43%) dischargees reported an increase in weight, as did slightly more women (47%) than men (42%).

**Table 8.3:** Prison dischargees, weight changes in prison, by sex, age group and Indigenous status, 2015

| | Increased | | Stayed the same | | Decreased | | Total prison dischargees |
|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number |
| **Sex** | | | | | | | |
| Male | 156 | 42 | 130 | 35 | 43 | 12 | 369 |
| Female | 32 | 47 | 24 | 35 | 9 | 13 | 68 |
| **Age group (years)** | | | | | | | |
| 18–24 | 22 | 33 | 23 | 35 | 12 | 18 | 66 |
| 25–34 | 85 | 53 | 49 | 30 | 14 | 9 | 161 |
| 35–44 | 56 | 42 | 52 | 39 | 15 | 11 | 133 |
| 45+ | 25 | 34 | 27 | 37 | 10 | 14 | 73 |
| **Indigenous status** | | | | | | | |
| Indigenous | 63 | 48 | 40 | 31 | 14 | 11 | 131 |
| Non-Indigenous | 125 | 43 | 102 | 35 | 37 | 13 | 292 |
| **Total** | **188** | **43** | **154** | **35** | **52** | **12** | **437** |

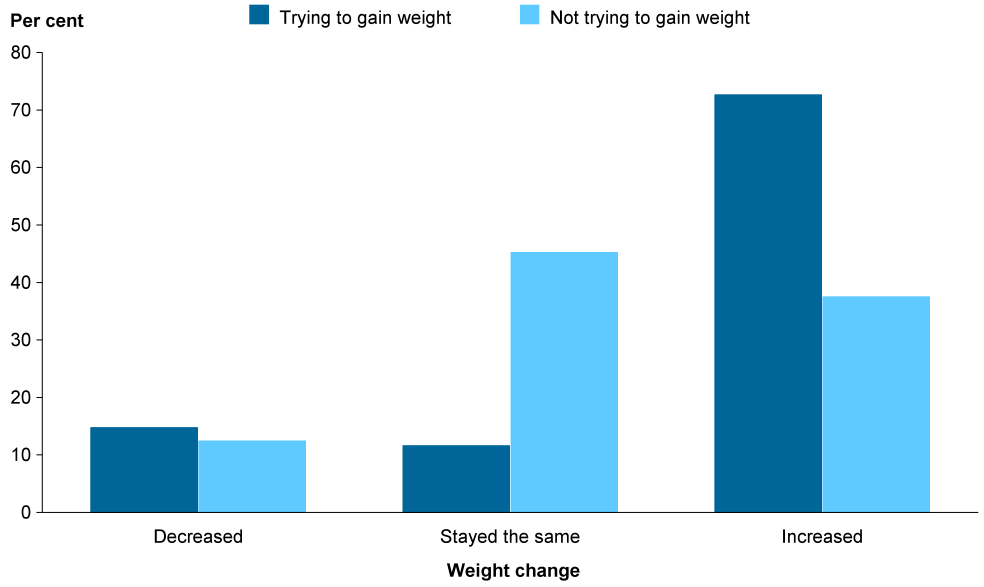
*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 43 dischargees whose weight change was unknown, 4 whose age was unknown and 14 whose Indigenous status was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Dischargee form, 2015 NPHDC.

An increase in weight may not necessarily be related to a decrease in activity levels. Some prisoners intend to gain weight while in prison through an increase in muscle. Just over one-fifth of dischargees (22%) reported trying to gain weight in prison, and of these, 73% did so (Figure 8.5). Those dischargees most likely to be trying to gain weight in prison were men (23% compared with 13% of women), younger (36% of those aged under 25, compared with 14% of those aged 45 or over), and Indigenous (30% compared with 19% of non-Indigenous dischargees). (Detailed data for Figure 8.5 are available in Appendix Table C8.6.)

**Figure 8.5:** Prison dischargees, actual and intended weight change, 2015




*Note:* Excludes New South Wales which did not provide dischargee data.
*Source:* Dischargee form, 2015 NPHDC.

## 8.3 Health changes

In a USA study of prison dischargees, over one-half (55%) thought their general health had improved since being in prison, and this was associated with perceiving their health status prior to prison as being poor (Yu et al. 2015). Dischargees were asked to rate changes in their overall physical health since being in prison.

**INDICATOR:** Proportion of prison dischargees reporting that their physical health improved or stayed the same in prison: 83%

Indigenous dischargees (37%) were more likely than non-Indigenous (24%) dischargees to report that their physical health was a lot better since being in prison, and men (28%) were slightly more likely than women (24%) to do so (Table 8.4). Improvements in physical health were reported generally more often by younger than older dischargees, with 53–60% of those aged under 35 reporting either a little or a lot of improvement, compared with 37% of the oldest dischargees (aged at least 45).

A slightly higher proportion of female (15%) than male (11%) dischargees reported a worsening of their physical health. The likelihood of reporting a deterioration in physical health fluctuated with age from a low of 9% of those aged 25–34 years to a high of 14% of the oldest dischargees (aged at least 45).

**Table 8.4:** Prison dischargees, changes to physical health while in prison, 2015

| | A lot better | | A little better | | Stayed the same | | A lot or a little worse | | Total prison dischargees |
|---|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent | No. |
| **Sex** | | | | | | | | | |
| Male | 102 | 28 | 90 | 24 | 115 | 31 | 39 | 11 | 369 |
| Female | 16 | 24 | 16 | 24 | 23 | 34 | 10 | 15 | 68 |
| **Age group (years)** | | | | | | | | | |
| 18–24 | 19 | 29 | 16 | 24 | 20 | 30 | 8 | 12 | 66 |
| 25–34 | 49 | 30 | 48 | 30 | 43 | 27 | 14 | 9 | 161 |
| 35–44 | 34 | 26 | 30 | 23 | 42 | 32 | 17 | 13 | 133 |
| 45+ | 16 | 22 | 11 | 15 | 30 | 41 | 10 | 14 | 73 |
| **Indigenous status** | | | | | | | | | |
| Indigenous | 49 | 37 | 32 | 24 | 29 | 22 | 16 | 12 | 131 |
| Non-Indigenous | 69 | 24 | 73 | 25 | 98 | 34 | 33 | 11 | 292 |
| **Total** | **118** | **27** | **106** | **24** | **138** | **32** | **49** | **11** | **437** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 dischargees whose age was unknown, 14 whose Indigenous status was unknown, and 26 whose change to physical health was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

# 9 Aspects of women's health

Women constitute a special group within prisons due to factors specific to their sex. This section focuses on two aspects of women's reproductive health—pregnancy and women's cancer screening.

## 9.1 Pregnancies

Pregnancy for younger women is associated with poor health outcomes for both mother and baby. A longitudinal study of Australian women aged 15–24 years found that those who had ever been pregnant had lower levels of education, higher levels of tobacco and cannabis dependence, and risky alcohol consumption, and a higher risk of depression compared with those who had never been pregnant (Olsson et al. 2014). Adolescent pregnancy (before 20 years of age) is associated with higher risks of poor outcomes including low birthweight, premature delivery, eclampsia (maternal seizures associated with high blood pressure during pregnancy), systemic infections and severe neonatal conditions (Ganchimeg et al. 2014).

During 2012, the average age of women who gave birth was 30.1, with 3.6% being aged less than 20 years, and 13.6% aged 20–24. Indigenous women giving birth were on average younger, with more than one-half (52%) aged under 25 years, compared with 16% of non-Indigenous women. The average age of first-time mothers in 2012 was 28.4 years (Hilder et al. 2014).

Little research has been done on the pregnancy intentions of women who have been in prison. One Australian study shows that recently released prisoners had rates of prescribed contraceptive medication of around one-quarter the levels of women in the general Australian population in the same age group (Sutherland et al. 2015).

### Entrants

Female prison entrants were asked if they had ever been pregnant, including live births, still births, miscarriages and terminations.

**INDICATOR:** Proportion of female prison entrants who have ever been pregnant: 84%

**INDICATOR:** Mean age at first pregnancy for female prison entrants: 19 years.

It was usual for female prison entrants to have ever been pregnant (84% overall) (Appendix Table C9.1). Of the youngest entrants aged under 25, 69% had been pregnant, increasing to 90% of the oldest entrants aged at least 45 years. A higher proportion of non-Indigenous (87%) than Indigenous (79%) entrants had experienced pregnancy; however Indigenous entrants were likely to have been slightly younger on average at their first pregnancy (18 years) than non-Indigenous entrants (19 years).

### Prisoners in custody

Pregnant women in prison have been found to have significant mental health issues, including high rates of depression and anxiety, with little change in smoking and alcohol consumption compared with before the pregnancy (prior to imprisonment) (Mukherjee et al. 2014). While imprisonment during pregnancy provides an opportunity for health interventions, these may not be sufficient to mitigate against poorer maternal and perinatal outcomes, given the existing disadvantages in this population of women prisoners, including mental health issues, drug and alcohol disorders and high rates of smoking during pregnancy (Walker et al. 2014).

**INDICATOR:** Rate of pregnant prisoners in custody during 2014: 4.6 per 100 prisoners received.

During the 2014 year, there were 179 pregnant prisoners in custody. This represents approximately 4.6% of the 3,919 female prisoners received into prison during that year. (These data exclude New South Wales which did not provide data for this indicator.)

### Dischargees

**INDICATOR:** Proportion of female prison dischargees who were pregnant while in prison: 3% of female prison dischargees.

Two of the 68 female dischargees reported being pregnant while in prison, and neither gave birth during their imprisonment. No female dischargees reported having a child live with them in prison. (These data exclude New South Wales as data were not provided for NSW dischargees.)

## 9.2 Cancer screenings

The National Cervical Screening Program targets women aged 20–69 years for early detection of cervical cancer, recommending a 'Pap test' every 2 years. In 2013–14, 57% of women in this target group had a 'Pap test' within the recommended 2 years (AIHW 2014h).

Women aged 40 and over are eligible for free 2-yearly mammograms in Australia, for early detection of breast cancer. During 2013–14, 54% of women in the target age group of 50–69 years had a mammogram through BreastScreen Australia (AIHW 2014e).

## Entrants

**INDICATOR:** Proportion of female prison entrants who have had a cervical cancer screening in the last two years: 56%

More than one-half (56%) of female entrants reported having had a cervical cancer screening within the recommended last 2 years, with no difference between Indigenous and non-Indigenous entrants (see Appendix Table C9.3). This rate is similar to the general Australian community, unlike in 2012, when 43% of entrants reported having a scheduled screening.

## Dischargees

**INDICATOR:** Proportion of female prison dischargees who had a cervical cancer screening in prison: 24%

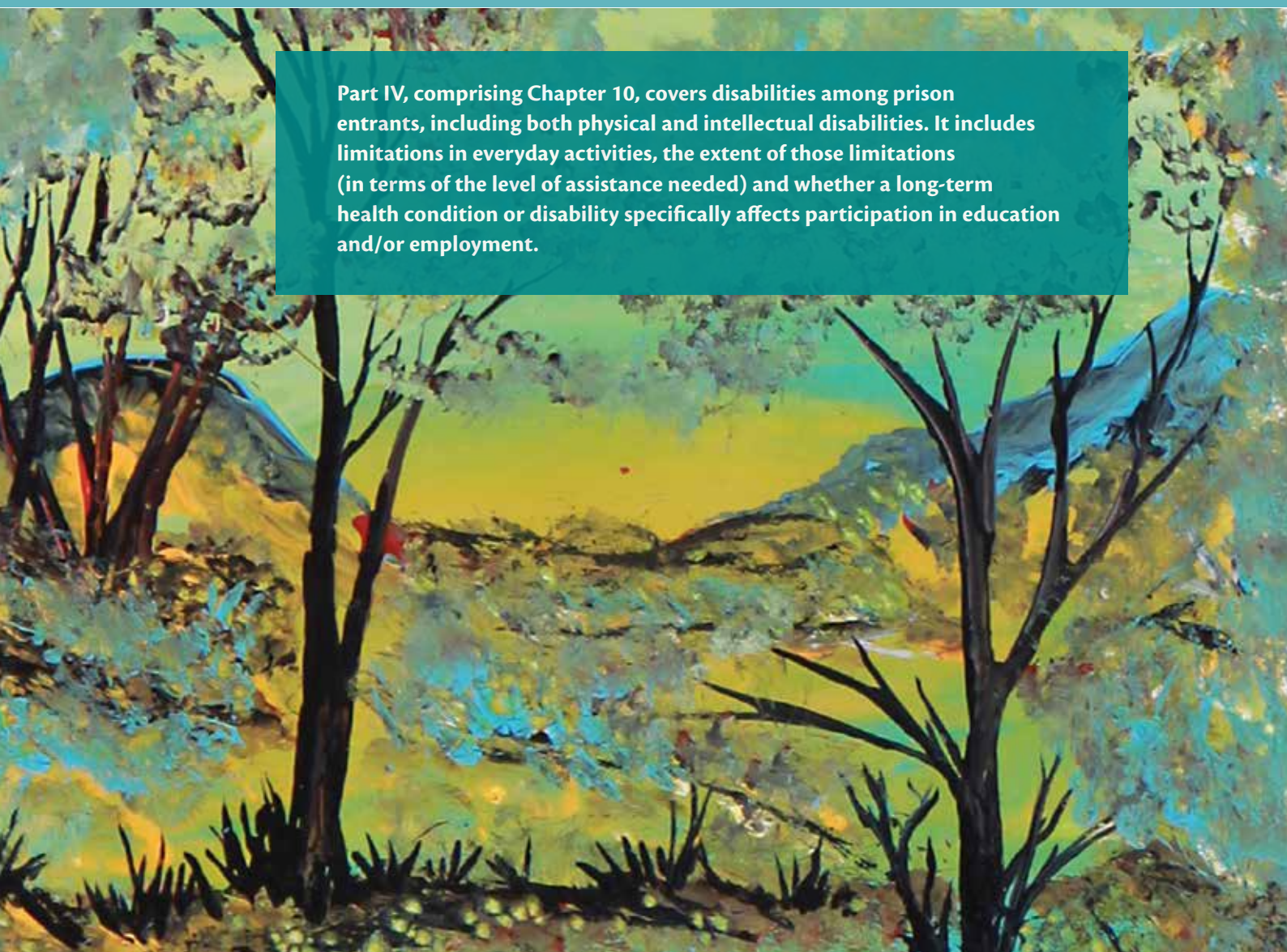
Female prisoners may have a routine (two-yearly) cervical cancer screening due while they are in prison. Almost one-quarter (24%) of female dischargees reported having a cervical cancer screening while in prison (see Appendix Table C9.4). (These data exclude New South Wales as data were not provided for NSW dischargees.)

**INDICATOR:** Number of female prison dischargees who had a mammogram in prison: One of 68

Only one female dischargee (of 68) reported having a mammogram screening for breast cancer while in prison. (These data exclude New South Wales as data were not provided for NSW dischargees.)

# IV

# Part IV: Disability



**Part IV, comprising Chapter 10, covers disabilities among prison entrants, including both physical and intellectual disabilities. It includes limitations in everyday activities, the extent of those limitations (in terms of the level of assistance needed) and whether a long-term health condition or disability specifically affects participation in education and/or employment.**

# 10 Disability

For the first time in the 2015 collection, the NPHDC included data on the disabilities of prison entrants. These data were collected in the NPHDC using the AIHW's 'Standardised Disability Flag', which is a set of questions to identify people with disabilities or long-term health conditions who experience difficulties and/or need assistance in various areas of their lives. The Flag is designed to be used in all mainstream service areas such as health, education, housing, transport, and community services, and uses a functional/needs assessment approach across specified activity and participation life areas (AIHW 2014i).

Long-term health conditions are those that have lasted, or are expected to last, for 6 months or more. Examples of long-term health conditions that might restrict a person's everyday activities include severe asthma, epilepsy, mental health conditions, hearing loss, arthritis, depression, autism, kidney disease, chronic pain, speech impairment or stroke. For this Flag, a long-term health condition or disability does not have to be medically diagnosed, but rather is self-reported from the perspective of the respondent.

The items from the Flag included in the NPHDC are 'activity and participation need for assistance cluster', 'education participation restriction flag' and 'employment participation restriction flag'. The 'activity and participation need for assistance cluster' asks respondents if they need help/supervision, have difficulty with or use aid/equipment or medications in each of the following 8 areas: self-care, mobility, communication, learning and applying knowledge, managing things around the home, managing tasks and stressful situations, personal relationships, and community life.

There are different causes of disability, including cognitive (intellectual) and physical. Adults with intellectual disability are significantly over-represented among prisoners, particularly for Indigenous prisoners. An Australian study looking at cognitive disability found that up to 12% of the prison population has intellectual disability, and up to 30% has borderline intellectual disability (Baldry et al. 2013). Those with intellectual disability are more likely to be male, Indigenous, have less than 10 years formal schooling, unstable accommodation immediately prior to imprisonment, a history of juvenile detention, poor self-assessed health status, depression and substance dependence (Dias et al. 2013).

Currently, little is known about prisoners with physical disabilities.

**INDICATOR:** Proportion of prison entrants with limitations in activities or restrictions in education or employment: 30%

Long-term health conditions or disabilities limiting activities (24%), or restricting participation in education (12%) or employment (16%), were reported by 30% of prison entrants, with some affected in more than one of those areas (Table 10.1).

Women were more likely than men to have activity limitations (34% compared with 23%).

Activity limitations and employment restrictions were more common among non-Indigenous entrants (26% and 18% respectively) than Indigenous entrants (21% and 12% respectively). Across each of the areas, limitations/restrictions increased with age, and 45% of the oldest entrants reported having some form of limitation/restriction.

**Table 10.1:** Prison entrants, activity limitations, and restrictions in employment and education, 2015 (per cent)

| | Activity | Employment | Education | Any limitation/ restriction | None/ unknown | Total |
|---|---|---|---|---|---|---|
| **Sex** | | | | | | |
| Male | 23 | 16 | 12 | 29 | 71 | 100 |
| Female | 34 | 19 | 12 | 37 | 63 | 100 |
| **Age group (years)** | | | | | | |
| 18–24 | 16 | 9 | 10 | 21 | 79 | 100 |
| 25–34 | 22 | 12 | 11 | 26 | 74 | 100 |
| 35–44 | 30 | 19 | 14 | 35 | 65 | 100 |
| 45+ | 34 | 33 | 17 | 45 | 55 | 100 |
| **Indigenous status** | | | | | | |
| Indigenous | 21 | 12 | 12 | 25 | 75 | 100 |
| Non-Indigenous | 26 | 18 | 12 | 32 | 68 | 100 |
| **Total (number)** | **247** | **163** | **123** | **302** | **709** | **1,011** |
| **Total (per cent)** | **24** | **16** | **12** | **30** | **70** | **100** |

*Notes*

1. Totals include 5 entrants whose age was unknown, and 5 whose Indigenous status was unknown.
2. In New South Wales, the question regarding limitations in managing tasks around the home was not asked.
3. There were 23 entrants whose disability status could not be ascertained from the responses (unknown).
4. Entrants may have more than one activity limitation and/or employment or education participation restrictions, so the proportions or numbers may not sum to 'any limitation/restriction'.
5. Detailed data for this table are available in Appendix Table C10.1.
6. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrants form, 2015 NPHDC.

In the 'activity and participation need for assistance cluster' of questions, responses were assigned to categories for the extent of limitations:

- **Profound/severe**—Always or sometimes need help and/or supervision for at least one activity
- **Moderate**—Have difficulty but don't need help or supervision for at least one activity
- **Mild**—Don't have difficulty but use aid/equipment/medications for at least one activity
- **None**—Have no difficulty with any of the activities.

Most entrants with an activity limitation rated their disability as moderate (15% overall), (Table 10.2). Activity limitations were profound/severe for 6% of entrants, and mild for 3%. The oldest entrants were the most likely to have severe activity limitations (12% compared with 4% of the youngest), with women and entrants aged 34–44 years being the sex/age groups respectively most likely to have moderate limitations (21% each).

**Table 10.2:** Prison entrants, extent of activity limitations, 2015 (per cent)

| | Profound/severe | Moderate | Mild | None | Total |
|---|---|---|---|---|---|
| Sex | | | | | |
| Male | 6 | 14 | 3 | 75 | 100 |
| Female | 7 | 21 | 5 | 64 | 100 |
| Age group (years) | | | | | |
| 18–24 | 4 | 10 | 2 | 82 | 100 |
| 25–34 | 6 | 13 | 3 | 76 | 100 |
| 35–44 | 7 | 21 | 3 | 68 | 100 |
| 45+ | 12 | 17 | 5 | 63 | 100 |
| Indigenous status | | | | | |
| Indigenous | 5 | 12 | 4 | 78 | 100 |
| Non-Indigenous | 7 | 16 | 3 | 72 | 100 |
| **Total (number)** | **65** | **151** | **31** | **742** | **1,011** |
| **Total (per cent)** | **6** | **15** | **3** | **73** | **100** |

*Notes*

1. Totals include 5 entrants whose age was unknown, 5 whose Indigenous status was unknown, and 22 for whom the extent of activity limitations was unknown.
2. In New South Wales, the question regarding limitations in managing tasks around the home was not asked.
3. Detailed data are available in Appendix Table C10.2.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrants form, 2015 NPHDC.

**INDICATOR:** Proportion of prison entrants with profound/severe core activity limitations: 2%

Limitations in the areas of self-care, mobility and/or communication are combined to form the 'core activity limitation' indicator. The assigning of categories for this is the same as the overall activity limitations, with the highest level of support required for any one of these activities determining the core activity limitation level.

Profound or severe core activity limitations were reported by 2% of entrants, moderate by 6% and mild by 2%. The oldest entrants (aged 45 years and over) were the most likely to be affected by severe (6%) or moderate (11%) limitations on self-care, mobility and/or communication. Moderate limitations to core activities also affected 10% of female entrants (see Appendix Tables C10.3 and C10.4).

## Comparisons with the general community

Almost two-fifths (38%) of prison entrants aged 35-54 had an activity limitation or participation restriction, compared with 14% of their general community counterparts (Table 10.3). However, opposite patterns were found by Indigenous status. Among Indigenous 35–54 year olds, those in the general community were more likely than prison entrants to have a limitation or restriction (38% and 29% respectively). For non-Indigenous 35–54 year olds, the opposite was true, with 14% of the general population having a limitation or restriction compared with 40% of prison entrants.

**Table 10.3:** Prison entrants and general population aged 35–54, any disability (per cent)

| Indigenous status | General Australian population | Prison entrants |
|---|---|---|
| Indigenous | 38 | 29 |
| Non-Indigenous | 14 | 40 |
| **Total** | **14** | **38** |

*Sources:* ABS 2014a, Table 1; Entrants form, 2015 NPHDC.

For non-Indigenous prison entrants aged 35–54, they were more likely to have only a schooling or employment restriction than their general population counterparts (4% compared with 2%) (Table 10.4). While similar proportions of prison entrants (2%) and those in the general community (3%) had a profound or severe core activity limitation, entrants were more likely than the general community to have a mild or moderate limitation (11% compared with 7%).

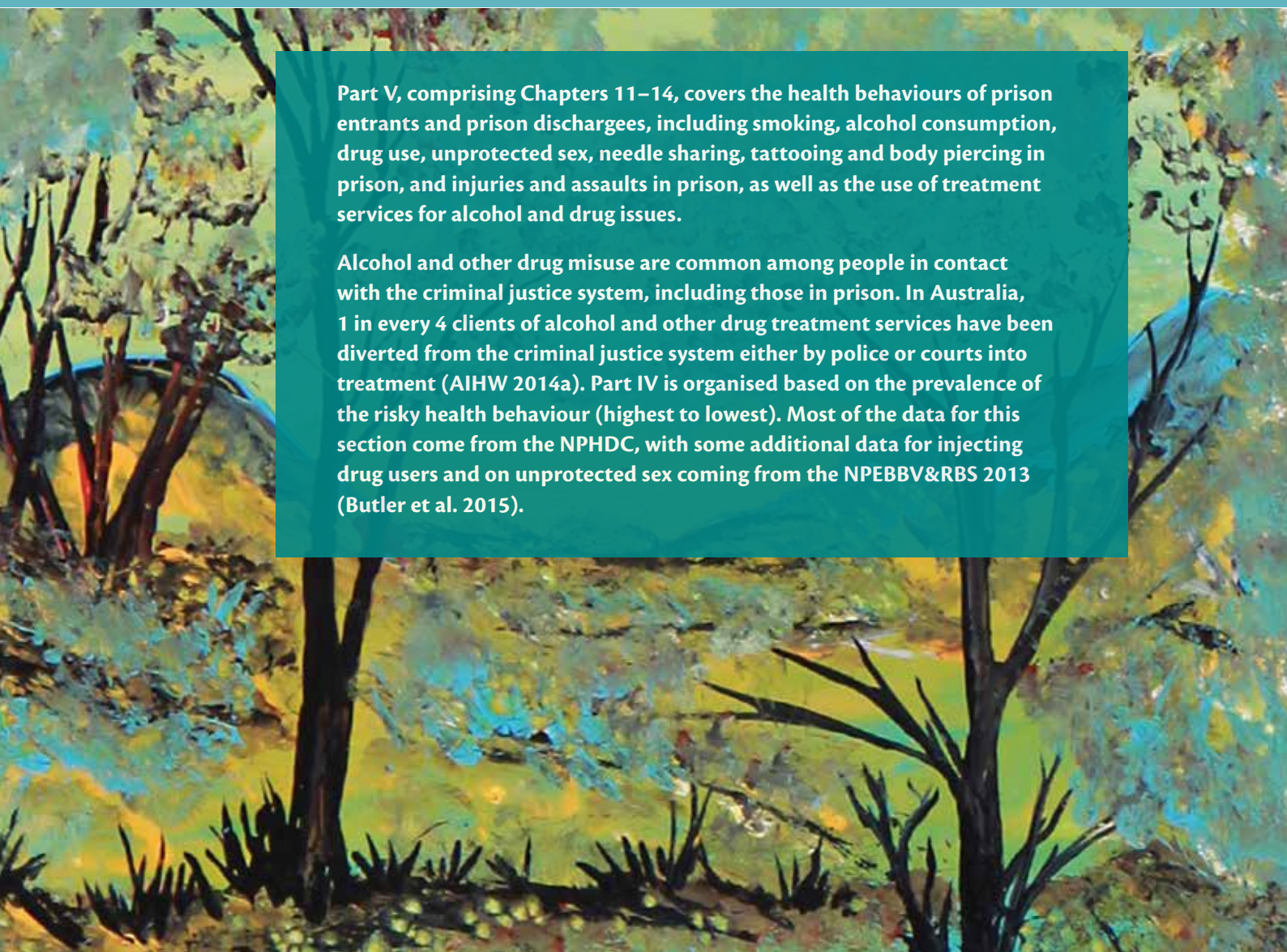
**Table 10.4:** Non-Indigenous prison entrants and general population aged 35–54, any disability (per cent)

| Disability | General non-Indigenous population | Non-Indigenous prison entrants |
|---|---|---|
| Profound/severe core activity limitation | 3 | 2 |
| Mild/moderate core activity limitation | 7 | 11 |
| Schooling or employment restriction only | 2 | 4 |

*Sources:* ABS 2014a, Table 2; Entrants form, 2015 NPHDC.

V

# Part V: Risky behaviours



Part V, comprising Chapters 11–14, covers the health behaviours of prison entrants and prison dischargees, including smoking, alcohol consumption, drug use, unprotected sex, needle sharing, tattooing and body piercing in prison, and injuries and assaults in prison, as well as the use of treatment services for alcohol and drug issues.

Alcohol and other drug misuse are common among people in contact with the criminal justice system, including those in prison. In Australia, 1 in every 4 clients of alcohol and other drug treatment services have been diverted from the criminal justice system either by police or courts into treatment (AIHW 2014a). Part IV is organised based on the prevalence of the risky health behaviour (highest to lowest). Most of the data for this section come from the NPHDC, with some additional data for injecting drug users and on unprotected sex coming from the NPEBBV&RBS 2013 (Butler et al. 2015).

# 11 Tobacco smoking

Tobacco smoking is a major risk factor for coronary heart disease, stroke, peripheral vascular disease, cancer and other diseases and conditions, and is the single most preventable cause of ill-health and death, contributing to more deaths and hospitalisations than alcohol and illicit drug use combined (AIHW 2012a). It is the major cause of cancer, accounting for about 20–30% of cancer cases (AIHW & AACR 2012).

Smoking is common in groups over-represented in the prison population (AIHW 2013b). Smoking is much higher among people from low socioeconomic groups, Aboriginal and Torres Strait Islanders, people with mental illness (IGCD 2013), people with substance use disorders, and the homeless (Twyman et al. 2014).

Some aspects of the prison environment suggested as being associated with the likelihood that prisoners will smoke are: stress, boredom, lack of social support, high rates of smoking among both prisoners and staff, shared cells, smoking as a way of initiating social contact within prison, and tobacco as both a currency and control measure in prisons (Mackay 2015).

While smoking has been decreasing among the general community in Australia, the same is not true of prisoners, whose smoking rates have remained high (AIHW 2013b). The National Tobacco Strategy 2012–2018 recognises the high levels of smoking by prisoners, and that prisons are an important setting for tobacco control efforts. The Strategy recommends that prisoners be provided with greater smoking cessation support, including access to nicotine replacement therapy and other pharmacotherapies (IGCD 2013).

## 11.1 Smoking status prior to prison

### Entrants

**INDICATOR:** Proportion of prison entrants who currently smoke tobacco: 74%

**INDICATOR:** Mean age at which prison entrants smoked their first full cigarette: 14 years.

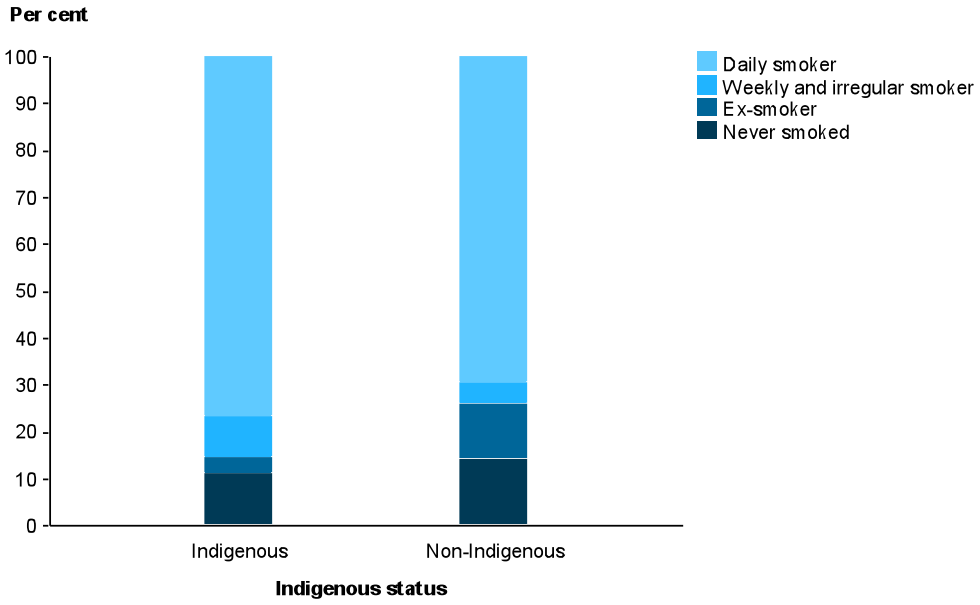
Unlike in the general community, smoking is still normalised and commonplace among prisoners. Almost three-quarters (74%) of prison entrants were current smokers and 86% had smoked at some time in their lives. The 74% figure represents a decrease since the 2012 NPHDC, when 84% of prison entrants were current smokers. However, at least some of this decrease may be due to recently introduced smoking bans in prisons (see section 11.2), with 78% of entrants into prisons allowing smoking saying they are current smokers, compared with 66% of entrants into prisons with smoking bans. Prisoners are not able to choose whether they are put into a prison that allows smoking.

Indigenous entrants were more likely than non-Indigenous entrants to be current smokers (82% and 72% respectively). Smoking decreased steadily with age, from 81% of the entrants aged under 25, to 58% of entrants aged 45 or more. (Details of these data are available in Appendix Table C11.1.)

The average age smoking began was 14.1 years, and was slightly younger for women entrants (13.6) and Indigenous entrants (13.7).

Indigenous entrants were more likely than non-Indigenous entrants to report being daily smokers (73% compared with 68%) (Figure 11.1). Indigenous entrants were twice as likely as non-Indigenous entrants to be weekly and irregular smokers (8% and 4% respectively), while non-Indigenous entrants were three times as likely as Indigenous entrants to be ex-smokers (12% and 4% respectively). A slightly higher proportion of non-Indigenous entrants than Indigenous entrants reported having never smoked (14% compared with 11%). (Detailed data for Figure 11.1 are available in Appendix Table C11.2.)

**Figure 11.1:** Prison entrants, smoking status, by Indigenous status, 2015




*Source:* Entrant form, 2015 NPHDC.

## Dischargees

**INDICATOR:** Proportion of prison dischargees who smoked tobacco on entry to prison: 73%

Just under three-quarters (73%) of dischargees reported being tobacco smokers upon entry to prison, a decrease of 7% since 2012 (see Table 11.3 in section 11.2). Indigenous dischargees (80%) were more likely than non-Indigenous dischargees (73%) to report smoking on entry to prison, as were men (74% compared with 69% of women). Being a smoker on entry to prison was less common among the oldest and youngest dischargees (63% of those aged 45 or more, 68% of those aged under 25), compared with 74–79% of those aged 25–44 years. The rate of smoking upon entry to prison for the youngest dischargees has decreased from 87% to 68% since 2012. It is not clear from the current data whether or not this represents the beginning of a trend away from tobacco smoking among prisoners. Almost one-fifth (19%) of dischargees had never smoked tobacco. (Details of these data, exclude New South Wales which did not provide dischargee data, are available in Appendix Table C11.3.)

## Comparisons with the general community

Smoking rates among people entering prison are much higher than in the general community (Table 11.1). Around two-thirds to three-quarters (68–78%) of prison entrants aged 18–44 are daily smokers. In the general community, 16–19% of non-Indigenous people of the same age are daily smokers. Around one-half (43–52%) of Indigenous people in the general community smoke daily.

Striking differences are also found when looking at the categories of 'ex-smoker' and 'never smoked'. In the general community, the proportion of people who say they have never smoked is highest among younger people, suggesting that over time, fewer young people in the general population are taking up smoking. However, among prison entrants, there is no apparent trend.

Similarly, in the general community fewer young people are taking up and then quitting smoking—the proportion of ex-smokers ranges from around 13% of 18–24 year olds to 23–29% of 35–44 year olds. However, among prison entrants, the proportions of ex-smokers show no clear trends.

**Table 11.1:** Prison entrants (2015) and general community (2014) aged 18–44, smoking status and Indigenous status, 2014 and 2015 (per cent)

| | | General community | | | Prison entrants | | |
|---|---|---|---|---|---|---|---|
| **Smoking status** | **Indigenous status** | **18–24** | **25–34** | **35–44** | **18–24** | **25–34** | **35–44** |
| Daily | Indigenous | 43 | 52 | 48 | 74 | 78 | 68 |
| | Non-Indigenous | 16 | 19 | 18 | 73 | 68 | 69 |
| Current but not daily | Indigenous | 3 | 3 | 2 | 10 | 7 | 9 |
| | Non-Indigenous | 3 | 4 | 2 | 6 | 4 | 7 |
| Ex-smoker | Indigenous | 13 | 18 | 23 | 5 | 2 | 3 |
| | Non-Indigenous | 14 | 24 | 29 | 10 | 13 | 8 |
| Never smoked | Indigenous | 42 | 28 | 27 | 8 | 11 | 12 |
| | Non-Indigenous | 68 | 54 | 51 | 11 | 13 | 13 |

*Sources:* General community data—ABS 2014b, Table 10.3; Prison entrants data—Entrants form, 2015 NPHDC.

## 11.2 Smoking in prison

Smoking bans have been or are being implemented in prisons across Australia—in the Northern Territory from July 2013, Queensland from May 2014, Tasmania from February 2015, Victoria from July 2015, and New South Wales from August 2015 (Table 11.2). In other jurisdictions, restrictions rather than bans on smoking are in place. A trial smoking ban is planned for South Australia in March 2016. The Australian Capital Territory is not expected to be smoke-free before July 2016, and possibly later than this. Banning smoking in prison can reduce mortality rates among prisoners from smoking-related causes, particularly cardiovascular and pulmonary deaths, and cancer in the longer term (Binswanger et al. 2014).

**Table 11.2:** Restrictions on smoking in prisons, states and territories, 2015

| | NSW | Vic | Qld | WA | SA | Tas | ACT | NT |
|---|---|---|---|---|---|---|---|---|
| No restrictions | | | | | | | | |
| Restricted indoor and outdoor | | | | ✓ | ✓ | | | |
| Banned indoor | | | | ✓ | | | ✓ | |
| Total ban indoor and outdoor | ✓ | ✓ | ✓ | | | ✓ | | ✓ |

Of the 55 prisons from which dischargee data were received, 16 had total smoking bans in place at the time of the data collection. Dischargees in the data collection were approximately evenly distributed between prisons with and without a smoking ban (Table 11.3).

**INDICATOR:** Proportion of prison dischargees who currently smoke tobacco (in prisons allowing smoking): 74%

Prison dischargees were asked whether or not they were current smokers. Under one-half (45%) of all dischargees reported being current smokers, less than the 73% who smoked on entry to prison. The dischargees least likely to report being current smokers were women (24% compared with 49% of men) and older dischargees (36% compared with 46–48% of those aged less than 45). Similar proportions of Indigenous and non-Indigenous dischargees reported being current smokers.

There was a reduction in smoking reported by 39% of dischargees. Women (51% compared with 37% of men) and Indigenous (45% compared with 38% of non-Indigenous) dischargees were most likely to have decreased their smoking, along with those in the middle age groups (41–44% of those aged 25–44 compared with 33% of older and younger dischargees).

Table 11.3 below compares the smoking behaviours for dischargees in prisons with and without smoking bans. The results clearly show lower rates of smoking and intention to smoke after release, in prisons with a total smoking ban in place. Almost three-quarters (74%) of dischargees in prisons allowing smoking were current smokers, compared with 18% of those in prisons where smoking is banned. Male dischargees were more likely to be current smokers than women in prisons allowing smoking (80% compared with 40%), as were Indigenous dischargees (87% compared with 74% of non-Indigenous dischargees).

The oldest dischargees (aged at least 45) were less likely than other dischargees to be current smokers in prisons allowing smoking (52% compared with 75–88%) (Appendix Table C11.5).

Few dischargees (10% overall) reported smoking more since being in prison, but reductions in smoking were more common among dischargees in prisons with bans (56%) than without (22%). Women were slightly more likely to report reductions in smoking than men (26% and 21% respectively) in prisons allowing smoking. They were much more likely to report a reduction in smoking in prisons banning smoking (79% compared with 52% of men). The youngest dischargees (aged less than 25) in prisons allowing smoking were the least likely to smoke less (16% compared with 21–25% of older dischargees) (see Appendix Table C11.7).

While it may seem illogical, there are several possible reasons why prisoners in prisons with complete smoking bans may still report that they are current smokers. Firstly, there may be some who had been in prison for a very short time and still consider themselves to be smokers from their smoking status prior to prison. Secondly, there may be opportunities to smoke even in prisons with complete bans, such as occasions outside the prison grounds such as for court appearances, or during work or other release times. Finally, smoking bans in prison can be difficult to enforce (AIHW 2013b).

**Table 11.3:** Prison dischargees, smoking status, smoking ban status of prison, 2015

| | Prison bans smoking | | Prison allows smoking | | Total prison dischargees | |
|---|---|---|---|---|---|---|
| **Smoking status** | **Number** | **Per cent** | **Number** | **Per cent** | **Number** | **Per cent** |
| Smoker on entry | 161 | 72 | 159 | 75 | 320 | 73 |
| Current smoker | 40 | 18 | 157 | 74 | 197 | 45 |
| Smokes more now | 8 | 4 | 34 | 16 | 42 | 10 |
| Smokes less now | 125 | 56 | 46 | 22 | 171 | 39 |
| Intends to smoke after release | 105 | 47 | 117 | 55 | 222 | 51 |
| **Total** | **224** | **51** | **213** | **49** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include prison dischargees whose smoking status was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.
4. Rows in each column will not sum to the total, because individual dischargees may appear in more than one row.

*Source:* Discharge form, 2015 NPHDC.

## 11.3 Quitting smoking

It is notoriously difficult to quit smoking, especially for vulnerable groups with high rates of smoking. Commonly perceived barriers to successful cessation include stress management, lack of support from professionals, and high prevalence and acceptability of smoking within vulnerable communities (Twyman et al. 2014). Smokers who have mental health problems have identified particular issues for quitting, including an expectation that their anxiety would increase, they would lose an important coping strategy, they would have given up something they find pleasurable, and that their mental health would deteriorate (Kerr et al. 2013).

Quitting smoking in prison presents prisoners with unique circumstances and additional obstacles to overcome on the path to successfully quitting, with these factors present, plus additional issues such as the use of smoking to alleviate boredom, and shared cells (AIHW 2013b). Various programs are available in most prisons to help prisoners who express a desire to quit smoking.

## Entrants

**INDICATOR:** Proportion of prison entrants who currently smoke and would like to quit: 50%

One-half (50%) of all prison entrants who were current smokers reported that they would like to quit smoking, an increase from 46% in 2012 (Table 11.4). A higher proportion of Indigenous (54%) than non-Indigenous (49%) smokers would like to quit. Those aged 25–44 years (51–57%) were more likely than older (47%) or younger entrants (44%) to report wanting to quit smoking.

**Table 11.4:** Prison entrants who smoke tobacco, propensity to quit smoking and assistance required to quit, by sex, age group and Indigenous status, 2015 (per cent)

| | | Assistance required to quit | | | |
|---|---|---|---|---|---|
| | Would like to quit smoking | Quit program | Nicotine replacement | Counselling | None |
| **Sex** | | | | | |
| Male | 50 | 33 | 45 | 11 | 22 |
| Female | 52 | 56 | 30 | 9 | 5 |
| **Age group (years)** | | | | | |
| 18–24 | 44 | 22 | 45 | 15 | 22 |
| 25–34 | 51 | 40 | 39 | 7 | 22 |
| 35–44 | 57 | 42 | 43 | 14 | 16 |
| 45+ | 47 | 32 | 53 | 3 | 15 |
| **Indigenous status** | | | | | |
| Indigenous | 54 | 39 | 34 | 8 | 20 |
| Non-Indigenous | 49 | 35 | 47 | 12 | 19 |
| **Total** | **50** | **37** | **43** | **11** | **19** |

*Notes*

1. Entrants were able to indicate more than one type of assistance.
2. Proportions for 'Would like to quit smoking' were calculated from the 753 entrants who reported being current smokers, and proportions for types of 'Assistance required to quit' were calculated from the 380 entrants who would like to quit.
3. Total includes 37 prison entrants whose desire to quit was unknown, 4 whose Indigenous status was unknown and 1 whose age was unknown.
4. 7 prison entrants nominated other types of assistance they would like to help them quit.
5. Detailed data for this table can be found in Appendix Table C11.9.

*Source:* Entrant form, 2015 NPHDC.

## Dischargees

Most dischargees did not make use of available assistance to quit smoking (Table 11.5). Nicotine replacement was the form of assistance dischargees most commonly reported as being available (60%) and that they used (17%), followed by quit smoking programs (55% and used by 9%), and other forms of counselling or support (45% and 3%). Those most likely to report knowing that assistance to quit smoking was available and who also used it, were men, and dischargees aged 25–34 years. There was little difference between Indigenous and non-Indigenous dischargees in the likelihood of having used assistance to quit, although non-Indigenous dischargees were more likely to report knowing that assistance was available.

**Table 11.5:** Prison dischargees, assistance to quit smoking, 2015 (per cent)

| | Quit smoking program | | Nicotine replacement | | Other counselling or support | | None |
|---|---|---|---|---|---|---|---|
| | Available | Used | Available | Used | Available | Used | Available |
| **Sex** | | | | | | | |
| Male | 58 | 10 | 63 | 18 | 47 | 4 | 9 |
| Female | 37 | 3 | 44 | 12 | 32 | 1 | 19 |
| **Age group (years)** | | | | | | | |
| 18–24 | 52 | 9 | 53 | 15 | 38 | 3 | 6 |
| 25–34 | 58 | 13 | 64 | 22 | 49 | 4 | 15 |
| 35–44 | 53 | 5 | 61 | 16 | 43 | 3 | 11 |
| 45+ | 56 | 7 | 56 | 10 | 48 | 1 | 5 |
| **Indigenous status** | | | | | | | |
| Indigenous | 46 | 8 | 50 | 17 | 37 | 3 | 10 |
| Non-Indigenous | 60 | 9 | 66 | 18 | 49 | 3 | 11 |
| **Total** | **55** | **9** | **60** | **17** | **45** | **3** | **11** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 dischargees whose age was unknown, and 14 whose Indigenous status was unknown.
3. Detailed data for this table can be found in Appendix Table C11.10.

*Source:* Discharge form, 2015 NPHDC.

Two-thirds (67%) of dischargees reported that smoking cessation assistance was available in their prison (Table 11.6). Those in prisons allowing smoking were more likely (72%) than those in prisons with smoking bans (62%) to report that assistance was available. However, those dischargees in prisons with smoking bans were more likely to use available assistance to quit than those in prisons allowing smoking (26% compared with 10%).

**Table 11.6:** Prison dischargees, quit smoking assistance, smoking ban status of prison, 2015

| | Prison bans smoking | | Prison allows smoking | | Total prison dischargees | |
|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent |
| Quit smoking assistance available | 138 | 62 | 153 | 72 | 291 | 67 |
| Quit smoking assistance used | 58 | 26 | 22 | 10 | 80 | 18 |
| **Total** | **218** | **50** | **219** | **50** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Denominators are the column totals.
3. Columns do not sum to 100% as dischargees may have provided more than one response.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

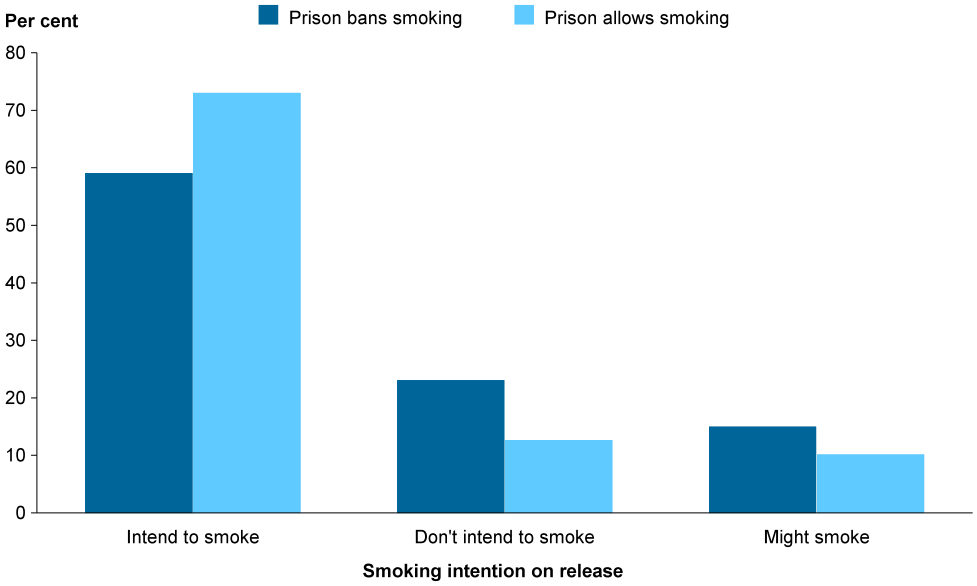
The majority of dischargees who were current smokers said they did not want any assistance to quit (59%). Not wanting any assistance to quit smoking was more common among men who currently smoke (60%), older dischargees aged 45 and over (65%) and Indigenous dischargees (64%) (see Appendix Table C11.13).

**INDICATOR:** Proportion of prison dischargees who intend to smoke upon release from prison: 51%

Just over one-half (51%) of all dischargees reported intending to smoke after release from prison (Table 11.3). There are indications that the reduction in smoking from being in a prison in which smoking is banned may flow through to the community. Dischargees from prisons with smoking bans were less likely to intend to smoke after release than those from prisons in which smoking is allowed (47% and 55% respectively).

Of those who smoked on entry to prison, dischargees from prisons with smoking bans were less likely to intend to smoke after release than those from prisons in which smoking is allowed (59% and 73% respectively) (Figure 11.2). (Detailed data for Figure 11.2 are available in Appendix Table C11.11.)

**Figure 11.2:** Prison dischargees who smoked on entry to prison, smoking intentions on release, by smoke-free status of prison, 2015



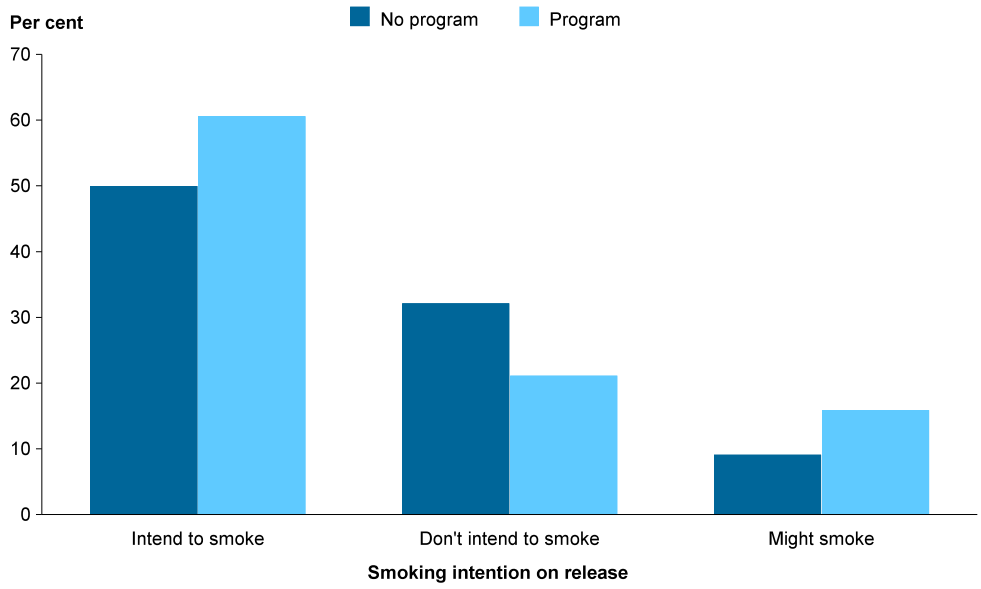

*Notes*

1. Only considers dischargees who smoked on entry to prison.
2. Excludes New South Wales which did not provide dischargee data.

*Source:* Dischargee form, 2015 NPHDC.

Dischargees who participated in a quit smoking program in prison were more likely to intend to smoke after release than those who did not participate in a program (Figure 11.3). Around 3 in 5 (61%) of dischargees who participated in a program intended to smoke on release, compared with 50% of those who did not participate in a program. (Detailed data for Figure 11.3 are available in Appendix Table C11.12.)

**Figure 11.3: Prison dischargees, smoking intentions on release, by participation in a quit smoking program, 2015**




Notes

1. Only considers dischargees who smoked on entry to prison.
2. Excludes New South Wales which did not provide dischargee data.

*Source:* Discharge form, 2015 NPHDC.

# 12 Illicit drug use and needle sharing

Illicit drug use describes the use of illegal drugs, the ingesting or inhaling of volatile substances, and the use of prescription drugs for non-medical purposes. There have been suggestions that severe substance use disorders should be viewed as chronic conditions which, similar to other chronic physical and mental health conditions, require long-term management, and include medications and psychosocial services to treat co-occurring disorders and conditions (Goodwin & Sias 2014). This may be especially applicable in the prison context where the majority of prisoners report using alcohol and other drugs, and many also have mental and physical health conditions.

There are clear links between alcohol and other drug misuse and the criminal justice system. Illicit drug use is a primary motivating factor in non-violent property offences such as burglary and theft, particularly for those who have drug dependence (Kopak & Hoffmann 2014). Among people with heroin dependence, criminal involvement is predicted by unemployment, mental health issues, a criminal history, greater severity of dependence and more extensive heroin use (Marel et al. 2013). Each year, around 1 in 7 opioid-dependent people on opioid substitution treatment programs are in prison (Degenhardt et al. 2014). Clients of alcohol and other drug treatment services are often referred to such services by the criminal justice system. During 2013–14, 17% of treatment episodes performed by these services were for clients referred by police or court diversion schemes, and a further 8% were referred by correctional services (AIHW 2015a).

## 12.1 Drug use prior to prison

**INDICATOR:** Proportion of prison entrants who engaged in illicit drug use in the last 12 months: 67%

Two-thirds (67%) of prison entrants reported illicit drug use during the previous 12 months (Table 12.1). Illicit drug use was more commonly reported by non-Indigenous (69%) than Indigenous (60%) entrants, and decreased with age from 76% of the youngest entrants (aged less than 25) to 53% of the oldest entrants (aged at least 45). The proportions of male and female entrants reporting illicit drug use were similar (67% and 65% respectively).

**Table 12.1:** Prison entrants, illicit drug use in previous 12 months, by sex, age group and Indigenous status, 2015

| | Illicit drug use in previous 12 months | | Total prison entrants |
|---|---|---|---|
| | Number | Per cent | Number |
| **Sex** | | | |
| Male | 497 | 67 | 739 |
| Female | 43 | 65 | 66 |
| **Age group (years)** | | | |
| 18–24 | 115 | 76 | 151 |
| 25–34 | 233 | 68 | 341 |
| 35–44 | 137 | 66 | 209 |
| 45+ | 52 | 53 | 99 |
| **Indigenous status** | | | |
| Indigenous | 118 | 60 | 196 |
| Non-Indigenous | 421 | 69 | 606 |
| **Total** | **540** | **67** | **805** |

*Notes*

1. Excludes New South Wales which did not provide data for this indicator.
2. Totals include 5 prison entrants whose age was unknown, 3 whose Indigenous status was unknown, and 16 whose recent drug use was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

In 2015, the most commonly reported illicit drug used was methamphetamine, with 50% of entrants reporting having used this drug in the previous 12 months. Cannabis was second, with 41% (Table 12.2). The use of methamphetamine has apparently risen, from 37% in 2012, and the use of cannabis has fallen, from 50%. The use of all other drug types either fell slightly or have remained stable since 2012.

After methamphetamine and cannabis, illicit use of prescription medications was the next most commonly reported, with 13% reporting illicit use of analgesics or painkillers, and 11% reporting illicit use of tranquilisers or sleeping pills. Just under 1 in 10 entrants (9%) reported using heroin, and 7% ecstasy during the previous 12 months.

Among entrants reporting recent illicit drug use, poly drug use was common—that is, with more than 2 different types of drugs reported on average. The recent illicit use of at least 4 different drug types was reported by 11% of entrants who had used drugs.

Data on people held in police custody show similar trends in terms of the use of cannabis and methamphetamines. The reported use of methamphetamines by police detainees has increased from 47% in the third quarter of 2013 to 52% in the second quarter of 2015, closing the gap on cannabis at 55% in 2015 (Coghlan & Goldsmid 2015; AIC 2015).

**Table 12.2:** Prison entrants, types of drugs illicitly used in the last 12 months, 2015

| Substance used | Number | Per cent |
|---|---|---|
| Methamphetamine | 400 | 50 |
| Cannabis/marijuana | 334 | 41 |
| Analgesics/painkillers | 102 | 13 |
| Tranquillisers/sleeping pills | 85 | 11 |
| Heroin | 71 | 9 |
| Other analgesics, for example, opiates/opioids | 63 | 8 |
| Ecstasy | 59 | 7 |
| Cocaine | 50 | 6 |
| Methadone/buprenorphine/Suboxone | 34 | 4 |
| GHB (gamma hydroxybutyrate) | 34 | 4 |
| Ketamine | 15 | 2 |
| Hallucinogens | 14 | 2 |
| Barbiturates | 10 | 1 |
| Inhalants | 10 | 1 |
| Steroids | 8 | 1 |
| **Total** | **805** | **100** |

*Notes*

1. Excludes New South Wales which did not provide data for this indicator.
2. Percentages do not sum to 100%, as prisoners may have used more than one type of drug.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

The use of methamphetamines was more common among non-Indigenous entrants compared with Indigenous entrants (54% to 38%). Use was also more common among younger entrants than older entrants (Table 12.3). Methamphetamine use was more common than cannabis use for entrants aged less than 45 years, but entrants aged 45 and over were more likely to report using cannabis (35%) than methamphetamines (28%). The youngest entrants (aged 18–24) were the group most likely to report methamphetamine use (59%).

Non-Indigenous entrants were more likely than Indigenous entrants to report use of tranquilisers/sleeping pills (12% compared with 5%), heroin (10% and 6%), and ecstasy (8% and 4%).

There was a general decline in illicit drug use by age from the youngest group of entrants (18–24 years) to the oldest (45 and over). For example, respective proportions for the use of cannabis were 53% and 35%, and ecstasy 11% and 3%. However, older entrants were more likely than the youngest entrants to use heroin (10–12% of those aged at least 35 compared with 4%).

The proportions of men and women using methamphetamines, cannabis, heroin and ecstasy were similar. Women were, however, more likely than men to misuse prescription medications, with just over over one-quarter using analgesics/painkillers (27% compared with 11%) and tranquilisers/sleeping pills (26% and 9%).

**Table 12.3:** Prison entrants, illicit drug use in previous 12 months for selected drugs, by sex, age group and Indigenous status, 2015

| | Metham-phetamine | Cannabis/ marijuana | Analgesics/ painkillers | Tranquillisers/ sleeping pills | Heroin | Ecstasy |
|---|---|---|---|---|---|---|
| | | | Number | | | |
| **Sex** | | | | | | |
| Male | 366 | 306 | 84 | 68 | 67 | 53 |
| Female | 34 | 28 | 18 | 17 | 4 | 6 |
| **Age group (years)** | | | | | | |
| 18–24 | 89 | 80 | 18 | 14 | 6 | 16 |
| 25–34 | 179 | 138 | 40 | 33 | 29 | 30 |
| 35–44 | 104 | 79 | 28 | 30 | 26 | 10 |
| 45+ | 28 | 35 | 14 | 8 | 10 | 3 |
| **Indigenous status** | | | | | | |
| Indigenous | 74 | 85 | 26 | 10 | 12 | 8 |
| Non-Indigenous | 326 | 248 | 76 | 75 | 59 | 51 |
| **Total** | **400** | **334** | **102** | **85** | **71** | **59** |
| | | | Per cent | | | |
| **Sex** | | | | | | |
| Male | 50 | 41 | 11 | 9 | 9 | 7 |
| Female | 52 | 42 | 27 | 26 | 6 | 9 |
| **Age group (years)** | | | | | | |
| 18–24 | 59 | 53 | 12 | 9 | 4 | 11 |
| 25–34 | 52 | 40 | 12 | 10 | 9 | 9 |
| 35–44 | 50 | 38 | 13 | 14 | 12 | 5 |
| 45+ | 28 | 35 | 14 | 8 | 10 | 3 |
| **Indigenous status** | | | | | | |
| Indigenous | 38 | 43 | 13 | 5 | 6 | 4 |
| Non-Indigenous | 54 | 41 | 13 | 12 | 10 | 8 |
| **Total** | **50** | **41** | **13** | **11** | **9** | **7** |

*Notes*

1. Excludes New South Wales which did not provide data for this indicator.
2. Percentages do not sum to 100%, as prisoners may have used more than one type of drug.
3. Totals include 5 prison entrants whose age was unknown, 3 whose Indigenous status was unknown, and 34 for whom the type of drug recently used was unknown.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## Injecting drug use

**INDICATOR:** Proportion of prison entrants who have ever injected drugs: 45%

Data on prison entrants who had injected drugs were obtained from the NPEBBV&RBS 2013 (Butler et al. 2015).

Less than one-half (45%) of prison entrants reported injecting drug use (IDU) (Table 12.4). Women (58%) were more likely than men (43%) to report IDU, as were entrants aged 25+ (47%) compared with entrants aged under 25 (36%). Compared with previous years (before 2013) there has been an increase in the proportion of Indigenous entrants reporting IDU—the proportions of Indigenous and non-Indigenous entrants reporting IDU in 2013 were similar (46% and 44% respectively).

**Table 12.4:** Prison entrants, sex, age group and Indigenous status, by IDU status, 2013

| | IDU | | Non-IDU | | Total prison entrant participants |
|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | |
| **Sex** | | | | | |
| Male | 283 | 43 | 382 | 57 | 665 |
| Female | 59 | 58 | 43 | 42 | 102 |
| **Age group** | | | | | |
| <25 | 67 | 36 | 118 | 64 | 185 |
| 25+ | 272 | 47 | 305 | 53 | 577 |
| **Indigenous status** | | | | | |
| Indigenous | 115 | 46 | 134 | 54 | 249 |
| Non-Indigenous | 226 | 44 | 291 | 56 | 517 |
| **Total** | **342** | **45** | **425** | **55** | **767** |

*Notes*

1. Totals exclude unknowns.
2. Numbers represent the number in the data collection, not the whole prison population.

*Source:* AIHW analysis of NPEBBV&RBS 2013, Tables 3 and 20.

## Comparisons with general community

The illicit drug use reported by prison entrants is higher than that of the general community for almost every drug type listed (Table 12.5). For many drug types, prison entrants were more than 2–3 times as likely as the general community to report recent use. Cannabis use was reported by more than one-half (53%) of 18–24 year old entrants, compared with just under one-quarter (23%) of their general community counterparts. Drug use among prison entrants remained relatively high across age groups more than in the general community, with 38% of 35–44 year old prison entrants reporting cannabis use, compared with 11% in the general

community for that age group. For some drug types, use in the general community either declined or remained stable as age group increased, but the opposite pattern was found for prison entrants. For example, use of heroin among prison entrants increased from 4% of those aged 18–24 to 12% of those aged 35–44, but remained stable at less than 1% across the age groups in the general community.

The drug most likely to be used by prison entrants, methamphetamines, was also the drug type with the largest difference in use compared to the general community, being reported at least 10 times as often by prison entrants as by the general community. Among 18–44 year olds, more than 50% (50–59%) of prison entrants reported using methamphetamines in the previous 12 months, compared with 5% or less in the general community. Problematic use of methamphetamines in the general community has been increasing recently. Over the 5 years to 2013–14, the proportion of alcohol and other drug treatment services episodes where amphetamines were the principal drug of concern has increased from 7% to 17% (AIHW 2015a).

**Table 12.5:** Prison entrants and general community, illicit drug use in last 12 months, by age group, 2015 (per cent)

| | Prison entrants (years) | | | General population (years) | | |
|---|---|---|---|---|---|---|
| | 18–24 | 25–34 | 35–44 | 18–24 | 25–34 | 35–44 |
| Cannabis | 53 | 40 | 38 | 23 | 16 | 11 |
| Methamphetamine | 59 | 52 | 50 | 5 | 5 | 2 |
| Painkillers/analgesics | 12 | 12 | 13 | 3 | 4 | 3 |
| Tranquilisers/sleeping pills | 9 | 10 | 14 | 2 | 2 | 2 |
| Other opiates/opioids | 5 | 8 | 10 | 1 | <1 | <1 |
| Heroin | 4 | 9 | 12 | <1 | <1 | <1 |
| Methadone or Buprenorphine | 3 | 4 | 7 | <1 | <1 | <1 |
| Ecstasy | 11 | 9 | 5 | 9 | 5 | 1 |
| Cocaine | 9 | 7 | 5 | 5 | 5 | 3 |
| Hallucinogens | 2 | 3 | 1 | 5 | 3 | <1 |
| GHB (gamma hydroxybutyrate) | 5 | 6 | 3 | <1 | <1 | <1 |
| Ketamine | 3 | 3 | 1 | <1 | <1 | <1 |
| Steroids | 1 | 1 | 2 | <1 | <1 | <1 |
| Inhalants | 1 | 2 | 2 | 2 | 1 | <1 |

*Notes*

1. Methamphetamines, painkillers/analgesics, tranquilisers/sleeping pills and other opiates/opioids taken for non-medical purposes.
2. Non-maintenance methadone, taken for non-medical purposes.
3. Excludes New South Wales which did not provide data for this item.

*Sources:* Entrant form, 2015 NPHDC; 2013 NDSHS.

## 12.2 Drug use in prison

Prison reduces illicit drug use for a number of reasons. Clearly, there are reduced opportunities in prison to obtain and use illicit drugs. Prisons use multiple strategies to reduce the supply of illicit drugs to prisoners, including drug detection dogs and urinalysis (Dolan & Rodas 2014). However, prisoners also see the prison environment as a risky one in which to use drugs, particularly to inject drugs, and they recognise the opportunities presented by being in prison to treat or attend to existing drug use concerns through health care and rehabilitation services (Tompkins 2013). Nevertheless, one research study has found that among a group of injecting drug users with a history of imprisonment, almost one-half had injected while in prison (Fetherston et al. 2013).

**INDICATOR:** Proportion of prison dischargees who reported using illicit drugs while in prison: 10%

**INDICATOR:** Proportion of prison dischargees who reported injecting drugs while in prison: 6%

Drug use in prison was reported by 10% of dischargees, and 6% reported injecting drugs in prison (Appendix Tables C12.1 and C12.2). Men (12%) more often reported using drugs in prison than women (3%), and all were aged under 45. Of the 35 dischargees who reported using drugs while in prison, 34 reported illicit drug use in the community prior to coming to prison. All of the 19 dischargees who reported injecting drugs in prison had also injected drugs previously in the community. (These data exclude New South Wales which did not provide dischargee data, and Victoria which did not collect data for these indicators. Note also that these data are self-reported and are therefore likely to be an underestimate because prisoners can be reluctant to disclose this kind of information.)

## 12.3 Needle sharing

Sharing needles and syringes carries risks of communicable diseases. Community needle and syringe exchange programs (NSPs) have been shown to be a cost-effective way to reduce infections such as Hepatitis C (Iversen et al. 2013; Abdul-Quader et al. 2013; Kwon et al. 2012). In some countries, NSPs are being extended to prisons (UNODC 2014), where they have decreased needle sharing practices and bloodborne virus transmissions, with no evidence of major unintended negative consequences (Schwitters 2014).

While there are currently no NSPs operating in Australian prisons, the Australian Capital Territory Government announced in April 2015 that a trial of a prison-based NSP would be conducted, subject to the support of the majority of prison staff.

An Inquiry of the Standing Committee on Health into Hepatitis C in Australia, conducted during 2014–15, included an investigation of NSPs in prisons. The Committee noted the developments in the Australian Capital Territory and that the outcome of the trial would inform the broader debate on prison-based NSPs in Australia (Commonwealth of Australia 2015).

## Entrants

**INDICATOR:** Proportion of prison entrants who have shared injecting equipment: 18%

Data from the National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey in 2013 found that of prison entrants who report having injected drugs, 90% reported using sterile injecting equipment all or most of the time in the previous month. Re-using someone else's used needle and syringe was reported by 18% of entrants, slightly down from 20% in 2010 (Butler et al. 2015).

## Dischargees

**INDICATOR:** Proportion of prison dischargees who reported using a needle that had been used by someone else while in prison: 4%

Four per cent of dischargees reported using a needle and syringe that had been used by someone else, while in prison (Appendix Table C12.3). A further 11% did not know if equipment they used had been used by someone else. (These data exclude New South Wales which did not provide dischargee data, and Victoria which did not collect data for this indicator. Note also that these data are self-reported and are therefore likely to be an underestimate because prisoners can be reluctant to disclose this kind of information.)

**INDICATOR:** Proportion of prison dischargees who accessed a needle and syringe exchange program in the community: 16%

More than one-quarter (27%) of dischargees reported having injected drugs prior to being in prison, and 16% of all dischargees reported accessing needle and syringe exchange programs in the community. Of those dischargees who injected drugs prior to prison, more than one-third (37%) accessed a needle and syringe exchange program in the community. Of the 12 dischargees who reported sharing equipment in prison, 5 had accessed exchange programs in the community, and 7 had not. (These data exclude New South Wales which did not provide dischargee data.)

# 12.4 Opioid substitution treatment (OST)

Opioid drugs include heroin and morphine, and dependence on them is associated with a range of health and social problems. Treatment with an opioid substitution treatment (OST), such as methadone and buprenorphine, can reduce cravings, improve physical and mental health and reduce drug-related crime. Opioid pharmacotherapy drugs are designed to reduce withdrawal symptoms, the desire to take opioids and the euphoric effect when opioids are used, and are associated with a reduction in demand for illicit drugs (Scott et al. 2015). On a snapshot day in June 2014, over 48,000 Australians received pharmacotherapy treatment for their opioid dependence, a rate of 24 per 10,000 people in the population (AIHW 2015b).

Entering prison can mean sudden withdrawal from drugs, and both detoxification (for withdrawal) and longer-term treatment may be required in prisons. Various types of treatment for drug addiction are provided in prisons and the corrections system. These vary from mandated residential drug treatment such as in the New South Wales Compulsory Drug Treatment Centre, which has specific legislation and sentencing options attached to it, to counselling and pharmacotherapy within mainstream prisons.

The availability of OST in prison has been associated with reduced drug injection in prison among those with a history of injecting drug use, which in turn reduces the associated needle sharing and infections (Kinner et al. 2013; Schwitters 2014). Health professionals must be authorised to prescribe opioid substitution treatment. In 2014, 4% of opioid pharmacotherapy prescribers were correctional facility prescribers (AIHW 2015b). OST should not be an isolated, prison-based intervention only. Adequate and effective OST in prison requires the provision of education alongside the OST, and an emphasis on linkages to community-based treatment (Schwitters 2014). Burprenorphine treatment initiated in prison has been shown to increase the likelihood that prisoners will enter treatment in the community upon release (Gordon et al. 2014).

Table 12.6 below shows the availability of OST in prisons in Australia.

**Table 12.6:** Availability of opioid substitution treatment in Australian prisons, states and territories, 2015

| | Methadone | | Buprenorphine | | Buprenorphine/naloxone | |
|---|---|---|---|---|---|---|
| | Maintenance | Initiation | Maintenance | Initiation | Maintenance | Initiation |
| NSW | ✓ | ✓ | ✓ | ✓ | × | × |
| Vic | ✓ | ✓ | ✓ | × | ✓ | ✓ |
| Qld | ✓ | × | ✓ | × | ✓ | × |
| WA | ✓ | ✓ | × | × | ✓ | × |
| SA | ✓ | ✓ | ✓ | ✓ | × | × |
| Tas | ✓ | × | × | × | × | × |
| ACT | ✓ | ✓ | × | × | ✓ | ✓ |
| NT | ✓ | × | × | × | × | × |

*Notes*

1. In Queensland, OST maintenance is available to female prisoners only.
2. In the Australian Capital Territory, Suboxone (Buprenorphine/naloxone) is available for withdrawal and 2 weeks prior to release only.

*Source:* Supplementary data, 2015 NPHDC.

## Entrants

**INDICATOR:** Proportion of prison entrants who report being on pharmacotherapy medication for opioid dependence: 7%

Opioid substitution treatment was currently being undertaken by 7% of prison entrants and 9% of prison dischargees, most commonly methadone (Table 12.7). A total of 15% of entrants reported ever having been on an OST.

**Table 12.7:** Prison entrants and dischargees, participation in opioid substitution treatment programs, 2015

| | Prison entrants | | Prison dischargees | |
|---|---|---|---|---|
| | Number | Per cent | Number | Per cent |
| Methadone currently | 47 | 5 | 28 | 6 |
| Plan to continue after release | .. | .. | 24 | 5 |
| No plan to continue after release | .. | .. | 4 | 1 |
| Methadone in the past | 65 | 6 | 29 | 7 |
| Other currently | 20 | 2 | 13 | 3 |
| Plan to continue after release | .. | .. | 13 | 3 |
| No plan to continue after release | .. | .. | 0 | 0 |
| Other in the past | 83 | 8 | 31 | 7 |
| Any OST | 147 | 15 | 71 | 16 |
| Never | 864 | 85 | 366 | 84 |
| **Total** | **1,011** | **100** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals may not sum because individual prison entrants may appear in more than one row.
3. 'Other' includes naltrexone, burprenorphine, suboxone and levomethadyl acetate (LAAM).
4. New South Wales did not collect data on whether prison entrants were currently on naltrexone or LAAM, so the 'Other currently' row may be underestimates.
5. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Entrant and Discharge forms, 2015 NPHDC.

## Prisoners in custody

**INDICATOR:** Proportion of prisoners in custody who received medication for opioid dependence: 3%

Medications for opioid dependence were taken by 3% of prisoners in custody. Prisoners in the oldest age group (45 and over) were less likely than younger prisoners to be taking OST while in prison. (These data exclude New South Wales which did not provide medication data.)

### Dischargees

**INDICATOR:** Proportion of prison dischargees on an opiate substitution program while in prison with a plan to continue after release: 8%

OST was being currently being undertaken by 9% of dischargees, and most (8% overall) had a plan to continue treatment after release from prison (Table 12.7). (These data exclude New South Wales which did not provide dischargee data.)

## 12.5 Tattooing and body piercing

Needles and other equipment may also be shared in prison when prisoners are receiving tattoos or body piercings by other prisoners. Without the availability of sterilised equipment, tattooing and body piercing are risky behaviours for contracting bloodborne viruses. Tattooing and piercing are currently unregulated in prisons in Australia and internationally (Sia & Levy 2015).

**INDICATOR:** Proportion of prison dischargees who reported receiving a tattoo while in prison: 2%

**INDICATOR:** Proportion of prison dischargees who reported receiving a body or ear piercing while in prison: <1%

Few dischargees reported engaging in tattooing and body piercing while in prison. There were 7 dischargees (2%) who reported getting a tattoo while in prison, and just 1 dischargee reported getting a body or ear piercing in prison. (These data exclude New South Wales which did not provide dischargee data, and Victoria which did not provide data for these indicators. Note also that these data are self-reported and are therefore likely to be an underestimate because prisoners can be reluctant to disclose this kind of information.)

# 13 Risky alcohol consumption

There are strong and persistent links between alcohol misuse and a range of adverse psychosocial outcomes affecting health and mental health such as family violence, relationship instability, sexual risk-taking and consequences, unemployment, violence victimisation and criminal offending (Fergusson et al. 2013). High alcohol consumption is a risk factor for a number of chronic conditions (see Chapter 7), and among clients of alcohol and other drug treatment services, alcohol is the most common principal drug of concern (AIHW 2014b).

## 13.1 Alcohol consumption prior to prison

The proportion of prison entrants who are at risk of alcohol-related harm was determined using questions on alcohol consumption from the WHO's Alcohol Use Disorder Identification Test (AUDIT) screening instrument. The consumption component of this instrument (AUDIT-C) contains the three consumption questions from the AUDIT, with each question scoring 0–4. Scores for the three questions are summed, with a maximum possible score of 12. A score of 6 or more indicates a risk of alcohol-related harm. The AUDIT tool alcohol harm risk profile does not align with the National Health and Medical Research Council *Australian guidelines to reduce health risks from drinking alcohol 2009*, which provides the standard risk rating used in Australia for reducing risks to health from drinking alcohol.

### Entrants

**INDICATOR:** Proportion of prison entrants who report a high risk of alcohol-related harm in the past 12 months (as measured by the AUDIT-C): 39%

Alcohol was consumed at risky levels by 39% of prison entrants during the 12 months prior to imprisonment (Table 13.1), down from 46% in 2012. Another 27% were low-risk drinkers. The biggest change since 2012 was an increase in the proportion of entrants who had not consumed any alcohol in the previous 12 months to 34% (up from 19% in 2012). Some of this increase may be attributable to a change in data collection methodology, with electronic data capture decreasing the invalid responses from over 5% to less than 1% compared with the paper-based collection used previously.

Indigenous entrants remain the group most likely to be at risk of alcohol-related harm, with 54% reporting risky drinking, compared with 33% of non-Indigenous entrants.

Men (40%) were more likely than women entrants (28%) to report risky drinking. The proportion of women entrants not drinking increased from 21% in 2012 to 53% in 2015. There was also a shift in the drinking habits of the youngest prison entrants, with the proportion at high risk dropping from 50% in 2012 to 39% in 2015, and a rise in non-drinkers from 14% to 32%. More Indigenous entrants (27%) also reported being non-drinkers than in 2012 (13%).

**Table 13.1:** Prison entrants, risk of alcohol-related harm in the previous 12 months, by sex, age group and Indigenous status, 2015

| | High risk of alcohol-related harm | | Low risk of alcohol-related harm | | Does not drink | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| **Sex** | | | | | | | | |
| Male | 348 | 40 | 247 | 29 | 266 | 31 | 862 | 100 |
| Female | 42 | 28 | 28 | 19 | 79 | 53 | 149 | 100 |
| **Age group (years)** | | | | | | | | |
| 18–24 | 74 | 39 | 53 | 28 | 61 | 32 | 188 | 100 |
| 25–34 | 173 | 41 | 111 | 26 | 141 | 33 | 425 | 100 |
| 35–44 | 101 | 38 | 65 | 24 | 101 | 38 | 268 | 100 |
| 45+ | 40 | 32 | 44 | 35 | 41 | 33 | 125 | 100 |
| **Indigenous status** | | | | | | | | |
| Indigenous | 153 | 54 | 54 | 19 | 78 | 27 | 285 | 100 |
| Non-Indigenous | 236 | 33 | 220 | 31 | 264 | 37 | 721 | 100 |
| **Total** | **390** | **39** | **275** | **27** | **345** | **34** | **1,011** | **100** |

*Notes*

1. Risk of alcohol-related harm is indicated by a score of 6 or more on the three consumption questions from the AUDIT-C.
2. Totals include 5 entrants whose age was unknown, 5 whose Indigenous status was unknown, and 1 for whom risk status was invalid or unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## Dischargees

Dischargees were also asked the AUDIT-C questions. Pre-release AUDIT scores have been found to predict hazardous drinking 6 months post-release from prison (Thomas et al. 2014).

**INDICATOR:** Proportion of prison dischargees who report a high risk of alcohol-related harm prior to current incarceration (as measured by the AUDIT-C): 58%

More than one-half (58%) of dischargees reported that prior to prison, they were consuming alcohol at risky levels, while 23% reported low risk drinking, and 19% reported not drinking any alcohol. Indigenous dischargees more commonly reported risky drinking prior to prison (71%) than non-Indigenous dischargees (51%). Abstinence was more likely for women (26%)

than men (17%), and for non-Indigenous (21%) rather than Indigenous (16%) dischargees. Abstinence prior to prison generally increased with age, from 15% of the youngest dischargees (aged 18–24) to 23% of those aged 45 or more. (Details of these data are available in Appendix Table C13.1. These data exclude New South Wales which did not provide dischargee data)

## Comparisons with general community

Across all age groups, a smaller proportion of prison entrants compared with their general community counterparts reported having consumed at least one serve of alcohol in the previous 12 months (Table 13.2). The differences were greatest for female prison entrants aged 18–24 or 30–49 compared with women of similar ages in the general community (38%–44% compared with 79–83%).

**Table 13.2:** Prison entrants and general community, consumed at least one serve of alcohol in last 12 months, by age group, 2015 (per cent)

| | Prison entrants (years) | | | | General population (years) | | | |
|---|---|---|---|---|---|---|---|---|
| | 18–24 | 25–29 | 30–39 | 40-49 | 18–24 | 25-29 | 30–39 | 40–49 |
| Male | 72 | 69 | 67 | 63 | 84 | 87 | 85 | 86 |
| Female | 38 | 69 | 44 | 43 | 82 | 80 | 79 | 83 |
| **Persons** | **67** | **69** | **63** | **60** | **83** | **83** | **82** | **84** |

*Sources:* Entrant form, 2015 NPHDC; 2013 NDSHS.

However, when prison entrants were drinking alcohol, they were likely to consume alcohol in greater quantities than their general community counterparts (Table 13.3). For both men and women, prison entrants were less likely to have 1–4 drinks, and more likely to have at least 7 standard drinks on an average day of drinking.

Among drinkers in the general population, there was a clear and steady decline in heavy drinking (at least 7 standard drinks in a day) with age, from 41% of the youngest men and 27% of the youngest women to 18% and 8% respectively of those aged 35–44. Among male prison entrants, this decline was weaker, with younger and older prison entrants drinking at similar levels (41% and 35% respectively). Female prison entrants had a pattern across age opposite to the general community—older female prison entrants (26–28%) were more likely to engage in heavy drinking than younger female entrants (19%). This suggests that among prison entrants who drink, heavy drinking is more likely to persist or worsen than among those who drink in the general community.

**Table 13.3:** Prison entrants and general community recent drinkers, number of drinks on a usual day of drinking, by age group, 2015 (per cent)

| | Prison entrants (years) | | | General population (years) | | |
|---|---|---|---|---|---|---|
| | 18–24 | 25–34 | 35–44 | 18–24 | 25–34 | 35–44 |
| Male | | | | | | |
| 1 or 2 | 22 | 23 | 33 | 19 | 31 | 38 |
| 3 or 4w | 23 | 21 | 16 | 22 | 28 | 30 |
| 5 or 6 | 13 | 21 | 16 | 18 | 16 | 14 |
| 7+ | 41 | 35 | 35 | 41 | 24 | 18 |
| Female | | | | | | |
| 1 or 2 | 57 | 52 | 50 | 32 | 55 | 61 |
| 3 or 4 | 10 | 12 | 12 | 24 | 26 | 24 |
| 5 or 6 | 14 | 8 | 12 | 17 | 8 | 8 |
| 7+ | 19 | 28 | 26 | 27 | 11 | 8 |
| Persons | | | | | | |
| 1 or 2 | 27 | 28 | 36 | 25 | 42 | 49 |
| 3 or 4 | 21 | 19 | 15 | 23 | 27 | 27 |
| 5 or 6 | 13 | 19 | 15 | 18 | 13 | 11 |
| 7+ | 38 | 34 | 34 | 34 | 18 | 13 |

*Note:* Excludes those who reported not drinking in the last 12 months.
*Sources:* Entrant form, 2015 NPHDC; 2013 NDSHS.

## 13.2 Alcohol consumption in prison

**INDICATOR:** Proportion of prison dischargees who reported consuming alcohol in prison: 3%

There were 9 dischargees (3%) who reported consuming alcohol while in prison. (These data exclude New South Wales which did not provide dischargee data, and Victoria, who did not collect data for this indicator. Note also that these data are self-reported and are therefore likely to be an underestimate because prisoners can be reluctant to disclose this kind of information.)

## 13.3 Alcohol treatment in prison

With the high proportion of prisoners who, while in the community, consume alcohol at levels which leave them at high risk of alcohol-related harm, there is a clear need for alcohol treatment services to be available in prison (see section 13.1).

**INDICATOR:** Proportion of prison dischargees who accessed an alcohol treatment program in prison: 8%

While 58% of dischargees reported risky alcohol consumption prior to prison, only 8% reported accessing alcohol treatment programs while in prison (Appendix Table C13.2). There were differences between those most likely to report being at-risk, and those most likely to report accessing treatment. Male dischargees were more likely than women to both be at-risk and access treatment (9% for males compared with 4% for females). However, despite a higher proportion of Indigenous dischargees being at-risk, they accessed treatment at similar rates to non-Indigenous dischargees (9% and 8% respectively). The oldest dischargees were slightly more likely to access treatment than younger dischargees (12% of those aged at least 45 compared with 7–9%).

Around 4 in 5 dischargees (81%) who accessed an alcohol-treatment program in prison were assessed as having a high pre-prison risk of alcohol-related harm. However, only 12% of those at high risk prior to prison reported accessing treatment while in prison. (These data exclude New South Wales which did not provide dischargee data)

# 14 Injuries, assaults and unprotected sex

## 14.1 Head injury

Acquired brain injury (ABI) refers to any damage to the brain that occurs after birth (with the exception of Foetal Alcohol Spectrum Disorder). The most common causes of ABI are stroke, followed by accident or trauma, known as Traumatic Brain Injury (TBI). Brain injury can lead to a range of disabilities affecting people physically, as well as thoughts, feelings and behaviours (Brain Injury Australia 2015). TBI may result from many different types of incidents, including physical abuse, falls, sport-related injury and motor vehicle accidents (Colantonio et al. 2014).

Among the general adult population, about 17% of men and 9% of women have a history of a head injury leading to a loss of consciousness (Frost et al. 2013). The prevalence among offenders is higher. Juvenile offenders have been found to be more than three times as likely as other youths to have experienced a traumatic brain injury (Farrer et al. 2013). A Canadian study found that one-half (50%) of male prisoners and 38% of female prisoners reported having previously had a head injury leading to a loss of consciousness, indicating possible acquired brain injury (Colantonio et al. 2014). Brain injury among prisoners affects prison health services and offender management. It is associated with increased use of medical and psychological services, including crisis interventions, and lower rates of treatment for alcohol and other drug issues, as well as higher recidivism rates (Piccolino & Solberg 2014).

Brain Injury Australia has recommended that prison reception screening and other assessments be modified to allow for optimum detection of ABI (Rushworth 2011).

### Entrants

**INDICATOR:** Proportion of prison entrants who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness: 13%

Just over one-third (34%) of prison entrants reported ever having received a head injury leading to a loss of consciousness (Table 14.1). Among entrants, more men (35%) than women (30%) had experienced a head injury, as had more non-Indigenous than Indigenous prison entrants (36% and 28% respectively). For 18% of entrants, symptoms were noticed after the head injury such as headaches, or changes in memory, behaviour or mood. For almost three-quarters (73%) of those who noticed symptoms around the time of injury (or 13% of all entrants), the symptoms were ongoing.

**Table 14.1:** Prison entrants, head injury resulting in loss of consciousness, by sex, age group and Indigenous status, 2015

| | Ever received a head injury | | Symptoms from head injury | | Ongoing symptoms | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| **Sex** | | | | | | | | |
| Male | 300 | 35 | 153 | 18 | 111 | 13 | 862 | 100 |
| Female | 44 | 30 | 28 | 19 | 22 | 15 | 149 | 100 |
| **Age group (years)** | | | | | | | | |
| 18–24 | 62 | 33 | 30 | 16 | 20 | 11 | 188 | 100 |
| 25–34 | 141 | 33 | 74 | 17 | 54 | 13 | 425 | 100 |
| 35–44 | 102 | 38 | 53 | 20 | 40 | 15 | 268 | 100 |
| 45+ | 36 | 29 | 23 | 18 | 18 | 14 | 125 | 100 |
| **Indigenous status** | | | | | | | | |
| Indigenous | 81 | 28 | 50 | 18 | 41 | 14 | 285 | 100 |
| Non-Indigenous | 261 | 36 | 130 | 18 | 91 | 13 | 721 | 100 |
| **Total** | **344** | **34** | **181** | **18** | **133** | **13** | **1,011** | **100** |

*Notes*

1. Totals include 5 entrants whose age was unknown, 5 whose Indigenous status was unknown, and 30 for whom head injury history was unknown.
2. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

### Dischargees

**INDICATOR:** Proportion of prison dischargees who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness while in prison: 2%

Having had a head injury while in prison, resulting in a loss of consciousness, was reported by 23 dischargees (5%), including 6% of male and 3% of female dischargees (Appendix Table C14.1). After the injury was sustained, almost one-half (12 or 3% overall) experienced symptoms such as changes to behaviour, memory or personality, and 8 of the 12 (or 2% of all dischargees) reported ongoing symptoms. (These data exclude New South Wales which did not provide dischargee data.)

## 14.2 Accidents or injuries

**INDICATOR:** Proportion of prison dischargees who had to see a doctor or nurse due to an accident or injury while in prison: 26%

Just over one-quarter (26%) of dischargees reported having to see a doctor or nurse in the prison due to an accident or injury. This occurred more often for men (27%) than women (21%), and more often for Indigenous (30%) rather than non-Indigenous (25%) dischargees.

The oldest dischargees, aged 45 or more, were the least likely to report having an accident or injury (19%, compared with 27–29% of younger dischargees) (Appendix Table C14.2). (These data exclude New South Wales as data were not provided for dischargees.)

## 14.3 Assault and sexual assault

Assaults by a prisoner on another prisoner are often under-reported, making the collection of data difficult. In the UK, a rate of 190 assaults per 1,000 prisoners was reported for 2014, including both prisoner-on-prisoner and prisoner-on-staff assaults (Ministry of Justice 2015).

A review of evidence regarding health interventions for prisoners found that sexual violence does occur in prisons even though there is little available literature on the issue (Schwitters 2014). A National Inmate Survey in the USA found that 1% of prisoners reported having been forced or pressured into having non-consensual sex with another inmate during the previous 12 months, and another 1% reported having experienced one or more abusive sexual contacts or unwanted sexual touching by another inmate (Beck et al. 2013).

**INDICATOR:** Proportion of prison dischargees who reported being physically assaulted or attacked by another prisoner while in prison: 8%

Less than 1 in 10 dischargees (8%) reported that they had been physically assaulted or attacked by another prisoner while in prison. A higher proportion of men (9%) than women (4%) reported being assaulted. The youngest dischargees (aged 18–24 years) were the group most likely to report being assaulted (14% compared with 5–8% of older dischargees) (Appendix Table C14.2). (These data exclude New South Wales which did not provide dischargee data. Note also that these data are self-reported and are therefore likely to be an underestimate because prisoners can be reluctant to disclose this kind of information.)

**INDICATOR:** Proportion of prison dischargees who reported being sexually assaulted by another prisoner while in prison: 3%

Data on sexual assaults were collected by asking prison dischargees whether they had been forced or frightened by another prisoner into doing something sexually that they did not want to do, during their current imprisonment. There were 11 dischargees (3%) who reported experiencing this while in prison. (These data exclude New South Wales which did not provide dischargee data.. Note also that these data are self-reported and are therefore likely to be an underestimate because prisoners can be reluctant to disclose this kind of information.)

## 14.4 Unprotected sex

Having unprotected sex, particularly with new or casual sexual partners, increases the risk of sexually transmissible infections (see section 6.1).

**INDICATOR:** Proportion of prison entrants who had a casual sexual partner in the last 3 months and reported never using a condom: 48%

Unprotected casual sex was common among prison entrants, particularly those who were injecting drug users (IDU) (Table 14.2). Of the 247 prison entrants who reported having had casual sex in the past 3 months, 48% never used a condom. A further 30% sometimes used one, and 22% reported always using a condom. Condom use in casual sex was more common among non-IDU than IDU entrants, with 59% of non-IDU reporting always or sometimes using a condom, compared with 46% of IDU.

**Table 14.2:** Condom use with casual sex partner(s) in the last 3 months, by IDU status, 2013

| | IDU | | Non-IDU | |
|---|---|---|---|---|
| **Condom use** | **Number** | **Per cent** | **Number** | **Per cent** |
| Never | 68 | 54 | 50 | 41 |
| Sometimes | 33 | 26 | 41 | 34 |
| Always | 24 | 19 | 31 | 25 |

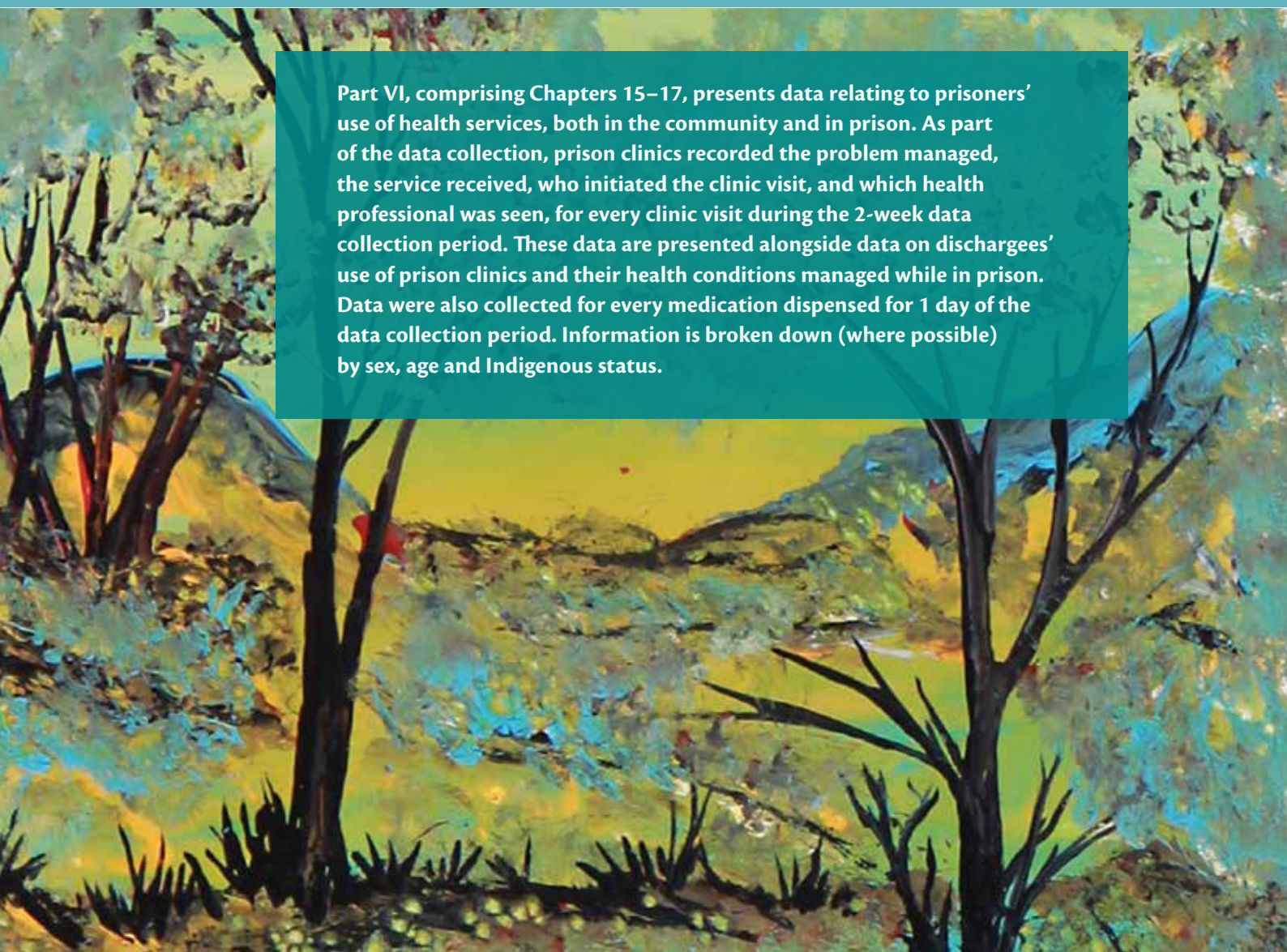
*Notes*

1. Percentages exclude participants reporting no regular, new or casual sex partners in the previous three months, and those who did not report their sexual behaviour.
2. The number of prison entrants surveyed included 342 IDUs and 425 non-IDUs. Of these, 300 and 349 prison entrants, respectively, had sexual intercourse in the last 3 months.
3. Numbers represent the number in the data collection, not the whole prison population.

*Source:* AIHW analysis of NPEBBV&RBS 2013, Table 26.

# VI

# Part VI: Health service use



Part VI, comprising Chapters 15–17, presents data relating to prisoners' use of health services, both in the community and in prison. As part of the data collection, prison clinics recorded the problem managed, the service received, who initiated the clinic visit, and which health professional was seen, for every clinic visit during the 2-week data collection period. These data are presented alongside data on dischargees' use of prison clinics and their health conditions managed while in prison. Data were also collected for every medication dispensed for 1 day of the data collection period. Information is broken down (where possible) by sex, age and Indigenous status.

# 15 General health services

Despite the high level of health problems among prisoners, accessing health services in the community is often difficult. Health may be seen as a lower priority than concerns about housing, employment, drug and alcohol issues, and other stressful life events, meaning that in the community this group of people makes less use of health services. Access to health care services is seen by prisoners as a benefit of being imprisoned, particularly among men (Plugge et al. 2014).

## 15.1 Consulting health services in the community and in prison

### Entrants

The NPHDC provides information from all prison entrants on their health-seeking behaviours. Data were collected for visits to health professionals both in prison (for those prison entrants who reported being in prison on a previous incarceration in the previous 12 months) and in the community. Information regarding non-use of health-care professionals and reasons for not seeking health care when needed was also collected.

**INDICATOR:** Proportion of prison entrants who, in the last 12 months, consulted a medical professional for their own health within the community: 66%

**INDICATOR:** Proportion of prison entrants who were in prison in the last 12 months and consulted a medical professional for their own health in prison: 57%

During the previous 12 months, two-thirds (66%) of prison entrants had consulted with a health professional in the community for their own health (Table 15.1). This is a decrease from 2012, when 74% of entrants had a consultation. In 2015, women (72%) were more likely than men (64%) to have consulted, and the oldest entrants, aged at least 45 years, were the group for whom consultations were the most likely (81%). Indigenous and non-Indigenous entrants were equally likely to have consulted with a health professional in the community (Appendix Table C15.1).

Doctors or general practitioners (58%) were the health professionals consulted by most prison entrants, followed by nurses (20%) and alcohol and other drug workers (18%).

Of those entrants who had been in prison in the previous 12 months, 57% had consulted with a health professional in prison, with women (79%) being more likely than men (55%) to have consulted. There were no differences among age groups or between Indigenous and non-Indigenous entrants in the likelihood of having consulted while in prison (Appendix Table C15.2). Similar to the situation with community consultations, the proportion of entrants who consulted with a health professional in prison in 2015 was also less than in 2012, when it was 67%.

Reflecting the predominance of nurse-led health care in prisons, nurses were the health professionals most likely to have been seen in prison (48%), followed by doctors or general practitioners (41%). Mental health professionals were seen more often in prison than in the community, with 17% of those who had been in prison consulting a mental health nurse/team, and 16% seeing psychologists. Around 12% of entrants saw alcohol and other drug workers while in prison, compared with 18% seeing them while in the community.

**Table 15.1:** Prison entrants, consultations with a health professional in the previous 12 months, in the community and in prison, by health professional, 2015

| | Community | | Prison | |
|---|---|---|---|---|
| **Health professional** | **Number** | **Per cent** | **Number** | **Per cent** |
| Doctor/general practitioner | 582 | 58 | 166 | 41 |
| Nurse | 200 | 20 | 192 | 48 |
| Alcohol/drug worker | 178 | 18 | 47 | 12 |
| Dentist | 132 | 13 | 58 | 14 |
| Psychologist | 125 | 12 | 64 | 16 |
| Psychiatrist | 123 | 12 | 48 | 12 |
| Social worker/welfare officer | 103 | 10 | 39 | 10 |
| Mental health nurse/team | 99 | 10 | 68 | 17 |
| Radiographer | 79 | 8 | 16 | 4 |
| Aboriginal health worker | 67 | 7 | 21 | 5 |
| Physiotherapist | 30 | 3 | 9 | 2 |
| Consulted with any health professional | 663 | 66 | 230 | 57 |

*Notes*

1. Percentages do not sum to 100%, as each prisoner may have seen more than one health professional.
2. Percentages are calculated from the total number of prison entrants (1,011) for the community visits, and from the number of entrants reporting having been in prison during the previous 12 months for the prison visits (402).
3. Visits to 'other' health professionals accounted for 6% of visits in the community and 7% in prison.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

Female entrants were more likely than men to have visited most types of health professionals in the community in the previous 12 months (Table 15.2). The largest differences were in having seen a doctor or general practitioner (67% of women and 56% of men), nurse (33% and 18%), dentist (19% and 12%), psychologist (17% and 11%), social worker or welfare officer (15% and 9%) and other types of health professionals (25% and 15%).

Similarly for consultations with health professionals while in prison, female entrants were more likely than male entrants to have visited each type of health professional.

**Table 15.2:** Prison entrants, consultations with a health professional in the previous 12 months, in the community and in prison, by health professional and sex of entrant, 2015

| Health professional | Community | | | | Prison | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | Female | | Male | | Female | |
| | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| Doctor/general practitioner | 482 | 56 | 100 | 67 | 141 | 39 | 25 | 60 |
| Nurse | 151 | 18 | 49 | 33 | 162 | 45 | 30 | 71 |
| Alcohol/drug worker | 145 | 17 | 33 | 22 | 38 | 11 | 9 | 21 |
| Other | 133 | 15 | 37 | 25 | 12 | 3 | 12 | 29 |
| Psychiatrist | 107 | 12 | 16 | 11 | 38 | 11 | 10 | 24 |
| Dentist | 104 | 12 | 28 | 19 | 49 | 14 | 9 | 21 |
| Psychologist | 99 | 11 | 26 | 17 | 47 | 13 | 17 | 40 |
| Mental health nurse/team | 82 | 10 | 17 | 11 | 52 | 14 | 16 | 38 |
| Social worker/ welfare officer | 80 | 9 | 23 | 15 | 28 | 8 | 11 | 26 |
| Aboriginal health worker | 50 | 6 | 17 | 11 | 16 | 4 | 5 | 12 |
| Consulted with any health professional | 555 | 64 | 108 | 72 | 197 | 55 | 33 | 79 |

*Notes*

1. Percentages do not sum to 100%, as each prisoner may have seen more than one health professional.
2. Percentages are calculated from the total number of prison entrants (1,011. or 862 males and 149 females) for the community visits, and from the number of entrants reporting having been in prison during the previous 12 months (402, or 360 males and 42 females) for the prison visits.
3. 'Other' includes physiotherapists, radiographers and other not-specified health professionals.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

Although the overall proportions of Indigenous and non-Indigenous entrants having consulted with a health professional in the previous 12 months were the same, there were differences in the types of health professionals seen (Table 15.3). In the community, Indigenous entrants were more likely than non-Indigenous entrants to have seen a nurse (25% compared with 18%), and Aboriginal health workers (20% compared with 2%). Among the remaining health professional types, the proportions were either similar, or higher for non-Indigenous than Indigenous entrants—for example, with all types of mental health professionals—psychologist (14% for non-Indigenous entrants, and 7% Indigenous), mental health nurse or team (14% and 8%), and psychiatrist (13% and 9%).

The patterns in prison health consultations, however, were different. Indigenous entrants were more likely to consult mental health professionals in prison than in the community. In prison, Indigenous entrants were more likely than non-Indigenous entrants to have seen most types of health professionals. The exceptions were doctor/general practitioner, seen in prison by 37% of Indigenous and 44% of non-Indigenous entrants, and social worker/welfare officer, for which results were similar.

**Table 15.3:** Prison entrants, consultations with a health professional in the previous 12 months, in the community or in prison, by health professional and Indigenous status, 2015

| Health professional | Community | | | | Prison | | | |
|---|---|---|---|---|---|---|---|---|
| | Indigenous | | Non-Indigenous | | Indigenous | | Non-Indigenous | |
| | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| Doctor/general practitioner | 161 | 56 | 419 | 58 | 47 | 37 | 119 | 44 |
| Nurse | 72 | 25 | 128 | 18 | 65 | 51 | 127 | 47 |
| Alcohol/drug worker | 44 | 15 | 134 | 19 | 17 | 13 | 30 | 11 |
| Aboriginal health worker | 56 | 20 | 11 | 2 | 17 | 13 | 4 | 1 |
| Social worker/ welfare officer | 25 | 9 | 78 | 11 | 14 | 11 | 25 | 9 |
| Dentist | 31 | 11 | 101 | 14 | 23 | 18 | 35 | 13 |
| Psychologist | 21 | 7 | 103 | 14 | 27 | 21 | 37 | 14 |
| Mental health nurse/team | 24 | 8 | 103 | 14 | 30 | 23 | 38 | 14 |
| Psychiatrist | 26 | 9 | 96 | 13 | 21 | 16 | 27 | 10 |
| Other | 55 | 19 | 114 | 16 | 22 | 17 | 31 | 11 |
| Consulted with any health professional | 188 | 66 | 473 | 66 | 74 | 58 | 156 | 57 |

*Notes*

1. Percentages may not sum to 100%, as each prisoner may have seen more than one health professional.
2. Percentages are calculated from the total number of Indigenous (285) and non-Indigenous (721) prison entrants for community visits, and from the number of entrants reporting having been in prison during the previous 12 months (128 Indigenous and 273 non-Indigenous) for prison visits.
3. Totals include 5 entrants of unknown Indigenous status.
4. 'Other' includes physiotherapists, radiographers and other not-specified health professionals.
5. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

## Comparisons with the general community

Non-Indigenous prison entrants aged 25–44 years were less likely than non-Indigenous people in the general community to have visited either a general practitioner or dentist in the previous 12 months (Table 15.4). Prison entrants (12–25%) were much less likely to have visited the dentist than their general community counterparts (35–53%). Visits to general practitioners were made by 52–68% of prison entrants in this group, compared with 68–87% of those in the general community.

**Table 15.4:** Non-Indigenous prison entrants (2015), and general community (2014), consultations with a health professional in the community in the previous 12 months, 2014 and 2015 (per cent)

| | | General non-Indigenous population | | Non-Indigenous prison entrants | |
|---|---|---|---|---|---|
| **Health professional seen** | **Sex** | **25–34** | **35–44** | **25–34** | **35–44** |
| GP | Male | 68 | 74 | 52 | 61 |
| | Female | 87 | 86 | 62 | 68 |
| Dentist | Male | 35 | 45 | 15 | 12 |
| | Female | 47 | 53 | 17 | 25 |

*Sources:* Prison entrants—Entrant form, 2015 NPHDC; general community—ABS 2014d.

# 15.2 Barriers to use of health services

Prison entrants were asked whether there was a time in the previous 12 months when they needed to see a health professional but did not attend. If an entrant indicated that they had not attended a health service when they needed to, they were also asked why they did not attend. In this section, analyses of these data are presented for needing but failing to see a health professional, both in the community and while in prison.

## Entrants

**INDICATOR:** Proportion of prison entrants who, in the last 12 months, needed to consult with a health professional in the community but did not: 34%

**INDICATOR:** Proportion of prison entrants who were in prison in the last 12 months and needed to consult with a health professional while in prison, but did not: 15%

About one-third (34%) of prison entrants reported that there was a time during the previous 12 months when they needed to consult with a health professional in the community but did not (Table 15.5). Women (48%) were more likely than men (32%) to report having missed a health consultation in the community. The proportions fluctuated by age, from a low of

30% of the youngest entrants aged under 25 to a high of 36% of entrants aged 35–44. There was no difference between Indigenous and non-Indigenous entrants (Appendix Table C15.3). The health professionals most commonly not seen were doctors/general practitioners (19%), dentists (11%), psychiatrists (7%), alcohol and other drug workers (6%), and psychologists (6%).

Failing to attend needed consultations with health professionals was more than twice as common in the community as in prison. Among the 337 entrants who had been in prison during the previous 12 months and responded to this question,, 15% reported failing to see a health professional in prison when needed (Table 15.5). The group least likely to report missing a health consultation in prison were entrants aged at least 45 (4%, compared with 13–17% of younger entrants). There was little difference between male and female entrants, and between Indigenous and non-Indigenous entrants in missing health-care consultations in prison. Doctors (10%), dentists (7%) and nurses (7%) were the most commonly-missed categories of health-care consultations .

**Table 15.5:** Prison entrants, consultations with a health professional in the community in the previous 12 months, needed but not made, by health professional, 2015

| | Community | | Prison | |
|---|---|---|---|---|
| **Health professional** | **Number** | **Per cent** | **Number** | **Per cent** |
| Doctor/general practitioner | 154 | 19 | 33 | 10 |
| Dentist | 86 | 11 | 22 | 7 |
| Psychiatrist | 53 | 7 | 11 | 3 |
| Alcohol/drug worker | 51 | 6 | 10 | 3 |
| Psychologist | 50 | 6 | 10 | 3 |
| Nurse | 34 | 4 | 24 | 7 |
| Mental health nurse/team | 31 | 4 | 12 | 4 |
| Social worker/welfare officer | 28 | 3 | 6 | 2 |
| Aboriginal health worker | 15 | 2 | 6 | 2 |
| Physiotherapist | 12 | 1 | 2 | 1 |
| Radiographer | 8 | 1 | 4 | 1 |
| Failed to consult with any health professional | 271 | 34 | 49 | 15 |
| **Total entrants** | **805** | **100** | **337** | **100** |

*Notes*

1. Excludes New South Wales which did not provide data for these indicators.
2. Percentages may not sum to 100%, as each prisoner may have needed to see more than one health professional.
3. Percentages are calculated from the total number of prison entrants (805) for the community visits, and from the number of entrants reporting having been in prison during the previous 12 months for the prison visits (337).
4. 41 prison entrants reported failing to see an unspecified health professional in the community, and 9 in prison.
5. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

Prison entrants reporting not having consulted with a health professional when they needed to were asked why they had not attended. The reasons given for failing to attend a consultation in the community were different to those given if the consultation was in prison (Table 15.6). The most common reason for not attending a consultation in either location was feeling like they did not need/want to or could not be bothered, nominated by 54% of those failing to attend a community consultation and 80% in prison. In the community, the next most common reasons were cost (32%), being affected by alcohol or other drugs (23%), being too busy with work and family responsibilities (20%), and transport or distance issues (18%). For missed consultations in prison, the next most common reasons given were being unable to access the appointment at the required time (due to lock down) (31%), and the waiting time being too long or the service not being available when it was required (27%).

**Table 15.6:** Prison entrants, reasons for not consulting with health professional in community and in prison in last 12 months, 2015

| | Community | | Prison | |
|---|---|---|---|---|
| **Health professional** | **Number** | **Per cent** | **Number** | **Per cent** |
| Felt I didn't need/want to, couldn't be bothered | 147 | 54 | 39 | 80 |
| Cost | 87 | 32 | 11 | 22 |
| Affected by alcohol or drugs (including prescribed drugs) | 61 | 23 | 4 | 8 |
| Too busy (including work, personal, family responsibilities) | 55 | 20 | 3 | 6 |
| Transport/distance | 48 | 18 | 4 | 8 |
| Legal issues | 34 | 13 | 7 | 14 |
| Waiting time too long or not available at time required | 29 | 11 | 13 | 27 |
| Not available in area | 16 | 6 | 5 | 10 |
| Unable to access at time required (lock down) | 10 | 4 | 15 | 31 |
| Other | 63 | 23 | 11 | 22 |
| **Total number of entrants who did not consult a health professional** | **271** | **100** | **49** | **100** |

Notes

1. Excludes New South Wales which did not provide data for this indicator.
2. Percentages do not sum to 100% because entrants could choose more than one reason.
3. Excludes prison entrants who did not report failing to attend a consultation.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Entrant form, 2015 NPHDC.

# 16 Prison clinic

Health-care is important to prisoners, and not only for their physical health. Prisoners view their interactions with health professionals in prison as being different from, and more positive than, other relationships in prison (Jordan 2012). Among male prisoners, those who are older, have had previous mental health treatment, display higher levels of physical symptoms, or who have neurological problems or a history of substance abuse are more likely than others to use prison health services (Goncalves et al. 2014).

## 16.1 Use of prison clinics

### Dischargees

Upon entry to prison, prisoners should routinely receive an initial health assessment. This health assessment is designed to provide health professionals with an indication of the health of the prisoner and which, if any, issues or conditions need to be referred or followed up for further assessment or treatment.

**INDICATOR:** Proportion of prison dischargees who received a health assessment upon entry to prison: 92%

Most dischargees (92%) reported that they had received a health assessment upon entry to prison (Table 16.1). This was consistent for Indigenous and non-Indigenous dischargees, and there was little difference by age. Female dischargees (100%) were more likely to say that they had received an assessment than men (91%).

Following the initial assessment, over one-half of prison dischargees (56%) reported having been referred for further assessment or treatment, up from 41% in 2012. Indigenous dischargees (66%) were more likely than non-Indigenous dischargees (52%) to have been referred. Younger dischargees aged 18–24 were less likely to be referred than those aged 45 or over (47% and 64% respectively).

Almost one-half of dischargees (48%) were referred to a doctor and about one-third (32%) were referred to a nurse. Around 1 out of 8 dischargees (13%) were referred to a mental health nurse and 10% were referred to a dentist.

**Table 16.1:** Prison dischargees, initial health assessment, by sex, age group and Indigenous status, 2015

| | Health assessment on entry to prison | | Referral made following assessment | | Total prison dischargees |
|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number |
| **Sex** | | | | | |
| Male | 335 | 91 | 205 | 56 | 369 |
| Female | 68 | 100 | 41 | 60 | 68 |
| **Age group (years)** | | | | | |
| 18–24 | 60 | 91 | 31 | 47 | 66 |
| 25–34 | 146 | 91 | 83 | 52 | 161 |
| 35–44 | 128 | 96 | 83 | 62 | 133 |
| 45+ | 66 | 90 | 47 | 64 | 73 |
| **Indigenous status** | | | | | |
| Indigenous | 121 | 92 | 86 | 66 | 131 |
| Non-Indigenous | 269 | 92 | 152 | 52 | 292 |
| **Total** | **403** | **92** | **246** | **56** | **437** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 dischargees whose age was unknown, 14 whose Indigenous status was unknown, and 8 whose assessment on entry was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Dischargee form, 2015 NPHDC.

**INDICATOR:** Proportion of prison dischargees who could easily see a medical professional (GP or nurse) in prison if they had a health problem: 91%

About 9 out of 10 prison dischargees (91%) felt they could easily see a GP or nurse in prison for a health condition; however this varied with type of professional: 92% felt they could easily see a nurse, compared with 78% who felt they could easily see a GP (up from 67% in 2012) (Table 16.2). More women (96%) than men (90%) felt they could easily see a GP or nurse for a health problem when needed. Almost all older dischargees aged 45 and over (99%) felt they could easily see a GP or nurse when needed, compared with 85% of prisoners aged 18–24.

**Table 16.2:** Prison dischargees, access to health professionals in prison, by sex, age group and Indigenous status, 2015

| | Could easily see a doctor | | Could easily see a nurse | | Could easily see doctor/nurse | | Total prison dischargees |
|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number |
| **Sex** | | | | | | | |
| Male | 284 | 77 | 335 | 91 | 333 | 90 | 369 |
| Female | 55 | 81 | 65 | 96 | 65 | 96 | 68 |
| **Age group (years)** | | | | | | | |
| 18–24 | 51 | 77 | 57 | 86 | 56 | 85 | 66 |
| 25–34 | 120 | 75 | 145 | 90 | 146 | 91 | 161 |
| 35–44 | 100 | 75 | 123 | 92 | 120 | 90 | 133 |
| 45+ | 65 | 89 | 71 | 97 | 72 | 99 | 73 |
| **Indigenous status** | | | | | | | |
| Indigenous | 103 | 79 | 121 | 92 | 120 | 92 | 131 |
| Non-Indigenous | 222 | 76 | 264 | 91 | 264 | 90 | 292 |
| **Total** | **339** | **78** | **400** | **92** | **398** | **91** | **437** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Data may not sum across rows because some dischargees may have indicated that they were easily able to see both a doctor and a nurse.
3. Totals include 4 dischargees whose age was unknown, 14 whose Indigenous status was unknown and 17 whose access to a doctor or nurse while in prison was unknown.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Dischargee form, 2015 NPHDC.

**INDICATOR:** Proportion of prison dischargees who visited the prison clinic: 84%

The majority of prison dischargees visited the prison clinic while in prison (84%), with a higher proportion of women (88%) than men (83%) visiting. This proportion has fallen from 93% in 2012. In 2015, the age group most likely to have made a visit to the prison clinic were dischargees aged 35–44 (92% compared with 73% of dischargees aged 18–24). A higher proportion of non-Indigenous than Indigenous prison dischargees visited the prison clinic (88% and 76% respectively). (Detailed data for this indicator are in Appendix Table C16.1.)

For many dischargees, their most recent clinic visit was in the last week (41%), and for a further 3 out of 10 (29%), it was within the last month. For the remainder, clinic visits were less recent, with 11% visiting in the last 2–6 months and 2% either in the last 6–12 months or only upon entry to prison.

## Prisoners in custody

The NPHDC collected information on prisoners' use of prison clinics during the 2-week data collection period. For each prisoner encounter at the prison clinic, a 1-page questionnaire was completed by staff. Data collected included demographic information, details of who initiated the visit, the problem managed and which health professional the prisoner saw.

A visit was defined as a consultation for which an entry was made in the health service record (other than for routine household-type treatment such as adhesive plasters or paracetamol).

**INDICATOR:** Proportion of prisoners in custody who used the prison clinic during the 2-week data collection period: 44%

Over 2 out of 5 prisoners (44%) used the prison clinic during the 2–week data collection period (Table 16.3). This is an increase since the 2012 data collection, when 29% of prisoners visited the clinic. It is likely that some of this increase is due to the change in data collection methodology from paper-based to electronic data collection (see Section 2.1).

A higher proportion of women (57%) than men (43%) visited the clinic, and, proportionally, more older prisoners visited than younger prisoners (53% of those aged 45 or over compared with 34% of those aged 18–24). The proportions of Indigenous (41%) and non-Indigenous (43%) prisoners visiting the clinic were similar.

**Table 16.3:** Prisoners who visited the prison clinic during the data collection period, by sex, age group and Indigenous status, 2015

| | Number of prisoners who used the prison clinic during data collection | Number of prisoners in custody on 30 June 2014 | Proportion of prisoners who used the prison clinic (per cent) |
|---|---|---|---|
| **Sex** | | | |
| Male | 8,502 | 19,828 | 43 |
| Female | 1,049 | 1,832 | 57 |
| **Age group (years)** | | | |
| 18–24 | 1,297 | 3,820 | 34 |
| 25–34 | 3,286 | 7,845 | 42 |
| 35–44 | 2,737 | 5,890 | 46 |
| 45+ | 2,162 | 4,105 | 53 |
| **Indigenous status** | | | |
| Indigenous | 2,565 | 6,238 | 41 |
| Non-Indigenous | 6,576 | 15,409 | 43 |
| **Total** | **9,571** | **21,660** | **44** |

*Notes*

1. Excludes New South Wales which did not provide clinic data.
2. Totals include 20 prisoners whose sex was unknown, 89 whose age was unknown and 430 whose Indigenous status was unknown.
3. 30 June 2014 data total (from the ABS) excludes New South Wales and prisons not participating in the NPHDC for the purpose of comparability.
4. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Clinic form, 2015 NPHDC; AIHW analysis of ABS 2014e.

Almost all clinic consultations (>99%) were conducted in person, with the remainder conducted via teleconference/telemedicine.

During the 2-week data collection period, 9,571 prisoners made 21,377 visits to the prison clinic (Table 16.4). Female prisoners visited the clinic more often than men (average of 2.60 and 2.19 visits per prisoner respectively), as did non-Indigenous prisoners when compared with Indigenous prisoners (2.27 and 2.17 visits per prisoner respectively). Older prisoners visited the clinic more often—an average of 2.48 visits per prisoner for prisoners aged 45 and over compared with 1.98 visits per prisoner for young prisoners aged 18–24. This pattern was also seen in relation to the average number of problems managed, though to a lesser extent. Prisoners aged 45 and over had an average of 1.35 problems per visit compared with 1.27 problems managed per visit for prisoners aged 18–24. Men had more problems managed than women per clinic visit (1.33 and 1.28 respectively). Overall, more than one problem was managed at almost one-quarter (23%) of clinic visits.

**Table 16.4:** Prisoners in custody, clinic visits during the data collection period, by sex, age group and Indigenous status, 2015

| | Number of prisoners who used the prison clinic during data collection | Number of clinic visits | Average (mean) visits per prisoner | Number of problems managed | Average (mean) problems managed per visit |
|---|---|---|---|---|---|
| **Sex** | | | | | |
| Male | 8,502 | 18,602 | 2.19 | 24,502 | 1.33 |
| Female | 1,049 | 2,732 | 2.60 | 3,456 | 1.28 |
| **Age group (years)** | | | | | |
| 18–24 | 1,297 | 2,563 | 1.98 | 3,216 | 1.27 |
| 25–34 | 3,286 | 7,096 | 2.16 | 9,257 | 1.32 |
| 35–44 | 2,737 | 6,176 | 2.26 | 8,156 | 1.34 |
| 45+ | 2,162 | 5,362 | 2.48 | 7,144 | 1.35 |
| **Indigenous status** | | | | | |
| Indigenous | 2,565 | 5,559 | 2.17 | 7,153 | 1.31 |
| Non-Indigenous | 6,576 | 14,907 | 2.27 | 19,667 | 1.33 |
| **Total** | **9,571** | **21,377** | **2.23** | **27,985** | **1.33** |

*Notes*

1. Excludes New South Wales which did not provide clinic data.
2. Totals include 20 prisoners whose sex was unknown, 89 whose age was unknown and 430 whose Indigenous status was unknown.
3. 'Number of clinic visits' includes 43 visits for prisoners of unknown sex, 180 of unknown age, 911 of unknown Indigenous status, and 260 visits in which the problem managed was unknown.
4. 'Number of problems managed' total includes 27 problems managed for prisoners of unknown sex, 212 of unknown age and 1,165 of unknown Indigenous status.
5. Calculation of 'Average (mean) number of problems managed per visit' excludes the 260 visits where the problem managed was unknown.
6. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Clinic form, 2015 NPHDC.

## 16.2 Problems managed in clinic visits

### Dischargees

Among prisoners in the USA reporting having a chronic condition, 27% were diagnosed while in prison. These chronic conditions included cancer, high blood pressure, stroke-related problems, diabetes, heart-related problems, kidney-related problems, arthritis, asthma and cirrhosis of the liver (Maruschak & Berzofsky 2015).

**INDICATOR:** Proportion of prison dischargees who were diagnosed with a health condition in prison: 26%

About one-quarter (26%) of prison dischargees were diagnosed with at least one health condition while in prison, down from 40% in 2012 (Appendix Table C16.2). More than one-half of dischargees who had ever been diagnosed with cancer had their diagnosis made while in prison (Table 16.5). Cancer was the condition most likely to be diagnosed in prison, accounting for over one-half (4 of 7 cases) of cancer cases, followed by digestive conditions (41% of cases diagnosed in prison). Asthma (8%), arthritis (8%) and respiratory conditions (6%) were the least likely health conditions to be diagnosed in prison, with most dischargees diagnosed before entering prison.

**INDICATOR:** Proportion of prison dischargees who received treatment for a health condition in prison: 57%

Overall, more than one-half (57%) of all prison discharges were offered and/or received treatment in prison, representing 84% of those ever diagnosed with a health condition (Appendix Table C16.3). All (20 of 20) of those diagnosed with diabetes, and a high proportion of dischargees ever diagnosed with psychological/mental health conditions (110 of 136), asthma (47 of 62), cardiovascular disease (18 of 24) and skin conditions (25 of 37) were offered treatment in prison (Table 16.5). Just over one-half of dischargees (70 of 132) ever diagnosed with alcohol or other drug issues were offered treatment in prison. (These data must be interpreted with caution, because not all health conditions are chronic and require ongoing treatment.)

**Table 16.5:** Prison dischargees, selected health conditions, 2015

| | Ever diagnosed | Diagnosed in prison this time | Offered treatment in prison |
|---|---|---|---|
| **Problem managed** | **Number** | **Number** | **Number** |
| Psychological/mental health | 136 | 28 | 110 |
| Drug and alcohol issue | 132 | 16 | 70 |
| Dental | 90 | 15 | 48 |
| Asthma | 62 | 5 | 47 |
| Musculoskeletal injury | 51 | 19 | 35 |
| Communicable disease | 45 | 13 | 17 |
| Skin condition | 37 | 13 | 25 |
| Sensory (including ear and eye conditions) | 26 | 9 | 14 |
| Musculoskeletal condition | 25 | 4 | 14 |
| Other | 28 | 10 | 14 |
| Cardiovascular disease | 24 | 4 | 18 |
| Diabetes | 20 | 5 | 20 |
| Neurological condition | 18 | 0 | 5 |
| Digestive condition | 17 | 7 | 13 |
| Women's health condition | 17 | 5 | 9 |
| Respiratory condition | 17 | 1 | 7 |
| Arthritis | 13 | 1 | 4 |
| Cancer | 7 | 4 | 4 |
| **Total (any condition)** | **297** | **114** | **248** |

Notes

1. Excludes New South Wales which did not provide dischargee data.
2. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

## Prisoners in custody

**INDICATORS:** Proportion of prisoners in custody who had a problem managed in the prison clinic during the 2-week data collection period: 12%—medication/vaccination issues; 13%—general health assessment

The most common problems managed in prison clinics were related to medication/vaccination (other than the administration of routine medications) and general health assessments, each representing around 1 in 5 (19% and 18% respectively) problems managed at the clinic and around 1 in 8 prisoners (12% and 13%) (Table 16.6). Psychological/mental health (12%), diabetes (9%) and pathology (8%) were also among the most commonly managed problems.

The two most commonly managed problems in the clinic are related to new prison entrants. General health assessments may be performed for various reasons specific to the prison environment, which contributes towards these assessments being among the most common reasons for attending the clinic. General health assessments for prisoners are mandated on reception, and annually. Further, prisoners who have returned to prison (for example, from being transported to and from court), or who are on suicide or self-harm alert, or have been in segregation, may be given a routine health check. Similarly, vaccination programs and the need to assess and provide continuity for existing medications of prison entrants may contribute to these being the most commonly managed problems in prison clinics.

Other commonly managed problems in the clinic may include some problems that require multiple clinic visits by the same prisoners. These problems may represent a high proportion of problems managed at the clinic, but a smaller proportion of prisoners. For example, despite diabetes being among the most commonly managed problems, only 3% of prisoners in custody visited the clinic for that reason. This is primarily because diabetes is a problem for which prisoners tended to make multiple visits during the period.

**Table 16.6:** Problems managed in prison clinics during the data collection period, 2015

| Problem managed | Number of problems managed | Proportion of problems managed (%) | Number of prisoners | Proportion of prisoners in custody (%) |
|---|---|---|---|---|
| Medication/vaccination | 5,242 | 19 | 2,602 | 12 |
| General health assessment | 5,013 | 18 | 2,769 | 13 |
| Psychological/mental health | 3,301 | 12 | 1,964 | 9 |
| Diabetes | 2,529 | 9 | 683 | 3 |
| Pathology | 2,178 | 8 | 1,570 | 7 |
| Wound care | 1,405 | 5 | 711 | 3 |
| Skin condition | 1,186 | 4 | 859 | 4 |
| Drug and alcohol use | 1,029 | 4 | 692 | 3 |
| Dental | 1,024 | 4 | 824 | 4 |
| Musculoskeletal injury | 1,001 | 4 | 771 | 4 |
| Musculoskeletal condition | 789 | 3 | 635 | 3 |
| Cardiovascular disease | 573 | 2 | 414 | 2 |
| Digestive condition | 445 | 2 | 313 | 1 |
| Other | 412 | 1 | 179 | 1 |
| Communicable disease | 351 | 1 | 270 | 1 |
| Respiratory condition | 331 | 1 | 236 | 1 |
| Sensory (including ear and eye conditions) | 298 | 1 | 250 | 1 |
| Neurological condition | 294 | 1 | 206 | 1 |
| Women's health condition | 194 | 1 | 139 | 1 |
| Asthma | 166 | 1 | 147 | 1 |
| Diet/weight loss | 82 | <1 | 50 | <1 |
| Arthritis | 65 | <1 | 55 | <1 |
| Malignancy | 40 | <1 | 28 | <1 |
| Pain management | 37 | <1 | 19 | <1 |
| **Total** | **27,985** | **100** | **21,660 prisoners in custody** | **100** |

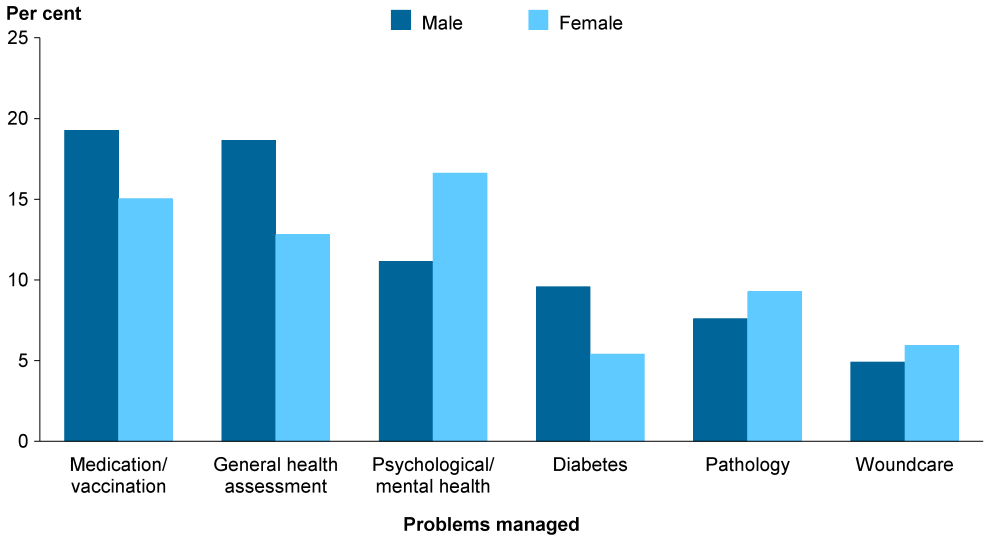
*Notes*

1. Excludes New South Wales which did not provide clinic data.
2. Excludes visits to the prison clinic during the data collection period for routine provision of medication.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Clinic form, 2015 NPHDC.

There were several differences between the problems that men and women had managed at the prison clinic. Men were more likely than women to have medication/vaccination management (19% compared with 15%), a general health assessment (19% and 13%) and diabetes management (10% and 5%) (Figure 16.1). Women were more likely than men to have management of psychological/mental health problems (17% compared with 11%). (Detailed data for Figure 16.1 are available in Appendix Table C16.4.)

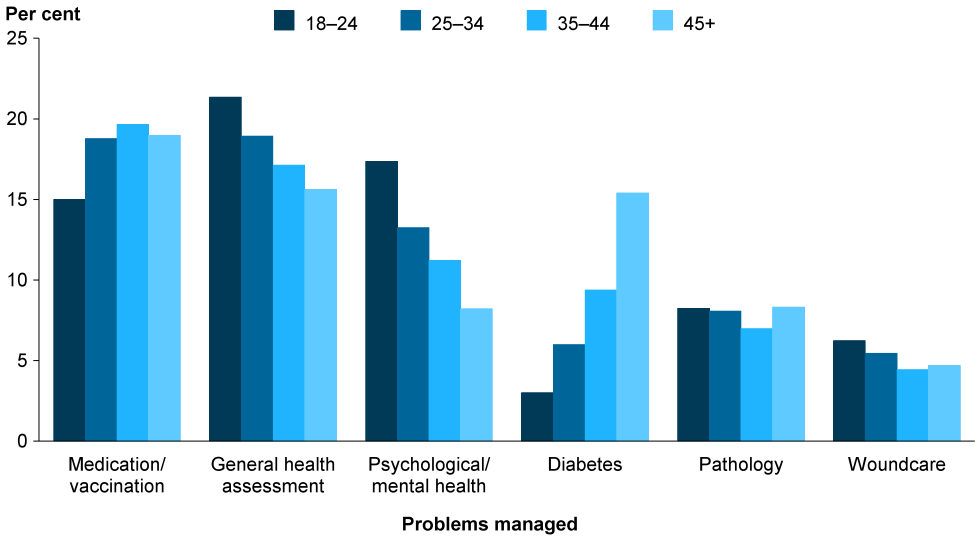
**Figure 16.1:** Problems managed at clinic visits, by sex, 2015




*Note:* Excludes New South Wales which did not provide clinic data.
*Source:* Clinic form, 2015 NPHDC.

General health assessments were more common among prisoners aged 18–24 who had a problem managed than those aged 45 and over (21% and 16% respectively). Similarly, psychological/mental health problems comprised 17% of problems managed for prisoners aged 18–24 compared with 8% of those for prisoners aged 45 and over. The pattern was the opposite for diabetes, where 15% of problems managed at the prison clinic were for prisoners aged 45 and over, compared with just 3% of problems managed for the 18–24 group. (Detailed data for Figure 16.2 are available in Appendix Table C16.5.)

**Figure 16.2:** Problems managed at clinic visits, by age group, 2015




*Note:* Excludes New South Wales which did not provide clinic data.
*Source:* Clinic form, 2015 NPHDC.

## Comparison with general community

The Bettering the Evaluation and Care of Health (BEACH) dataset collects information on problems managed in a sample of encounters with General Practitioners. However, BEACH data with detailed patient demographic breakdowns are not publically available and these analyses were out-of-scope for this project. Therefore, unlike other general community comparisons made in this report, the data for problems managed are not directly comparable with the prisoner population. The sample of patients in the BEACH data includes younger (11% aged under 15 years) and more older (33% aged over 65 years) people than in the prisoner data, as well as more women (57% were women) and fewer Indigenous people (99% were non-Indigenous) (Britt et al. 2014).

Note that in the table below, clinic visits in the general community are with a general practitioner, and in prison may be with a general practitioner or nurse.

Prison clinic visits were more likely than general practitioner visits in the community to involve management of one problem rather than multiple problems (Table 16.7). Three-quarters (75%) of prison clinic visits managed a single problem, compared with 60% of visits in the general community. This may reflect the different types of workload in prison clinics compared to general practice in the community. Some of the problems managed in prison clinics are specific to prisons, such as general health assessments following transfers to court, or time in segregation. This would have the effect of boosting the proportion of single problem encounters in prisons. Alternatively, some problems that would be handled as a single problem in a prison clinic visit might not be handled by a general practitioner in the general community because of the greater range of available healthcare options in the community compared to prison, with problems such as diabetes blood tests likely to be managed either at home or in a pharmacy. The results also reflect the general community data having a higher proportion of older patients, and female patients, who on average have a higher number of problems managed per visit (Britt et al. 2014).

**Table 16.7:** Clinic visits, number of problems managed per visit, 2015 (per cent)

| Number of problems managed per visit | General community | Prisoners in custody |
|---|---|---|
| 1 | 60 | 75 |
| 2 | 26 | 18 |
| 3 | 10 | 4 |
| 4+ | 4 | 1 |
| Total | 100 | 100 |

Notes

1. Excludes New South Wales which did not provide 'Prisoners in custody' clinic data.
2. 260 prisoners who visited prison clinics had unknown problems managed.
3. Excludes visits to the prison clinic for routine provision of medication.
4. The general community and prisoners in custody sample populations in this table have different demographic compositions, with the general community sample containing people under 18 years, a higher proportion of people aged over 65 years, a higher proportion of women, and a lower proportion of Indigenous people than the prisoners in custody sample.

*Sources:* Clinic form, 2015 NPHDC; Britt et al. 2014, Table 7.1.

Table 16.8 compares some of the problems managed in prison clinics with those in general practice in the community, further highlighting differences in the types of health care provided in the two settings. Some of these differences are reflective of the health conditions of prisoners, and others are more reflective of the prison setting. General health assessments represent 18% of problems managed in prison clinics, and were included in 23% of visits. The general community equivalent, a general check-up, comprised only 2% of problems managed and 3% of encounters in the community. Prison clinics managed diabetes at 12% of visits, compared with 4% in the general community. Psychological problems represented a greater proportion of problems managed in prison clinics than the general community (12% compared with 9%).

**Table 16.8:** Problems managed in prison clinics during the data collection period, 2015 (per cent)

| | General community | | Prisoners in custody | |
|---|---|---|---|---|
| **Problem managed** | **Proportion of problems managed** | **Proportion of encounters** | **Proportion of problems managed** | **Proportion of clinic visits** |
| Respiratory including asthma | 12 | 18 | 2 | 2 |
| Musculoskeletal injury/condition including arthritis | 12 | 17 | 7 | 9 |
| Skin | 11 | 17 | 4 | 6 |
| Circulatory including cardiovascular disease | 11 | 16 | 2 | 3 |
| Psychological | 9 | 13 | 12 | 15 |
| Digestive | 7 | 11 | 2 | 2 |
| Diabetes (non-gestational) | 3 | 4 | 9 | 12 |
| Neurological | 3 | 4 | 1 | 1 |
| General check-up/health assessment | 2 | 3 | 18 | 23 |

Notes

1. Excludes New South Wales which did not provide 'Prisoners in custody' clinic data.
2. 260 prisoners who visited prison clinics had unknown problems managed.
3. Excludes visits to the prison clinic for routine provision of medication.
4. The general community and prisoners in custody sample populations in this table have different demographic compositions, with the general community sample containing people under 18 years, a higher proportion of people aged over 65 years, a higher proportion of women, and a lower proportion of Indigenous people than the prisoners in custody sample.

*Sources:* Clinic form, 2015 NPHDC; Britt et al. 2014, Table 7.3.

## 16.3 Services received in prison clinic visits

### Prisoners in custody

**INDICATOR:** Proportion of clinic visits during the 2-week data collection period by service received: treatment—62% of clinic visits; assessment—75%; advice and education—44%; and referral—11%.

For each clinic visit during the data collection period, the service or services received by the prisoner was/were recorded. An assessment was performed at three-quarters (75%) of all clinic visits, treatment was provided at around 3 out of 5 visits (62%), advice and education was provided at around 2 out of 5 visits (44%), and around 1 in 10 (11%) had a referral for further care provided. Assessment was more common among young prisoners (79% of 18–24 year olds compared with 72% of those aged 45+), but treatment was more common among older prisoners (64% of those aged 35+ compared with 56% of 18–24 year olds). Treatment was more commonly provided to men (63%) compared to women (56%), and to non-Indigenous prisoners (64%) compared with Indigenous prisoners (58%). Referrals were more commonly provided to women (15%) than men (10%).

**Table 16.9:** Prisoners who visited the prison clinic during the data collection period, services received, by sex, age group and Indigenous status, 2015

| | Assessment | | Advice and education | | Treatment | | Referral | |
|---|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| **Sex** | | | | | | | | |
| Male | 13,840 | 74 | 8,162 | 44 | 11,810 | 63 | 1,881 | 10 |
| Female | 2,164 | 79 | 1,269 | 46 | 1,531 | 56 | 404 | 15 |
| **Age group (years)** | | | | | | | | |
| 18–24 | 2,012 | 79 | 1,114 | 43 | 1,425 | 56 | 310 | 12 |
| 25–34 | 5,390 | 76 | 3,259 | 46 | 4,408 | 62 | 804 | 11 |
| 35–44 | 4,599 | 74 | 2,807 | 45 | 3,959 | 64 | 625 | 10 |
| 45+ | 3,872 | 72 | 2,230 | 42 | 3,456 | 64 | 539 | 10 |
| **Indigenous status** | | | | | | | | |
| Indigenous | 4,183 | 75 | 2,336 | 42 | 3241 | 58 | 578 | 10 |
| Non-Indigenous | 11,137 | 75 | 6,775 | 45 | 9,499 | 64 | 1,585 | 11 |
| **Total** | **16,020** | **75** | **9,434** | **44** | **13,352** | **62** | **2,286** | **11** |

*Notes*

1. Excludes New South Wales which did not provide clinic data.
2. Percentages calculated from total number of clinic visits.
3. Prisoners could have multiple services received at each clinic visit.
4. Totals include 43 where sex was unknown, 180 whose age was unknown and 911 whose Indigenous status was unknown.
5. Numbers represent the number in this data collection, not the whole prison population.

*Sources:* Clinic form, 2015 NPHDC; AIHW analysis of ABS 2014.

## 16.4 Initiator of clinic visits

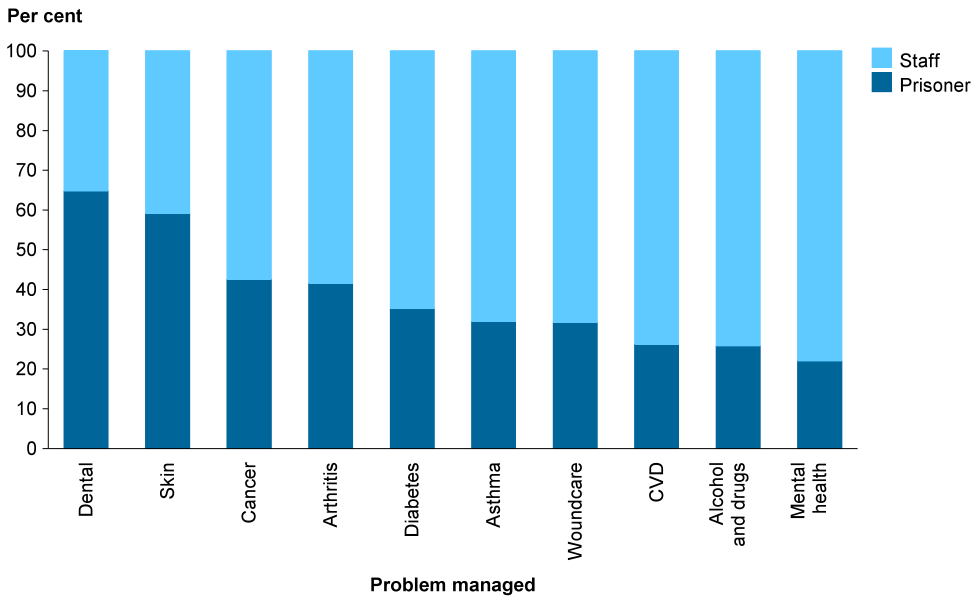
Prisoners may initiate visits to the prison clinic or prison clinic staff may initiate the visit. A patient initiating a health contact indicates healthcare-seeking behaviour. Health staff may initiate clinic contacts to, for example, monitor a health condition or follow up a pathology test or health intervention. For the PHDC, clinic staff recorded who initiated each clinic visit.

### Prisoners in custody

**INDICATOR:** Proportion of clinic visits initiated by prisoners: 34%

More clinic visits during the data collection period were initiated by clinic staff (65%) than prisoners (34%). This trend was consistent among prisoners of both sexes and across all ages. Non-Indigenous prisoners (37%) more likely to initiate visits than Indigenous prisoners (27%). Prisoners were more likely to initiate a visit than clinic staff for dental conditions (64% of visits initiated by prisoner) and skin conditions (59%) (Figure 16.3). For all other types of problems, clinic staff were more likely to initiate visits, especially psychological/mental health issues (78% initiated by staff). (Detailed data from this figure are available in Appendix Table C16.7.)

**Figure 16.3:** Clinic visits, visits initiated by staff or prisoner, by selected problems managed, 2015




*Notes*

1. Excludes New South Wales which did not provide clinic data.
2. Excludes visits where the person who initiated managing the problem was unknown.

*Source:* Clinic form, 2015 NPHDC.

## 16.5 Type of health professional seen

Prisons have nurse-led healthcare, with nurses responsible for providing most of an individual's primary healthcare through the prison clinic. If nursing staff are unable to help a prisoner, they can refer them to a prison doctor, allied health worker or other health specialist. Most prisons have general practitioners who either work at the prison or visit regularly. Some prisons offer dental services and mental health services.

### Dischargees

**INDICATOR:** Proportion of prison dischargees' clinic visits by type of health professional seen: Nurse seen by 82% of dischargees, medical practitioner 66%

While in prison, around 8 out of 10 prison dischargees (82%) visited a nurse, and more than 3 out of 5 (66%) visited a GP (Table 16.10). One-quarter (25%) of all prison dischargees were seen by a dentist, while around 1 in 5 (18%) were seen by a mental health nurse/team while visiting the prison clinic. Aboriginal health workers (3%), radiographers and physiotherapists (6% each) were among the least commonly seen health professionals. The proportion visiting a doctor fell from 75% to 66% between 2012 and 2015.

**Table 16.10:** Prison dischargees, health professional visited during imprisonment, 2015

| Health professional | Number | Per cent |
|---|---|---|
| Nurse | 360 | 82 |
| Medical practitioner/ GP | 290 | 66 |
| Dentist | 109 | 25 |
| Mental health nurse/team | 79 | 18 |
| Psychiatrist | 52 | 12 |
| Alcohol and drug worker | 46 | 11 |
| Psychologist | 44 | 10 |
| Social worker/welfare officer | 42 | 10 |
| Radiographer | 27 | 6 |
| Physiotherapist | 25 | 6 |
| Other | 21 | 5 |
| Aboriginal health worker | 13 | 3 |
| Total | 437 | 100 |

*Notes*

1. Excludes New South Wales which did not provide dischargee data..
2. Multiple health professionals could be selected. Percentages calculated from total number of dischargees.
3. Includes 2 dischargees where the type of health professional seen was unknown.
4. 'Other' includes orthopaedic surgeon, optometrist, counsellor, sexual health nurse, midwife and rheumatologist.
5. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

## Prisoners in custody

**INDICATOR:** Proportion of clinic visits by type of health professional seen: Nurse seen in 71% of clinic visits, doctor/general practitioner 17%

A nurse was the most commonly consulted health professional by prisoners in custody, at almost three-quarters (71%) of all clinic visits. About 1 in 6 clinic visits was to a general practitioner (17%), with a mental health nurse/team seen at 7% of visits, and dentists, psychiatrists and other health professionals seen at 2–3% of visits. The remaining health professionals were seen at 1% or less of visits (Table 15.11). The proportion of clinic visits being with a doctor/general practitioner fell from 21% to 17% since 2012.

The results in this table differ to Table 15.10 because this table represents the health professionals seen during a 2-week sample of clinic visits, whereas Table 15.10 represents all health professionals seen during the entire time dischargees were in prison.

**Table 16.11:** Clinic visits during the data collection period, by health professional seen, 2015

| Health professional | Number | Per cent |
|---|---|---|
| Nurse | 15,190 | 71 |
| Doctor/general practitioner | 3,581 | 17 |
| Mental health nurse/team | 1,519 | 7 |
| Dentist | 627 | 3 |
| Psychiatrist | 529 | 2 |
| Other | 323 | 2 |
| Psychologist | 246 | 1 |
| Aboriginal health worker | 192 | 1 |
| Physiotherapist | 184 | 1 |
| Alcohol and drug worker | 164 | 1 |
| Radiographer | 88 | <1 |
| Social worker/welfare officer | 42 | <1 |
| **Total clinic visits** | **21,377** | **100** |

*Notes*

1. Excludes New South Wales which did not provide clinic data.
2. Totals do not sum because more than one health professional was seen during some visits.
3. 'Other' includes optometrists, pharmacists, cardiologists, population health workers, immunisation nurses, and 'quit smoking' nurse.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Clinic form, 2015 NPHDC.

## 16.6 Satisfaction with health services

In the USA, 80% of prisoners had seen a health care professional for a medical reason since admission, and of these, 56% of prisoners reported being very or somewhat satisfied with the health care services they had received (Maruschak & Berzofsky 2015).

Prison dischargees were asked questions about their experience with prison health services during their time in prison. (These data exclude New South Wales which did not provide dischargee data and dischargees who visited the prison clinic only on reception for their initial screening assessment.)

**INDICATOR:** Proportion of prison dischargees who were satisfied with the amount of information on their condition received at a clinic visit: 90%

More than one-half (56%) of prison dischargees who visited the prison clinic during their imprisonment were completely satisfied with the amount of information they received, while one-third (34%) were somewhat satisfied. The proportion being satisfied rose from 77% to 90% between 2012 and 2015. In 2015, 1 in 20 dischargees (5%) felt that they did not receive enough information from the prison clinic.

**INDICATOR:** Proportion of prison dischargees who received answers that they could understand at the prison clinic: 94%

Two-thirds (66%) of prison dischargees who visited the prison clinic felt completely satisfied that they received answers they could understand. A further 28% were somewhat satisfied and 1% of dischargees felt that they did not get answers they could understand. The proportion reporting receiving answers they could understand rose from 72% to 94% between 2012 and 2015.

**INDICATOR:** Proportion of prison dischargees who were able to be involved in their treatment decision at a clinic visit: 83%

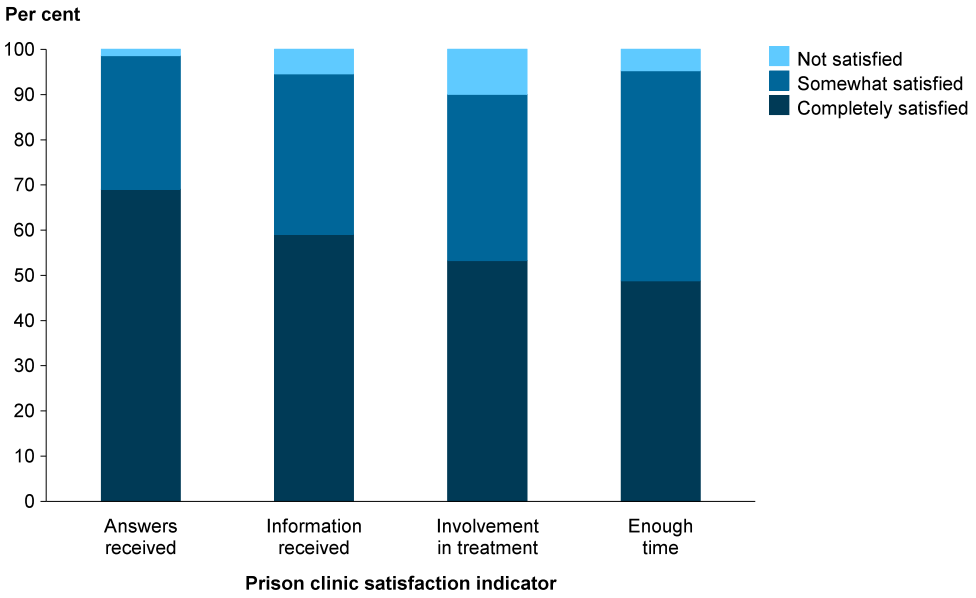
Just under one-half (49%) of prison dischargees felt they were completely involved in their treatment decision and a further one-third (34%) felt that they were somewhat involved. This represents an increase from 72% to 83% since 2012 in the proportion of dischargees reporting being able to be involved in their treatment decisions. In 2015, under 1 in 10 (9%) felt that they were not given an opportunity to be involved in their treatment decision. This was more likely for non-Indigenous dischargees (12%) than Indigenous dischargees (4%).

**INDICATOR:** Proportion of prison dischargees who mostly or always had enough time at a clinic visit: 79%

Around one-half (47%) of dischargees felt that they always had enough time at clinic visits. A further one-third (32%) felt that they mostly had time while over 1 in 10 (13%) felt that they only sometimes had enough time at a clinic visit. A small proportion (4%) of dischargees felt they rarely or never had enough time.

Of the indicators relating to satisfaction with the prison clinic, dischargees were more likely to be completely satisfied with answers received at the prison clinic than any other indicator (66% compared with having enough time at a clinic, which had the lowest level of dischargees reporting to be completely satisfied at 47%) (Figure 16.4). Dischargees were more likely to report not being satisfied with their level of involvement in their treatment decision (9%) than any other indicator. (Detailed data for Figure 16.4 can be found in Appendix Tables C16.8, C16.9, C16.10 and C16.11.)

**Figure 16.4:** Prison dischargees, satisfaction with health services 2015




*Note:* Excludes New South Wales which did not provide dischargee data..
*Source:* Discharge form, 2015 NPHDC.

**INDICATOR:** Proportion of prison dischargees who rated the health care they received in the prison clinic as excellent: 27%

About 4 in 5 prison dischargees (82%) rated their healthcare as 'excellent' (27%) or 'good' (54%) (Table 16.12). A further 10% rated the health care as 'neither good nor poor', and 4% rated their health care as 'poor or very poor'. Men were more likely than women to rate the service as excellent (29% compared with 22%), while women were more likely than men to rate the service as good (60% compared with 53%). Indigenous dischargees were slightly more likely to rate the service as 'excellent' or 'good' (31% excellent, 55% good) than non-Indigenous dischargees (27% and 52%).

**Table 16.12:** Prison dischargees, rating of health care received by dischargees who visited the prison clinic, 2015

| | Excellent | | Good | | Neither good nor poor | | Poor/ very poor | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | No. | Per cent | No. | Per cent | No. | Per cent | No. | Per cent | No. |
| **Sex** | | | | | | | | | |
| Male | 88 | 29 | 163 | 53 | 31 | 10 | 13 | 4 | 308 |
| Female | 13 | 22 | 36 | 60 | 7 | 12 | 2 | 3 | 60 |
| **Age group (years)** | | | | | | | | | |
| 18–24 | 11 | 23 | 29 | 60 | 7 | 15 | 1 | 2 | 48 |
| 25–34 | 36 | 28 | 70 | 54 | 15 | 12 | 5 | 4 | 130 |
| 35–44 | 31 | 25 | 68 | 55 | 11 | 9 | 8 | 7 | 123 |
| 45+ | 23 | 36 | 29 | 45 | 5 | 8 | 1 | 2 | 64 |
| **Indigenous status** | | | | | | | | | |
| Indigenous | 31 | 31 | 54 | 55 | 9 | 9 | 2 | 2 | 99 |
| Non-Indigenous | 70 | 27 | 133 | 52 | 28 | 11 | 13 | 5 | 256 |
| **Total** | **101** | **27** | **199** | **54** | **38** | **10** | **15** | **4** | **368** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data..
2. Totals include 3 prison dischargees whose age was unknown, 13 whose Indigenous status was unknown, and 15 whose rating of the health care at the prison clinic was unknown.
3. Excludes dischargees who did not visit the prison clinic after their initial health assessment on reception to prison.
4. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

# 17 Medication

High proportions of prisoners, especially female prisoners, are taking prescription medications for a variety of mental and physical health conditions, both in Australia and internationally (Carroll et al. 2014; Viitanen et al. 2013).

## Dischargees

**INDICATOR:** Proportion of prison dischargees who were prescribed medication for a health condition in prison: 56%

Over one-half (56%) of all dischargees reported having been prescribed medication for a health condition while in prison, including 23% who were prescribed medication for the health condition which had been diagnosed in prison (Table 17.1). The conditions most commonly diagnosed in prison were psychological or mental health conditions (28 occurrences or 6% of all dischargees), musculoskeletal injury (19 or 4%), drug and alcohol issues (16 or 4%) and dental issues (15 or 3%).

The majority of these diagnoses led to treatment being offered (see section 16.2) and medication being prescribed. There was some variation, which is to be expected given that not all health conditions would require medication, and the availability of treatment for conditions varies. 'Drug and alcohol issues' was the condition least likely to have a diagnosis that led to offers of treatment (9 from 16 diagnosed) or medication prescribed (7 of 16 diagnosed). (These data exclude New South Wales which did not provide dischargee data.)

**Table 17.1:** Prison dischargees offered treatment or prescribed medication for selected health conditions in prison, 2015

| Health condition | Number diagnosed in prison | Number of these prescribed medication |
|---|---|---|
| Psychological/mental health | 28 | 26 |
| Musculoskeletal injury | 19 | 16 |
| Drug and alcohol issues | 16 | 7 |
| Dental issues | 15 | 10 |
| Skin condition | 13 | 12 |
| Communicable disease | 13 | 6 |
| Sensory (including ear and eye conditions) | 9 | 3 |
| *Any condition* | *114* | *102* |
| **Total dischargees** | **437** | |

*Notes*

1. Excludes New South Wales which did not provide dischargee data..
2. Numbers represent the number in this data collection, not the whole prison population.
3. Columns may not sum to total since each dischargee could have been diagnosed with, and prescribed medication for, more than one health condition.

*Source:* Discharge form, 2015 NPHDC.

## Prisoners in custody

The Medication form of the NPHDC was used to collect information on all prescribed medications administered to all prisoners in custody on one day during the data collection period. Depot medications (medications given by injection that release slowly over some weeks, such as some antipsychotics) were included, regardless of whether or not they were actually administered on the data collection day, while routine, household-type medications taken on an as-needed basis (such as paracetamol) were not included.

(Information about mental-health-related medication can be found in section 4.5, and for Hepatitis C medication, see section 6.4.)

**INDICATOR:** Proportion of prisoners in custody who received prescribed medication during the data collection period: 43%

More than two-fifths (43%) of prisoners in custody were taking prescribed medication, up from 37% in 2012 (Table 17.2). It is likely that some of this increase is due to the change from paper-based to electronic data collection.

Two-thirds (66%) of female prisoners were taking medication, compared with 41% of male prisoners. The 9,400 prisoners were taking 23,495 medications, at an average of 2.50 medication types per prisoner taking medication.

**Table 17.2:** Prisoners in custody taking prescribed medication, by sex, 2015

| | Male | Female | Total |
|---|---|---|---|
| Number of prisoners taking prescribed medication | 8,136 | 1,202 | 9,400 |
| Number of prescribed medications | 20,332 | 3,047 | 23,495 |
| Number of prisoners in custody | 19,828 | 1,832 | 21,660 |
| Proportion of prisoners taking prescribed medication (%) | 41 | 66 | 43 |
| Average number of prescribed medications per prisoner | 2.50 | 2.53 | 2.50 |

*Notes*

1. Excludes New South Wales which did not provide medication data.
2. Totals include 62 prisoners and 116 medications records where the sex of the prisoner was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Medication form, 2015 NPHDC.

The most common medications administered were antidepressants or mood stabilisers (18%), followed by repeat (prescribed) analgesics (14%, plus controlled opioid analgesics 2%), anti-inflammatories/antirheumatic agents (9%) and antipsychotics (8%) (Table 17.3).

Antidepressants were taken by 1 in 5 prisoners in custody (20%), an increase from 14% in 2012. The proportion of prisoners in custody who were administered repeat analgesics increased from 11% in 2012 to 16% in 2015.

When only repeat medications are considered (excludes medications for short-term use such as antibiotics and antihistamines), one-third (33%) of all medications administered were mental-health-related—antidepressants/mood stabilisers (21%), antipsychotics (10%), anti-anxiety medications (anxiolytics) (2%), and hypnotics and sedatives (1%).

**Table 17.3:** Prescribed medications administered during the data collection period, 2015

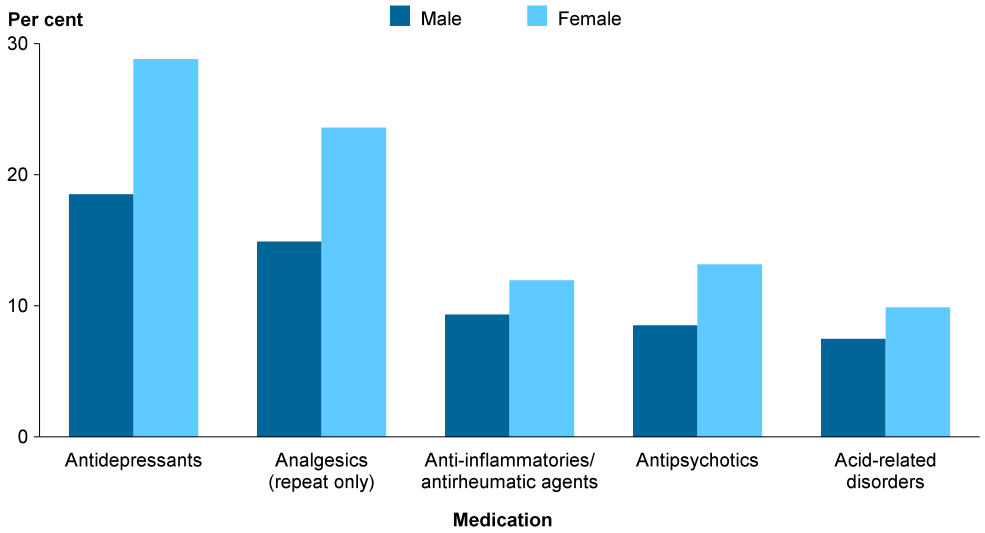
| Medication category | Number of medications | Proportion of prescribed medications (%) | Proportion of prisoners in custody (%) | Proportion of repeat medications (%) |
|---|---|---|---|---|
| Antidepressants/mood stabilisers | 4,224 | 18 | 20 | 21 |
| S4 and over-the-counter analgesics—repeat only | 3,385 | 14 | 16 | 17 |
| Anti-inflammatories/antirheumatic agents | 2,068 | 9 | 10 | 10 |
| Antipsychotics | 1,929 | 8 | 9 | 10 |
| Drugs used in acid-related disorders, anti-emetics and anti-nauseants, laxatives, anti-diarrhoeals | 1,660 | 7 | 8 | .. |
| Anti-hypertensives, beta-blocking agents | 1,477 | 6 | 7 | 7 |
| Cholesterol-lowering drugs (lipid modifying agents) | 1,214 | 5 | 6 | 6 |
| Vitamins and mineral supplements | 986 | 4 | 5 | 5 |
| Asthma relievers, preventers, symptom controllers (drugs for obstructed airways) | 908 | 4 | 4 | 4 |
| Anti-epileptics, anti-Parkinson drugs | 817 | 3 | 4 | 4 |
| Drugs used in diabetes | 738 | 3 | 3 | 4 |
| Dermatologicals (skin, including anti-fungals) | 608 | 3 | 3 | .. |
| Drugs used in opioid dependence | 548 | 2 | 3 | 3 |
| S8 Controlled opioid analgesics (not including opioid dependence) | 506 | 2 | 2 | 3 |
| Antibiotics | 467 | 2 | 2 | .. |
| Antihistamines | 456 | 2 | 2 | .. |
| Anti-anxiety (anxiolytics) | 350 | 1 | 2 | 2 |
| Other | 337 | 1 | 2 | 2 |
| Drugs used in nicotine dependence | 217 | 1 | 1 | 1 |
| Hypnotics and sedatives | 123 | 1 | 1 | 1 |
| Hepatitis, antivirals for HIV, infectious diseases | 122 | 1 | 1 | 1 |
| Diuretics | 121 | 1 | 1 | .. |
| Thyroid therapy | 105 | <1 | <1 | 1 |
| Antithrombotic | 94 | <1 | <1 | <1 |
| Drugs used in benign prostatic hypertrophy (prostate) | 35 | <1 | <1 | <1 |
| Totals | 23,495 | 100 | 21,660 prisoners in custody | 20,183 repeat medications |

*Note:* Excludes New South Wales which did not provide medication data.

*Source:* Medication form, 2015 NPHDC.

Female prisoners were more likely to be administered the 5 most common medications than male prisoners (Figure 17.1), with the largest difference being for antidepressants/mood stabilisers (29% of female prisoners and 18% of male prisoners). (Detailed data for Figure 17.1 are available in Appendix Table C17.1.)

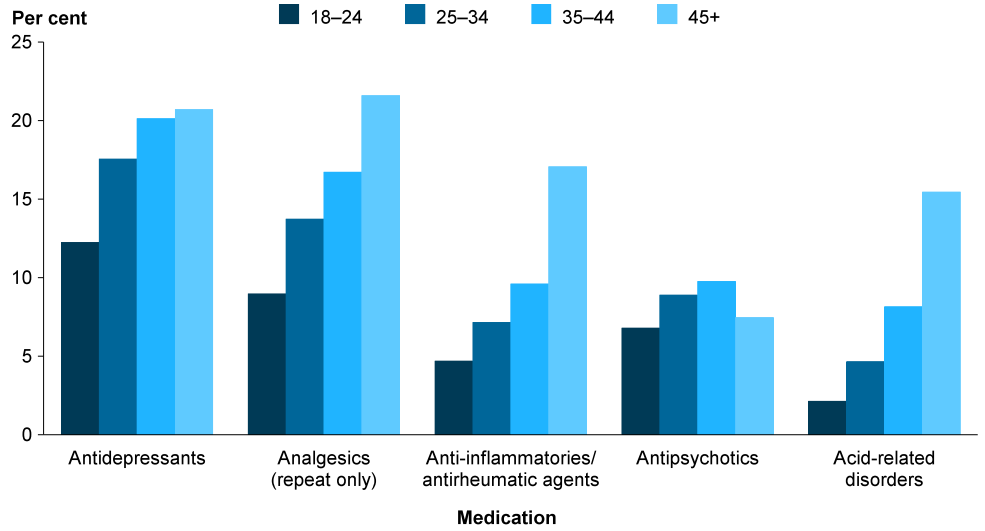
**Figure 17.1:** Proportion of prisoners on selected prescribed medications, by sex, 2015




Note: Excludes New South Wales which did not provide medication data.
Source: Medication form, 2015 NPHDC.

There were clear age patterns among those taking prescribed medications (Figure 17.2). Prisoners aged 45 and over were far more likely than younger prisoners to take prescribed anti-inflammatories (17% compared with 4% of those aged 18–24), analgesics (22% and 10%) and medication for acid-related disorders (15% compared with 2%). (Detailed data for Figure 17.2 are available in Appendix Table C17.2.)

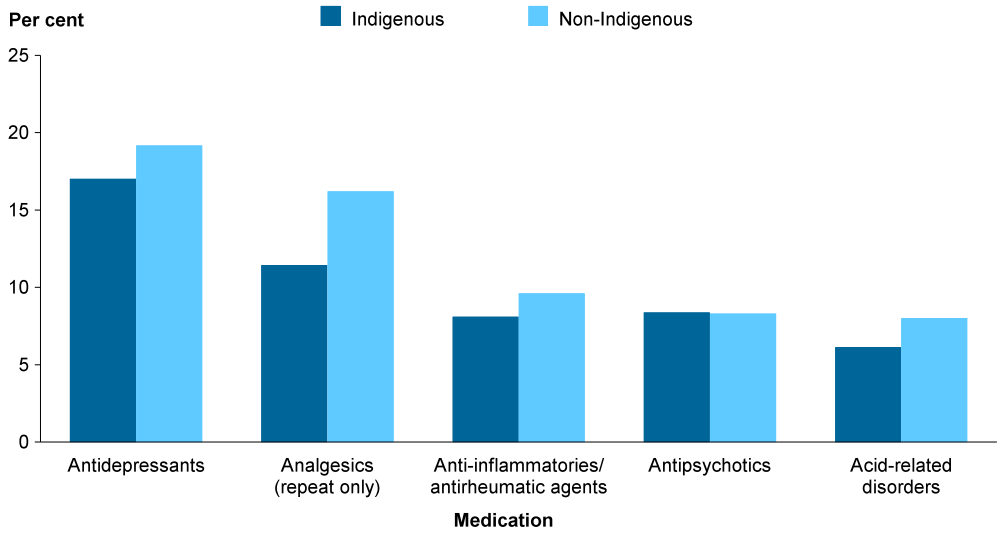
**Figure 17.2:** Proportion of prisoners on selected prescribed medications, by age, 2015




Note: Excludes New South Wales which did not provide medication data.
Source: Medication form, 2015 NPHDC.

Non-Indigenous prisoners were slightly more likely than Indigenous prisoners to be taking 4 of the 5 most commonly prescribed medications (Figure 17.3). They were more likely to take antidepressants (19% and 17% respectively), analgesics (16% and 11% respectively), anti-inflammatories (10% and 8% respectively) and acid-related medication (8% and 6% respectively). Indigenous prisoners were just as likely to take antipsychotics as non-Indigenous prisoners (8% each). (Detailed data for Figure 17.3 are available in Appendix Table C17.3.)

**Figure 17.3:** Proportion of prisoners on selected prescribed medications, by Indigenous status, 2015




*Note:* Excludes New South Wales which did not provide medication data.

*Source:* Medication form, 2015 NPHDC.

## Comparisons with general community

Comparisons with medications taken in the general community are difficult. Data from the Pharmaceuticals Benefits Scheme (PBS) only count medications that fall under the PBS, and count prescriptions rather than people. Prescriptions are not the same as medications administered because some people may not actually take medications prescribed to them. This means that some medications are over-estimated. Also, some medications are missing (that is, they are not listed on the PBS).

The Bettering the Evaluation and Care of Health (BEACH) dataset collects information on prescriptions in a sample of encounters with General Practitioners. However, BEACH data with detailed patient demographic breakdowns are not publically available and these analyses were out-of-scope for this project. Therefore, unlike other general community comparisons made in this report, the data for medications are not directly comparable with the prisoner population. The sample of patients in the BEACH data includes younger (11% aged under 15 years) and more older (33% aged over 65 years) people than in the prisoner data, as well as more women (57% were women) and fewer Indigenous people (99% were non-Indigenous) (Britt et al. 2014). Therefore caution should be used when comparing the two populations.

The patterns of medication use among prisoners and the general community were different (Table 17.4). Medications prescribed more commonly for prisoners than in the general community included: antidepressants/mood stabilisers (18% for prisoners, 5% community); analgesics (14% compared with 3%); anti-inflammatories and antirheumatic agents (9% and 4%); and antipsychotics (8% and 2%). Controlled opioid analgesics were taken more often in the general community (7%) than in prison (2%).

**Table 17.4:** Selected prescribed medications for prisoners and the general community, 2015 (per cent)

| | Proportion of prescribed medications | |
|---|---|---|
| **Medication category** | **Prisoners** | **General community** |
| Antidepressants/mood stabilisers | 18 | 5 |
| S4 and over-the-counter analgesics—repeat only | 14 | 3 |
| Anti-inflammatories/antirheumatic agents | 9 | 4 |
| Antipsychotics | 8 | 2 |
| Cholesterol-lowering drugs (lipid modifying agents) | 5 | 4 |
| Asthma relievers, preventers, symptom controllers (drugs for obstructed airways) | 4 | 6 |
| Dermatologicals (skin, including antifungals) | 3 | 5 |
| Anti-epileptics, anti-Parkinson drugs | 3 | 1 |
| S8 Controlled opioid analgesics (not including opioid dependence) | 2 | 7 |
| Anti-anxiety (anxiolytics) | 1 | 2 |
| Hypnotics and sedatives | 1 | 2 |
| Thyroid therapy | <1 | 1 |

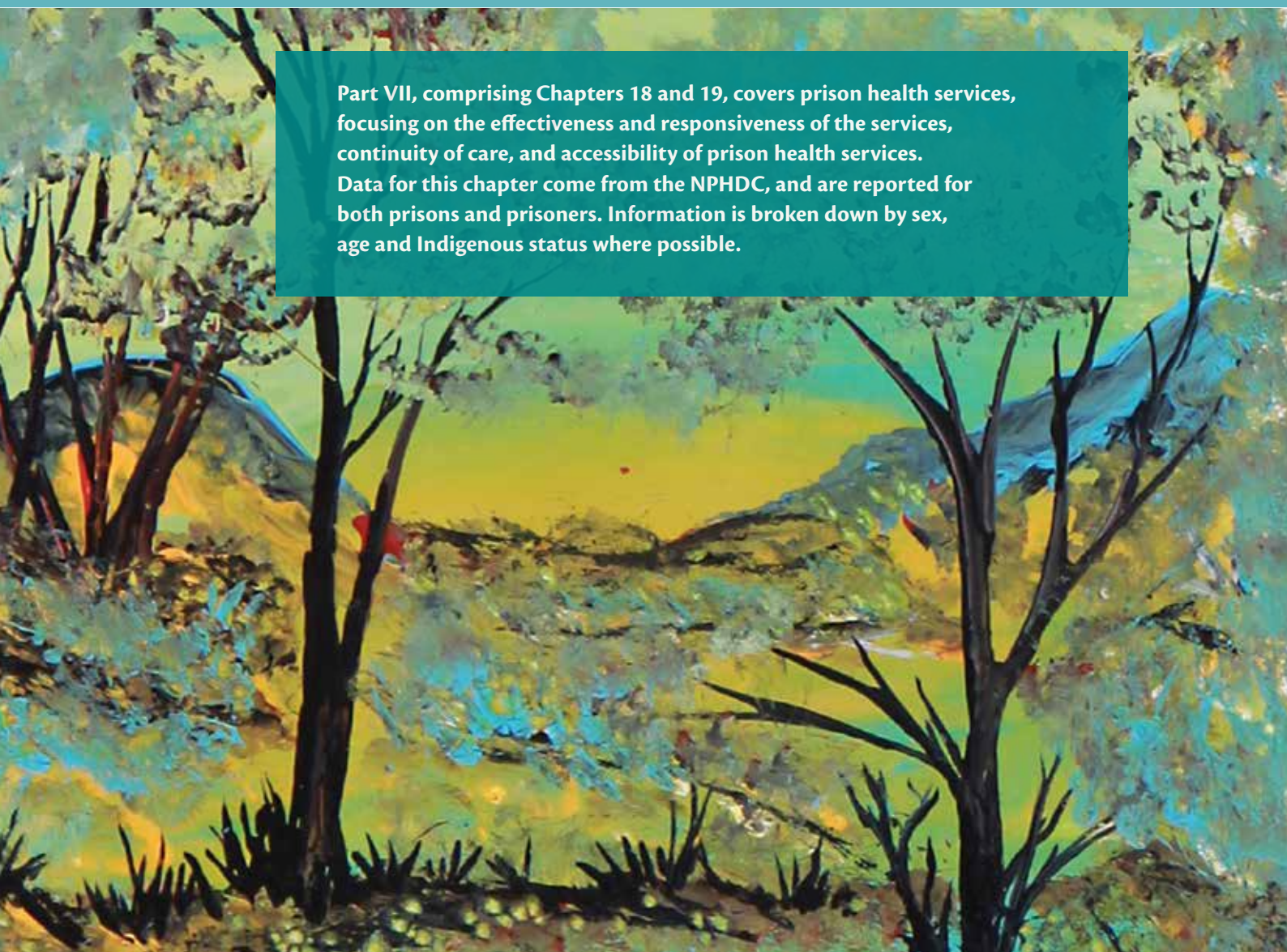
*Notes:*

1. Excludes New South Wales which did not provide medication data.
2. The general community and prisoners in custody sample populations in this table have different demographic compositions, with the general community sample containing people under 18 years, a higher proportion of people aged over 65 years, a higher proportion of women, and a lower proportion of Indigenous people than the prisoners in custody sample

*Sources:* Medication form, 2015 NPHDC; Britt et al. 2014.

# VII

# Part VII: Prison health services and procedures



Part VII, comprising Chapters 18 and 19, covers prison health services, focusing on the effectiveness and responsiveness of the services, continuity of care, and accessibility of prison health services. Data for this chapter come from the NPHDC, and are reported for both prisons and prisoners. Information is broken down by sex, age and Indigenous status where possible.

# 18 Prison health services

## 18.1 Full-time equivalent staffing

The provision of health care services to prisoners is dependent on the availability of suitably qualified staff.

The number of healthcare staff required in a prison depends on factors such as: whether the prison is a reception centre where complete medical examinations are done; whether the prison is a women's prison (because medical use may be higher than in a male prison); requirements for drug and alcohol detoxification; trauma and emergency incidence rates that may necessitate ongoing professional staffing; and which services are provided within the prison and which are routinely provided in the community.

Reporting on full-time equivalent staffing for certain health professions can be problematic in some jurisdictions. In jurisdictions where justice, health, and corrective services are managed separately, health professionals such as psychologists and psychiatrists may be employed by corrective services rather than justice or health. This may mean that the data collected from justice or health departments are not an accurate reflection of full-time equivalent staffing for all health professionals if they do not take into account the professionals employed by corrective services.

Staffing in this report is restricted to doctors/general practitioners and nurses, for which there is more consistency among jurisdictions. Previous editions of this report included a greater range of health professionals in the overall ratio. Therefore the ratio presented here is not comparable with previous years.

**INDICATOR:** Ratio of full-time equivalent doctors and nurses working within the correctional system to the total number of prisoners: 2.98 per 100 prisoners.

A total of 51.6 full-time equivalent doctors and 594.3 full-time equivalent nurses were working within the 56 prisons from which these data were collected. This equates to 0.24 doctors and 2.74 nurses per 100 prisoners (from the total of 21,660 prisoners in custody on 30 June 2014 in participating jurisdictions). Registered nurses were the most common healthcare staff working within the correctional system across all jurisdictions. Nursing staff reported by jurisdictions included dedicated mental health and psychiatric nurses, nurse practitioners and endorsed enrolled nurses, as well as alcohol and other drug nurses, clinical nurses, Aboriginal health practitioners and clinical nurse coordinators and managers. (These data exclude New South Wales which did not provide data for this indicator.)

## 18.2 Immunisation

With prisoners being a group at high risk of both vaccine-preventable and other diseases, prison provides an opportunity to access immunisation. Prison immunisation may serve dual purposes—both to ensure completion of recommended adult schedules, and to immunise against diseases associated with higher risk environments and populations such as prisons (Sequera et al. 2013).

### Dischargees

**INDICATOR:** Proportion of prison dischargees who received an immunisation while in prison: 36%

More than one-third (36%) of dischargees reported having received an immunisation during their time in prison (Table 18.1), down from 49% in 2012. In 2015, about one-quarter (24%) received an immunisation for Hepatitis B, 21% for influenza, and 4% for Hepatitis A. Few dischargees received immunisations for human papillomavirus (5 dischargees), measles, mumps and rubella (2 dischargees), or meningococcal (1 dischargee).

**Table 18.1:** Prison dischargees, immunisations while in prison, 2015

| Type of immunisation | Number | Per cent |
|---|---|---|
| Influenza | 90 | 21 |
| Hepatitis B | 105 | 24 |
| Hepatitis A | 16 | 4 |
| Measles, mumps and rubella | 2 | <1 |
| Meningococcal | 1 | <1 |
| Human papillomavirus | 5 | 1 |
| Any of the above immunisations | 159 | 36 |
| **Total** | **437** | **100** |

*Notes*

1. Excludes New South Wales, as data were not provided for NSW dischargees.
2. Columns will not sum to the total because an individual may have received more than one type of vaccination.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

A higher proportion of men (38%) than women (25%) received an immunisation while in prison, and the likelihood was less with increasing age from 41% of the youngest dischargees (aged 18–24) to 27% of the oldest dischargees (aged at least 45) (Table 18.2). (These data exclude New South Wales which did not provide dischargee data.)

**Table 18.2:** Prison dischargees, immunisations during imprisonment, by sex, age and Indigenous status, 2015

| | Received any immunisation | | |
|---|---|---|---|
| | Number | Per cent | Total |
| **Sex** | | | |
| Male | 142 | 38 | 369 |
| Female | 17 | 25 | 68 |
| **Age group (years)** | | | |
| 18–24 | 27 | 41 | 66 |
| 25–34 | 62 | 39 | 161 |
| 35–44 | 48 | 36 | 133 |
| 45+ | 20 | 27 | 73 |
| **Indigenous status** | | | |
| Indigenous | 47 | 36 | 131 |
| Non-Indigenous | 112 | 38 | 292 |
| **Total** | **159** | **36** | **437** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 prison dischargees of unknown age, and 14 of unknown Indigenous status.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC

## Prisoners in custody

**INDICATOR:** Number of vaccinations provided by prison clinics during the 2-week data collection period: 1,230.

During the 2-week data collection period, 56 prison clinics administered 1,230 vaccinations to prisoners. The most common were for influenza (785 or 64%), followed by Hepatitis B (397 or 32%). There were also 27 vaccinations for Hepatitis A; 11 for human papilloma virus; 6 for measles, mumps and rubella; and 4 for meningococcal disease. (These data exclude New South Wales, as NSW did not provide data for this indicator.)

## 18.3 Use of health services outside prison

In some jurisdictions, prisoners who are hospitalised or who require highly specialised health care can be managed within the prison system, because larger prisons may contain a number of inpatient beds for prisoners who require care. Alternatively, prisoners may be transferred to community facilities and secure wards in community hospitals for specialised treatment. Transfers to hospital may be planned transfers for inpatient care such as surgery and specialist outpatient appointments, or unplanned transfers, which may occur in emergency situations. Where particular health services are not provided within the prison, or where prisoners request to pay for private health consultations, appointments may be attended outside prison.

### Dischargees

**INDICATOR:** Proportion of prison dischargees who went to a medical appointment outside the prison: 25%

Medical appointments outside prison were attended by 25% of dischargees. Over one-third (35%) of female dischargees attended outside appointments, compared with 23% of men. The oldest dischargees, aged at least 45 years, were more likely to attend external appointments (33%) than younger dischargees (21–25% of those aged less than 35). The proportions of Indigenous and non-Indigenous dischargees attending medical appointments outside the prison were similar (Appendix Table C18.1). (These data exclude New South Wales which did not provide dischargee data.)

**INDICATOR:** Proportion of prison dischargees who were admitted to a general or psychiatric hospital: 10%

**INDICATOR:** Proportion of prison dischargees who visited an emergency department: 11%

One-in-ten dischargees (10%) were admitted to a general or psychiatric hospital in the community during their imprisonment, and 11% visited the emergency department of a community hospital. (These data exclude New South Wales which did not provide dischargee data.)

### Prisoners in custody

**INDICATOR:** Number of hospital transfers for prisoners in custody during the data collection period: 540 non-acute and 198 acute hospital transfers

During the 2-week data collection period there were 198 acute or unplanned transfers to hospital for emergencies, and 540 non-acute or planned hospital transfers. (These data exclude New South Wales which did not provide data for this indicator.)

## 18.4 Indigenous health services

The Royal Commission into Aboriginal Deaths in Custody recommended that corrective services, in conjunction with Aboriginal Health Services and other such bodies where appropriate, should review and report on the provision of health services to Indigenous prisoners in correctional institutions (RCIADIC 1991). The Royal Commission recommended that this review should include, among other things, the involvement of Aboriginal Health Services in the provision of general and mental health care to Aboriginal prisoners. This may be achieved in several ways, including visits by Aboriginal Health Services, and having Aboriginal health workers as members of the clinic staff.

An Aboriginal Community Controlled Health Organisation or Service (ACCHO) is a primary health care service initiated and operated by the local Aboriginal community to deliver holistic, comprehensive and culturally appropriate health care to the community that controls it, through a locally elected Board of Management (NACCHO 2015). An Aboriginal Medical Service (AMS) is a health service funded principally to provide services to Aboriginal and Torres Strait Islander people. It may be either an ACCHO or a state/ territory government service.

### Dischargees

**INDICATOR:** Proportion of Indigenous prison dischargees who received treatment or consultation from an Aboriginal Community Controlled Health Organisation (ACCHO) or an Aboriginal Medical Service (AMS): 13%

**INDICATOR:** Proportion of Indigenous prison dischargees who report they always received culturally appropriate healthcare in prison: 70%

Of the 131 Indigenous dischargees, 13% reported receiving treatment or consultation from an Aboriginal Community Controlled Health Organisation or Aboriginal Medical Service, up from 7% in 2012 (Appendix Table C18.2).

Culturally appropriate healthcare was always received by a reported 70% of Indigenous dischargees, and a further 9% thought they sometimes did (Appendix Table C18.3). These proportions have increased since 2012, when 45% reported always receiving appropriate care, and 17% sometimes. In 2015, almost three-quarters (74%) of Indigenous male dischargees thought they always received culturally appropriate healthcare, as did 52% of women. The youngest Indigenous dischargees, aged 18–24 years, were least likely to consider their healthcare to be always culturally appropriate (46%, compared with 69–81% of older dischargees). (These data exclude New South Wales which did not provide dischargee data.)

## Prisons

**INDICATOR:** Frequency of visits by an Aboriginal Community Controlled Health Organisation (ACCHO) or an Aboriginal Medical Service (AMS) to a prison facility: Never—58% of prisons; at least once a month—5% of prisons

In most jurisdictions, there were at least some prisons visited by an ACCHO or AMS (Table 18.3). Usually, these visits were made less often than once a month (in 12 of 59 prisons), with only 2 prisons (1 in Victoria and 1 in Western Australia) having daily visits from these services.

Visiting health professionals from ACCHOs and AMSs were most likely to be Aboriginal health workers (at 18 prisons), but also included doctors (6 prisons), alcohol and other drug workers (5 prisons), counsellors (3 prisons), and social workers and psychologists (2 prisons each).

**Table 18.3:** Prisons, frequency of visits by ACCHOs or AMSs, states and territories, 2015

| Frequency of visits | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Total |
|---|---|---|---|---|---|---|---|---|---|
| Every day | n.a. | 1 | — | 1 | — | — | — | — | 2 |
| At least once a week | n.a. | — | 2 | 2 | — | — | 1 | — | 5 |
| At least once every 2 weeks | n.a. | 1 | 1 | 1 | — | — | — | — | 3 |
| At least once a month | n.a | 1 | 1 | 1 | — | — | — | — | 3 |
| Less often than once a month | n.a. | 7 | 1 | 2 | 2 | — | — | — | 12 |
| Never | n.a | 5 | 8 | 8 | 6 | 6 | — | 1 | 34 |
| **Total** | **n.a.** | **15** | **13** | **15** | **8** | **6** | **1** | **1** | **59** |

*Note:* Excludes New South Wales which did not provide these data.
*Source:* Establishment form, 2015 NPHDC.

While more than one-half of all prisons did not have regular visits from an ACCHO or AMS, there may be other ways in which Aboriginal workers are employed and help within prisons that have not been captured by the NPHDC. For example, Aboriginal liaison officers may be employed within the welfare sections of prisons. Similar positions may also be involved within contracted and ad hoc service provision by forensic mental health or alcohol and drug services, which are not directly the responsibility of the prison health clinic responding to this data collection.

# 19 Release procedures

Release from prison can be difficult, with the transition back into the community often being a time of high vulnerability, trauma and emotional distress, with high health and mental health needs, and increased risk of illness, injury and death, and risky substance use and behaviours—particularly for Indigenous ex-prisoners (SPRINT Project Team 2013). One study found that within the first week of release, ex-prisoners are more than twice as likely as their peers in the general community to be hospitalised (Wang et al. 2013). Continuity of care and support for ex-prisoners is necessary to achieve successful reintegration into the community.

## 19.1 Health-related discharge planning

With the multiple and complex health needs of prisoners, including mental illness, reintegration into the community is a challenging process (Baillargeon et al. 2010). Discharge planning supports the continuity of health care between prison and the community, based on the individual needs of the prisoner (Borzycki & Baldry 2003). Planning and managing prisoner re-entry or reintegration into the community, including continuity of health services, benefits both the prisoner and the community. A discharge plan provides a plan for the continuity of care from prison to the community and so incorporates referrals to appropriate community-based services. The WHO recognised the 'notable gap' in research relating to throughcare and the transition to the community internationally (WHO 2013).

Discharge planning for prisoners can be logistically difficult for a variety of reasons, including resourcing issues, competing institutional priorities, and difficulties in establishing links with community healthcare services across wide geographical areas (Dyer & Biddle 2013). With a high proportion of prisoners being on remand (56% of prison entrants in this data collection), the timing of release is often uncertain—for example, they may be released directly from court when applications for bail are successful. From the prison services perspective, this means that when a prisoner on remand leaves the prison to attend court, it is not known whether they will return to prison from that court appearance. Even for sentenced prisoners, in some instances an exit may not be planned. For example, a sentenced prisoner may appear at several parole hearings, or may have an appeal proceeding in court. Therefore, knowing when to begin discharge planning for many people in prison is a difficult task. Over one-third (37%) of prisoners released during the data collection period were released from remand. A discharge summary provides information about the care provided to the prisoner while in prison.

**INDICATOR:** Proportion of prisoners who had a health-related discharge summary in place at time of their release: 95% of sentenced prisoners with planned exit

The NPHDC gathered information regarding how many remand and sentenced prisoners were released during the 2-week data collection period (including planned and unplanned releases) and how many of them had a written discharge summary on file. The results varied according to the legal status of the prisoner (Table 19.1). For sentenced prisoners with a planned exit, 95% had a health-related discharge summary on file, up from 72% in 2012. Over one-half (56%) of released remand prisoners had a summary on file, as did 24% of sentenced prisoners whose exit was not planned.

**Table 19.1:** Prisoners, discharge summaries on file during the data collection period, 2015

| | Total |
|---|---|
| Number of prisoners released with discharge summaries on file | |
| Remand | 293 |
| Sentenced—exit planned | 637 |
| Sentenced—exit not planned | 52 |
| Number of prisoners released | |
| Remand | 525 |
| Sentenced—exit planned | 673 |
| Sentenced—exit not planned | 215 |
| Proportion of released prisoners with a discharge summary | |
| Remand | 56% |
| Sentenced—exit planned | 95% |
| Sentenced—exit not planned | 24% |

*Note:* Excludes New South Wales and Tasmania which did not provide these data.
*Source:* Establishment form, 2015 NPHDC.

Data on the approach taken by prisons in relation to health-related discharge planning were also collected. Prisoners with mental illness, chronic disease, and drug and alcohol problems, or who are on medication, would be more likely to have a health-related discharge plan prepared. Some prisons reported that, in general, the process for health-related discharge planning includes the following:

- Before the date of discharge, each prisoner is seen at the prison clinic.
- A discharge summary or discharge health report and letter for the prisoner's GP are prepared, and either given to the prisoner or forwarded to the prisoner's GP, community clinic or health centre.
- The discharge summary contains information on the prisoner's medical history, current problems, allergies, special diets or other needs, scheduled future appointments, recent pathology and radiology tests, any current medication, vaccination record and contact details for further information on the prisoner.
- If required, the prisoner is referred to appropriate community services such as GPs, community health clinics, Aboriginal health clinics, mental health services, psychologists medical specialists, methadone programs and accommodation support programs.
- Many prison clinics also provide a limited supply of ongoing medication (for example, 1–2 weeks), or arrange for these to be collected from a pharmacy.

## 19.2 Continuing care

Continuation of care, including medications for prisoners after release, is difficult, both because of the uncertainties surrounding time of release and because of poor knowledge of prisoners regarding what medications they are taking. A study of prisoners being released from Queensland prisons found that almost one-half (46%) were taking some form of medication, but they had poor knowledge of what those medications were (Carroll et al. 2014).

**INDICATOR:** Proportion of prison dischargees on treatment or taking medication for a health condition who have a plan to continue after release: 83%

Most dischargees (83%) who were on treatment or taking medication for a health condition while in prison, had a plan to continue care after release, although this varied considerably by the type of health condition (Table 19.2). The conditions most likely to have a plan were diabetes (18 of 20), asthma (39 of 47), cardiovascular disease (20 of 25) and psychological/mental health conditions (100 of 129). Dental issues were the health condition for which dischargees were least likely to have a plan for continuation of care after release (16 of 57).

**Table 19.2:** Prison dischargees who received treatment or were prescribed medication for a health condition in prison and have a plan to continue care after prison, selected health conditions, Australia, 2015

| Health condition | Number on treatment or medication | Number with a plan to continue |
|---|---|---|
| Psychological/mental health condition | 129 | 100 |
| Alcohol or drug use problems | 75 | 44 |
| Asthma | 47 | 39 |
| Musculoskeletal injury | 49 | 24 |
| Cardiovascular disease | 25 | 20 |
| Diabetes | 20 | 18 |
| Skin condition | 33 | 17 |
| Dental | 57 | 16 |
| Musculoskeletal condition | 25 | 14 |
| Communicable disease | 21 | 14 |
| Digestive conditions | 19 | 9 |
| Sensory conditions | 17 | 9 |
| Total number of dischargees with any condition | 275 | 229 |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Dischargees could select multiple health conditions.
3. Numbers represent the number in this d ata collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

**INDICATOR:** Proportion of prison dischargees who on release have a referral or appointment to see a health professional: 50%

One-half (50%) of all dischargees reported having a referral or appointment to see a health professional upon release from prison (Table 19.3). Over one-third (36%) had a referral or appointment to see a doctor or general practitioner; 13% had a referral or appointment with an alcohol and other drug treatment or counselling service; 9% with community mental health services; 8% with opioid substitution treatment providers; and 5% with an Aboriginal Medical Service. (These data exclude New South Wales which did not provide dischargee data.)

**Table 19.3:** Prison dischargees, referrals to health professionals upon release, Australia, 2015

| Health professional | Number | Per cent |
|---|---|---|
| Doctor/general practitioner | 157 | 36 |
| Alcohol and other drug treatment or counselling service | 55 | 13 |
| Community mental health service | 38 | 9 |
| Pharmacist/Opioid Substitution Treatment provider | 34 | 8 |
| Aboriginal Medical Service | 22 | 5 |
| Other | 34 | 8 |
| Any referral or appointment | 219 | 50 |
| **Total dischargees** | **437** | **100** |

*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Dischargees could select multiple health professionals.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

## 19.3 Medicare card

Medicare cards are not used by prisoners within prison because the Medicare and Pharmaceutical Benefits Schemes do not operate in prisons in the same way as in the community (see section 1.2 for details). Upon release from prison, access to a valid Medicare card is essential for accessing health services in the community. Dischargees were asked whether or not they would have a valid Medicare card available on release from prison.

**INDICATOR:** Proportion of prison dischargees who have a valid Medicare card available on release: 75%

Three-quarters (75%) of dischargees reported having access to a valid Medicare card upon release from prison; 14% said they would not; and 11% did not know (Table 19.4). The oldest dischargees, aged at least 45, were the most likely to know that they had a Medicare card available (86%). Indigenous dischargees were the group least likely to have a valid Medicare card available (62%), and the most likely to not know (18%). (Excludes New South Wales which did not provide dischargee data.)

**Table 19.4:** Prison dischargees, by whether Medicare card is available on release, by sex, age group and Indigenous status, 2015

| | Available | | Not available | | Don't know | | Total prison dischargees |
|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number |
| **Sex** | | | | | | | |
| Male | 276 | 75 | 47 | 13 | 46 | 12 | 369 |
| Female | 51 | 75 | 13 | 19 | 4 | 6 | 68 |
| **Age group (years)** | | | | | | | |
| 18–24 | 48 | 73 | 11 | 17 | 7 | 11 | 66 |
| 25–34 | 120 | 75 | 22 | 14 | 19 | 12 | 161 |
| 35–44 | 92 | 69 | 23 | 17 | 18 | 14 | 133 |
| 45+ | 63 | 86 | 4 | 5 | 6 | 8 | 73 |
| **Indigenous status** | | | | | | | |
| Indigenous | 81 | 62 | 26 | 20 | 24 | 18 | 131 |
| Non-Indigenous | 232 | 79 | 34 | 12 | 26 | 9 | 292 |
| **Total** | **327** | **75** | **60** | **14** | **50** | **11** | **437** |

Notes

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 prison dischargees whose age was unknown and 14 whose Indigenous status was unknown.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

## 19.4 Preparedness for release

**INDICATOR:** Proportion of prison dischargees who felt prepared for their upcoming release from prison: 88%

Most dischargees reported feeling either very prepared (36%) or prepared (52%) for their upcoming release from prison (Table 19.5). There were 25 dischargees (6%) who said they did not know how prepared they felt. Non-Indigenous dischargees were the most likely to feel very prepared (41%), and women the least likely (29%). The proportions of dischargees feeling very prepared were similar across the age groups. (Excludes New South Wales which did not provide dischargee data.)

**Table 19.5:** Prison dischargees, preparedness for release from prison, by sex, age group and Indigenous status, 2015

| | Very prepared | | Prepared | | Unprepared/Very unprepared | | Total prison dischargees |
|---|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent | Number |
| **Sex** | | | | | | | |
| Male | 139 | 38 | 188 | 51 | 20 | 5 | 369 |
| Female | 20 | 29 | 40 | 59 | 5 | 7 | 68 |
| **Age group (years)** | | | | | | | |
| 18–24 | 24 | 36 | 35 | 53 | 2 | 3 | 66 |
| 25–34 | 61 | 38 | 82 | 51 | 11 | 7 | 121 |
| 35–44 | 45 | 34 | 74 | 56 | 6 | 5 | 133 |
| 45+ | 27 | 37 | 35 | 48 | 6 | 8 | 73 |
| **Indigenous status** | | | | | | | |
| Indigenous | 40 | 31 | 74 | 56 | 9 | 7 | 131 |
| Non-Indigenous | 119 | 41 | 142 | 49 | 15 | 5 | 292 |
| **Total** | **159** | **36** | **228** | **52** | **25** | **6** | **437** |

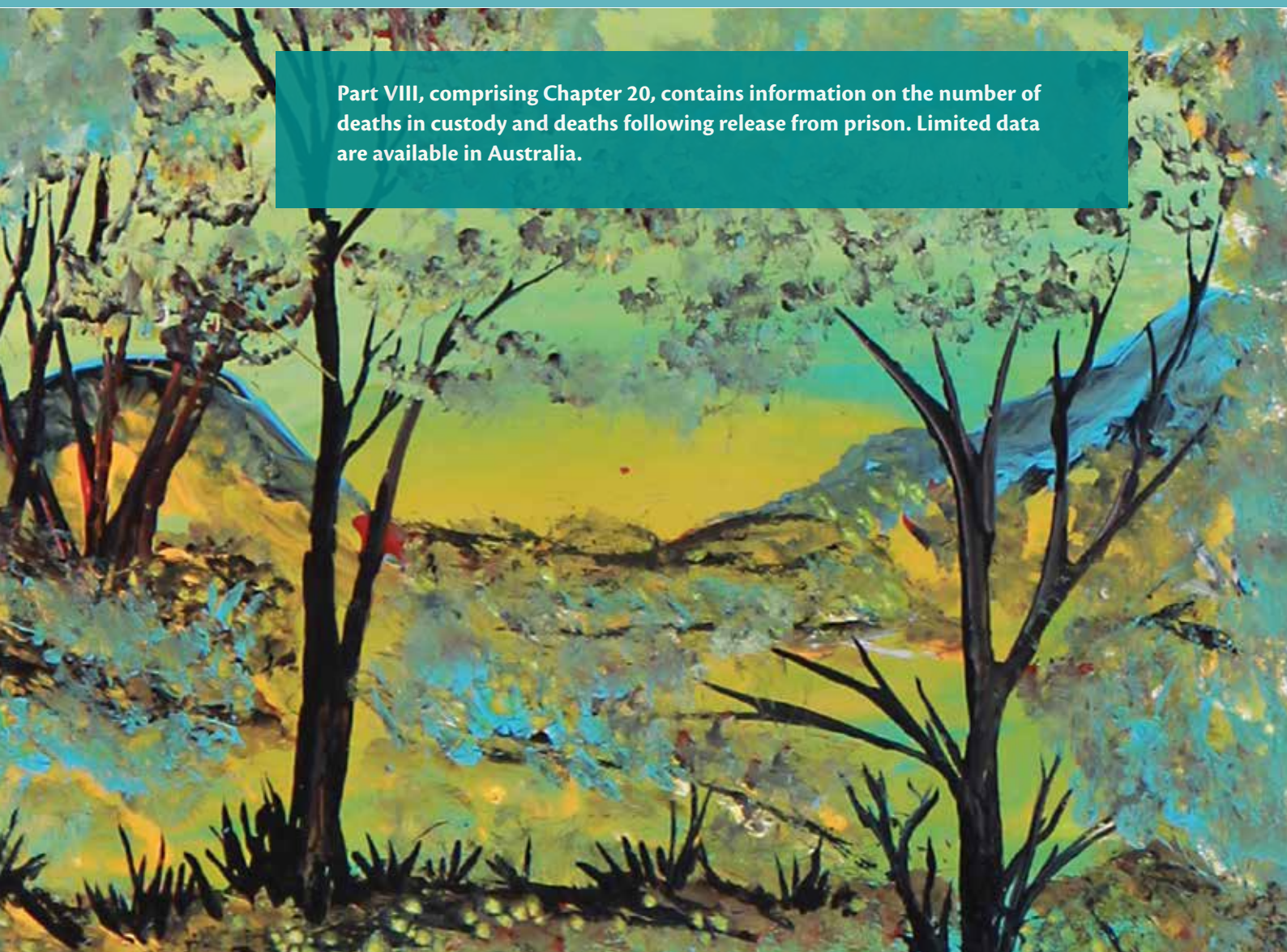
*Notes*

1. Excludes New South Wales which did not provide dischargee data.
2. Totals include 4 dischargees whose age was unknown, 14 whose Indigenous status was unknown, and 25 who said they did not know how prepared they felt.
3. Numbers represent the number in this data collection, not the whole prison population.

*Source:* Discharge form, 2015 NPHDC.

# VIII

# Part VIII: Deaths



Part VIII, comprising Chapter 20, contains information on the number of deaths in custody and deaths following release from prison. Limited data are available in Australia.

# 20 Deaths

## 20.1 Deaths in custody

There are many reasons why a person may die while in prison custody. Just like in the community, people in prison die from illness and from preventable causes including accident, injury and suicide.

Data for this section come from the Australian Institute of Criminology (AIC) report *Deaths in custody in Australia: National Deaths in Custody Program 2011–12 and 2012–13* (Baker & Cussen 2015). Information is broken down (where possible) by Indigenous status and cause of death.

The AIC, through the National Deaths in Custody Program (NDICP), monitors deaths in custody. This is the main data source in Australia on deaths in custody, including in prison, police custody, and juvenile detention. The NDICP was established after a Royal Commission into Aboriginal Deaths in Custody, which was established in 1989 following concern over the deaths of 99 Indigenous people in police custody and prisons between 1 January 1980 and 31 May 1989. The Royal Commission made 339 recommendations when it released its findings in 1991. Among the findings were that:

- the high number of Aboriginal deaths in custody was due to the overrepresentation of Aboriginal people in custody
- Indigenous Australians were no more likely to die in custody than non-Indigenous Australians
- Aboriginality was a significant factor in the person's placement and death in custody.

In addition to a series of recommendations designed to reduce the rate of incarceration for Indigenous people, recommendations to reduce the number of deaths in custody included removing hanging points from cells, increasing awareness of custodial and medical staff of issues relating to the proper treatment of prisoners, and a greater commitment to cross-cultural training for criminal justice staff (Cunneen 2006).

The Royal Commission also recommended that an ongoing program be established to monitor both Indigenous and non-Indigenous deaths in prison, police custody and juvenile detention to gauge the impact of the recommendations on the rates of death in custody.

There is no internationally recognised definition of a death in custody, with many factors, including place, time, cause and the prison environment relevant to the definition (Ruiz et al. 2014). According to the NDICP, 'deaths in prison custody include those deaths that occur in prison or youth justice facilities. This also includes deaths that occur during transfer

to or from these custody settings, or in medical facilities following transfer from adult and youth detention centres' (RCIADIC 1991). The NDICP has found that:

- between 1979-80 and 2012-13 there were 1,487 deaths in prison custody
- the most common cause of death since 2000–01 has been natural causes (that is, illnesses), most frequently cardiac-related
- hanging deaths have declined, particularly since 2004–05
- 70% of Indigenous prisoners who have died in custody have been 39 years or younger, compared with just over one-half (53%) of non-Indigenous deaths
- over the last 10 years, Indigenous prisoners have been less likely than non-Indigenous prisoners to die in custody (Baker & Cussen 2015).

In the UK during 2014 there were 2.88 deaths per 1,000 prisoners, including 1.0 per 1,000 deaths classified as self-inflicted, and 1.67 per 1,000 classified as being from natural causes (Ministry of Justice 2015). These rates are based on average month end populations for the calendar year. In Australian prisons, there were 13 unnatural (injury and poisoning) deaths in custody during 2013–14, all of whom were non-Indigenous prisoners (Productivity Commission 2015).

**INDICATOR:** Number of deaths in prison custody in 2012–13: 53

During 2012–13 there were 53 deaths in prison custody, including 9 deaths among Indigenous prisoners, and 44 deaths among non-Indigenous prisoners. With just over one-quarter (27%) of prisoners in custody being Indigenous, and 17% of deaths in custody being Indigenous, Indigenous prisoners were under-represented. The median age at time of death was 49 years.

Of the 49 deaths in custody during 2012–13 for which the cause of death was available, 32 were due to natural causes, 9 were due to hanging, 5 to external/multiple trauma and 3 to other causes. A total of 13 deaths were recorded as being self-inflicted.

Of the 53 deaths recorded in 2012–13, 21 occurred in public hospitals, 5 in the prison hospital, 23 in prison cells and 4 elsewhere in the prison or custodial setting (Baker & Cussen 2015).

The rate of deaths in custody was estimated at 1.1 per 1,000 prisoners (AIHW analysis of AIC data). This rate was calculated by dividing the number of deaths in 2012–13 by the number of prisoners received into prison in 2014. This rate may be an underestimate, as the number of prisoners received into custody during 2014 is likely to be higher than during 2012–13. No estimate for the number of prisoners received into custody was available for the 2012–13 reporting period. This differs from the NDCIP rate, which uses the average daily number of prisoners during the year as the population group, and was selected because both the number of deaths and the population group had a time period of 12 months.

## 20.2 Deaths following release from prison

The complex challenges faced by prisoners after release, including housing, employment, general health and mental health problems, relapse to risky alcohol and other drug use, and stressed relationships, combine to make this a risky time. Ex-prisoners are at an increased risk of death, particularly during the period immediately following release (Merrall et al 2010).

Drug-related deaths are common in ex-prisoners, driven in large part by reduced drug tolerance but often associated with the use of a combination of alcohol and other drugs (Andrews & Kinner 2012). However, a different pattern has been observed for Indigenous ex-prisoners, who do not seem to experience an acute elevation in risk of drug-related death after release from prison, but do experience a sustained elevation in risk of substance-related death, often related to alcohol (Forsyth et al. 2014). Although the absolute risk of death is greatest for older ex-prisoners, the elevation in risk of death is greatest for younger ex-prisoners, particularly young women (van Dooren et al. 2013). The risk of suicide among recently released prisoners is more than 6 times as high as in the general population (Jones & Maynard 2013), with rates of suicide similar to rates of drug-related death (Spittal et al. 2014).

**INDICATOR:** Crude mortality rate in ex-prisoners within 4 weeks of release from prison: 13.4 per 1,000 person years (2013)

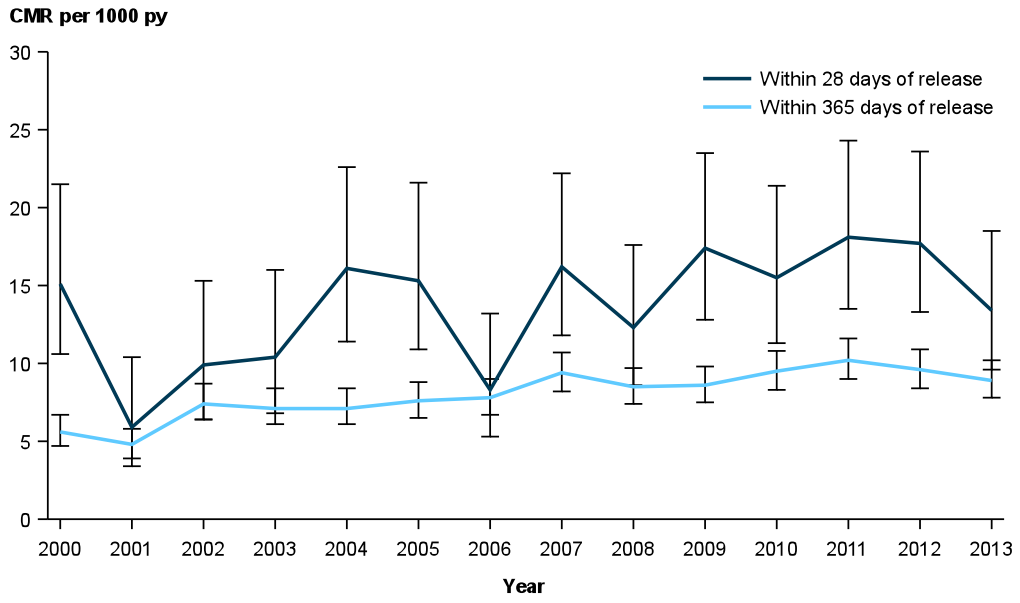
**INDICATOR:** Crude mortality rate in ex-prisoners within 365 days of release from prison: 8.9 per 1,000 person years (2013)

Upon release from prison, ex-prisoners are eligible to apply for a crisis payment from Centrelink (see Chapter 3.4). From the NPHDC, 47% of dischargees expected to receive that payment. Ex-prisoners may also then continue to receive other payments from Centrelink in the form of income support. Because death may be recorded as a reason for cessation of Centrelink benefits, Centrelink data from the Department of Human Services (DHS) can be used to estimate the number of deaths after release from prison. This will be an underestimate, because some individuals do not receive a crisis payment from Centrelink on release, and because not all ex-prisoners who die after release from custody are receiving Centrelink benefits at the time of death.

Using DHS data, the number of deaths and the crude mortality rate (CMR) for ex-prisoners nationally, within 28 days and within 365 days of release from custody, were estimated for the calendar years 2000 to 2013. Over that period, DHS recorded an average of about 32 deaths per annum for ex-prisoners within 28 days of release, and on average about 188 within a year of release (Figure 20.1). (Detailed data for this Figure can be found in Appendix Table C20.1.)

The crude rate of death after release form prison increased slightly between 2000 and 2013, although it is possible that this reflects better identification of deaths in DHS records. The CMR per 1,000 person years (py) fluctuated from a low of 5.9 in 2001 to a high of 18.1 in 2011 for deaths within 28 days of release. The rate of death within 365 days of release fluctuated from a low of 4.8 in 2001 to a high of 10.2 in 2011. By comparison, the estimated CMR for those still in prison in 2012–13 was 1.1 per 1,000 prisoner population (section 20.1).

**Figure 20.1:** Ex-prisoners crude mortality rate within 28 days and within 365 days of release, 2000–2013




*Source:* Commonwealth Department of Human Services.

The average CMR per 1,000 person years within 365 days of release from prison from 2000–2013 was slightly higher for Indigenous (8.5) than non-Indigenous (7.8) ex-prisoners. For Indigenous ex-prisoners, the rate fluctuated from a low of 6.2 in 2000 to a high of 10.4 in 2012. For non-Indigenous ex-prisoners, the rate fluctuated from a low of 4 in 2001 to a high of 10.7 in 2012 (see Appendix Table C20.2).

# Appendix A: Specifications of indicators

**Key**

= Sourced from discharge form
= Sourced from entrant form
= Sourced from repeat medication form
= Sourced from clinic form
= Sourced from establishment form
= Other sources

| Indicator | Numerator | Denominator |
|---|---|---|
| Socioeconomic factors | | |
| Proportion of prison entrants whose highest year of completed schooling was below Year 10 | Number of prison entrants whose highest completed year of schooling was below Year 10 | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees whose highest year of completed schooling was below Year 10 | Number of prison dischargees whose highest year of completed schooling was below Year 10 | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who completed qualifications while in prison | Number of prison dischargees who report that they completed qualifications in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who were unemployed in the 30 days prior to imprisonment | Number of prison entrants who were either unemployed and looking for work or unemployed and not looking for work | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who on release have organised paid employment which will start within 2 weeks of leaving prison | Number of prison dischargees who on release have organised paid employment which will start within 2 weeks of leaving prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who on release are expecting to receive government payment through Centrelink | Number of prison dischargees who on release are expecting to receive income support (including disability) and/or crisis payment through Centrelink | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who were homeless in the 4 weeks prior to imprisonment (including short-term and emergency accommodation) | Number of prison entrants who were sleeping rough or in short-term or emergency accommodation in the 4 weeks prior to imprisonment | Total number of prison entrants during the data collection period |
| Proportion of dischargees who on release are expecting to be homeless (including short-term and emergency accommodation) | Number of prison dischargees who on release are expecting to be sleeping rough or in short-term or emergency accommodation | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who had one or more of their parents/carers imprisoned while they were a child | Number of prison entrants who had one or more of their parents or carers imprisoned while they were a child | Total number of prison entrants during the data collection period |

| Indicator | Numerator | Denominator |
|---|---|---|
| Proportion of prison entrants who have children who depend on them for their basic needs | Number of prison entrants who had children living with them and dependent on them for their basic needs before prison | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who in the last 4 weeks had contact with family, friends and/or elders | Number of prison dischargees who, in the last 4 weeks, had letter, phone or visit contact from family, friends, elders | Total number of prison dischargees during the data collection period |
| **Mental health** | | |
| Proportion of prison entrants who have ever been told by a doctor, psychiatrist, psychologist or nurse that they have a mental health disorder (including drug and alcohol abuse) | Number of prison entrants who have ever been told by a doctor, psychiatrist, psychologist or nurse that they have a mental health disorder | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who have ever been told they have a health condition—mental health, including drug and alcohol abuse | Number of prison dischargees who have ever been told that they have a mental health disorder, including drug and alcohol abuse | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees reporting that their mental health improved or stayed the same while in prison | Number of prison dischargees who report that their mental health improved a lot or a little, or stayed the same while in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants with high or very high level of psychologist distress as measured by the Kessler-10 (K10) scale | Number of prison entrants with high or very high levels of psychological distress as measured by the Kessler-10 (K10) scale | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees with high or very high level of psychologist distress as measured by the Kessler-10 (K10) scale | Number of prison dischargees with high or very high levels of psychological distress as measured by the Kessler-10 (K10) scale | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who rate their mental health as generally good or better | Number of prison entrants who rate their mental health as generally good, very good or excellent | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who rate their mental health as generally good or better | Number of prison dischargees who rate their mental health as generally good, very good or excellent | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who are currently taking medication for a mental health disorder | Number of prison entrants who are currently taking medication for a mental health disorder | Total number of prison entrants during the data collection period |
| Proportion of prisoners in custody who received medication for mental health issues | Number of prisoners in custody who received medication for mental health related issues | Total number of prisoners in custody on 30 June 2014 |
| Proportion of prison entrants who, at reception, were referred to mental health services for observation and further assessment | Number of prison entrants who, at reception, were referred to mental health services for observation and further assessment | Total number of prison entrants during the data collection period |
| **Self-harm** | | |
| Proportion of prison entrants who have ever intentionally harmed themselves | Number of prison entrants who have ever intentionally harmed themselves | Total number of prison entrants during the data collection period |
| Proportion of prison entrants who have thought of harming themselves in the last 12 months | Number of prison entrants who have thought of harming themselves in the last 12 months | Total number of prison entrants during the data collection period |

| Indicator | Numerator | Denominator |
|---|---|---|
| Proportion of prison dischargees who have intentionally harmed themselves in prison | Number of prison dischargees who have intentionally harmed themselves in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants identified as currently at risk of suicide or self-harm | Number of prison entrants identified as currently at risk of suicide or self-harm | Total number of prison entrants during the data collection period |
| **Communicable diseases** | | |
| Rate of notifications of sexually transmissible infections for prisoners in custody during 2014 (*Source:* Jurisdictions) | Number of notifications of sexually transmissible infections for prisoners in custody during 2014 | Total number of prisoners received into custody during 2014 |
| Proportion of prison entrants testing positive to Hepatitis C virus (*Source:* NPEBBV&RBS) | Number of prison entrants testing positive to Hepatitis C antibody | Total number of prison entrants tested |
| Proportion of prison entrants testing positive to Hepatitis B virus (*Source:* NPEBBV&RBS) | Number of prison entrants testing positive to Hepatitis B antibody | Total number of prison entrants tested |
| Proportion of prison entrants testing positive for HIV (*Source:* NPEBBV&RBS) | Number of prison entrants testing positive for HIV | Total number of prison entrants tested |
| Proportion of prison dischargees who were tested for a bloodborne virus or a sexually-transmissible infection | Number of prison dischargees who were tested for a bloodborne virus or a sexually-transmissible infection in prison | Total number of prison dischargees during the data collection period |
| Rate of courses of treatment for Hepatitis C commenced during 2014 (*Source:* Jurisdictions) | Number of courses of treatment for Hepatitis C commenced during 2014 | Total number of prisoners received into custody during 2014 |
| **Chronic conditions** | | |
| Proportion of prison entrants who have ever been told they have a chronic condition | Number of prison entrants who report that they have been told by a doctor or nurse that they have arthritis, asthma, cancer, cardiovascular disease or diabetes | Total number of prison entrants during the data collection period |
| **Activity and health changes** | | |
| Proportion of prison entrants who rate their physical health as generally good or better | Number of prison entrants who rate their physical health as generally good, very good or excellent | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who rate their physical health as generally good or better | Number of prison dischargees who rate their physical health as generally good, very good or excellent | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who report that while in prison their level of physical activity increased or stayed the same | Number of prison dischargees who report that while in prison their level of physical activity increased or stayed the same | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who report that while in prison their weight increased or stayed the same while in prison | Number of prison dischargees who report that while in prison their weight increased or stayed the same | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees reporting that their physical health improved or stayed the same while in prison | Number of prison dischargees who report that their physical health improved a lot or a little, or stayed the same while in prison | Total number of prison dischargees during the data collection period |
| **Aspects of women's health** | | |
| Proportion of female prison entrants who have ever been pregnant | Number of female prison entrants who have ever been pregnant | Total number of female prison entrants during the data collection period |

| Indicator | Numerator | Denominator |
|---|---|---|
| Mean age at first pregnancy for female prison entrants | | |
| Rate of pregnant prisoners in custody during 2014 | Number of female prisoners in custody who were pregnant during 2014 | Number of female prisoners received into custody in 2014 |
| Proportion of female prison dischargees who were pregnant while in prison | Number of female prison dischargees who were pregnant while in prison | Total number of female prison dischargees |
| Proportion of female prison entrants who have had a cervical cancer screening in the last two years | Number of female prison entrants who had a cervical screening in the last two years | Total number of female prison entrants during the data collection period |
| Proportion of female prison dischargees who had cervical a cancer screening in prison | Number of female prison dischargees who had cervical cancer screening in prison | Total number of female prison dischargees |
| Number of female prison dischargees who had a mammogram in prison | Number of female prison dischargees who had a mammogram in prison | Total number of female prison dischargees |
| **Disability status** | | |
| Proportion of prison entrants with limitations in activities or restrictions in education or employment | Number of prison entrants with limitations in activities or restrictions in education or employment | Total number of prison entrants during the data collection period |
| Proportion of prison entrants with profound/severe core activity limitations | Number of prison entrants with profound or severe limitations to self-care, mobility and/or communication | Total number of prison entrants during the data collection period |
| **Tobacco smoking** | | |
| Proportion of prison entrants who currently smoke tobacco | Number of prison entrants who currently smoke tobacco | Total number of prison entrants during the data collection period |
| Mean age at which prison entrants who have ever smoked, smoked their first full cigarette | | |
| Proportion of prison dischargees who smoked tobacco on entry to prison | Number of prison dischargees who smoked tobacco on entry to prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who currently smoke tobacco (in prisons allowing smoking) | Number of prison dischargees in prisons allowing smoking who currently smoke tobacco | Total number of prison dischargees in prisons allowing smoking during the data collection period |
| Proportion of prison entrants who currently smoke and would like to quit | Number of prison entrants who currently smoke and would like to quit | Total number of prison entrants who are current smokers |
| Proportion of prison dischargees who intend to smoke upon release from prison | Number of prison dischargees who intend to smoke upon release from prison | Total number of prison dischargees during the data collection period |
| **Illicit drug use and needle sharing** | | |
| Proportion of prison entrants who engaged in illicit drug use in the last 12 months | Number of prison entrants who engaged in illicit drug use in the last 12 months | Total number of prison entrants during the data collection period |
| Proportion of prison entrants who have ever injected drugs (***Source:*** NPEBBV&RBS) | Number of prison entrants who have ever injected drugs | Total number of prison entrants during the data collection period |

| Indicator | Numerator | Denominator |
|---|---|---|
| Proportion of prison dischargees who reported using illicit drugs in prison | Number of prison dischargees who reported using illicit drugs in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who reported injecting drugs in prison | Number of prison dischargees who reported injecting drugs in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who have shared injecting equipment (*Source:* NPEBBV&RBS) | Number of prison entrants who have shared injecting equipment | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who reported using a needle that had been used by someone else while in prison | Number of prison dischargees who reported using a needle that had been used by someone else | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who accessed a needle and syringe exchange program in the community | Number of prison dischargees who accessed a needle and syringe exchange program in the community | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who report being on pharmacotherapy medication for opioid dependence | Number of prison entrants on pharmacotherapy medication for opioid dependence | Total number of prison entrants during the data collection period |
| Proportion of prisoners in custody who received medication for opioid dependence | Number of prisoners in custody who received medication for opioid dependence | Total number of prisoners in custody on 30 June 2014 |
| Proportion of prison dischargees on an opiate substitution program while in prison with a plan to continue after release | Number of prison dischargees on an opiate substitution program while in prison and has a plan to continue after release | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who reported receiving a tattoo while in prison | Number of prison dischargees who report that while in prison they received a tattoo | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who reported receiving a body or ear piercing while in prison | Number of prison dischargees who reported receiving a body or ear piercing while in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who report a high risk of alcohol-related harm (as measured by the AUDIT-C) | Number of prison entrants who received a consumption score of at least 6 on the Alcohol Use Disorders Identification Test (AUDIT-C), indicating a risk of alcohol-related harm | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who reported consuming alcohol in prison | Number of prison dischargees who consumed alcohol in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who accessed an alcohol treatment program in prison | Number of prison dischargees who accessed an alcohol treatment program in prison | Total number of prison dischargees during the data collection period |
| **Injuries, assaults and unprotected sex** | | |
| Proportion of prison entrants who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness | Number of prison entrants who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness | Total number of prison entrants during the data collection period |
| Proportion of prison dischargees who have ongoing symptoms from a head injury/blow to the head resulting in a loss on consciousness while in prison | Number of prison dischargees who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness while in prison | Total number of prison dischargees during the data collection period |

| Indicator | Numerator | Denominator |
|---|---|---|
| Proportion of prison dischargees who had to see a doctor or nurse due to an accident or injury while in prison | Number of prison dischargees who had to see a doctor or nurse due to an accident or injury while in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who reported being physically assaulted or attacked by another prisoner while in prison | Number of prison dischargees who were physically assaulted or attacked by another prisoner while in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who reported being sexually assaulted by another prisoner while in prison | Number of prison dischargees who were sexually assaulted another prisoner while in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison entrants who had a casual female sexual partner in the last 3 months and reported never using a condom (*Source:* NPEBBV&RBS) | Number of prison entrants who report having had unprotected sex with a casual female partner in the last 3 months | Total number of prison entrants during the data collection period |
| **General health services** | | |
| Proportion of prison entrants who, in the last 12 months, consulted with a medical professional in the community | Number of prison entrants, by professional medical contact sought in the community | Total number of prison entrants during the data collection period |
| Proportion of prison entrants who were in prison in the last 12 months and consulted a medical professional for their own health in prison. | Number of prison entrants, by professional medical contact sought in prison | Total number of prison entrants during the data collection period who had been in prison in the last 12 months |
| Proportion of prison entrants who, in the last 12 months, needed to consult with a health professional in the community but did not | Number of prison entrants, by medical contact required in the community, yet not sought | Total number of prison entrants during the data collection period |
| Proportion of prison entrants who were in prison in the last 12 months and needed to consult with a health professional while in prison, but did not | Number of prison entrants, by medical contact required in prison, yet not sought | Total number of prison entrants during the data collection period who had been in prison in the last 12 months |
| **Prison clinic** | | |
| Proportion of prison dischargees who received a health assessment upon entry to prison | Number of prison dischargees who received a health assessment upon entry to prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who could easily see a medical professional (GP or nurse) in prison if they had a health problem | Number of prison dischargees who could easily see a GP or nurse in prison if they had a health problem | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who visited the prison clinic | Number of prison dischargees who visited the prison clinic | Total number of prison dischargees during the period |
| Proportion of prisoners in custody who used the prison clinic during the 2-week data collection period | Number of prisoners in custody who used the prison clinic during the data collection period | Total number of prisoners in custody on 30 June 2014 |
| Proportion of prison dischargees who were diagnosed with a health condition in prison | Number of prison dischargees who were diagnosed with a health condition in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who received treatment for a health condition in prison | Number of prison dischargees who received treatment for a health condition in prison | Total number of prison dischargees during the data collection period |

| Indicator | Numerator | Denominator |
|---|---|---|
| Proportion of prisoners in custody who had a problem managed in the prison clinic during the 2-week data collection period, by problem managed | Number of prisoners in custody, by reason for attending the prison clinic | Total number of prisoners in custody on 30 June 2014 |
| Proportion of clinic visits during the 2-week data collection period, by service received | Number of clinic visits by service received | Total number of clinic visits during the data collection period |
| Proportion of clinic visits initiated by prisoners | Number of clinic visits initiated by prisoners | Total number of clinic visits during the data collection period |
| Proportion of prison dischargees' clinic visits by type of health professional seen | Number of prison dischargees by professional medical contact sought in prison | Total number of prison dischargees during the data collection period |
| Proportion of clinic visits by type of health professional seen | Number of clinic visits by type of health professional seen | Total number of clinic visits during the data collection period |
| Proportion of prison dischargees who were satisfied with the amount of information on their condition received at a clinic visit | Number of prison dischargees who were completely or somewhat satisfied with the amount of information on their condition received at a clinic visit | Total number of prison dischargees who visited the clinic |
| Proportion of prison dischargees who received answers they could understand at the prison clinic | Number of prison dischargees who had received answers they could completely or somewhat understand at a clinic visit | Total number of prison dischargees who visited the clinic |
| Proportion of prison dischargees who were able to be involved in their treatment decision at a clinic visit | Number of prison dischargees who were completely or somewhat able to be involved in their treatment decision at a clinic visit | Number of prison dischargees who visited the clinic |
| Proportion of prison dischargees who had enough time at a clinic visit | Number of prison dischargees who mostly or always had enough time at a clinic visit | Number of prison dischargees who visited the clinic |
| Proportion of prison dischargees who rated the health care they received in the prison clinic as excellent | Number of prison dischargees who rated the health care they received in the prison clinic as excellent | Number of prison dischargees who visited the clinic |
| **Medication** | | |
| Proportion of prison dischargees who were prescribed medication for a health condition in prison | Number of prison dischargees who were prescribed medication for a health condition in prison | Total number of prison dischargees during the data collection period |
| Proportion of prisoners in custody who received medication during the data collection period | Number of prisoners in custody who received prescribed medication on one day of the data collection period | Total number of prisoners in custody on 30 June 2014 |
| **Prison health services** | | |
| Ratio of full-time equivalent doctors and nurses working within the correctional system to the total number of prisoners | Number of full-time equivalent doctors and nurses working within the correctional system | Total number of prisoners in custody on 30 June 2014 |
| Proportion of prison dischargees who received an immunisation while in prison | Number of prison dischargees who received immunisation while in prison | Total number of prison dischargees during the data collection period |
| Number of vaccinations provided by prison clinics during the 2-week data collection period | | |

| Indicator | Numerator | Denominator |
|---|---|---|
| Proportion of prison dischargees who went to a medical appointment outside the prison | Number of prison dischargees who went to a medical appointment outside the prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who were admitted to a general or psychiatric hospital | Number of prison dischargees who were admitted to a general or psychiatric hospital while in prison | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who visited an emergency department | Number of prison dischargees who visited an emergency department of a general hospital while in prison | Total number of prison dischargees during the data collection period |
| Number of hospital transfers for prisoners in custody during the 2-week data collection period | | |
| Proportion of Indigenous prison dischargees who received treatment or consultation from an Aboriginal Community Controlled Health Organisation (ACCHO) or an Aboriginal Medical Service (AMS) | Number of Indigenous prison dischargees who received treatment or consultation from ACCHO or AMS | Total number of Indigenous prison dischargees |
| Proportion of Indigenous prison dischargees who always received culturally appropriate health care in prison | Number of Indigenous prison dischargees who always received culturally appropriate health care in prison | Total number of Indigenous prison dischargees |
| Frequency of visits by an ACCHO or AMS to a prison facility | Number of prisons that received visits by an Aboriginal Community Controlled Health Organisation or an Aboriginal Medical Service. | Total number of prisons that took part in the NPHDC. |
| **Release procedures** | | |
| Proportion of prisoners who had a health-related discharge summary in place at time of their release | Number of prisoners who had a health-related discharge summary in place at time of their release, by legal status | Total number of prisoners released during the data collection period, by legal status |
| Proportion of prison dischargees on treatment or medication for a health condition who have a plan to continue after release | Number of prison dischargees on treatment and/or medication for a health condition who have a plan to continue after release | Total number of prison dischargees who have a health condition |
| Proportion of prison dischargees who on release have a referral or appointment to see a health professional | Number of prison dischargees who on release have a referral or appointment to see a health professional | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who have a valid Medicare card available on release | Number of prison dischargees who have a valid Medicare card available on release | Total number of prison dischargees during the data collection period |
| Proportion of prison dischargees who felt prepared for their upcoming release from prison | Number of prison dischargees who felt prepared for their upcoming release from prison | Total number of prison dischargees during the data collection period |
| **Deaths** | | |
| Number of deaths in prison custody during 2012–13. | | |
| Crude mortality rate in ex-prisoners within 4 weeks of release from prison<br>Crude mortality rate in ex-prisoners within 365 days of release from prison | | |

# Appendix B: Data quality statement—National Prisoner Health Data Collection

## Summary of key data quality issues

- The National Prisoner Health Data Collection (NPHDC) contains data relating to people entering prison (prison entrants), people about to be released from prison (prison dischargees), clinic visits and services, and medications taken by prisoners. Data are collected over a 2-week period, and sent to the AIHW for collation, analysis and reporting.
- The collection does not provide complete coverage of the prisoner population. Firstly, not all prisons are included because the collection has yet to achieve full participation by every jurisdiction in a single collection. Secondly, the collection is based on convenience sampling with prisoners approached for participation where possible, and not all of these prisoners providing consent.
- The majority of the data collected for the entrants and dischargee sections are self-reported data. This method provides a simple and efficient method of collecting data. There are advantages to self-reported data such as that it does not require specialised training for the interviewers, is often quicker than diagnostic interviewing (for health conditions), and provides the direct perspective of the person being interviewed. The main disadvantage of self-reported data is that there is no independent validation of the responses. This may lead, for example, to deliberate under-reporting of illegal activities. Self-reported data may be compared with other self-reported data (provided where possible throughout this report), but may not be directly comparable with reports and studies that use other data collection methods.
- As a longer term aim, the data would ideally be collected as a by-product of jurisdictions' administrative systems, rather than being a separate data collection as it is currently. That would allow for the samples to be increased, thereby expanding the options for analysis, especially for entrants and dischargees data. It is anticipated that this would take some time to achieve, because the data requirements for the NPHDC would need to be built into the administrative data systems in each jurisdiction.

### Description

The NPHDC is the only national source of information on the health of prisoners in Australia, covering a broad range of health issues and social and other determinants of health.

### Institutional environment

The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent corporate Commonwealth entity established in 1987, governed

by a management Board, and accountable to the Australian Parliament through the Health portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.

One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.

The *Australian Institute of Health and Welfare Act 1987*, in conjunction with compliance with the *Privacy Act 1988* (Commonwealth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

For further information see the AIHW website <www.aihw.gov.au>.

The AIHW has been maintaining the NPHDC since 2009.

### Timeliness

The NPHDC has been collected 4 times: 2009, 2010, 2012 and 2015. The exact timing of the data collection and how often it will be conducted in the future are not yet confirmed. The 2015 report will be released on 27 November 2015.

### Accessibility

The AIHW website provides access to various prisoner health data reports including *The health of Australia's prisoners*, and thematic bulletins, which can be downloaded free of charge. Users can request data not available online or in reports via the Child Welfare and Prisoner Health Unit, Australian Institute of Health and Welfare, on (02) 6244 1000 or via email to <prisoner.health@aihw.gov.au>. A fee may be charged for substantial requests on a cost-recovery basis. General enquiries about AIHW publications can be made to the Digital and Media Communications Unit on (02) 6244 1032 or via email to <info@aihw.gov.au>.

### Interpretability

Most of the data on health conditions in the NPHDC are self-report rather than diagnostic health data. Reports such as *The health of Australia's prisoners* have a 'method' section in the Introduction chapter, where technical information may be found. The metadata for the collection are found in the Prisoner Health Data Set Specification (METeOR identifier 375978) on the AIHW's Metadata Online Registry <meteor.aihw.gov.au>. METeOR is Australia's repository for national metadata standards for health, housing and community services statistics and information.

The denominator for indicators sourced from the clinic and medication data is the total number of prisoners in custody at 30 June for the relevant year. Some indicators in the NPHDC relate to 12 months of data (number of pregnant prisoners in custody, number of prisoners taking medication for Hepatitis C, number of notifications of sexually transmitted infections). To provide an appropriate denominator for these indicators, jurisdictions provide data on the number of prisoners received into prison and released from prison, during the same 12-month period. This is a more appropriate denominator for these indicators, as it provides a more accurate representation of the number of prisoners over a 12-month period than the ABS 30 June snapshot, or an average daily number of prisoners, because of the flow of prisoners through the system each year is up to 50% higher than the daily population.

Significance testing for the NPDC is problematic because of the design and method of data collection. The collection is designed to be a census, capturing data on the entire population of interest. To date, this has not been achieved, as in practice some prisoners (especially prison entrants and dischargees) are not able to be approached for involvement in the data collection for various reasons. Of those who are, some do not provide consent to participate. The sample is therefore not probabilistic sampling, but rather convenience sampling, rendering standard approaches to statistical testing inappropriate. Comparisons in the report are therefore restricted to those where the data are both internally consistent with previous collections, and externally consistent with other similar data. There is a program of work being undertaken at the AIHW to develop a methodology to indicate variability of data points to support meaningful comparisons. The results of this work may inform future reports of the NPHDC. Incomplete coverage of all prisons and prisoners in the collection (see 'Coverage' below) also means that the data may not be representative of the whole prisoner population.

## Relevance

*Scope*

A prison entrant is classed as a person aged at least 18, entering full-time prison custody, either on remand (awaiting a trial or sentencing) or on a sentence. Prisoners who have been transferred from one prison to another are not included as entrants.

A prison dischargee is a full-time prisoner aged at least 18, who expects to be released from prison within the 4 weeks following the time of interview.

Prisoners aged at least 18 years, held in full-time custody in correctional facilities in Australia are in scope for the clinic and medication components of the NPHDC.

Police cells, court cells, periodic detention, juvenile correctional facilities and immigration detention centres are out of scope for all components of the NPHDC.

*Reference period*

Data were collected over two 2-week periods, with some jurisdictions collecting data between 2–15 March 2015 and the remaining jurisdictions (excluding New South Wales ) collecting data between 27 April–10 May. In Queensland, the data collection was re-run in Arthur Gorrie, Townsville Male and Wolston Correctional Centres from 27 April to 10 May due to technical difficulties during the initial data collection round.

Entrants, dischargee and clinic data cover the whole 2-week period, and medications data cover 1 day in this 2-week period. Some indicators cover the entire 2014 year.

*Coverage*

Complete coverage of all prisons and prisoners has yet to be achieved in this data collection. The participation of jurisdictions and individual prisons has varied across the collection years for various reasons such as funding and resource availability and private prison contracts. A collection with full participation has not yet occurred. Not all eligible prisoners are able to be approached to participate, and some may not provide consent. For details on participation, see 'Participation rate' below.

In 2015, data were collected from all states and territories. In New South Wales, data were collected for selected entrants' data items only.

*Statistical standards*

Australian Standard Classification of Countries (ASCC) and Australian Standard Classification of Languages (ASCL) were used as the code frame for questions on country of birth and main language spoken at home.

## Accuracy

*Participation rate*

Participation rates for entrants and dischargees have been calculated from data provided by the jurisdictions on the overall number of prisoners received into prison, and released from prison, during the 2-week data collection period. New South Wales were excluded from the calculations of participation rates because of methodological differences in their collection of entrants' data, and they did not provide dischargee data.

In Western Australia, Acacia Prison was unable to participate fully in the data collection due to resourcing constraints and was removed from the data.

For the entrant data, there were usable completed forms for 809 entrants from a total of 1,644 entrants into prisons during the 2-week period—a participation rate of 49%. Among dischargees, participation rates were calculated for all dischargees, and also for sentenced dischargees, who were the focus of data collection. During the data collection period, there were 445 usable dischargee forms completed, from a total of 1,740 prisoners discharged. Of those discharged, 1,059 were sentenced prisoners, resulting in a participation rate of 26% overall, with 42% among sentenced dischargees. The indicative participation rates among entrants and the target population group of sentenced dischargees were therefore similar.

Note that the method of calculation of participation rates has changed since 2012, so rates between 2012 and 2015 may not be comparable.

*Indigenous data*

Identification of Indigenous status was generally good in each state and territory, with 'not stated' or 'unknown' rates under 5%. The proportions of Indigenous participants in the entrants and dischargee data were slightly higher than the reported proportion of Indigenous people in the prisoner population on 30 June 2014.

## Coherence

The indicators that constitute the NPHDC were developed by the AIHW with the assistance and advice of the National Prisoner Health Information Committee (NPHIC) and are influenced by policy relevance in monitoring key aspects of prisoner health.

Where possible, existing data standards have been used, to increase comparability both within the NPHDC between collection years, and with other data collections such as those held by the ABS.

There have been some changes between collections in the NPHDC, with indicators being added and deleted, and some changes to definitions and data collection methods. For these reasons, caution should be used in making comparisons between different years of the collection.

# Appendix C: Tables

Appendix C contains data tables at national level, providing additional information referred to in the report, *The health of Australia's prisoners 2015*. For example, where an indicator is presented as a Figure in the report, an accompanying data table is included in Appendix C.

Data tables reporting indicators at state and territory level are available as supplementary tables.

Available online at <http://www.aihw.gov.au/publication-detail/?id=60129553527>.

# Appendix D: Data sources

### National Prisoner Health Data Collection (AIHW)

The National Prisoner Health Data Collection (NPHDC) is the main data source for the reporting of the National Prisoner Health Indicators. The NPHDC was conducted over 2 weeks in March-May 2015 in all states and territories in Australia except New South Wales. The NPHDC captured data on prison entrants, prison dischargees, and visits to the prison clinic for 2 weeks, and repeat medications taken by prisoners for one day.

### National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey

The National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (Butler et al. 2015) is held biennially in all states and territories. It is a census of prison entrants done over 2 weeks, which provides estimates of prevalence of bloodborne viruses. Testing is conducted for HIV, hepatitis B and hepatitis C. The data can be categorised by age, sex and Indigenous status.

### Prisoners in Australia (ABS)

*Prisoners in Australia* presents national statistics on prisoners who were in custody on 30 June each year (ABS 2014). These statistics describe the characteristics of prisoners, sentence lengths, and offences for which offenders are imprisoned, and provide a basis for measuring change over time.

### Deaths in custody in Australia (AIC)

The *Deaths in custody in Australia* report from the National Deaths in Custody Program monitors the extent and nature of deaths that have occurred in police, prison and juvenile custody since 1980. These statistics describe the number of deaths, the demographic characteristics of the deceased, and the circumstances surrounding the deaths.

### National Drug Strategy Household Survey (AIHW)

The National Drug Strategy Household Survey was conducted during 2013, sampling almost 24,000 people throughout Australia. The survey collected information on their tobacco, alcohol and illicit drug use, attitudes and opinions.

### Australian Health Survey (ABS)

The Australian Health Survey was conducted by the ABS in 2011–13; collecting information from about 16,000 Australian households. The survey provides information on various demographic, health, social, environmental and economic indicators, including: long-term health conditions, health risk behaviours and health related actions.

### Australian Aboriginal and Torres Strait Islander Health Survey (ABS)

The Australian Health Survey includes a nationally representative sample of around 13,000 Aboriginal and Torres Strait Islander people. As part of the Australian Health Survey, the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) which commenced in April 2012 collected information from the Aboriginal and Torres Strait Islander population in non-remote and remote areas, including discrete communities.

### Drug Use Monitoring in Australia (AIC)

The Drug Use Monitoring in Australia report series is held by the Australian Institute of Criminology (AIC). The DUMA project is funded by the Australian Government. The data used in this publication were made available through the AIC. These data were originally collected by the AIC by an independent data collector with the assistance of the New South Wales, Northern Territory, Queensland, South Australia, Victoria and Western Australia Police. Neither the collectors, the police, nor the AIC bear any responsibility for the analyses or interpretations presented herein.

### Survey of Disability, Ageing and Carers (ABS)

The Survey of Disability, Ageing and Carers was conducted by the ABS in 2012 and sampled 1,550 Aboriginal and Torres Strait Islander people and 66,550 non-Indigenous people living in private dwellings. The Survey is designed to measure the prevalence of disability in Australia and the need for support by people with disability.

### Patient Experience Survey (ABS)

The ABS Patient Experience Survey is conducted annually and collects data on access and barriers to a range of health care services, including general practitioners, medical specialists, dental professionals, imaging and pathology tests, hospital admissions, and emergency department visits.

### Bettering the Evaluation and Care of Health (University of Sydney)

The BEACH program continually collects information about the clinical activities in general practice in Australia including characteristics of the general practitioners, patients seen, reasons people seek medical care, problems managed, and for each problem managed—medication, referrals and tests. The BEACH database includes over 1,600,000 GP-patient encounter records.

## Denominators

Some indicators relate to 12 months of data (number of pregnant prisoners in custody, number of courses of treatment for Hepatitis C commenced and number of notifications of sexually transmitted diseases). Obtaining an appropriate denominator for these data is difficult, because in order for the denominator to match the numerator, the flow of prisoners during the year is required. With the high proportion of prisoners on short-term remand (awaiting trial or sentencing), the number of prisoners who move through the prison system during a 12 month period is much higher than the number in prison on any one day. For example, during 2014, over 50,000 individual people entered prison, compared with 33,000 in custody on 30th June that year (see Table 2.1). Given this large difference between the daily population and the number of individuals received into prison in a year, if the daily population is used as a denominator where the numerator contains 12 months of data, the numerator is derived from a larger population than the denominator, inflating the result.

The ideal denominator would be the number of people in custody on the first day of the year, plus the number who entered prison during the 12 months, with individuals only counted once. Although the 30th June population data are available, and in this data collection the number of individuals received into custody over a 12 month period is reported, there is currently no way of combining these data because individuals who were in custody on 30th June and were subsequently received into prison again later that same year would be counted twice. Of entrants in this data collection, 40% had been in prison previously during the last 12 months (see Table 2.2). AIHW and others in the field are working with the sector to improve the availability of prison population data (e.g. Avery & Kinner 2015).

Given the available data, to provide an appropriate denominator for these indicators, jurisdictions provided data on the number of prisoners received into prison during the same 12-month period. For more details, see 'Chapter 2.1 Australia's prisoners'.

# Appendix E–H: Additional information

Appendix E: Prisoner health services in Australia.

Appendix F: Key policy directions.

Appendix G: Prisoner health legislation in Australia.

Appendix H: List of prisons in Australia.

This additional information is available online at <http://www.aihw.gov.au/publication–detail/?id=60129553527>.

# Glossary

**Aboriginal Community Controlled Health Organisation (ACCHO):** A health organisation controlled by, and accountable to, Aboriginal and Torres Strait Islander people in those areas in which the organisation operates. An individual ACCHO aims to deliver holistic, comprehensive and culturally appropriate health care to the community that controls it.

**Aboriginal health worker:** A health worker who provides clinical and primary health care for Aboriginal and Torres Strait Islander individuals, families and community groups.

**Aboriginal Medical Service (AMS):** A health service funded principally to provide services to Aboriginal and Torres Strait Islander individuals that is not necessarily community controlled. AMSs that are not community controlled are government health services run by a state or territory government. Non-community controlled AMSs mainly exist in the Northern Territory and the northern part of Queensland.

**Adult prison:** A place administered and operated by a justice department, where individuals are detained while under the supervision of the relevant justice department on a pre-sentence or sentenced detention episode.

**Arthritis:** An umbrella term for more than 100 medical conditions that affect the musculoskeletal system, specifically joints. The three most common forms of arthritis are osteoarthritis, rheumatoid arthritis and gout.

**Asthma:** A chronic inflammatory disorder of the airways. This inflammation causes recurrent episodes of wheezing, breathlessness, chest tightness and coughing, particularly in the night or in the morning.

**Bloodborne virus:** A virus that lives in the blood and is transmitted by blood-to-blood contact. Examples of bloodborne viruses include Hepatitis C and HIV.

**Cancer:** A group of several hundred diseases in which abnormal cells are not destroyed by normal metabolic processes, but instead proliferate and spread out of control (after being affected by a carcinogen or after developing from a random genetic mutation) and form a mass called a tumour or neoplasm. In this data collection, cancer includes leukaemia, lymphoma, kidney cancer, bladder cancer, digestive system cancer, stomach cancer, bowel cancer, breast cancer, genital cancer, head and neck cancers, liver cancer, lung cancer, nervous system cancers and skin cancer (excluding non-melanoma skin cancer).

**Cardiovascular disease:** Any disease that affects the circulatory system, including the heart and blood vessels. Examples include coronary heart disease, heart failure, rheumatic fever and rheumatic heart disease, congenital heart disease, stroke and peripheral vascular disease.

**Clinic visit:** A face-to-face consultation for which an entry is made in the health service record, other than for routine, household-type treatment such as adhesive plasters or paracetamol.

**Communicable disease:** Diseases that are capable of being transmitted between individuals, including AIDS, HIV, hepatitis, malaria, meningitis, sexually transmitted infections, and vaccine-preventable diseases such as chickenpox and influenza.

**Diabetes:** A disease marked by high blood glucose levels resulting from defective insulin production, insulin action or both. The three main types of diabetes are Type 1 diabetes, Type 2 diabetes and gestational diabetes.

**Digestive conditions:** Includes abdominal pain, diarrhoea, gallstones, gastroenteritis, hernias, incontinence, indigestion, intestinal diseases, liver disease, malabsorption syndromes, oesophageal disease, pancreatic disease and peptic ulcer. Excludes digestive system cancers such as bowel, liver and stomach cancer.

**Dischargee:** A full-time prisoner aged at least 18, who expects to be released from prison within the 4 weeks following the time of interview.

**Entrant:** A person aged at least 18, entering full-time prison custody, either on remand (awaiting a trial or sentencing) or on a sentence. Prisoners who have been transferred from one prison to another are not included as entrants.

**Full-time equivalent staff:** Full-time equivalent staff units are the on-job hours paid for (including overtime) and hours of paid leave of any type for a staff member (or contract employee where applicable) divided by the number of ordinary-time hours normally paid for a full-time staff member when on the job (or contract employee where applicable) under the relevant award or agreement for the staff member (or contract employee occupation where applicable). Hours of unpaid leave are excluded. Contract staff employed through an agency are included where the contract is for the supply of labour (for example, nursing) rather than of products (such as maintenance). A full-time equivalent of 1.0 means the person is equivalent to a full-time worker, while a full-time equivalent of 0.5 signals the person works half-time.

**Health-related discharge plan:** A plan that supports the continuity of health care between the prison health service and the community, based on the individual needs of the prisoner.

**Illicit drug use:** Includes use of:

- any drug that is illegal to possess or use
- any legal drug used in an illegal manner, such as
  - a drug obtained on prescription, but given or sold to another person to use
  - glue or petrol which is sold legally, but is used in a manner that is not intended, such as inhaling fumes
  - stolen pharmaceuticals sold on the black market (such as pethidine)
- any drug used for 'non-medical purposes', which means drugs used
  - either alone or with other drugs to induce or enhance a drug experience
  - for performance enhancement (for example, athletic)
  - for cosmetic purposes (for example, body shaping).

**Indigenous:** For administrative collections, an Indigenous person is a person of Aboriginal and/or Torres Strait Islander descent who identifies as such.

**Juvenile detention centre:** A place administered and operated by a department responsible for juvenile justice, where young people under the age of 18 are detained while under the supervision of the department on a pre-sentence or sentenced detention episode.

**Malignancy:** Includes most type of cancers but excludes non-melanoma skin cancer in this data collection.

**Mental health:** A state of wellbeing in which the person realises his or her own abilities, can cope with normal stresses of life, can work productively and can make a contribution to the community. Mental health is the capacity of individuals and groups to interact with one another and the environment, in ways that promote subjective wellbeing, optimal development and the use of cognitive, affective and relational abilities.

**Mental illness/mental health disorder:** The range of cognitive, emotional and behavioural disorders that interfere with the lives and productivity of people. Mental health disorders are diagnosable by certain criteria, and include depression, anxiety, substance use disorders, personality disorders, and psychoses.

**Methadone program:** A program for opiate addicts, usually conducted in an outpatient setting. These programs use a long-acting synthetic opiate medication, usually methadone or levo-alpha acetyl methadol, administered orally for a sustained period at a dosage sufficient to prevent opiate withdrawal, block the effects of illicit opiate use and decrease opiate craving.

**Musculoskeletal condition:** Long-term conditions affecting a skeletal muscle, tendon, ligament, joint or blood vessel that services skeletal muscles and any related tissues. Includes back injuries, back pain, bone disease, bursitis, joint diseases, muscular disease, spinal diseases and tendonitis. Excludes arthritis, injury or cancer in this data collection.

**Musculoskeletal injury:** Recent/short-term injuries to a skeletal muscle, tendon, ligament, joint or blood vessel that services skeletal muscles and any related tissues.

**Opiate/opioid substitution treatment (OST):** A form of healthcare for heroin and other opiate-dependent people using prescribed opioid agonists, which have some similar or identical properties to heroin and morphine on the brain and which alleviate withdrawal symptoms and block the craving for illicit opiates. OST includes methadone, buprenorphine, and buprenorphine with naloxone.

**Pregnancy:** The carrying of one or more offspring that has been confirmed by medical test with or without the assistance of a medical professional. Pregnancy includes babies carried to full term, abortions and miscarriages.

**Prisoner:** Adult prisoners (aged 18 and over) held in custody whose confinement is the responsibility of a correctional services agency. Includes sentenced prisoners and prisoners held in custody awaiting trial or sentencing (remandees). Juvenile offenders, persons in psychiatric custody, police cell detainees, those in periodic detention, asylum seekers or Australians held in overseas prisons are not included.

**Prison mental health service:** A health service that provides screening of prisoners at intake, does psychiatric assessments, provides therapy or counselling by mental health professionals and distributes psychotropic medication. This may be part of or separate to the prison heath service.

**Psychosis:** A mental disorder in which the person has strange ideas or experiences that are unaffected by rational argument and are out of keeping with the views of any culture or group that the person belongs to.

**Psychological conditions:** Include depression, anxiety, psychosis, substance abuse, attention deficit/hyperactivity, adjustment, dissociation, impulse disorder, personality disorder and sleeping disorder.

**Reception:** The formal process whereby sentenced persons are received into prison, either on remand or sentence.

**Remand:** When a person is placed in custody while awaiting the outcome of a court hearing.

**Repeat medication:** Prescribed medication regularly taken by the prisoner, including depot and oral medications. Excludes routine household-type medications, such as paracetamol, that are taken on an as-needed basis.

**Respiratory conditions:** Conditions of the respiratory system, including airways, lungs and the respiratory muscles, such as respiratory disease (chronic respiratory disease, lung disease and respiratory tract infections), bronchitis, diphtheria, influenza, colds, croup, pneumonia, sinusitis, legionnaires' disease, severe acute respiratory syndrome (SARS), tuberculosis and whooping cough. Excludes asthma and cancer.

**Risk factor:** Any factor that represents a greater risk of a health disorder or other unwanted condition or event. Some risk factors are regarded as causes of disease, other are not necessarily so.

**Skin conditions:** In this data collection, includes burns, scalds, dermatitis, fungal skin diseases, infectious skin disease, pressure sores, psoriasis, rosacea, ulcers and warts. Excludes cancer.

**Smoking status:** The extent to which an adult was smoking at the time of interview. It refers to smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars, pipes and other tobacco products. The smoking categories include:

- daily smoker—an adult who reported at the time of the interview that he or she regularly smoked one or more cigarettes, cigars or pipes per day
- weekly smoker—an adult who reported at the time of the interview that he or she smoked occasionally, not every day, but at least once a week
- irregular—an adult who reported at the time of the interview that he or she smoked occasionally, but less than once a week
- ex-smoker—an adult who reported he or she did not currently smoke but had in the past
- never smoked—an adult who reported he or she had never smoked a full cigarette.

**Social worker:** Someone with a bachelor degree in social work who provides counselling and support to prisoners.

**Throughcare:** Can be described as the coordinated and integrated approach to the provision of services to meet the needs of prisoners, from the time of sentencing throughout their imprisonment and after their release. Working between services based both in the prison and the community is essential.

**Transgender:** A person's sex may change during their lifetime as a result of procedures known as: sex change; gender reassignment; transsexual surgery; transgender reassignment; or sexual reassignment. Throughout this process, which may be over a considerable period, sex could be recorded as either male or female. Prisoners who identified as engaging in any of these procedures or who were currently undergoing gender reassignment were recorded as transgender.

# References


Abdul-Quader AS, Feelemyer J, Modi S, Stein ES, Briceno A, Semaan S et al. 2013. Effectiveness of structural-level needle/syringe programs to reduce HCV and HIV infection among people who inject drugs: a systematic review. AIDS and Behaviour 17:2878–92.

ABS (Australian Bureau of Statistics) 2003. Information paper: use of the Kessler Psychological Distress Scale in ABS health surveys. ABS cat. no. 4817.0.55.001. Canberra: ABS.

ABS 2012a. Australian Health Survey: updated results, 2011–12. ABS cat. no. 4364.0.55.003. Canberra: ABS.

ABS 2012b. Census of Population and Housing: estimating homelessness, 2011. ABS cat. no. 2049.0. Canberra: ABS.

ABS 2012c. Profiles of health, Australia, 2011–13. ABS cat. no. 4338.0. Canberra: ABS.

ABS 2014a. Aboriginal and Torres Strait Islander people with a disability, 2012. ABS cat. no. 4433.0.55.005. Canberra: ABS.

ABS 2014b. Australian Aboriginal and Torres Strait Islander Health Survey: updated results, 2012–13. ABS cat. no. 4727.0.55.006. Canberra: ABS.

ABS 2014c. Education and work, Australia, May 2014. ABS cat. no. 6227.0. Canberra: ABS.

ABS 2014d. Patient experiences in Australia: summary of findings, 2013–14. ABS cat. no. 4839.0. Canberra: ABS.

ABS 2014e. Prisoners in Australia 2014. ABS cat. no. 4517.0. Canberra: ABS.

ABS 2015a. Australian demographic statistics, December 2014. ABS cat. no. 3101.0 Canberra: ABS.

ABS 2015b. Corrective services Australia, March quarter 2015. ABS cat. no. 4512.0. Canberra: ABS.

ABS 2015c. Population by age and sex, regions of Australia, 2014. ABS cat. no. 3235.0. Canberra: ABS.

AIC (Australian Institute of Criminology) 2012. Standard guidelines for corrections in Australia 2012. Canberra: AIC.

AIC 2015. AIC DUMA collection 2015 [computer file]. Canberra: AIC.

aids.gov 2014. What is HIV/aids? Viewed 5 February 2015, <https://www.aids.gov/hiv-aids-basics/hiv-aids-101/what-is-hiv-aids/>.

AIHW (Australian Institute of Health and Welfare) 2009. From corrections to community: a set of indicators for the health of Australia's prisoners. Bulletin no. 75. Cat. no. AUS 120. Canberra: AIHW.

AIHW 2012a. Australia's health 2012. Cat. no. AUS 156. Canberra: AIHW.

AIHW 2012b. Risk factors contributing to chronic disease. Cat. no. PHE 157. Canberra: AIHW.

AIHW 2013a. The health of Australia's prisoners 2012. Cat. no. PHE170. Canberra: AIHW.

AIHW 2013b. Smoking and quitting smoking among prisoners 2012. Bulletin no. 119. Cat. no. AUS 176. Canberra: AIHW.

AIHW 2014a. Alcohol and other drug treatment and diversion from the criminal justice system 2012–13. Bulletin 125. Cat. no. AUS 186. Canberra: AIHW.

AIHW 2014b. Alcohol and other drug treatment services in Australia 2012–13. Drug treatment series no. 24. Cat. no. HSE 150. Canberra: AIHW.

AIHW 2014c. Arthritis and other musculoskeletal conditions across the life stages. Arthritis series no. 18. PHE 173. Canberra: AIHW.

AIHW 2014d. Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW.

AIHW 2014e. Breast cancer screening. Canberra: AIHW. Viewed 1 July 2015, <http://www.aihw.gov.au/cancer/screening/breast/>.

AIHW 2014f. Cancer in Australia: an overview 2014. Cancer series no. 90. Cat. no. CAN 88. Canberra: AIHW.

AIHW 2014g. Cardiovascular disease, diabetes and chronic kidney disease—Australian facts: prevalence and incidence. Cardiovascular, diabetes and chronic kidney disease series no. 2. Cat no. CDK 2. Canberra: AIHW.

AIHW 2014h. Cervical screening. Canberra: AIHW. Viewed 1 July 2015, <http://www.aihw.gov.au/cancer/screening/cervical/>.

AIHW 2014i. National Community Services Data Dictionary. Version 8. Cat. no. HWI 126. Canberra: AIHW.

AIHW 2014j. Prisoner health services in Australia 2012. Bulletin 123. Cat. no. AUS 183. Canberra: AIHW.

AIHW 2014k. Specialist homelessness services 2013–14. Cat. no. HOU 276. Canberra: AIHW.

AIHW 2015a. Alcohol and other drug treatment services in Australia 2013–14. Drug treatment series no. 25. Cat. no. HSE 158. Canberra: AIHW.

AIHW 2015b. National opioid pharmacotherapy statistics 2014. Bulletin no. 128. Cat. no. AUS 190. Canberra: AIHW.

AIHW & AACR 2012. Cancer in Australia: an overview, 2012. Cancer series no. 74. Cat. no. CAN 70. Canberra: AIHW.

Andrews G & Slade T 2001. Interpreting scores on the Kessler Psychological Distress Scale (K10). Australian and New Zealand Journal of Public Health 25:494–7.

Andrews JY & Kinner SA 2012. Understanding drug-related mortality in released prisoners: a review of national coronial records. BMC Public Health 12:270.

Avery A & Kinner SA 2015. A robust estimate of the number and characteristics of persons released from prison in Australia. Australia and New Zealand Journal of Public Health 39:315–8.

Baillargeon J, Hoge S & Penn J 2010. Addressing the challenge of community re-entry among released inmates with serious mental illness. American Journal of Community Psychology 46:361–75.

Baker A & Cussen T 2015. Deaths in custody in Australia: National Deaths in Custody Program 2011–12 and 2012–13. Canberra: AIC.

Baker D 2014. Unlocking care report—continuing mental health care for prisoners. Canberra: The Australia Institute.

Baldry E, Clarence M, Dowse L & Trollor J 2013. Reducing vulnerability to harm in adults with cognitive disabilities in the Austrailan criminal justice system. Journal of Policy and Practice in Intellectual Disability 10:222–9.

Bartlett A, Dholakia N, England R, Hales H, van Horn E, McGeorge T et al. 2014. Prison prescribing practice: practitioners' perspectives on why prison is different. International Journal of Clinical Practice 68:413–7.

Barton JJ, Meade T, Cumming S & Samuels A 2014. Predictors of self-harm in male inmates. Journal of Criminal Psychology 4:2–18.

Beck A, Berzofsky M, Caspar R & Krebs C 2013. Sexual victimisation in prisons and jails reported by inmates, 2011–12. Washington, DC: US Department of Justice.

Bennett L & Dyson J 2014. Deliberate self-harm among adults in prisons. Mental Health Practice 18.

Bevitt A, Chigavazira A, Herault N, Johnson G, Moschion J, Scutella R et al. 2015. Journeys home research report no. 6. Melbourne: The University of Melbourne.

Binswanger IA, Carson EA, Krueger PM, Mueller SR, Steiner JF & Sabol WJ 2014. Prison tobacco control policies and deaths from smoking in United States prisons: population based retrospective analysis. British Medical Journal 349:g4542.

Borzycki M & Baldry E 2003. Promoting integration: the provision of prisoners post-release services. AIC Trends and Issues no. 262. Canberra: AIC.

Bowen RA, Rogers A & Shaw J 2009. Medication management and practices in prison for people with mental health problems: a qualitative study. International Journal of Mental Health Systems 3:24.

Brain Injury Australia 2015. About Acquired Brain Injury. Sydney. Viewed 28 May 2015, <http://www.braininjuryaustralia.org.au/index.php?option=com_content&view=article&id=2&Itemid=3>.

Bretana NA, Boelen L, Bull R, Teutsch S, White PA, Lloyd AR et al. 2015. Transmission of Hepatitis C virus among prisoners, Australia, 2005–2012. Emerging Infectious Diseases 21:765–74.

Britt H, Miller G, Henderson J, Bayram C, Harrison C, Valenti L et al. 2014. General practice activity in Australia 2013–14. General practice series no. 36. Sydney: Sydney University Press.

Butler T, Callander D & Simpson M 2015. National prison entrants' bloodborne virus and risk behaviour survey 2004, 2007, 2010 and 2013. Sydney: Kirby Institute (UNSW Australia).

Carroll M, Kinner SA & Heffernan EB 2014. Medication use and knowledge in a sample of Indigenous and non-Indigenous prisoners. Australia and New Zealand Journal of Public Health 38:142–6.

Coghlan S, Gannoni A, Goldsmid S, Patterson E & Willis M 2015. Drug use monitoring in Australia: 2013–14 report on drug use among police detainees. Canberra: AIC.

Coghlan S & Goldsmid S 2015. Findings from the DUMA program—impact of reduced methamphetamine supply on consumption of illicit drugs and alcohol. Canberra: AIC.

Colantonio A, Kim H, Allen S, Asbridge M, Petgrave J & Brochu S 2014. Traumatic brain injury and early life experiences among men and women in a prison population. Journal of Correctional Health Care 20:271–9.

Commonwealth of Australia 2015. The silent disease: inquiry into hepatitis C in Australia. Canberra: Commonwealth of Australia.

Correll P, Poulos L, Ampon R, Reddel H & Marks G 2015. Respiratory medication use in Australia 2003–2013: treatment of asthma and COPD. Cat. no. ACM 31. Canberra: AIHW.

Cunneen C 2006. Aboriginal deaths in custody: a continuing systematic abuse. Social Justice 33:37–51.

Cutcher Z, Degenhardt L, Alati R & Kinner SA 2014. Poor health and social outcomes for ex-prisoners with a history of mental disorder: a longitudinal study. Australia and New Zealand Journal of Public Health 38:424–9.

Degenhardt L, Larney S, Gisev N, Trevena J, Burns L, Kimber J et al. 2014. Imprisonment of opioid-dependent people in New South Wales, Australia, 2000–2012: a retrospective linkage study. Australian and New Zealand Journal of Public Health 38:165–70.

Dennison S, Stewart A & Freiberg K 2013. A prevalence study of children with imprisoned fathers—annual and lifetime estimates. Australian Journal of Social Issues 48.

Dias S, Ware RS, Kinner SA & Lennox NG 2013. Physical health outcomes in prisoners with intellectual disability: a cross-sectional study. Journal of Intellectual Disability Research 57:1191–6.

DoH 2014a. Fourth national hepatitis C strategy 2014–2017. Canberra: Department of Health.

DoH 2014b. Second national hepatitis B strategy 2014–2017. Canberra: Department of Health.

DoH 2014c. Third national sexually transmissible infections strategy 2014–2017. Canberra: Department of Health.

DoHA 2010. The third national hepatitis C strategy 2010–2013. Canberra: DoHA.

Doiron D, Fiebig DG, Johar M & Suziedelyte A 2014. Does self-assessed health measure health? Applied Economics 47:180–94.

Dolan K, Kite B, Black E, Aceijas C & Stimson GV 2007. HIV in prison in low-income and middle-income countries. The Lancet Infectious Diseases 7:32–41.

Dolan K & Rodas A 2014. Detection of drugs in Australian prisons: supply reduction strategies. International Journal of Prisoner Health 10:111–7.

Duwe G & Clark V 2011. Blessed be the social tie that binds: the effects of prison visitation on offender recidivism. Criminal Justice Policy Review 24:271–96.

Dyer W & Biddle P 2013. Prison health discharge planning—evidence of an integrated care pathway or the end of the road? Social Policy and Society 12:521–32.

Farrer TJ, Frost RB & Hedges DW 2013. Prevalence of traumatic brain injury in juvenile offenders: a meta-analysis. Child Neuropsychology 19:225–34.

Fazel S, Geddes JR & Kushel M 2014. The health of homeless people in high-income countries: descriptive epidemiology, health consequences, and clinical and policy recommendations. The Lancet 384:1529–40.

Fergusson DM, Boden JM & Horwood LJ 2013. Alcohol misuse and psychosocial outcomes in young adulthood: Results from a longitudinal birth cohort studied to age 30. Drug and Alcohol Dependence 133:513–9.

Fergusson DM, McLeod GF & Horwood LJ 2014. Unemployment and psychosocial outcomes to age 30: a fixed-effects regression analysis. Australia and New Zealand Journal of Psychiatry 48:735–42.

Fetherston J, Carruthers S, Butler T, Wilson D & Sindicich N 2013. Rates of injection in prison in a sample of Australian-injecting drug users. Journal of Substance Use 18:65–73.

Flynn C 2014. Getting there and being there: visits to prisons in Victoria—the experiences of women prisoners and their children. Probation Journal 61:176–91.

Forsyth SJ, Alati R, Ober C, Williams GM & Kinner SA 2014. Striking subgroup differences in substance-related mortality after release from prison. Addiction 109:1676–83.

Frost RB, Farrer TJ, Primosch M & Hedges DW 2013. Prevalence of traumatic brain injury in the general adult population: a meta-analysis. Neuroepidemiology 40:154–9.

Ganchimeg T, Ota E, Morisaki N, Laopaiboon M, Lumbiganon P, Zhang J et al. 2014. Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study. BJOG: An International Journal of Obstetrics & Gynaecology 121 Supplement 1:40–8.

Goncalves LC, Goncalves RA, Martins C & Dirkzwager AJE 2014. Predicting infractions and health care utilization in prison: a meta-analysis. Criminal Justice and Behavior 41:921–42.

Gonzalez JMR & Connell NM 2014. Mental health of prisoners: identifying barriers to mental health treatment and medication continuity. American Journal of Public Health 104.

Goodwin LRJ & Sias SM 2014. Severe substance use disorder viewed as a chronic condition and disability. Journal of Rehabilitation 80:42–9.

Gordon M, Kinlock TW, Schwartz R, Fiztgerald T, O'Grady K & Vocci F 2014. A randomized controlled trial of prison-initiated buprenorphine: prison outcomes and community treatment entry. Drug and Alcohol Dependence 142:33–40.

Grace J, Krom I, Maling C, Butler T, Midford R & Simpson P 2013. Review of Indigenous offender health. Perth: Australian Indigenous HealthInfoNet.

Harrison J & Henley G 2014. Suicide and hospitalised self-harm in Australia: trends and analysis. Canberra: AIHW.

Hassan L, Senior J, Frisher M, Edge D & Shaw J 2014. A comparison of psychotropic medication prescribing patterns in East of England prisons and the general population. Journal of Psychopharmacology 28:357–62.

Hayes A, Senior J, Fahy T & Shaw J 2014. Actions taken in response to mental health screening at reception into prison. The Journal of Forensic Psychiatry and Psychology 25:371–9.

Heffernan E, Andersen K, Dev A & Kinner S 2012. Prevalence of mental illness among Aboriginal and Torres Strait Islander people in Queensland prisons. Medical Journal of Australia 197:37–41.

Hepatitis Australia 2014. Fast facts on hepatitis C. Canberra: Hepatitis Australia. Viewed 1 July 2015, <http://www.hepatitisaustralia.com/contact-us/>.

Hilder L, Zhichao Z, Parker M, Jahan S & Chambers G 2014. Australia's mothers and babies 2012. Perinatal statistics series no. 30. Cat. no. PER 69. Canberra: AIHW.

IGCD (Intergovernmental Committee on Drugs) 2013. National Tobacco Strategy 2012–2018. Canberra: Commonwealth of Australia.

Iversen J, Wand H, Topp L, Kaldor J & Maher L 2013. Reduction in HCV incidence among injection drug users attending needle and syringe programs in Australia: a linkage study. American Journal of Public Health 103:1436–44.

Jones D & Maynard A 2013. Suicide in recently released prisoners—a systematic review. Mental Health Practice 17:20–7.

Jordan M 2012. Patients'/prisoners' perspectives regarding the National Health Service mental healthcare provided in one Her Majesty's Prison Service establishment. Journal of Forensic Psychiatry and Psychology 23:722–39.

Jürgens R 2007. Effectiveness of interventions to address HIV in prisons. Geneva: WHO.

Kerr S, Woods C, Knussen C, Watson H & Hunter R 2013. Breaking the habit: a qualitative exploration of barriers and facilitators to smoking cessation in people with enduring mental health problems. BMC Public Health 13:221.

Kessler RC, Barker PR, Colpe LJ, Epstein JF, Gfroerer JC, Hiripi E et al. 2003. Screening for serious mental illness in the general population. Archives of General Psychiatry 60:184–9.

Kinner SA, Moore E, Spittal MJ & Indig D 2013. Opiate substitution treatment to reduce in-prison drug injection: a natural experiment. International Journal of Drug Policy 24:460–3.

Kirby Institute 2014. HIV, viral hepatitis and sexually transmissible infections in Australia annual surveillance report 2014. Sydney: UNSW.

Kopak AM & Hoffmann NG 2014. Pathways between substance use, dependence, offense type, and offense severity. Criminal Justice Policy Review 25:743–60.

Kwon JA, Anderson J, Kerr CC, Thein HH, Zhang L, Iversen J et al. 2012. Estimating the cost-effectiveness of needle-syringe programs in Australia. AIDS 26:2201–10.

Li J & Powdthavee N 2015. Does more education lead to better health habits? Evidence from the school reforms in Australia. Social Science and Medicine 127:83–91.

Mackay A 2015. Stubbing out smoking in prisons—bans are an ineffective mechanism. Alternative Law Journal 99.

MacLachlan JH, Allard N, Towell V & Cowie BC 2013. The burden of chronic hepatitis B virus infection in Australia, 2011. Australia and New Zealand Journal of Public Health 37:416–22.

Maralani V 2014. Understanding the links between education and smoking. Social Science Research 48:20–34.

Marel C, Mills KL, Darke S, Ross J, Slade T, Burns L et al. 2013. Static and dynamic predictors of criminal involvement among people with heroin dependence: Findings from a 3-year longitudinal study. Drug and Alcohol Dependence 133:600–6.

Maruschak L & Berzofsky M 2015. Medical problems of State and Federal prisoners and jail inmates, 2011–12. Special Report NCJ 248491. Washington DC: US Department of Justice.

Merrall ELC, Kariminia A, Binswanger I, Hobbs MS, Farrell M, Marsden J et al 2010. Meta-analysis of drug-related deaths soon after release from prison. Addiction 105: 1545-1554.

Midgley EK & Lo CC 2013. The role of a parent's incarceration in the emotional health and problem behaviors of at-risk adolescents. Journal of Child and Adolescent Substance Abuse 22:85–103.

Ministry of Justice 2015. Safety in custody statistics England and Wales. London: Ministry of Justice.

Mitrou F, Cooke M, Lawrence D, Povah D, Mobilia E, Guimond E et al. 2014. Gaps in Indigenous disadvantage not closing: a census cohort study of social determinants of health in Australia, Canada, and New Zealand from 1981–2006. BMC Public Health 14:201.

Morgan VA, Morgan F, Valuri G, Ferrante A, Castle D & Jablensky A 2013. A whole-of-population study of the prevalence and patterns of criminal offending in people with schizophrenia and other mental illness. Psychological Medicine 43:1869–80.

Mukherjee S, Pierre-Victor D, Bahelah R & Madhivanan P 2014. Mental health issues among pregnant women in correctional facilities: a systematic review. Women Health 54:816–42.

National Aboriginal Community Controlled Health Organisation 2015. About us. Canberra: NACCHO. Viewed 11 June 2015, <http://www.naccho.org.au/about-us/>.

Olsson C, Horwill E, Moore E, Eisenberg M, Venn A, O'Loughlin C et al. 2014. Social and emotional adjustment following early pregnancy in young Australian women: a comparison of those who terminate, miscarry, or complete pregnancy. Journal of Adolescent Health 54:698–703.

Piccolino AL & Solberg KB 2014. The impact of traumatic brain injury on prison health services and offender management. Journal of Correctional Health Care 20:203–12.

Plugge E, Ahmed Abdul Pari A, Maxwell J & Holland S 2014. When prison is 'easier': probationers' perceptions of health and wellbeing. International Journal of Prisoner Health 10:38–46.

Post JJ, Arain A & Lloyd AR 2013. Enhancing assessment and treatment of hepatitis C in the custodial setting. Clinical Infectious Diseases 57 Supplement 2:S70–4.

Productivity Commission 2015. Report on government services 2015. Canberra: Productivity Commission.

Ramakers A, Apel R, Nieuwbeerta P, Dirkzwager AJE & Van Wilsem J 2014. Imprisonment length and post-prison employment prospects. Criminology 52:399–427.

RCIADIC (Royal Commission into Aboriginal Deaths in Custody) 1991. Royal Commission into Aboriginal Deaths in Custody. Canberra: Australian Government Publishing Service.

Ruiz G, Wangmo T, Mutzenberg P, Sinclair J & Elger BS 2014. Understanding death in custody: a case for a comprehensive definition. Journal of Bioethical Inquiry 11:387–98.

Rushworth N 2011. Policy paper: Out of sight, out of mind: people with an acquired brain injury in the criminal justice system. Sydney: Brain Injury Australia.

Schilders MR & Ogloff JRP 2014. Review of point-of-reception mental health screening outcomes in an Australian prison. Journal of Forensic Psychiatry and Psychology 25:480–94.

Schwitters A 2014. Health interventions for prisoners update of literature since 2007. Geneva: WHO.

Scott N, Caulkins JP, Ritter A & Dietze PM 2015. How patterns of injecting drug use evolve in a cohort of people who inject drugs. Canberra: AIC.

Sequera V, Garcia-Basteiro A & Bayas J 2013. The role of vaccination in prisoners' health. Expert Reviews Vaccines 12:469–71.

Sharratt K 2014. Children's experiences of contact with imprisoned parents: A comparison between four European countries. European Journal of Criminology 11:760–75.

Sia HJ & Levy M 2015. What have you heard about tattooing in prison—the clandestine role of hearing aids in the risk of bloodborne virus transmission. Healthcare Infection 20:36–7.

Spittal MJ, Forsyth S, Pirkis J, Alati R & Kinner SA 2014. Suicide in adults released from prison in Queensland, Australia: a cohort study. Journal of Epidemiology and Community Health 68:993–8.

SPRINT Project Team 2013. Primary health care services better meeting the health needs of Aboriginal Australians transitioning from prison to the community: SPRINT final report. Sydney: University of New South Wales.

Sutherland G, Carroll M, Lennox N & Kinner S 2015. Prescribed contraceptives among woman after release from prison. Health and Justice 3.

Thomas E, Degenhardt L, Alati R & Kinner S 2014. Predictive validity of the AUDIT for hazardous alcohol consumption in recently released prisoners. Drug and Alcohol Dependence 134:322–9.

Tompkins CN 2013. Exploring motivations to stop injecting in English prisons: qualitative research with former male prisoners. International Journal of Prisoner Health 9:68–81.

Topp L, Iversen J, Baldry E & Maher L 2013. Housing instability among people who inject drugs: results from the Australian needle and syringe program survey. Journal of Urban Health 90:699–716.

Twyman L, Bonevski B, Paul C & Bryant J 2014. Perceived barriers to smoking cessation in selected vulnerable groups: a systematic review of the qualitative and quantitative literature. British Medical Journal 4(12).

United Nations 2015. United Nations standard minimum rules on the treatment of prisoners (the Mandela Rules). Vienna: UN Commssion on Crime Prevention and Criminal Justice 24th session.

UNODC (United Nations Office on Drugs and Crime) 2014. A handbook for starting and managing needle and syringe programmes in prisons and other closed settings. Vienna: UNODC.

van Dooren K, Kinner SA & Forsyth S 2013. Risk of death for young ex-prisoners in the year following release from adult prison. Australia and New Zealand Journal of Public Health 37:377–82.

Viitanen P, Vartiainen H, Aarnio J, Von Gruenewaldt V, Hakamaki S, Lintonen T et al. 2013. Finnish female prisoners—heavy consumers of health services. Scandinavian Journal of Public Health 41:479–85.

von Dresner KS, Underwood LA, Suarez E & Franklin T 2013. Providing counselling for transgendered inmates—a survey of correctional services. International Journal of Behavioral Consultation and Therapy 7.

Walker JR, Hilder L, Levy MH & Sullivan EA 2014. Pregnancy, prison and perinatal outcomes in New South Wales, Australia: a retrospective cohort study using linked health data. BMC Pregnancy and Childbirth 14:214.

Wang EA, Wang Y & Krumholz HM 2013. A high risk of hospitalization following release from correctional facilities in Medicare beneficiaries: a retrospective matched cohort study, 2002 to 2010. JAMA Internal Medicine 173:1621–8.

Weatherburn DJ & Holmes J 2010. Re-thinking Indigenous over-representation in prison. Australian Journal of Social Issues 45(4).

WHO (World Health Organization) 2013. Alcohol problems in the criminal justice system: an opportunity for intervention (eds Graham L, Parkes T, McAuley A & Doi L). Copenhagen: WHO.

Williams BA, Ahalt C & Greifinger RB 2014. The older prisoner and complex chronic medical care. In: WHO. Prisons and health. Copenhagen: WHO.

Williams K, Poyser J & Hopkins K 2012. Accommodation, homelessness and reoffending of prisoners: results from the Surveying Prisoner Crime Reduction (SPCR) survey. London: Ministry of Justice.

Wingfield M & Trenell P 2014. Joined up justice: understanding the links between employment, benefits and offending. Significance 11:2 14–19.

Woodall J, Dixey R & South J 2013. Prisoners' perspectives on the transition from the prison to the community: implications for settings-based health promotion. Critical Public Health 23:188–200.

Wu S, Wang R, Zhao Y, Ma X, Wu M, Yan X et al. 2013. The relationship between self-rated health and objective health status: a population-based study. BMC Public Health 13:320.

Yap L, Carruthers S, Thompson S, Cheng W, Jones J, Simpson P et al. 2014. A descriptive model of patient readiness, motivators, and hepatitis C treatment uptake among Australian prisoners. PLoS ONE 9(2): e87564.

Yu SS, Sung HE, Mellow J & Koenigsmann CJ 2015. Self-perceived health improvements among prison inmates. Journal of Correctional Health Care 21:59–69.

# List of tables

# List of figures

*The health of Australia's prisoners 2015* is the 4th report produced by the Australian Institute of Health and Welfare on the health and wellbeing of prisoners. The report explores the conditions and diseases experienced by prisoners; compares, where possible, the health of prisoners to the general Australian community and provides valuable insight into the use of prison health services. New to the 2015 report are data on the disabilities or long-term health conditions of prisoners entering the prison system (prison entrants), self-assessed mental and physical health status of prisoners and data on smoke-free prisons.