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## **Summary**

The health and well-being of people in prison are also those of the community. People in contact with the criminal justice system have higher rates of homelessness and unemployment and often come from socioeconomically disadvantaged backgrounds.

People leaving prison are members of society needing employment, housing, health care, and other support services in the community to maintain and improve health and well-being, and reduce the likelihood of returning to prison.

On 30 June 2018, there were about 43,000 people in Australia's prisons. Most people in prison were either on remand (32%), or serving sentences under 5 years in length (62%), and thousands of people cycle through the prison system each year (ABS 2018a).

People in prison have significant and complex health needs, which are often long-term or chronic in nature. They have higher rates of mental health conditions, chronic disease, communicable disease, acquired brain injury, tobacco smoking, high-risk alcohol consumption, recent illicit drug use, and recent injecting drug use, than the general population (AIHW 2015). Improving the health and well-being of people in prison, and maintaining those improvements after prison, benefits the entire community.

This report presents the results of the 5th National Prisoner Health Data Collection (NPHDC), which was conducted in 2018.

#### 3 in 4 prison entrants had previously been in prison

Most people (73%) entering prison had been in prison before, and almost half (45%) of prison entrants had been in prison within the previous 12 months.

Male prison entrants were more likely to have extensive prison histories than female entrants. More than one-third (35%) of male entrants had been in prison 5 or more times, compared with 15% of female entrants.

Indigenous prison entrants were more likely than non-Indigenous entrants to have an extensive prison history. Almost half (43%) of Indigenous entrants had been in prison at least 5 times before, compared with 25% of non-Indigenous entrants.

# 2 in 5 prison entrants had been told they had a mental health condition, with almost 1 in 4 currently taking mental health-related medication

About 2 in 5 prison entrants (40%) and prison dischargees (37%) reported a previous diagnosis of a mental health condition, including alcohol and other drug use disorders. Women were more likely than men to report:

- a history of a mental health condition (65% compared with 36%)
- taking medication for a mental health condition (40% compared with 21%).

Non-Indigenous prison entrants (26%) were more likely than Indigenous entrants (19%) to report currently taking medication for a mental health condition.

#### 3 in 4 deaths in prison custody were due to natural causes

Between 2013–14 and 2014–15, 115 people died in prison. Almost 3 in 4 (71%) of these deaths were from natural causes, and 1 in 4 (25%) were due to suicide or self-inflicted causes.

#### 1 in 5 prison entrants reported a history of self-harm

More than 1 in 5 (21%) prison entrants reported a history of self-harm. Women entering prison (31%) were 1.5 times as likely as men (20%) to report a history of self-harm. More than 1 in 4 (26%) younger prison entrants (aged 18–24) reported a history of self-harm, higher than any other age group.

#### Almost 3 in 10 younger prison entrants had a family history of incarceration

Almost 1 in 5 (18%) prison entrants reported that one or more parents or carers had been in prison when they were a child. This was more likely among Indigenous entrants (31%) than non-Indigenous entrants (11%).

Younger prison entrants (27% of those aged 18–24) were almost 3 times as likely as older entrants (10% of those aged 45 and over) to have had a parent or carer in prison during their childhood.

#### 3 in 4 prison entrants were current smokers

Most (75%) prison entrants said they were current smokers. Indigenous prison entrants (80%) were more likely than non-Indigenous entrants (73%), and women (86%) were more likely than men (73%) to be current smokers. More than 2 in 5 (41%) prison entrants who were current smokers said that they would like to quit.

#### Almost 2 in 3 prison entrants reported using illicit drugs in the previous year

Almost two-thirds (65%) of prison entrants reported using illicit drugs during the previous 12 months. Female prison entrants (74%) were more likely to report recent illicit drug use than male entrants (64%), and non-Indigenous entrants (66%) were more likely than Indigenous entrants (63%). Methamphetamine was the most common illicit drug used, followed by cannabis.

Almost 1 in 6 (16%) prison dischargees reported using illicit drugs in prison, and 1 in 12 (8%) said they had injected drugs in prison.

#### About 1 in 3 prison entrants had a high-school education level of Year 9 or under

Prison entrants were asked about the highest level of schooling that they had completed—one-third (33%) said Year 9 or under, and 17% said Year 8 or under. About 1 in 4 (25%) Indigenous prison entrants had completed Year 11 or 12 at school, compared with 41% of non-Indigenous entrants. Indigenous entrants (24%) were more likely than non-Indigenous entrants (10%) to report that their highest level of completed schooling was Year 8 or under.

#### Almost 1 in 3 (30%) prison entrants had a chronic physical health condition

Almost one-third (30%) of prison entrants said they had a history of at least 1 of the following chronic physical health conditions—arthritis, asthma, cancer, cardiovascular disease, or diabetes. Asthma (22%) was the most common chronic physical health condition reported. Almost half (45%) of female entrants had a history of a chronic condition, compared with almost 3 in 10 (28%) male entrants.

# Of the prison entrants tested for blood-borne viruses, 1 in 5 tested positive for hepatitis C

In 2016, more than 1 in 5 (22%) prison entrants tested positive for hepatitis C antibodies—about 1 in 5 (21%) male prison entrants and more than 1 in 4 (28%) female prison entrants (Butler & Simpson 2017). About half (50%) of the prison entrants who had previously injected drugs had positive hepatitis C antibody tests—52% of males, and 45% of females.

#### More than 1 in 2 prison dischargees expected they would be homeless on release

Homelessness is far more common among people in contact with the prison system than among people in the general community. About one-third (33%) of prison entrants said they were homeless in the 4 weeks before prison—28% were in short-term or emergency accommodation, and 5% were in unconventional housing or sleeping rough.

More than half (54%) of prison dischargees expected to be homeless on release from prison, with 44% planning to sleep in short term or emergency accommodation, 2% planning to sleep rough, and 8% did not know where they would sleep.



**Overview** 

## 1

# The stages in the prison cycle

#### **Entrants form**

Completed by 803 people as they entered prison.

#### It asked about:

- Demographics (such as their age and sex)
- Education
- Family
- Housing arrangements and experiences of homelessness
- Mental and physical health
- Chronic diseases and disability
- Tobacco, alcohol and other drug use
- Use of health services

## **Clinic form**

Completed for 7,747 people who visited a prison health clinic.

#### It asked about:

- Demographics
- Who initiated the visit (the patient or prison staff)
- The reason for the visit and the health problems treated
- The type of health professional consulted

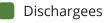
### **Medication form**

Completed for 8,273 people who were dispensed prescription medications on a single day.

#### It asked about:

- Demographics
- Medications dispensed







## **Establishment form**

Completed by all 62 prison health clinics.

#### It asked about:

- The prison's procedures for managing prisoners' release
- Vaccinations for people in prison
- Hepatitis C treatment programs provided to people in prison
- Pregnant women in prison
- Whether Aboriginal Community Controlled Health Organisations or Aboriginal Medical Services provided health services to people in prison
- Procedures relating to transfers to hospital

## **Dischargees form**

Completed by 335 people who were due to be released within 4 weeks.

#### It asked about:

- Demographics
- Mental and physical health
- Injuries sustained in prison
- Use of prison health services
- Plans and preparation for release (such as planned employment, access to a Medicare card, and where they expected to live)



## 1 Introduction



People in contact with the criminal justice system are some of the most vulnerable people in society. They are more likely to come from disadvantaged backgrounds, and to experience homelessness and unemployment than people in the general community.

People in prison have higher rates of mental health conditions, chronic physical disease, communicable disease, tobacco smoking, high-risk alcohol consumption, illicit drug use, and injecting drug use than the general population (AIHW 2015). This means that people in prison often have complex, long-term health needs. The health of people in prison is much poorer compared with the general community, and people in prison are often considered to be elderly at the age of 50–55 (compared with 65 and over in the general community). This is known as 'accelerated ageing' (Baidawi 2016; Stojkovic 2007; Williams et al. 2014).

The picture on pages 2–3 shows the stages in the prison cycle where data are collected for the NPHDC, how many people participated, and the aspects of society related to imprisonment.

## 1.1 Why is the health of people in prison important?

Prison stays are usually temporary. On 30 June 2018, about one-third (32%, or 13,800) of the 43,000 people in prison were on remand while awaiting trial or sentencing. For those who were sentenced, the median time they could expect to serve was 1.9 years (ABS 2018b). This means that the prison population is fluid, with people constantly entering, and being released from prison. With more than 65,000 people cycling through prison each year, the health concerns of people in prison are also the health concerns of the general community (ABS 2018b).

National and international standards govern the provision of health care to people in prison. In May 2015, the United Nations Commission on Crime Prevention and Criminal Justice adopted updated standard minimum rules on the treatment of prisoners, known as the 'Mandela Rules' (United Nations 2015). This update to the original 1955 rules detailed the provision of health care to people in prison, and included:

- principles of equivalence (to the community standard)
- independence
- multidisciplinary care (including psychological and psychiatric)
- dental care
- continuity of care into the community upon release (United Nations 2015).

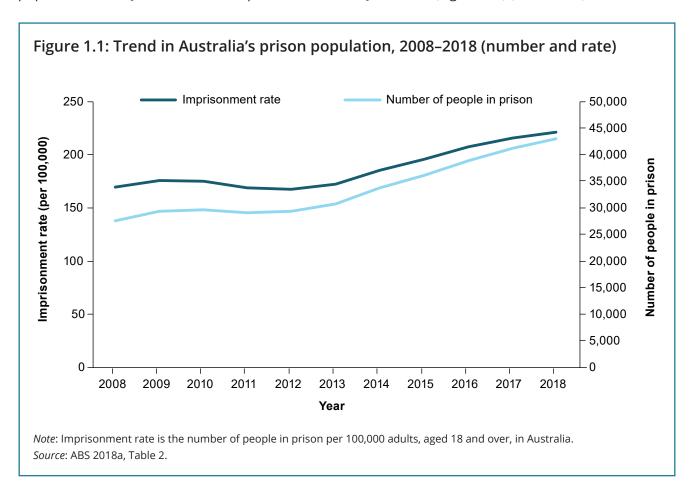
In Australia, the Corrective Services Administrators' Council (CSAC) published Standard Guidelines for Corrections in 2012 (CSAC 2012). These guidelines specifically reference health-care provision in prisons, including:

- · equivalence of care for physical and mental health
- · access to primary and specialist health professionals
- medical examination within 24 hours of being received into prison
- · care for pregnant women in prison
- · care for people with disability
- continuity of care between prison and the community (CSAC 2012).

## 1.2 How many people are in prison in Australia?

Australia's prison population increased over the past 10 years in both number and rate. The number of people in Australia's prisons rose by 56%, from almost 28,000 people in prison in 2008 to about 43,000 in 2018 (ABS 2018b). Over the same period, the general Australian population rose by 17% (ABS 2018c).

The imprisonment rate in Australia rose from 170 people in prison per 100,000 adults in the general population on 30 June 2008, to 221 per 100,000 on 30 June 2018 (Figure 1.1) (ABS 2018c).



The prison population is fluid, with many people entering and leaving prison each year. People in prison may be either sentenced or unsentenced (on remand) while awaiting trial and sentencing.

Unsentenced prisoners represent about one-third of the prison population on an average day (ABS 2018a). But unsentenced people, or people on remand, are more commonly represented among prison entrants. In the 2018 NPHDC, two-thirds (67%) of prison entrants were on remand.

This flow of people through prison means that the number of people in custody on any given day will be less than the total number of people incarcerated over the course of a year. Data on the number of individual people who entered or left prison in a year are not available, as some jurisdictions record reception and release 'events' rather than the number of people, some of whom might be in prison several times within the year.

On 30 June 2017, there were 24,700 people in the 62 prisons that participated in the NPHDC. But throughout the 2017 calendar year, more than 44,100 people entered these participating prisons, and 44,000 were discharged.

## 1.3 How are health services delivered?



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

In the community, health services are provided through both the Australian Government and the relevant state or territory government department. But health services for people in prison are the sole responsibility of state and territory governments, and the way in which these services are delivered varies among jurisdictions.

In some jurisdictions the local health department provides prison health services, while in others it is the responsibility of the justice or corrections department.

Most jurisdictions use a mix of directly-provided services, community health services and contracted health services. Providing mental health services and alcohol and other drug services can be particularly complex, both in terms of the services delivered and the method of delivery.

In prisons, nurses usually provide primary health care (or the first level of contact with the health-care system). In the general community, general practitioners provide most of the primary health care.

Specialist medical care can be provided to people 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 deliver dental services and perform X-rays, whereas other, smaller prison clinics, are staffed by a single nurse only.

The Medicare Benefits Schedule (Medicare) gives residents of Australia access to no-cost or subsidised health care, including no-cost or low-cost 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 prison health services are not provided under the Medicare system (Cumming et al. 2018). The Pharmaceutical Benefits Scheme, which provides access to medicines at lower cost for Australian residents, is also funded by the Australian Government. So medications dispensed to people in prison are not covered, with the exception of medications that fall under Schedule 100 of the Pharmaceutical Benefits Scheme, known as the Highly Specialised Drugs Program.

For people who underuse health services in the general community, prison can 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 Chapter 14) for various reasons, including cost, work or family commitments, and alcohol or other drug issues (see Chapters 10–12).

But providing and operating health services in a prison environment is not always straightforward. Delivery of services to people in prison can be impacted by:

- regimes and processes in the prison environment that make continuity of care between the community and prison difficult
- delays in establishing communication with a prisoner's community-based doctor, or to confirm existing prescriptions, leading to disruptions to regular medications or to self-medication practices, and leaving prison entrants at increased risk of mental health instability during a particularly difficult time (Bowen et al. 2009)
- uncertainty about exact discharge dates, often affected by bail and parole applications, which makes continuity of care from prison to the community difficult.

Tobacco smoking is a significant health issue in the prison environment, with 3 in 4 prison entrants identifying as current smokers in 2018. Prison can be a particularly difficult environment in which to quit successfully (AIHW 2013). But smoking is banned in all enclosed public places, and most outdoor public areas in Australia, and bans are increasingly being introduced in prisons (see Chapter 10).

The prison population in Australia is increasing both in overall numbers and in the rate of imprisonment. As a result, many prisons are operating at, or over, capacity.

During 2017–18, prisons in Australia were operating at 116% of design capacity, meaning that there were more people in prison than the prisons were designed to accommodate (this excludes New South Wales, Victoria and South Australia, which did not provide data) (Productivity Commission 2019). One strategy used to manage this is to move people between prisons, making continuing health care more difficult (Grace et al. 2013).

## 1.4 What is the National Prisoner Health Data Collection?

This report presents the results of the 5th National Prisoner Health Data Collection (NPHDC) in Australia. The NPHDC is the main source of national data about the health of people in prison in Australia. It presents information about the health experiences of people throughout the prison cycle—from entry, to time spent in prison, to discharge, and to after release. It includes:

- information on the operation of prison health clinics, the conditions and problems they manage, and the medications dispensed
- self-reported information from people as they enter and exit the prison system—known as prison entrants and prison dischargees in this report
- summary information, recorded by the prison clinics.

The NPHDC reports on a set of 108 indicators that provide information on the health and well-being of people in Australia's prison population. These include indicators on the highest level of schooling completed, employment history and current physical and mental health conditions.

## 1.5 How is the information collected?

The main data source for this report was the 2018 NPHDC. Data for the NPHDC were collected in 2-week periods in all states and territories, except New South Wales.

The NPHDC consisted of 5 forms, each collecting different information:

- The *Prison entrants form* was—completed for people entering prison during the data collection period. It included questions about demographics of the prison entrants, mental health, chronic diseases, disability, tobacco, alcohol and other drug use, and health service use.
- The *Prison dischargees form* was—completed for people in prison scheduled to be released within 4 weeks of the data collection period. It included questions about demographics, mental health, chronic diseases, tobacco, alcohol and other drug use, use of prison health services, injuries in prison, and preparation for release.
- The *Clinic form* was—completed for people in custody who visited the prison clinic during the data collection period and consented to participate. It included questions about demographics, who initiated the visit, the problems managed at the visit, and the type of health professional consulted.
- The *Medication form* was—completed on a single day during the data collection period for all consenting participants in custody who were dispensed prescription medications. It included questions on the demographics of the individual, and medication types dispensed.

• The *Prison establishment form* was—completed once for each prison clinic. It 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, pregnant women in prison, and hospital transfers.

These forms were usually completed electronically on android tablets mailed out to prisons, with a small number completed on paper forms.

While the data collected from the forms were comprehensive, additional sources of data were used in this report to provide greater detail, contextualise findings, and ensure denominators were appropriate.

These data sources included:

- The National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (NPEBBV&RBS) (Butler & Simpson 2017), which provided data about communicable diseases, injecting drug use, and unsafe sexual practices among prison entrants.
- The Australian Institute of Criminology's Deaths in Custody Monitoring Program reports (Ticehurst et al. 2018), which provided data on deaths in prison.
- The Australian Bureau of Statistics (ABS), which provided the denominator (the number of people in prisons included in the 2018 NPHDC at 30 June 2018) for the indicators sourced from the clinic and medication forms.

More information about data sources and denominators can be found in Appendix A online.

## 1.6 How many prisons and people took part?

The NPHDC collected data from 62 out of 70 public and private prisons in all participating states and territories in Australia (excludes New South Wales). Periodic detention centres and court cells administered by corrective services, juvenile detention centres, immigration detention centres, and secure psychiatric facilities were excluded.

Prison entrants, prison dischargees, people in custody visiting the prison clinic, and people in custody taking prescribed medication, were invited to participate in the data collection. They could choose not to participate without consequence.

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 supplying adhesive plasters or paracetamol. The services provided by prison clinics varied between prisons and between states and territories, so not all health services reported on were available at every site.

Data for prison entrants, prison dischargees, and people in custody visiting the prison clinic were collected over a 2-week period. Data for regular medications dispensed to people in prison were collected on 1 day only.

Entrants forms were completed by 803 of the 3,442 people who entered prison during the data collection period—a participation rate of 23%. Over the same period, 335 of the 2,003 people discharged from prison completed the dischargee form—a participation rate of 17%.

Anecdotal feedback from prisons suggested that some of the clinic and medications data were not captured for a number of reasons, including, for example, staffing constraints that affected data collection, or obtaining participant consent.

All participating prisons completed an establishment form.

#### How are prisoners defined in the data collection?

Prisoners, or people in custody, were defined as adults, aged 18 or over, held in custody, whose confinement was the responsibility of a corrective services agency. This definition included sentenced prisoners, and those 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. Some people aged 17 were detained in adult prisons in Queensland, but they were excluded from the NPHDC.

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

#### Who is a prison entrant?

A prison entrant is a person aged at least 18, entering full-time custody, either on remand or on a sentence. People currently in prison who were transferring from 1 prison to another were not included in the prison entrants.

#### Who is a prison dischargee?

A prison dischargee is a person aged at least 18, in prison full-time, and expects to be released from prison within 4 weeks of participation in the NPHDC. People who were being transferred from 1 prison to another prison were not defined as dischargees.

## Profile of prison entrants

In the 2018 data collection, there were 803 prison entrants. Of these:

- most (85%) were men
- their median age was 33, with the youngest being 18 and the oldest being 76
- 13% had been in juvenile detention previously
- 73% had been in an adult prison before, including 45% in the previous 12 months
- 38% identified as being Aboriginal or Torres Strait Islander peoples (Indigenous).

There were variations between states and territories in the prison history and remand status of prison entrants. These variations were most likely due to differing legislation and sample sizes across the states and territories (Table 1.1).

Table 1.1: Prison entrants, self-reported characteristics, by state/territory, 2018

Jurisdiction	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Prison entrants (number)	89	240	210	137	42	35	50	803
Male (%)	78	83	95	81	71	89	88	85
Indigenous (%)	7	43	42	34	17	26	98	38
Median age (years)	32	32	32	35	32.5	32	32	33
Age range (years)	19-74	18-76	18-68	19-74	21-53	18-69	19-51	18-76
History of juvenile detention (%)	10	11	10	17	17	29	16	13
Previously in prison (%)	66	73	72	76	74	66	78	73
In prison during the previous 12 months (%)	31	44	38	59	52	37	60	45
Currently on remand (%)	69	58	74	66	81	74	58	67

#### Notes

Source: Entrants form, 2018 NPHDC.

<sup>1.</sup> Numbers represent numbers in this data collection only,, and not the entire prison population.

<sup>2.</sup> Excludes New South Wales, which did not provide data for this item.

## Profile of prison dischargees

Data were collected from 335 prison dischargees. Of these:

- most (89%) were men
- their median age was 35, the youngest being 18, and the oldest being 80
- just under one-third (30%) had been in prison for less than 3 months, and 1 in 8 (12%) for 2 years or more (Table 1.2).

Conducting health assessments on people leaving prison is more difficult than for those entering prison. All prison entrants arrive from court or police cells and routinely undergo a health assessment on entry to prison. But prison releases occur in various ways, including:

- · at the end of a sentence
- · from a parole hearing
- · from a court hearing
- · by being granted bail from a court hearing.

As a result, it is difficult for prison authorities and health professionals to know ahead of time that a person is going to be released, which can make it difficult to schedule a pre-release health assessment and to plan for discharge and continuity of care.

The proportion of prison dischargees captured varied because of the different processes and systems in place in each state and territory. Prison clinics could identify sentenced prisoners due to be released more readily than remandees. As a result, collecting information on, and providing a discharge plan for, sentenced prisoners expecting to be released was more complete than for remandees, who made up two-thirds of prison entrants in the 2018 NPHDC. For these reasons, the participation rate for dischargees was lower than that for entrants.

Table 1.2: Prison dischargees, self-reported characteristics, by state/territory, 2018

Jurisdiction	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Prison dischargees (number)	83	79	52	64	16	15	26	335
Male (%)	94	80	92	94	94	87	81	89
Indigenous (%)	10	46	56	30	31	27	100	38
Median age (years)	36	31	34.5	37	33	34	36	35
Age range (years)	20-80	19-62	18-64	21-70	20-73	21-57	22-62	18-80
Most recent prison stay less than 3 months (%)	32	28	19	36	57	0	35	30
Most recent prison stay 2 years or more (%)	10	5	31	13	0	13	4	12

#### Notes

Source: Dischargees form, 2018 NPHDC.

<sup>1.</sup> Numbers represent numbers in this data collection only, and not the entire prison population.

<sup>2.</sup> Excludes New South Wales, which did not provide data for this item.

#### Prison entrants and dischargees throughout this report

Prison entrants and prison dischargees in this data collection were different groups of people. But the surveys of these 2 different groups were administered during the same 2-week data collection period in 2018.



Comparisons were made between the health of people in prison and those in the general community, where data were available. Because the demographic profile of people in prison differs substantially from that of the general community, comparisons were made by age group, sex, and Indigenous status wherever possible. This reduced the likelihood that any differences were due to demographic factors rather than being true differences between people in prison and in the general population.

## 1.7 What are the limitations of the data?

Numbers in this report represented the sample in this data collection, and not the entire prison population. The NPHDC was designed as a census, capturing data on the population of interest.

But not all people in prison (particularly prison entrants and dischargees) could be asked to be involved in the data collection. This might have been due to prison staffing constraints, physical or mental limitations of people, or uncertain release dates. Of those who could be approached, some did not provide consent to participate. So, the NPHDC sample is not necessarily representative of the total prison population.

The majority of the data collected for the entrants and dischargees forms were self-reported. That is, the participants (the prison entrants or prison dischargees) answered the survey questions. This was a simple and efficient method of collecting data, which provided the direct perspective of the person being interviewed.

Logistical advantages of this method were that interviewers did not need specialised training, and that it was generally quicker than diagnostic interviewing (for health conditions).

The main disadvantage of self-reported data was that there were few ways to validate the responses beyond excluding those where the answers given were impossible, such as where a respondent might claim to be aged 1000. Self-reported data might be compared with other self-reported data (provided where possible throughout this report), but are not directly comparable with reports and studies that use other data collection methods.

A future aim of the NPHDC is to collect much of the data through by-products of jurisdictional administrative systems, rather than as the current entirely separate data collection. This would allow for a much larger and more representative sample, expanding the options for data analysis, and improving the validity and reliability of the collection. But there is significant complexity involved in adapting the data requirements of the NPHDC to the different administrative data systems in each jurisdiction.

# Introduction

## 1.8 Which ethical and privacy processes were followed?

The AIHW Ethics Committee is required to advise on the ethical acceptability of AIHW activities involving information that can potentially identify a person. The committee has been actively involved with the NPHDC since its inception. The AIHW operates under a strict privacy regime based on Section 29 of the Australian Institute of Health and Welfare Act 1987 and the Privacy Act 1988.

The AIHW has policies, protocols, and processes in place to manage confidentiality and reliability, including how data should be reported to ensure confidentiality.

Initial ethics approval for the NPHDC project was obtained on 4 March 2008 (EC488), with updated approval granted for the dischargee component on 20 April 2012, and for the electronic data collection method and new data items on 25 November 2014. Each participating jurisdiction was responsible for ensuring that any additional ethics approvals were granted from the relevant jurisdictional ethics committees.

Further information on AIHW's ethics, privacy, and confidentiality practices is available at https://www.aihw.gov.au/privacy-policy.

Further information on the data collection methods used in this report is available at https://meteor.aihw.gov.au/content/index.phtml/itemId/643458.

## 2 Socioeconomic factors

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



#### **Key Findings**

- Most (89%–92%) prison entrants and dischargees were born in Australia.
- About 1 in 3 prison entrants had an education attainment level under Year 10.
- Almost 3 in 4 (73%) prison entrants had previously been in prison, and more than 3 in 10 (32%) had previously been in prison at least 5 times.
- More than half (54%) of prison dischargees expected to be homeless, or didn't know where they would stay, once released.

## 2.1 Cultural background

People in prison who were born overseas or whose first language is not English face added challenges during imprisonment, such as additional isolation, discrimination and marginalisation (Shepherd 2016; Watt et al. 2018).

Prison entrants and prison dischargees were asked about their country of birth and the primary language they spoke. It was a condition of obtaining consent that participants had to be able to understand the process of consent. As a result, this group of people might be under-represented in this data collection.

Most prison entrants (89%) and dischargees (92%) surveyed were born in Australia. English was the main language spoken at home (90% of prison entrants, and 86% of dischargees). Australian Indigenous languages were the second most common language group, with 5% of prison entrants and 6% of prison dischargees speaking an Indigenous language at home.

Table 2.1 Prison entrants and dischargees, by country of birth and main language spoken at home, 2018 (%)

	Proportion of prison entrants	Proportion of prison dischargees
Country of birth		
Australia	88	92
New Zealand	3	1
England/United Kingdom	1	2
Vietnam	<1	<1
Other	7	4
Total (%)	100	100
Main language spoken at home		
English	90	86
Australian Indigenous languages	5	6
Kriol/Creole	<1	4
Other	4	4
Total (%)	100	100
Total (number)	803	335

#### Notes

Sources: Entrants and dischargees forms, 2018 NPHDC.

<sup>1.</sup> Numbers represent numbers in this data collection only, and not the entire prison population.

<sup>2.</sup> Excludes New South Wales, which did not provide data for these items.

## 2.2 Family

## Family history of incarceration

When an individual is incarcerated, it affects their entire community (Besemer et al. 2018; Jardine 2018). Most people who enter prison leave a family, and often dependent children in the community (Flynn et al. 2018). This can become an intergenerational problem, and many people in prison had a parent in prison during their own childhood (Dennison & Besemer 2018; Troy et al. 2018).

Imprisonment of mothers and fathers can be harmful to the health and well-being of the parent and the child, particularly if the parent-child relationship is severed (Bartlett & Trotter 2019; Dennison & Smallbone 2015; McIntyre 2017; Wildeman et al. 2018).

Maintaining and improving family relationships results in a better transition from prison to the community, reduced reoffending, and better health and welfare outcomes for the person in the prison system and their children and families (Troy et al. 2018).

Almost **1** in **5** (18%) prison entrants reported that **1** or more of their parents or carers had been in prison during their childhood



**Indicator 1:** Proportion of prison entrants who reported that 1 or more of their parents/carers had been in prison while they were a child—18%

Indigenous entrants (31%) were more likely than non-Indigenous entrants (11%) to report having had parents or carers in prison during their childhood. Younger prison entrants were almost 3 times as likely to report they had had a parent or carer in prison during their childhood, as older prison entrants (27% of 18–24 year-old prison entrants and 10% of entrants aged 45 and over).

## Dependent children in the community

Almost **2** in **5** (38%) prison entrants reported they had children in the community who were dependent on them for their basic needs



**Indicator 2:** Proportion of prison entrants who had children who were dependent on them for their basic needs—38%

The 803 prison entrants in this data collection had a total of 1,451 children (almost 2 children per prison entrant) who depended on them for their basic needs.

Almost half (47%) of Indigenous prison entrants had dependent children, compared with one-third (33%) of non-Indigenous entrants.

Women (54%) were more likely than men (36%) to have dependent children. In the NPHDC, dependent children were defined as being either under the age of 15, or dependent students.

## Contact with family, friends, and/or elders

Transitioning from prison to the community can be challenging, and people released from prison make a more successful transition if they have culturally-appropriate psychosocial support (Abbott et al. 2018).

Strong and supportive relationships with family, friends or elders in the community can help with the transition (Abbott et al. 2018; Besemer et al. 2018). Men and younger people are particularly vulnerable compared with women and older people transitioning from prison, with typically lower levels of social support in the community (Pettus-Davis et al. 2018).

About **4** in **5** (79%) dischargees reported having **contact with family**, **friends**, **and/or elders in the community** in the past 4 weeks.



**Indicator 3:** Proportion of prison dischargees who reported having contact with family, friends and/or elders in the previous 4 weeks—79%

Non-Indigenous dischargees (85%) were more likely than Indigenous dischargees (72%), and women (92%) were more likely than men (77%) to report recent contact with family, friends, or elders in the community. Phone contact was most common (71%), followed by visits (34%), and receiving letters (22%). About 1 in 6 (16%) dischargees reported having had no recent contact (Figure 2.1).

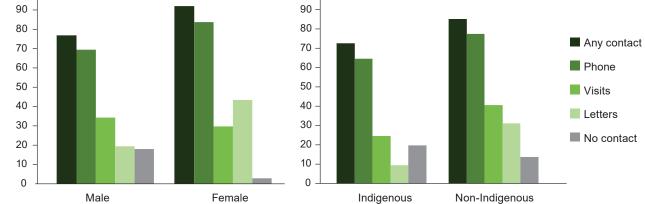
About 1 in 5 (20%–21%) dischargees aged 18–24, and 45 and over, received no contact in the previous 4 weeks.

Figure 2.1: Prison dischargees, type of contact with family, friends, or elders in the previous 4 weeks, by sex and Indigenous status, 2018 (%)

Per cent

Per cent

100
90
80
80
80
80



#### Note.

- 1. Proportions are proportions of prison dischargees in this data collection only, and not the entire prison population.
- 2. Multiple responses were allowed.
- 3. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

## 2.3 Education

Education is a recognised social determinant of health, with lower levels of education associated with poorer health (Mitrou et al. 2014).

People in prison have lower levels of educational attainment and higher levels of learning difficulties and learning disabilities than people in the general community (AIHW 2015; Kendall & Hopkins 2019; Skues et al. 2019). Lower levels of educational attainment are associated with poorer employment opportunities and outcomes, and unemployment is a risk factor for incarceration and for reoffending post-release (Baldry et al. 2018).

#### **Entrants**

For **1** in **3** (33%) prison entrants the **highest level of completed schooling** was **Year 9** or under

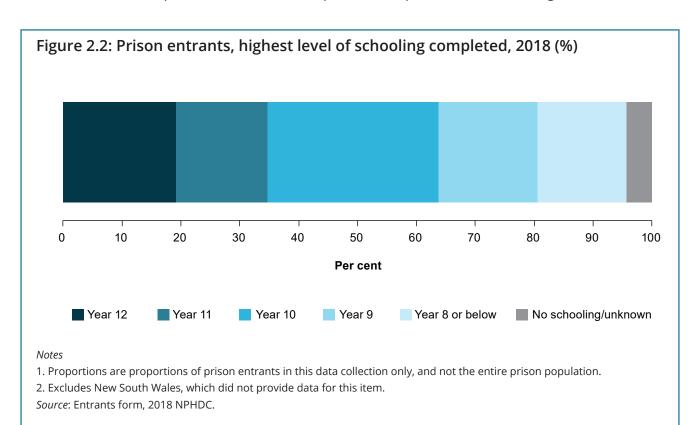


**Indicator 4:** Proportion of prison entrants whose highest year of completed schooling was Year 9 or under—33%

Prison entrants were asked about the highest level of schooling that they had completed and about any qualifications they attained other than school.

One-third (33%) of prison entrants had not completed Year 10, 17% had completed Year 8 or under, including 2% who reported no schooling as their highest level of education completed.

Less than 1 in 5 (19%) prison entrants had completed the equivalent of Year 12 (Figure 2.2).



Indigenous entrants showed lower levels of educational attainment than non-Indigenous entrants. Half as many Indigenous prison entrants (12%) reported completing Year 12 as non-Indigenous entrants (24%). Indigenous entrants (24%) were more likely than non-Indigenous entrants (10%) to have their highest level of completed schooling as Year 8 or under.

The educational attainment of Indigenous and non-Indigenous people in the general community also differed. In 2016, 1 in 3 (30%) Indigenous people and more than 3 in 5 (63%) non-Indigenous people aged 25–64 had completed Year 12 or equivalent (ABS 2018b).

One-third (31%) of prison entrants had completed a trade certificate, while more than half (56%) had no formal education other than schooling.

Education at the tertiary level was not common—the highest level of completed education for entrants was a diploma (4.4%), followed by a bachelor degree (1.5%), and a postgraduate qualification (0.5%).

While the prison population cannot be compared with the general community directly due to the differences in age structure, tertiary qualifications were more prevalent in the community. In 2018, almost 1 in 3 (31%) people aged 20–64, and 2 in 5 (40%) people aged 25–34, in the general community reported attaining a bachelor degree or higher (ABS 2018d).

## **Dischargees**

People in prison, particularly if sentenced, might be able to complete some study or a qualification. These educational attainments can improve self-confidence, have a positive impact on employment outcomes post-release, and reduce the likelihood of reoffending (Baldry et al. 2018).

Prison dischargees were asked whether they had completed any qualifications while in prison.

**About 1 in 6** (17%) prison dischargees reported **completing a qualification** while in prison



**Indicator 5:** Proportion of prison dischargees who reported completing a qualification while in prison—17%

About 1 in 7 (14%) prison dischargees reported they finished a trade qualification while in prison, with a further 2.1% reported completing school.

A small proportion (8%) of prison dischargees started or continued some form of qualification while in prison. A further 2.7% started or continued school, and another 3.3% started or continued a trade qualification.

## 2.4 Employment and government support

Unemployment is a social determinant of health and is linked with a number of poor psychosocial outcomes including mental health issues, alcohol and other drug use disorders, and crime (Fergusson et al. 2014; Winter et al. 2019).

People in contact with the criminal justice system already face difficulties in gaining employment, with lower educational attainment, lower socioeconomic status, higher levels of alcohol and other drug use disorders and higher levels of mental health conditions compared with the general community (Sullivan et al. 2019). Imprisonment adds another barrier to employment, particularly for those who have been in prison for longer than 6 months (Ramakers et al. 2014; Winter et al. 2019).

#### **Entrants**

**More than half** (54%) of prison entrants reported they were **unemployed during the 30 days before being imprisoned** 





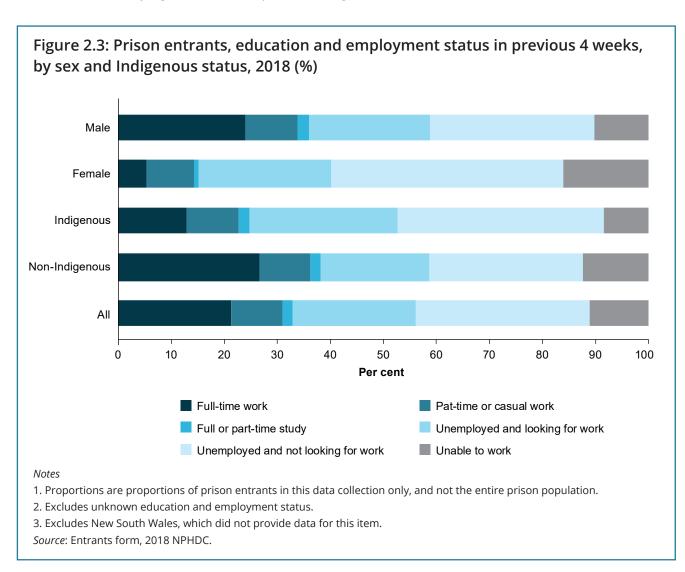
**Indicator 6:** Proportion of prison entrants who were unemployed in the 30 days before prison—54%

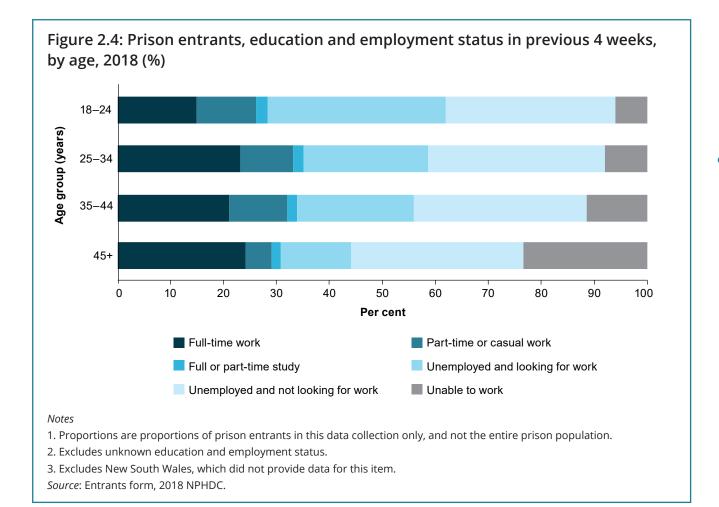
About 1 in 9 (11%) prison entrants reported being unable to work due to disability, age, or health conditions. Of those who were unemployed, 41% were looking for work (Figure 2.3).

The likelihood of prison entrants reporting unemployment decreased with age, from 66% of entrants aged 18–24, to 46% of those aged 45 and over. Conversely, almost one-quarter (23%) of entrants aged 45 and over reported being unable to work, compared with 6% of those aged 18–24 (Figure 2.4).

A higher proportion of Indigenous entrants (67%) reported being unemployed before prison than non-Indigenous entrants (50%).

Almost one-third (31%) of prison entrants were working, either full-time (21%) or part-time (10%) before prison. Men (34%) were more often in paid work than women (14%), who were the group most likely to report being unemployed and not looking for work (44%). Less than 1 in 20 (2%) prison entrants were studying, either full- or part-time (Figure 2.3).





## **Dischargees**

Less than 1 in 4 (22%) prison dischargees had paid employment organised to start within 2 weeks of release from prison



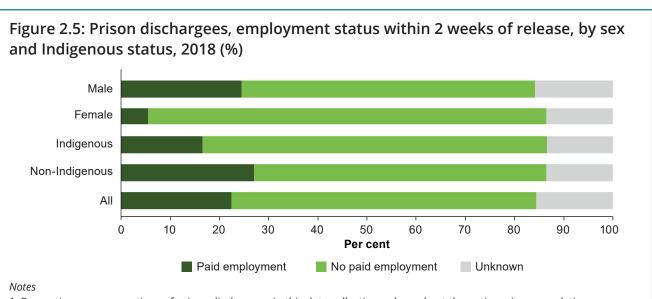
**Indicator 7:** Proportion of prison dischargees who reported having paid employment that will start within 2 weeks of leaving prison—22%

Less than one-quarter (22%) of prison dischargees reported having paid employment organised that would begin within 2 weeks of release from prison (Figure 2.5). About 3 in 5 (62%) prison dischargees said they did not have paid employment organised, and 1 in 6 (16%) said they were unsure.

Male dischargees (24%) were more likely than female dischargees (5%) to have paid employment organised to start within 2 weeks of release.

A higher proportion of Indigenous dischargees (70%) said they did not have any work organised than non-Indigenous dischargees (60%).

Dischargees under the age of 45 were more likely to report they had paid employment organised than those aged 45 and over (24%–25% of dischargees aged 18–44 and 12% of dischargees aged 45 and over).



- 1. Proportions are proportions of prison dischargees in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

Almost **4 in 5** (78%) prison dischargees **expected to receive** a government payment through Centrelink on release



Indicator 8: Proportion of prison dischargees who were expecting to receive a government payment through Centrelink on release—78%

Of the 335 prison dischargees in this data collection, 260 were expecting to receive some form of financial assistance from Centrelink upon release from prison (Figure 2.6).

A higher proportion of non-Indigenous dischargees (81%) expected to receive a Centrelink payment than Indigenous dischargees (76%). But more Indigenous dischargees (15%) were unsure about whether they were going to receive Centrelink payment than non-Indigenous dischargees (8%).

About one-quarter (23%) of prison dischargees expected to receive income support, including disability support, 28% expected to receive a crisis payment, and 26% expected to receive both payments.

Figure 2.6: Prison dischargees expecting to receive some form of financial assistance from Centrelink, by payment type (%) Male Female Indigenous Non-Indigenous ΑII 10 20 30 40 50 60 70 80 90 100 n Per cent Income support (including disability support) Crisis payment Both None Unknown Notes 1. Proportions are proportions of prison dischargees in this data collection only, and not the entire prison population. 2. Excludes New South Wales, which did not provide data for this item. Source: Dischargees form, 2018 NPHDC.

## 2.5 Detention history

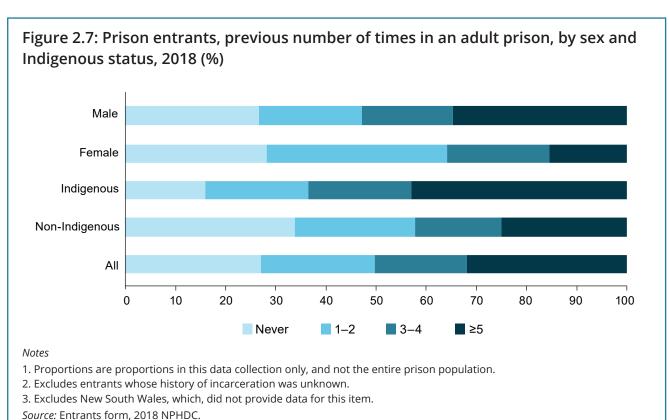
Almost 3 in 4 (73%) prison entrants reported they had previously been in an adult prison. Almost one-third (32%) had been in prison at least 5 times before, and 27% had never been previously incarcerated in the adult prison system (Figure 2.7).

About 1 in 8 (13%) prison entrants had previously been in juvenile detention, with more than half (53%) having been in juvenile detention 1–2 times and about one-third (30%) having been at least 5 times.

Male prison entrants were more likely to report extensive prison histories than female entrants (Figure 2.7). More than one-third (35%) of male entrants had been in prison 5 or more times, compared with 15% of women. Similar proportions of male entrants (27%) and female entrants (28%) had never been in prison before. Proportions for youth detention histories were also similar for male and female prison entrants, with 86% of males and 91% of females having never been in youth detention.

Indigenous prison entrants were more likely than non–Indigenous entrants to have an extensive prison history. Almost half (43%) of Indigenous entrants had been in prison at least 5 times before, compared with 25% of non-Indigenous entrants. Non-Indigenous entrants (34%) were more likely than Indigenous entrants (16%) to have never been in prison before.

The same was seen in the history of juvenile detention, with 92% of non-Indigenous entrants having never been in detention, compared with 79% of Indigenous entrants.



## 2.6 Homelessness

There are clear links between homelessness and health, with homeless people having mortality rates that are an estimated 2–5 times higher 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 alcohol and other drug use disorders. Similar to people in prison, they also experience accelerated ageing (Fazel et al. 2014).

Homelessness does not only refer to those sleeping on the streets, but also includes those with unstable housing, such as improvised dwellings or tents, supported accommodation, temporarily living with other households, and staying in boarding houses or other temporary lodging.

Data from the 2016 Australian Census of Population and Housing show that an estimated 116,427 people (0.5% of the general Australian population) were homeless on Census night (ABS 2018c). Of these people, an estimated 8,200 (less than 0.1% of the Australian population) were sleeping rough in improvised dwellings, tents, or sleeping outside (ABS 2018c).

#### **Entrants**

About **1 in 3** (33%) prison entrants reported they were **homeless** (including staying in short-term or emergency accommodation) **during the 4 weeks before prison** 



**Indicator 9:** Proportion of prison entrants who were homeless in the 4 weeks before prison (including short-term and emergency accommodation)—33%

Prison entrants were around 66 times more likely to be homeless than people in the general community. One-third (33%) of prison entrants reported being homeless in the 4 weeks immediately before being imprisoned, including 28% who were in short-term or emergency accommodation, and another 5% who were in unconventional housing or sleeping rough (Figure 2.8).

Indigenous entrants (37%) were more likely than non-Indigenous entrants (23%) to be in short-term or emergency accommodation.

Women and men were equally likely to report homelessness before prison. Older entrants, aged 45 and over, were the age group most likely to have been living in their own accommodation, and the least likely to have been in short-term or emergency accommodation. But they were also the group most likely to be sleeping rough before imprisonment (Figure 2.9).

Source: Entrants form, 2018 NPHDC.

- 1. Proportions are proportions of prison entrants in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item. Source: Entrants form, 2018 NPHDC.

Figure 2.9: Prison entrants, accommodation type in the 4 weeks before prison, by age, 2018 (%) 18 - 24Age group (years) 25 - 3435 - 4445+ 0 10 20 30 40 50 60 70 80 90 100 Pre cent Sleeping rough or in non-conventional accommodation Short-term or emergency accommodation Own accommodation Unknown Notes 1. Proportions are proportions of prison entrants in this data collection only, and not the entire prison population. 2. Excludes New South Wales, which did not provide data for this item.

## **Dischargees**

Finding suitable stable accommodation is a major concern for people about to be released from prison, especially for those with no family support.

In 2017–18, 3% of all clients of specialist homelessness services had come from a custodial setting, including prison, youth justice detention centres, and immigration detention centres. The majority of them were men (76%), and aged 25–44 (61%). They were also more likely than other homelessness services clients to need assistance with alcohol and other drug counselling (12% compared with 4% of all clients) (AIHW 2019).

**Over half** (54%) of prison dischargees **expected to be homeless** (including in short-term and emergency accommodation) once released



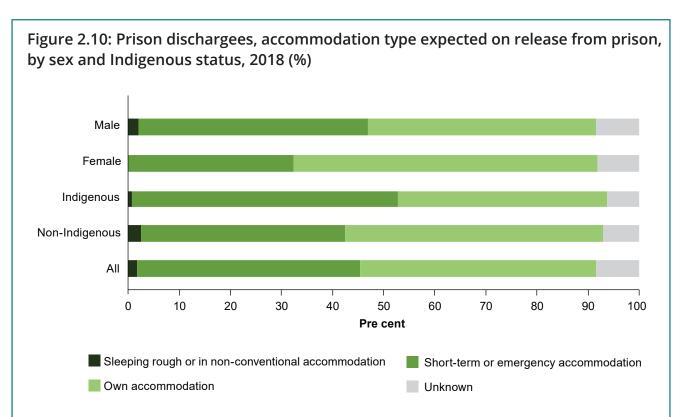
**Indicator 10:** Proportion of prison dischargees who expected to be homeless (including short-term and emergency accommodation) once released—54%

Most prison dischargees (54%) expected to be homeless upon release from prison. Almost half (44%) were planning to sleep in short-term or emergency accommodation, almost 2% expected to sleep rough, and 8% did not know where they would stay (Figure 2.10).

Less than half (46%) of prison dischargees had their own stable accommodation arranged, where they were either the owner or named on a lease. Men (47%) were more likely than women (32%) to expect being homeless on release.

Indigenous people (52%) were more likely to report planning to stay in emergency or short-term accommodation than non-Indigenous people (40%).

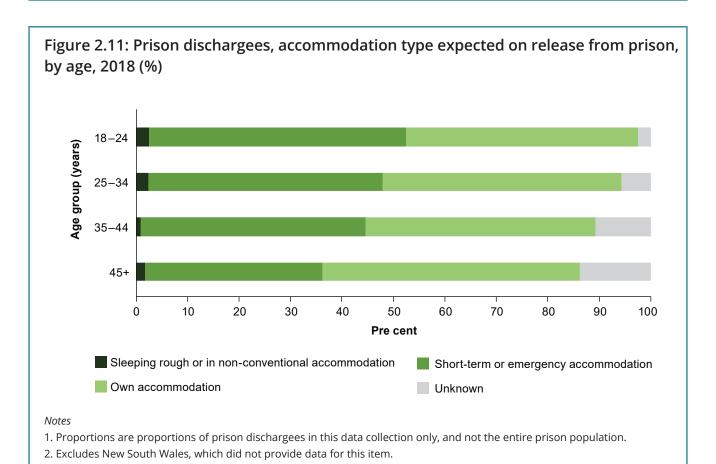
Prison dischargees aged 45 and over were the most likely age group to report having their own accommodation (50%), and were also the most likely to say they did not know where they would stay (14%). The youngest group of dischargees (those aged 18–24) were the most likely to report they would be sleeping rough (2.5%) or in short-term or emergency accommodation (50%) (Figure 2.11).



#### Notes

- 1. Proportions are proportions of prison dischargees in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item. *Source:* Dischargees form, 2018 NPHDC.

Source: Dischargees form, 2018 NPHDC.



Part II

Mental health and self-harm

# 3 Mental health

#### **Key findings**

- A total of 2 in 5 (40%) prison entrants reported being told they had a mental health condition at some stage in their life.
- Female prison entrants (65%) were more likely than male prison entrants (36%) to report a history of a mental health condition.
- One-quarter (26%) of prison entrants had a high or very high level of psychological distress score on the Kessler 10 scale.
- Almost one-quarter (23%) of prison entrants reported currently taking medication for a mental health condition.
- About 1 in 6 (16%) people in custody were dispensed mental health-related medication.
- Women in custody (28%) were almost twice as likely as men (15%) to be dispensed mental health-related medication
- Almost 1 in 5 (18%) prison entrants were referred to mental health services for observation and further assessment when they arrived in prison.

This section analyses the self-reported mental health of prison entrants and prison dischargees, including:

- · mental health status
- past diagnoses
- history of self-harm behaviours
- · perceived changes to mental health while in prison
- current psychological distress
- · prison entrants identified by prison clinic staff as being at risk of suicide or self-harm
- · people in custody taking mental health-related medications

# 3.1 Mental health before and while in prison

Mental health is fundamental to emotional, psychological and social well-being, and affects individuals, families, and the wider community (ABS 2018e). Mental health conditions are chronic conditions such as depression, anxiety disorders, psychotic disorders, and alcohol and other drug use disorders. These conditions can influence thoughts, feelings, behaviour, stress levels, relationships, and decision making.

Mental health conditions, particularly severe conditions, are over-represented in the prison population. For example, the prevalence of psychosis in a London prison population was found to be more than 20 times that of the general community, and almost 70% of people in prison had more than 1 mental health disorder (Bebbington et al. 2017).

Unlike many other chronic conditions, mental health conditions do not increase in prevalence with age. For some, interaction with the justice system might be the first time that a health professional assessed their mental health.



An Australian population-based data linkage study of adults in their 20s and 30s found that 1 in 3 (32%) of those with a psychiatric illness had been arrested during a 10-year period, and the first arrest often occurred before their first contact with mental health services (Morgan et al. 2013).

People in prison have a high prevalence of self-reported mental health conditions (AIHW 2015), and, while often able to access mental health care during incarceration, mental health can quickly deteriorate after release (Cutcher et al. 2014).

People in prison with a history of a mental health condition are more likely to experience alcohol and other drug use disorders, crime, and poor health outcomes post-release. A history of substance use, and particularly injecting drug use, is linked to mental health conditions, self-harm and suicidal behaviour in people while in prison and post-release (Butler et al. 2018; Stewart et al. 2018; Cossar et al. 2018).



### **Entrants and dischargees**

During the data collection period, prison entrants were asked whether they:

- had ever been told they had a mental health condition by a doctor, psychiatrist, psychologist or nurse
- were currently taking medication for a mental health condition including those relating to alcohol and other drug use.

Prison dischargees were asked whether they:

- had ever been told they had a mental health condition and/or an issue with alcohol and other drug use
- had been diagnosed with the condition during their current incarceration.

A total of **2 in 5** (40%) prison entrants **reported being told they** had a mental health condition at some stage in their lives.



**Indicator 11:** Proportion of prison entrants who reported being told by a health professional that they had a mental health condition (including alcohol and other drug use disorders)—40%

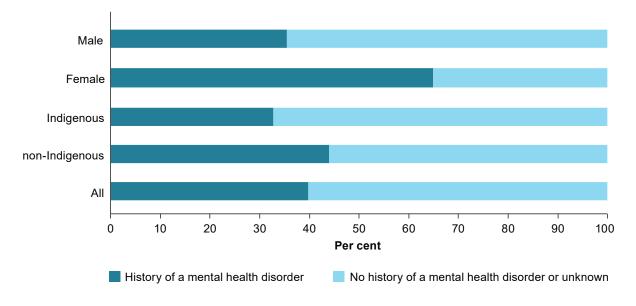
**Indicator 12:** Proportion of prison dischargees who reported being told by a health professional that they had a mental health condition (including alcohol and other drug use disorders)—37%

About 2 in 5 prison entrants (40%) and prison dischargees (37%) reported a previous diagnosis of a mental health disorder, including alcohol and other drug use disorders.

Female prison entrants (65%) were more likely than male prison entrants (35%) to report a history of a mental health condition (Figure 3.1). But, the proportion of male dischargees (37%) and female dischargees (38%) reporting a history of a mental health condition were similar (Figure 3.2).

Non-Indigenous prison entrants (44%) and dischargees (47%) were more likely to report a prior mental health condition than Indigenous prison entrants (33%) and dischargees (24%) (figures 3.1 and 3.2).

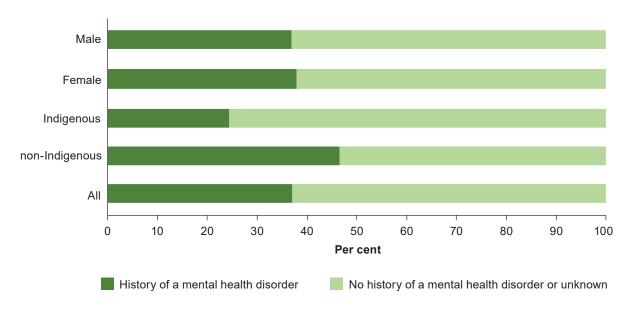
Figure 3.1: Prison entrants who had ever been told they had a mental health condition, by sex and Indigenous status, 2018 (%)



#### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item. Source: Entrants form, 2018 NPHDC.

Figure 3.2: Prison dischargees who had ever been told they had a mental health condition, by sex and by Indigenous status, 2018 (%)



#### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item. Source: Dischargees form, 2018 NPHDC.

Prison entrants aged 35–44 were most likely to report a history of a mental health condition (45%), and those aged 45 and over were the least likely (34%).

Prison dischargees showed a decrease with age in the proportion reporting a history of a mental health condition—from 43% of dischargees aged 18–24 to 34% of those aged 35 and over (see Supplementary table S21).

These trends in mental health conditions were generally consistent for entrants and dischargees. They were also comparable with previous years of this data collection, as well as with national and international literature (Bebbington et al. 2017; Borschmann et al. 2018; Butler et al. 2018).

## 3.3 Self-assessed mental health status

Self-assessed health status is used extensively in public health research in the absence of more detailed, objective health data. It is used in various data collections on numerous topics, making it useful for comparisons between different population groups (Wu et al. 2013).

In this data collection, prison entrants and prison dischargees were asked to rate their mental and physical health separately as being excellent, very good, good, fair, poor, or unknown. This section reports on self-assessed mental health of prison entrants and prison dischargees, with self-assessed physical health being reported in Chapter 7.

More than **2** in **3** (69%) prison entrants **described their mental health as good, very good, or excellent** 



**Indicator 13:** Proportion of prison entrants who rated their mental health as good, very good, or excellent—69%

Almost **4** in **5** (79%) prison dischargees **described their mental health as good, very good, or excellent** 

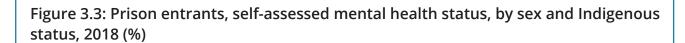


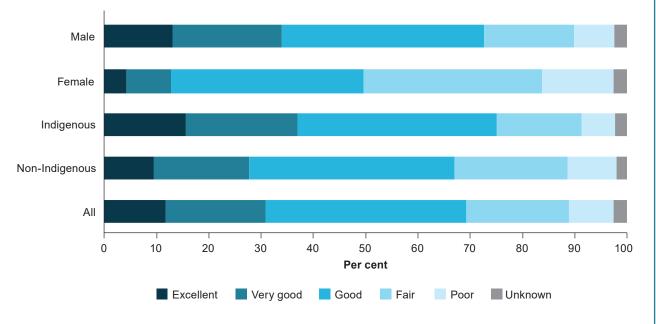
**Indicator 14:** Proportion of prison dischargees who rated their mental health as good, very good, or excellent—79%

More than two-thirds (69%) of prison entrants, and more than three-quarters of prison dischargees (79%) described their mental health as generally good, very good or excellent.

Male prison entrants (73%) were almost 1.5 times as likely as female entrants (50%) to report their mental health as good, very good or excellent (Figure 3.3). The gap between the sexes was narrower for dischargees, with 8 in 10 (80%) male dischargees, and 7 in 10 (70%) female dischargees, describing their mental health as generally good or better (Figure 3.4).

Indigenous prison entrants (75%) were more likely than non-Indigenous prison entrants (67%) to describe their mental health as generally good or better. Indigenous prison dischargees (87%) were also more likely than non-Indigenous prison dischargees (77%) to describe their mental health as generally good or better (Figure 3.4).

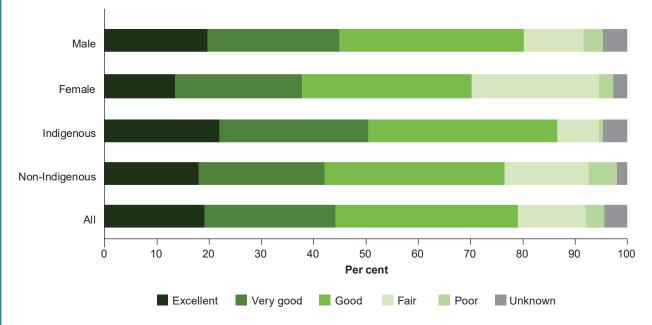




#### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item. Source: Entrants form, 2018 NPHDC.

Figure 3.4: Prison dischargees, self-assessed mental health status, by sex and Indigenous status, 2018 (%)



#### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

Prison entrants aged 25–34 (74%) were most likely to describe their mental health as generally good or better and those aged 35-44 were the least likely (63%) (Figure 3.5). Prison dischargees aged 18-24 (83%) were most likely to describe their mental health as generally good or better and those aged 45 and over were the least likely (76%) (Figure 3.6).

Figure 3.5: Prison entrants, self-assessed mental health status, by age, 2018 18-24 Age group (years) 25-34 35-44 45+ 0 10 20 30 40 50 60 70 80 90 100 Per cent Excellent Very good Good Fair Poor Unknown 1. Proportions are proportions in this data collection only, and not the entire prison population. 2. Excludes New South Wales, which did not provide data for this item. Source: Entrants form, 2018 NPHDC.

Figure 3.6: Prison dischargees, self-assessed mental health status, by age, 2018 (%) 18-24 Age group (years) 25-34 35-44 45+ 30 40 70 10 20 50 80 90 0 60 100 Per cent Excellent Very good Good Fair Poor Unknown Notes 1. Proportions are proportions in this data collection only, and not the entire prison population. 2. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

# 3.4 Mental health changes

Source: Dischargees form, 2018 NPHDC.

### **Dischargees**

During the 2018 survey period, prison dischargees were asked whether their mental health had changed over their recent period of incarceration, and by how much.

Almost 2 in 5 (39%) prison dischargees reported their mental health improved while in prison

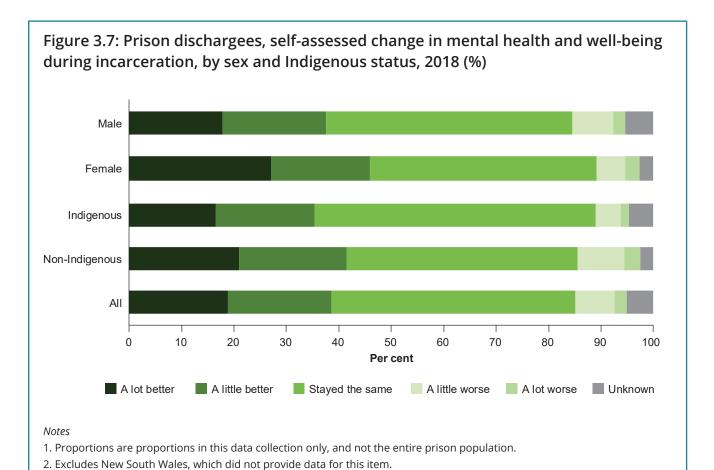


Indicator 15: Proportion of prison dischargees who reported their mental health improved or stayed the same while in prison—85%

Almost 2 in 5 (38%) male dischargees, and almost half (46%) of female dischargees reported an improvement in their mental health and well-being.

Only 1 in 10 male dischargees (10%) and less than 1 in 12 female dischargees (8%) reported their mental health had deteriorated during their time in prison (Figure 3.7).

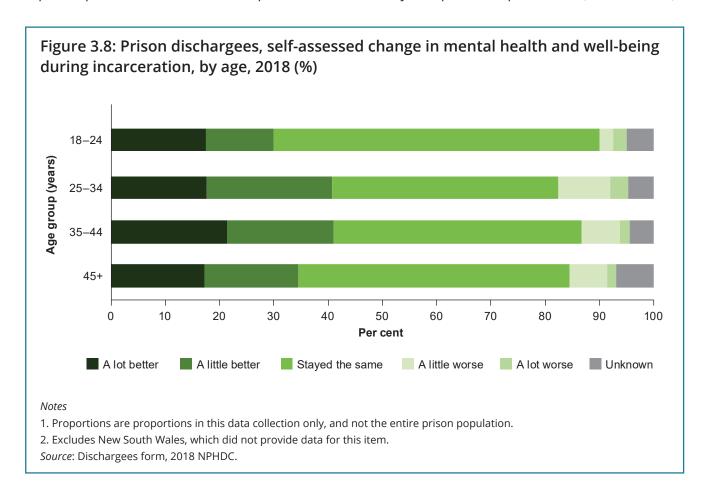
Non-Indigenous dischargees were more likely to report an improvement in their mental health during their time in prison (42%) compared with Indigenous dischargees (35%) (Figure 3.7).



#### 33

Prison dischargees aged 35–44 (41%) were most likely, and those aged 18–24 (30%) were least likely, to report an improvement in their mental health (Figure 3.8). Prison dischargees aged 35–44 (45%) were also most likely to report a history of a mental health condition.

These results were consistent with a study in the United States, which found that one-third (32%) of prison dischargees reported their mental health improved while in prison and dischargees who reported poor mental health before prison were more likely to report an improvement (Yu et al. 2015).



# 3.5 Recent psychological distress

Entering and leaving prison can be highly stressful for people in the prison system. The experience of being in prison, the prison environment, relationships with other prisoners, family, housing, employment, and alcohol and other drug use might all be potential causes of concern and distress for people in the prison system.

Prison entrants and dischargees were asked about their recent psychological distress levels, and their perceived reasons for any distress.

The Kessler 10 (K10) scale is a widely-used and well-validated survey tool, designed to measure participants' levels of psychological distress through questions about depression and anxiety symptoms over the preceding 4 weeks (Kessler et al. 2002; Andrews & Slade, 2001). It has also been shown to be a good indicator of serious mental illness (Kessler at al. 2003).

The K10 was included in the surveys completed by prison entrants (for distress levels before prison entry), and by prison dischargees (for distress levels leading up to release).

The scoring used in this report for the K10 scale of psychological distress is the same scoring used in ABS surveys to enable comparisons between the prison and general Australian populations (ABS 2012). The K10 scoring categories used were:

- low—indicated by a score of 10-15
- · moderate—indicated by a score of 16-21
- high—indicated by a score of 22–29
- very high—indicated by a score of 30-50.

Slightly different scoring for the K10 is sometimes 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.

About 1 in 4 (26%) prison entrants scored high or very high levels of psychological distress



Indicator 16: Proportion of prison entrants with a high or very high level of psychological distress, as measured by the Kessler 10 (K10) scale—26%

1 in 7 (14%) prison dischargees scored high or very high levels of psychological distress



**Indicator 17:** Proportion of prison dischargees with a high or very high level of psychological distress, as measured by the Kessler 10 (K10) scale—14%

Using the K10 scale, during the survey period in 2018, prison entrants reported higher levels of psychological distress (26% scored high or very high) than prison dischargees (14% scored high or very high). A greater proportion of prison dischargees (61%) scored low levels of psychological distress than prison entrants (53%) (figures 3.9 and 3.10).

Prison entrants (26%) were twice as likely to score high or very high levels of psychological distress as the general population in 2017–18 (13%), while prison dischargees were almost equally likely (14%) as the general population (ABS 2018e).

Female prison entrants (52%) were more than twice as likely as male prison entrants (22%), and female prison dischargees (22%) were more than 1.5 times as likely as male dischargees to score high or very high levels of psychological distress (figures 3.9 and 3.10).

In the general Australian population, females (15%) were also more likely to score high or very high levels of psychological distress on the K10 than males (11%), although the differences between the sexes were smaller than in the prison populations (ABS 2018e).

Non-Indigenous prison entrants (30%) were 1.3 times as likely as Indigenous prison entrants (20%), and non-Indigenous prison dischargees (18%) were more than twice as likely as Indigenous dischargees (8%), to score high or very high levels of psychological distress on the K10 (figures 3.9 and 3.10).

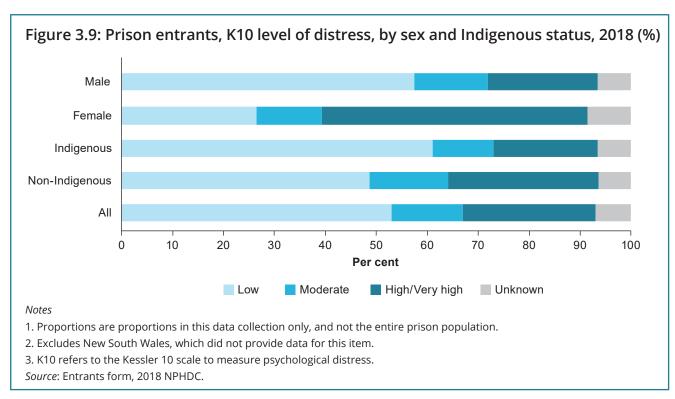


Figure 3.10: Prison dischargees, K10 level of distress, by sex and Indigenous status, 2018 (%) Male Female Indigenous Non-Indigenous ΑII 10 40 70 0 20 30 50 60 80 90 100 Per cent Moderate High/Very high Low Unknown 1. Proportions are proportions in this data collection only, and not the entire prison population. 2. Excludes New South Wales, which did not provide data for this item. 3. K10 refers to the Kessler 10 scale to measure psychological distress. Source: Dischargees form, 2018 NPHDC.

### Reasons for psychological distress

Prison entrants and prison dischargees were asked to rate how worried they were about:

- · their current imprisonment
- · family or relationships in the community
- relationships in prison
- · mental health issues

- physical health issues
- · tobacco, alcohol, and/or other drugs
- any other particular issue.

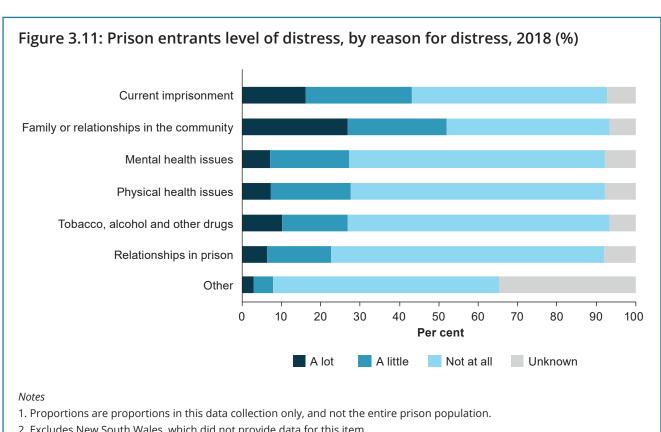
Prison dischargees were also asked how worried they were about their upcoming release.

For prison entrants, the most common causes of distress were:

- family or relationships in the community (52%)
- current imprisonment (43%)
- physical health issues (28%)
- mental health issues (27%)
- issues around tobacco, alcohol, and other drugs (27%)
- relationships in prison (23%) (Figure 3.11)

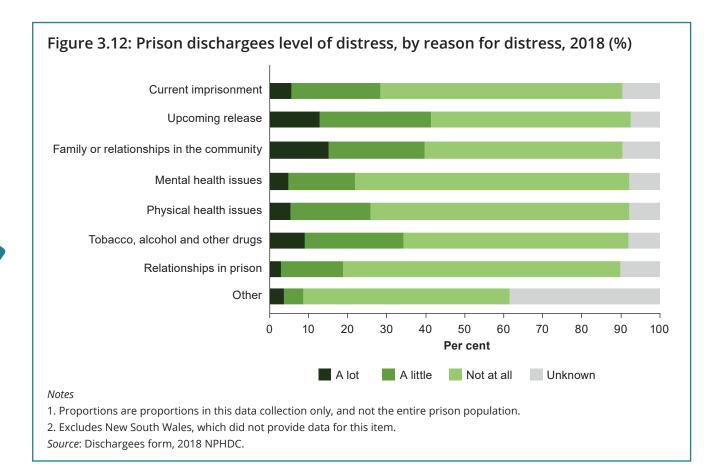
Results were similar for prison dischargees with the most common causes of distress being:

- upcoming release (41%)
- family or relationships in the community (40%)
- issues around tobacco, alcohol, and other drugs (34%)
- current imprisonment (28%)
- physical health issues (26%)
- mental health issues (22%)
- relationships in prison (19%) (Figure 3.12).



2. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.



### 3.6 Mental health medication

Medications for mental health conditions, known as psychotropic medications, include antidepressants and mood stabilisers, anti-anxiety medications, antipsychotics, sedatives, and hypnotics. People in prison are more likely to be prescribed psychotropic medications than people in the general community (Spittal et al. 2019).

A study of people in prison in the United States 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 as rates for the general population of a similar age (Hassan et al. 2014).

Women in contact with the prison system in Australia are more likely than men to have been prescribed psychotropic medication. A study of female dischargees in New South Wales found that around half had a current prescription for psychotropic medication (Abbott et al. 2016).

#### **Entrants**

Prison entrants were asked whether they were currently taking medication for a mental health condition.

Almost 1 in 4 (23%) prison entrants reported currently taking mental health-related medication

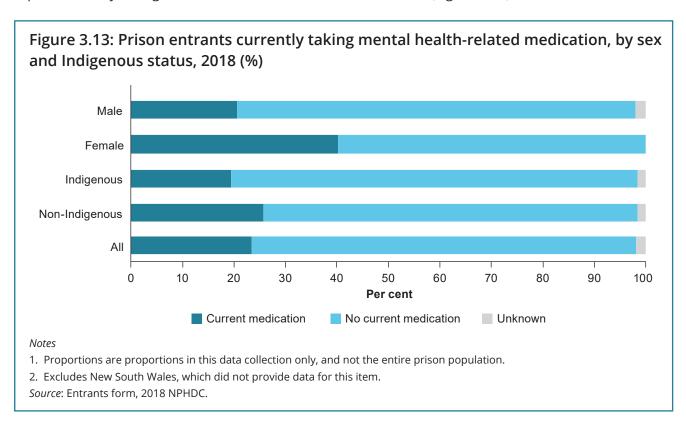


**Indicator 18:** Proportion of prison entrants who reported currently taking medication for a mental health condition—23%

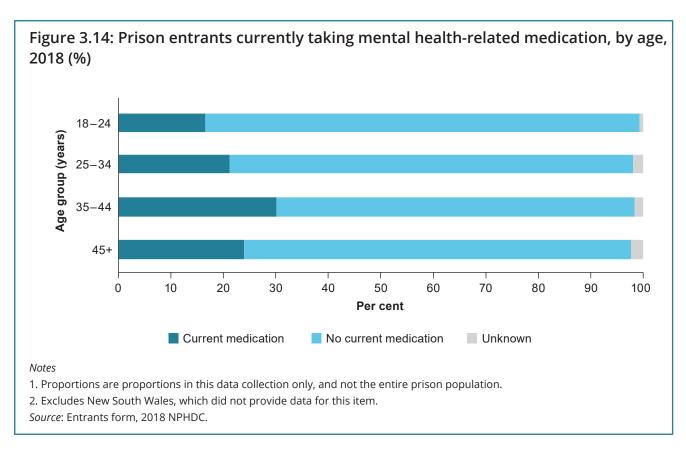
Almost one-quarter (23%) of prison entrants reported they were currently taking medication for a mental health condition.

Female prison entrants (40%) were twice as likely as male prison entrants (21%) to report taking mental health-related medication (Figure 3.13).

Non-Indigenous prison entrants (26%) were more likely than Indigenous prison entrants (19%) to report currently taking medication for a mental health condition (Figure 3.13).



Prison entrants aged 35–44 (30%) were most likely to report currently taking medication for a mental health condition, and those aged 18–24 (17%) were least likely (Figure 3.14).



### People in custody

Prison clinic staff recorded the prescription medications dispensed to people in custody on a single day during the 2018 survey period. This provided a snapshot of the types of medications dispensed on a typical day, and an indication of the types of health conditions people in custody experience.

Some medications may be prescribed for conditions other than the primary condition that the medication was originally designed to treat. For example, some anti-psychotic medications may be prescribed in low doses to treat insomnia while some anti-epileptic medications are commonly prescribed to treat neuropathic pain (Murnion 2018; Thompson et al. 2016). Additionally, not all medications regularly dispensed were reported, so the proportions are likely under-representative of the true values.



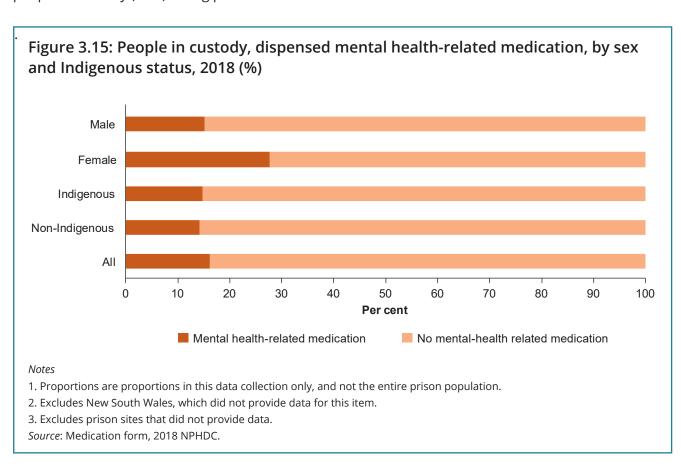
About 1 in 6 (16%) people in custody were dispensed mental health-related medication



Indicator 19: Proportion of people in custody who were dispensed mental health-related medication—16%

Women in prison (28%) were almost twice as likely as men (15%) to be dispensed mental healthrelated medication (Figure 3.15).

There was no difference in the proportion of Indigenous people in custody (15%) and non-Indigenous people in custody (14%) taking prescribed mental health-related medication.



The proportion of people in custody dispensed mental health-related medications increased with age—from 1 in 9 (12%) of those aged 18-24 to about 1 in 6 in those aged 35-44 (18%) and those aged 45 and over (17%).

- · anti-depressants
- · anti-psychotics
- · anti-anxiety medications
- · hypnotics and sedatives.

Due to the many co-morbidities in the area of mental health alone, some people were prescribed and dispensed medications from multiple categories. So, the rate of people in prison taking any mental health-related medication is less than the sum of the rates for each category of mental health-related medications (Table 3.1).

The majority of mental health-related medications dispensed were anti-depressants, regardless of age, sex, or Indigenous status. Anti-depressants accounted for two-thirds (67%) of all mental health-related medications dispensed during the 2018 collection period.

One-quarter (25%) of mental health-related medications dispensed were anti-psychotics, while only 6% were hypnotics and sedatives, and 3% were anti-anxiety medications.

Women in custody were twice as likely to be dispensed anti-depressant medications (23% of all women in custody or 231 per 1,000) as men in custody (12% of men in custody or 120 per 1,000). Compared with their male counterparts, women in custody were:

- almost 2.5 times as likely to be dispensed anti-psychotic medications (102 per 1,000 women in custody compared with 43 per 1,000 men)
- more than 4 times as likely to be dispensed anti-anxiety medications (20 per 1,000 women compared with 4 per 1,000 men)
- equally likely to be dispensed hypnotic or sedative medications as men (10–11 per 1,000 each) (Table 3.1).

Table 3.1: Mental health-related medications dispensed per 1,000 people in custody, by sex and Indigenous status, 2018 (rate)

	Male	Female	Indigenous	Non-Indigenous	All	
Anti-depressants	120	231	101	118	129	
Anti-psychotics	43	102	55	39	48	
Anti-anxiety	4	20	4	5	6	
Hypnotics and sedatives	10	11	13	8	10	
Any mental health-related medication	142	277	147	142	153	

#### Notes

- 1. Rates for 'any mental health-related medication' were less than the sum of the rates in each category as many individuals were dispensed medications from multiple categories.
- 2. Rates are rates in this data collection only, and not the entire prison population.
- 3. Excludes New South Wales, which did not provide data for this item.
- 4. Excludes prison sites that did not provide data.

Source: Calculated from the medication form, 2018 NPHDC, and prison population estimates provided by the ABS, 2018.

### 3.7 Prison entrants referred to mental health services

The initial health assessment people receive on entry to prison is similar to a screening assessment that might include history taking and/or a mental health screening tool (Dean et al. 2017; Martin et al. 2018). As a result, prison entrants might then be referred to various health professionals for further assessment, observation, or treatment.

After administering the prison entrants survey, clinic staff were asked whether the participant was considered at risk of self-harm and was referred to mental health services for observation and/or further assessment as a result.



Almost **1** in **5** (18%) prison entrants were referred to the prison mental health service after their reception assessment

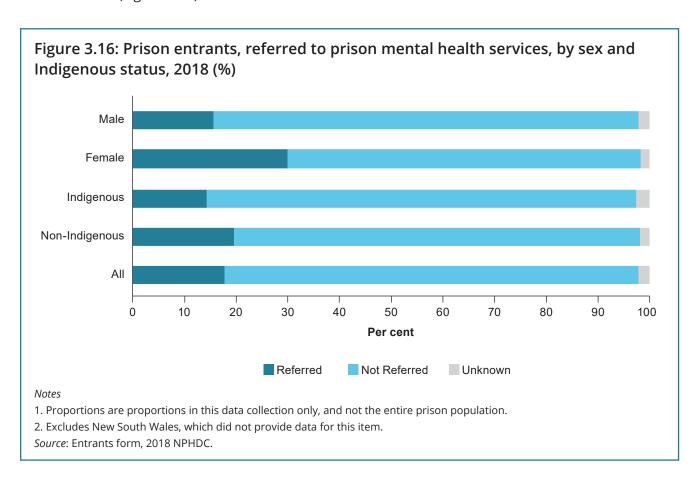


**Indicator 20:** Proportion of prison entrants who, at reception, were referred to mental health services for observation and/or further assessment—18%

Female prison entrants (30%) were twice as likely as male prison entrants (16%) to be referred to prison mental health services (Figure 3.16).

Non-Indigenous prison entrants (20%) were more likely to be referred than Indigenous prison entrants (14%).

These patterns were generally consistent with prison entrants reporting on their mental health status. That is, female entrants were more likely than male entrants, and non-Indigenous people were more likely than Indigenous people to rate their mental health as poor or fair, and to be referred to mental health services (Figure 3.16).



# 4 Self-harm

#### **Key findings**

- About 1 in 5 (21%) prison entrants reported a history of self-harm.
- Female prison entrants (31%) were 1.5 times as likely to report a history of self-harm as male prison entrants (20%).
- About 1 in 7 (14%) prison entrants reported recent thoughts of self-harm.
- About 1 in 20 (5%) prison dischargees reported self-harm during their current period in prison.

Self-harm is a broad term that refers to a person intentionally inflicting physical harm to their own body, an act that may or may not have been intended to cause death (Harrison & Henley 2014).

Rates of self-harm and suicide in Australia differ between men and women. Age-standardised suicide rates in Australia were more than 3 times as high for males (19 per 100,000) as females (6 per 100,000) in 2014–2015 (Henley & Harrison, 2018). But, between 1999–00 and 2011–12, rates of self-harm leading to hospitalisation were about 1.5 times higher for women than for men (Harrison & Henley 2014).

Suicide rates were higher for:

- · men than for women
- Indigenous people than for non-Indigenous people
- those who were more socioeconomically disadvantaged.

All of these groups were over-represented in the prison population (AIHW 2015; Henley & Harrison 2018).

A history of self-harm is particularly common in the prison population where risk factors for self-harm, such as a history of childhood abuse, mental health conditions, or alcohol and other drug use disorders, are also more prevalent than in the general population (Barton et al. 2014; Stewart et al. 2018).

A recent study of the health and well-being of people in an Australian prison showed that people in prison were 10 times as likely as the general Australian population to report a history of suicide attempts and thoughts of suicide within the previous 12 months (Butler et al. 2018).

## 4.1 Self-harm behaviours

#### **Entrants**

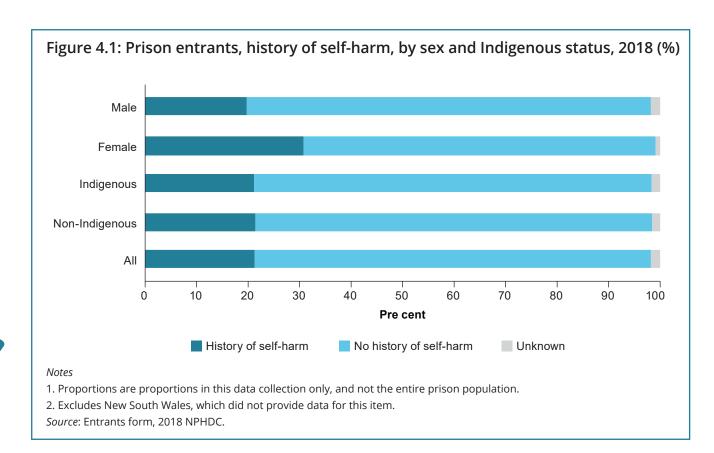
About 1 in 5 (21%) prison entrants reported a history of self-harm



**Indicator 21:** Proportion of prison entrants who reported a history of self-harm—21%

Female prison entrants (31%) were about 1.5 times as likely to report a history of self-harm as male prison entrants (20%) (Figure 4.1).

Indigenous and non-Indigenous prison entrants were equally as likely to report a history of self-harm (both 21%) (Figure 4.1). Prison entrants aged 18–24 (26%) were most likely to report a history of self-harm, and prison entrants aged 35–44 were least likely (19%).



Prison entrants were asked whether they had thoughts of self-harm in the previous 12 months, referred to in this section as recent thoughts of self-harm.

About 1 in 7 (14%) prison entrants reported having thoughts of self-harm in the previous 12 months



**Indicator 22:** Proportion of prison entrants who reported having thoughts of harming themselves in the previous 12 months—14%

Female prison entrants (16%) were slightly more likely to report recent thoughts of self-harm than male entrants (14%).

Non-Indigenous prison entrants (16%) were more likely to report recent self-harm thoughts than Indigenous prison entrants (12%).

Reports of recent thoughts of self-harm decreased with age—from almost one-quarter (24%) of those aged 18–24 to about 1 in 10 (10%) aged 45 and over (Figure 4.2).

Figure 4.2: Prison entrants, thoughts of self-harm in the previous 12 months, by age, 2018 (%) 18 - 24Age group (years) 25 - 3435 - 4445+ 0 10 20 30 40 50 60 70 80 90 100 Per cent Recent thoughts of self-harm No recent thoughts of self-harm Unknown Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.

### **Dischargees**

Prison dischargees were asked whether they had ever intentionally harmed themselves and whether they had intentionally harmed themselves during their current period in prison.

Almost 1 in 5 (18%) prison dischargees reported a history of self-harm



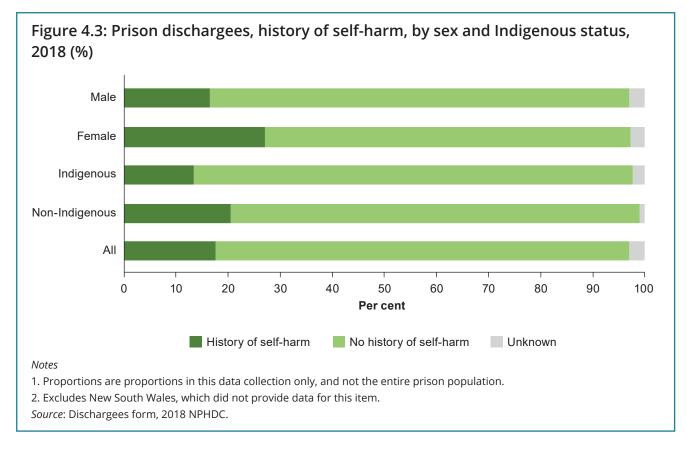
About **1 in 20** (5%) prison dischargees reported **having harmed themselves during their current period in prison** 



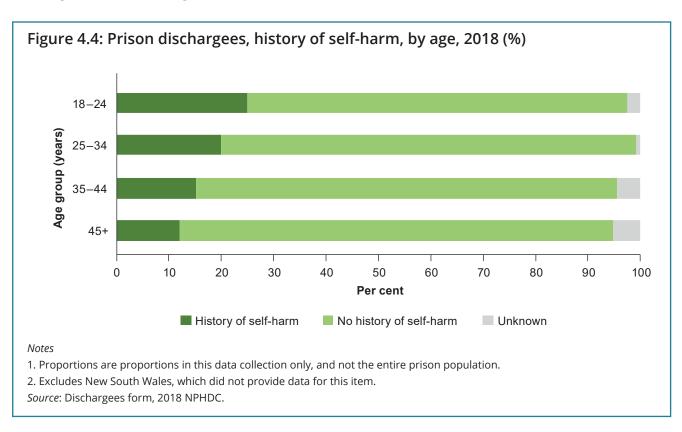
**Indicator 23:** Proportion of prison dischargees who reported having intentionally harmed themselves in prison—5%

While almost 1 in 5 (18%) prison dischargees reported a history of self-harm, only 1 in 20 (5%) reported doing so during their current period of incarceration.

As with prison entrants, female prison dischargees (27%) were more likely than male dischargees (16%) to report a history of self-harm, and non-Indigenous prison dischargees (21%) were more likely to report a history of self-harm than Indigenous dischargees (13%) (Figure 4.3).



History of self-harm decreased with age—from 1 in 4 (25%) prison dischargees aged 18–24 to 1 in 8 (12%) aged 45 and over (Figure 4.4).



Trends were the same for prison dischargees reporting intentionally harming themselves in prison, though the proportions were lower than those reporting having self-harmed at some stage in their lives.

Female dischargees were more likely to report intentional self-harm during their current period in prison (8%) than male dischargees (5%), and non-Indigenous dischargees (6%), were more likely than Indigenous dischargees (4%).

The likelihood of self-harm during prison decreased with age—from 1 in 13 (8%) prison dischargees aged 18–24 to fewer than 1 in 50 (2%) aged 45 and over.

## 4.2 Identification of self-harm or suicide risk

At the end of the prison entrants' survey, staff administering the survey were asked whether the participant was identified as currently at risk of self-harm or suicide.

Almost **1 in 20** (5%) prison entrants were identified by staff as **being at risk of self-harm or suicide** 

**Indicator 24:** Proportion of prison entrants identified by clinic staff as being currently at risk of self-harm or suicide—5%

Male entrants (5%) were slightly more likely than female entrants (3%) to be identified as being at risk of self-harm.

No clear pattern emerged as to the likelihood of prison entrants being identified as at risk of self-harm when compared by age. But, this might have been due to the small numbers of participants identified as being at risk.



Physical health

#### Communicable diseases 5

#### **Key Findings**

- There is a close relationship between imprisonment, illicit and injecting drug use, and bloodborne virus infections, such as hepatitis B and C.
- Of the prison entrants tested for sexually transmissible infections (STIs), 4% were positive for chlamydia, 1.5% were positive for gonorrhoea and 6% were identified with the syphilis marker.
- Of the prison entrants tested for blood-borne viruses, 22% tested positive for hepatitis C, and 16% for hepatitis B. No one tested positive for human immunodeficiency virus (HIV).
- About 3 in 5 prison dischargees reported that they had been tested for hepatitis C while in prison.

Communicable diseases, or infectious diseases, are spread from a person to another, or from an animal to a person, through viruses or bacteria in the air, food, blood or other bodily fluids. The Australian Government monitors communicable diseases through the National Notifiable Diseases Surveillance System, which coordinates the surveillance of more than 50 communicable diseases (DoH 2016).

Due to good sanitation practices, and the use of antibiotics and immunisation programs, communicable diseases are not generally a major issue in Australia (AIHW 2016). But, some communicable diseases, particularly blood-borne viruses and sexually transmissible infections (STIs), are more prevalent in the prison population than in the wider Australian community (AIHW 2015; Butler & Simpson 2017).

This is due, in part, to the higher level of at-risk behaviours that people engage in before and during incarceration, compared with the general population. These include injecting drug use (IDU), needlesharing, unsafe sexual practices, amateur tattooing, and physical violence (Butler & Simpson 2017).

Data for this section were obtained from the National Prison Entrants' Bloodborne Virus and Risk Behaviours Survey Report (NPEBBV&RBS) 2016 (Butler & Simpson 2017). Information is presented by sex, Indigenous status, and age group, where possible.

# Sexually transmissible infections

STIs are a continuing public health concern in Australia (DoH 2018a)—particularly for some groups of people, including people in prison.

The incidence of some STIs, such as human papillomavirus, has declined drastically in recent years, mostly due to the introduction of a human papillomavirus vaccine. But, the incidence of other STIs such as chlamydia, gonorrhoea, and syphilis—have increased (DoH 2019).

The Australian Government monitors the incidence and prevalence of certain STIs through the National Notifiable Diseases Surveillance System. Notifiable STIs include chlamydial infection, donovanosis, gonococcal infection, and syphilis (DoH 2018a).

In the past, the NPHDC has reported on the rate of notifiable STIs in people received into prisons in the previous calendar year. But, data were not available from the majority of the jurisdictions for the 2017 calendar year. As a result, this section reports the rates of the notifiable STIs, apart from donovanosis, based on data from the NPEBBV&RBS (Butler & Simpson 2017).

The numbers of prison entrants testing positive for STIs were small, and in some cases, methods for determining a positive diagnosis were different for prison entrants than those used for the general population. So, results and comparisons to the general population should be made with caution.

### Chlamydia

Chlamydia is the most prevalent notifiable STI in Australia, and rates have increased over the past 2 decades. (DoH 2019). Rates of chlamydia were substantially higher among prison entrants than the general population—particularly for women. While the prevalence of chlamydia in male prison entrants appears to have fallen between 2010 and 2016, it rose for females (Figure 5.1).

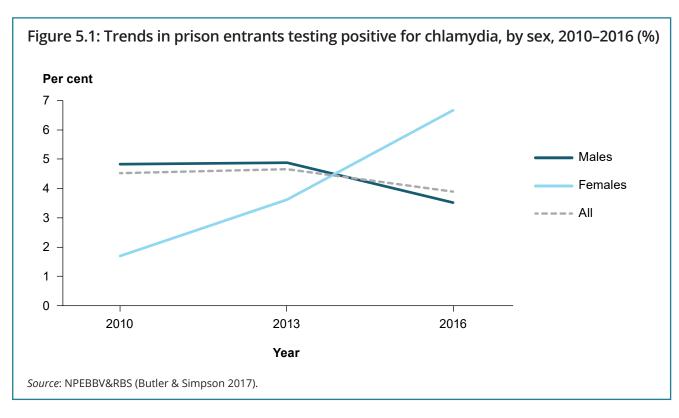
In 2016:

- 1 in 25 (3.9%) prison entrants tested positive for chlamydia (Butler & Simpson 2017)
- There was 1 notification of chlamydia per 255 people in Australia (DoH 2019).

In the general population in 2016, there was 1 notification of chlamydia recorded per 255 people (or 0.4%), with a greater proportion of women affected. This was much higher among prison entrants, with 1 in 25 (or about 4%) prison entrants testing positive.

In 2016, rates of chlamydia were higher among female prison entrants (6.7%) than male prison entrants (3.5%). This trend was reversed in the 2010 and 2013 years of the NPEBBV&RBS (Figure 5.1).

This means that prison entrants were about 10 times as likely to test positive for chlamydia as people in the general population—and this was even higher for female prison entrants, at 16 times as likely (Figure 5.1).



There might be several reasons behind the higher rates of chlamydia in people in prison. In the general community, some groups are over-represented in notifications of chlamydia. This includes Indigenous people—in 2016, 1 in 10 (9.7%) notifications for chlamydia were for Indigenous people, despite Indigenous people making up about 3.0% of the total Australian population. (ABS 2018c; The Kirby Institute 2017).

#### Gonorrhoea

Prison entrants were 15 times as likely to test positive for gonorrhoea as people in the general population. In 2016, 1 in 67 (1.5%) prison entrants tested positive for gonorrhoea in the NPEBBV&RBS, all of whom were men. This equated to 1 in 59 (1.7%) male prison entrants.

In 2016:

- 1 in 67 (1.5%) prison entrants tested positive for gonorrhoea (Butler & Simpson 2017)
- there was 1 notification of gonorrhoea per 1,000 people in Australia (DoH 2019).

Over time, the prevalence of gonorrhoea in male prison entrants fluctuated, with an overall rise—from 0.9% in 2010 to 1.7% in 2016. No female entrants tested positive for gonorrhoea in that period.

### **Syphilis**

Syphilis can be detected as antibodies in the blood, indicating a previous or current infection, or as infectious or recent syphilis in cases where the blood test is rapid plasma reagin positive (CDNA 2018). In 2016, 1 in 17 (6.0%) prison entrants recorded blood test results suggesting a current or past syphilis infection—a rate 270 times as high as notifications in the general population.

In 2016:

- 1 in 17 (6.0%) prison entrants tested positive for syphilis markers (Butler & Simpson 2017)
- there was 1 notification of syphilis (previous or current) per 4,500 people in Australia (DoH 2019).

Male prison entrants were more than 110 times as likely as men in the community to test positive for having a previous or current syphilis infection. Female prison entrants were more than 2,000 times as likely as women in the community to test positive for syphilis antibodies (Butler & Simpson 2017, DoH 2019). In 2016:

- about 1 in 23 (4.3%) male prison entrants tested positive for syphilis antibodies
- about 1 in 60 (1.7%) male prison entrants tested positive for syphilis antibodies and infectious syphilis
- almost 1 in 5 (18%) female prison entrants tested positive for syphilis antibodies
- almost 1 in 18 (5.9%) female prison entrants tested positive for syphilis antibodies and infectious syphilis (Butler & Simpson 2017).

## 5.2 Blood-borne viruses

## **Hepatitis C**

The hepatitis C virus is an infection that causes liver inflammation and, if left untreated, can lead to complications such as cirrhosis, a chronic liver disease, and cancer (Wallace et al. 2018).

It is the most commonly reported notifiable blood-borne disease in Australia (DoH 2019). In 2018, there were 10,913 notifications of hepatitis C, a rate of 44 notifications per 100,000 people (or 1 notification per 2,250 people) in Australia.

The prison population is especially at risk of hepatitis C infection, due to the high proportion of people in custody with a history of injecting drug use (IDU), the at-risk behaviours associated with illicit and injecting drug use, including needle-sharing, and other at-risk behaviours, such as amateur tattooing and violence that can lead to blood-to-blood contact (DoH 2018b).

People in prison often come from marginalised groups, where medical care in the community is unavailable or not accessed, so are at risk of having undiagnosed hepatitis C before prison (DoH 2018b; Wallace et al. 2018).



Prison clinics are an ideal place to detect and treat people with undiagnosed hepatitis C. In recent years, new medications for hepatitis C have led to an enormous increase in the treatment rate of people in prison with hepatitis C (DoH 2018b).

As part of the 2016 NPEBBV&RBS, 288 prison entrants (252 men and 36 women) were screened for hepatitis C with a voluntary blood test (Butler & Simpson 2017).

In 2016, more than **1** in **5** (22%) prison entrants **tested positive for hepatitis C** 



### **Indicator 26:** Proportion of prison entrants testing positive for hepatitis C—22%

More than 1 in 5 (22%) prison entrants tested positive for hepatitis C antibodies—1 in 5 (21%) males and more than 1 in 4 (28%) females (Butler & Simpson 2017).

Indigenous prison entrants (21%) and non-Indigenous prison entrants (23%) were almost equally likely to test positive for Hepatitis C antibodies.

The proportion of prison entrants with positive hepatitis C antibody results was lower in 2016 than in previous years, declining by about one-third between 2013 and 2016 (Figure 5.2). The longer-term trend also showed an overall decline since 2004, despite some fluctuation. A similar pattern was seen among the general population (DoH 2019).

While female prison entrants were consistently more likely than male prison entrants to test positive for hepatitis C over time, the reverse was seen in the general population (DoH 2019).

About half of the prison entrants who had previously injected drugs had positive hepatitis C antibody tests (52% of males and 45% of females). Between the 2004 and 2016 NPEBBV&RBS, prison entrants with a recent history of IDU were 13–67 times as likely as prison entrants without a recent history of IDU to test positive for hepatitis C antibodies (Figure 5.3).

Due to the small sample size in the NPEBBV&RBS and the small number of female prison entrants in particular, these results should be interpreted with caution.

Figure 5.2: Trends in prison entrants testing positive for hepatitis C antibodies, by sex, 2004-2016 (%) Per cent 70 60 Males 50 **Females** 40 --- All 30 20 10 0 2004 2007 2010 2013 2016 Year Note: Proportions are proportions in the NPEBBV&RBS data collection only, and not the entire prison population. Source: Butler & Simpson 2017.

#### Notes

- 1. Proportions are proportions in the NPEBBV&RBS data collection only, and not the entire prison population.
- 2. IDU refers to prison entrants who reported recent injecting drug use *Source*: Butler & Simpson 2017.

### Hepatitis C surveillance

### **Dischargees**

In 2018, prison dischargees were asked whether they had received a test for hepatitis C in prison.

About **3 in 5** (59%) prison dischargees reported they **had been tested for hepatitis C in prison** 



**Indicator 27:** Proportion of prison dischargees who reported they were tested for hepatitis C in prison—59%

Male (58%) and female (59%) dischargees, and Indigenous (61%) and non-Indigenous (59%) dischargees were similarly likely to report they had received a test for hepatitis C in prison.

Due to the nature of self-reported data, these proportions were likely to be an under-estimate.

### **Medication for hepatitis C**

The Australian Government Department of Health has outlined strategies to eliminate hepatitis C as a public health threat by 2030 (DoH 2018b).

From March 2016—that is, since the last NPHDC in 2015—direct-acting antivirals became subsidised by the Australian Government, which has led to a much higher uptake of hepatitis C treatment in Australia, and in priority groups such as the prison population (DoH 2018b).

Direct-acting antivirals replaced the interferon-based treatments for hepatitis C infection, and are shorter in course duration, more effective, and have fewer side-effects for patients (Lafferty et al. 2018).

Under the Australian Government Department of Health's 4th National Hepatitis C Strategy 2014–2017, 1 prison in Queensland and 1 prison in the ACT achieved 80%–90% treatment uptake among people in prison with hepatitis C, and 3 prisons in New South Wales reported eliminating hepatitis C (DoH 2018b).

But, people in prison remain a priority group for testing and treating hepatitis C, and diagnoses and treatments need to be accompanied by education and support.

### **Indicator 28:** Rate of courses of treatment for hepatitis C started during 2017—50 per 1,000 people received into custody

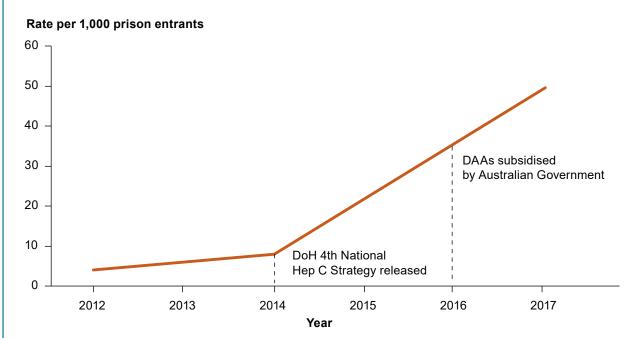
The introduction of direct-acting antivirals for the treatment of hepatitis C has been revolutionary in the prison population.

Before direct-acting antivirals were available, the rate of uptake of hepatitis C treatment was 4 courses of treatment per 1,000 people received into custody in 2012, and 8 courses of treatment per 1,000 in 2014.

The rate then rose by 620% to 50 courses of treatment per 1,000 people received into custody in 2017 (Figure 5.4).



Figure 5.4: Trends in hepatitis C treatment courses per 1,000 people received into prison custody, by year, 2012–2017 (rate)



#### Notes

- 1. Rates of hepatitis C treatment courses are rates in this data collection only, and not the entire prison population.
- 2. The Australian Government Department of Health 4th National Hepatitis C Strategy 2014–2017 identifies the prison population as a priority group (DoH 2014).
- 3. Direct-acting antiviral medications (DAAs) were subsidised by the Australian Government from 2016. Source: Establishment forms, NPHDC 2012, 2015, 2018.

### **Hepatitis B**

Hepatitis B is a common blood-borne virus that causes inflammation of the liver, and can lead to cirrhosis and cancer, conditions that can be fatal (DoH 2018c).

In 2016, almost 240,000 people in Australia were living with a chronic hepatitis B infection. A vaccination for hepatitis B has been available since the 1980s, but, the virus still disproportionately affects many disadvantaged populations, including people born overseas, Indigenous people, and people in custody (DoH 2018c).

The Australian Government has made a substantial effort to target vulnerable groups with vaccinations and treatment for hepatitis B, and hepatitis B infection rates have fallen in recent years (DoH 2018c, 2019).

In the 2016 NPEBBV&RBS, 269 prison entrants (233 men, and 36 women) were tested for hepatitis B through a voluntary blood test (Butler & Simpson 2017).

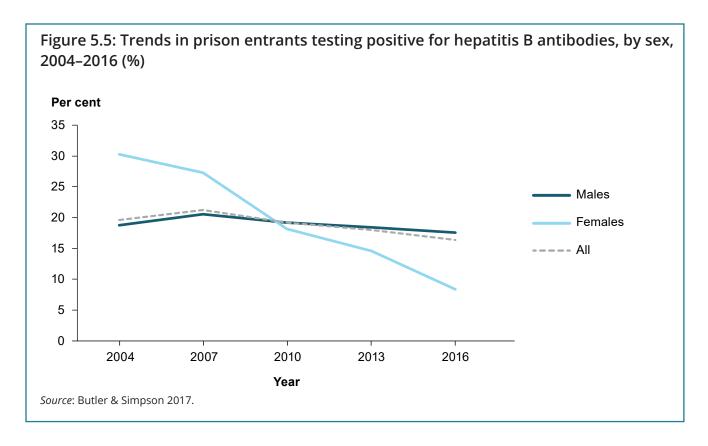
In 2016, about **1 in 6** (16%) prison entrants **tested positive for Hepatitis B**.



#### **Indicator 29:** Proportion of prison entrants testing positive for hepatitis B—16%

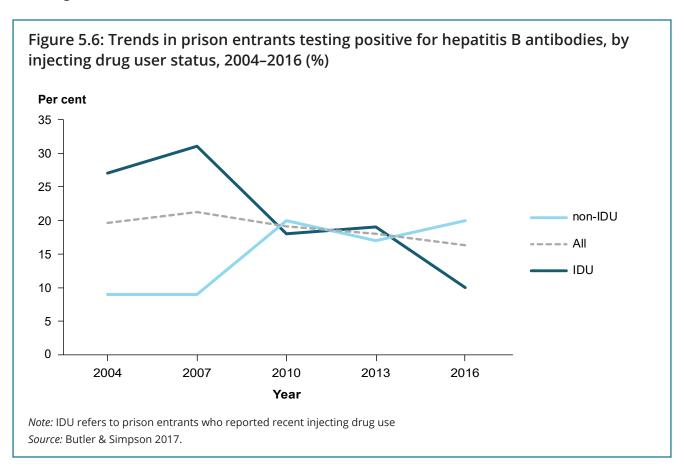
In 2016, male prison entrants (18%) were more than twice as likely as female prison entrants (8%) to test positive for hepatitis B. This trend had reversed from 2004, when female prison entrants (30%) were more than 1.5 times as likely as male prison entrants (19%) to test positive for hepatitis B (Figure 5.5).

One-third (32%) of Indigenous prison entrants tested positive for hepatitis B antibodies, 4 times the proportion of non-Indigenous prison entrants (8%).



In 2016, prison entrants who were recent IDU were half as likely as those who were not recent IDU to test positive for hepatitis B antibodies (Figure 5.6).

This trend changed dramatically over time, with prison entrants who were recent IDU being around 3 times as likely as those who were not recent IDU to test positive for hepatitis B antibodies in 2004 and 2007 (Figure 5.6).



### Human immunodeficiency virus

HIV is a blood-borne virus that weakens the immune system, and, if left untreated, can eventually lead to acquired immunodeficiency syndrome (AIDS) (UNAIDS 2018). There is currently no known safe cure for HIV.

Rates of HIV have been relatively stable in Australia over the past decade (The Kirby Institute 2017). No cases of HIV have been detected in prison entrants in the NPEBBV&RBS since 2007 (Butler & Simpson 2017).

In 2004 and 2007, 0.7% of prison entrants (0.8% of males and 0.5% of females in 2004, and 0.9% of males and 0.4% of females in 2007) tested positive for HIV. No prison entrants tested positive for HIV in the 2010, 2013, nor 2016 NPEBBV&RBS (Butler & Simpson 2017).

**Indicator 30:** Proportion of prison entrants testing positive for HIV—0%

# 6 Chronic conditions

#### **Key findings**

- Almost 1 in 3 prison entrants reported a history of 1 or more selected chronic condition/s (asthma, arthritis, cardiovascular disease, diabetes and/or cancer).
- More than 1 in 5 prison entrants reported a history of asthma, and about 7 in 10 of those reported their asthma was current.
- About 1 in 14 prison entrants reported a history of arthritis, and more than 9 in 10 of those reported their arthritis was current.
- About 1 in 14 prison entrants reported a history of cardiovascular disease.
- About 1 in 5 prison entrants aged 45 and over reported a history of cardiovascular disease, and 1 in 7 reported a current diagnosis.
- About 1 in 15 prison entrants reported a prior diagnosis of diabetes, and 1 in 17 reported a current diagnosis.
- About 1 in 9 Indigenous prison entrants reported a history of diabetes, compared with 1 in 29 non-Indigenous prison entrants.
- About 1 in 50 prison entrants reported a history of cancer.

Chronic conditions are complex, long lasting, and are a leading cause of illness, disability, and death in Australia (AIHW 2018a).

Various factors can influence a person's likelihood of developing a chronic physical condition, including where they live, the socioeconomic areas in which they live, and access to medical care (AIHW 2016a).

Some risk factors associated with chronic conditions are considered preventable, including poor diet, physical inactivity, obesity, tobacco smoking, at-risk alcohol consumption, illicit drug use, and unsafe sexual practices (AIHW 2016b).

People in the prison system are some of the most vulnerable in our society, and often experience these risk factors to a higher degree than people in the general population. (AIHW 2015).

The major chronic physical disease groups investigated as part of the NPHDC were asthma, arthritis, cardiovascular disease, diabetes, and cancer. Mental health conditions, also a group of chronic conditions, are reported in Chapter 3.

This chapter includes self-reported findings from prison entrants about chronic physical conditions. Information about people in prison dispensed prescription medication for chronic conditions can be found in Chapter 17.

# 6.1 Entrants with a chronic physical condition

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 physical health conditions: arthritis, asthma, cancer, cardiovascular disease, or diabetes.

Self-reported data rely on the respondents' accurate recall and are likely to be an underestimate of the true prevalence. Further, some prison entrants might have existing health conditions that have

yet to be diagnosed. This might be especially true for Indigenous entrants, and those living in remote areas, where access to health services can be limited.

Almost 1 in 3 (30%) prison entrants reported being told they had at least 1 of 5<sup>(a)</sup> selected chronic conditions at some stage in their lives.



(a) Asthma, arthritis, cardiovascular disease, diabetes, and cancer.

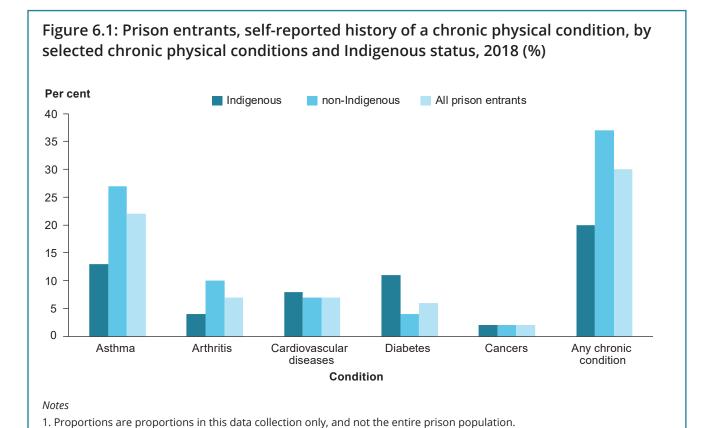
**Indicator 31:** Proportion of prison entrants who reported being told by a doctor or nurse that they had a chronic condition—30%

Almost one-third (30%) of prison entrants reported they had ever been told they had a chronic physical condition, the most common being asthma (22%) (Figure 6.1). One-quarter (26%) of prison entrants, or 86% of those ever told they had a chronic condition, reported their chronic physical condition was current.

Almost half (45%) of female prison entrants reported a history of a chronic physical condition, compared with over one-quarter (28%) of male prison entrants. More than 1 in 3 (36%) female entrants, and 1 in 4 (25%) male entrants, reported a chronic physical condition that was current.

Non-Indigenous entrants (37%) were almost twice as likely as Indigenous entrants (20%) to report a past diagnosis of a chronic physical condition. But, the difference was smaller for those reporting a current chronic physical condition—just over one-quarter (28%) of non-Indigenous prison entrants, and just under one-quarter (23%) of Indigenous entrants.





3. 'Any chronic condition' does not represent a sum of the conditions, as 1 prison entrant might have multiple conditions.

Source: Entrants form, 2018 NPHDC.

2. Excludes New South Wales, which did not provide data for this item.

### 6.2 Asthma

Asthma is a common chronic inflammatory condition of the airways that can be controlled, but not cured.

In 2017–18, 1 in 9 (11%) Australians had asthma, a rise of 1.3% since 2007–08 (ABS 2018e). Females (12%) in Australia had a higher rate than males (10%).

#### **Entrants**

About 1 in 5 (22%) prison entrants reported being told they had asthma at some stage in their lives



More than 1 in 5 (22%) prison entrants reported having been diagnosed with asthma in the past. Women (33%) were more likely to report a prior diagnosis of asthma than men (20%).

Non-Indigenous entrants (27%) were twice as likely to report being told they had asthma as Indigenous entrants (13%). The difference was smaller when entrants were asked to report a current asthma diagnosis—19% of non-Indigenous entrants reported they currently had asthma, compared with 11% of Indigenous entrants.

For the majority of those who had reported ever been diagnosed with asthma (70%, or 15% of all prison entrants), the condition was current when they entered prison.

### 6.3 Arthritis

Arthritis, a group of musculoskeletal diseases involving joint inflammation, affects many people in Australia, and can be debilitating.

In 2017–18, 1 in 7 (15%) Australians suffered from arthritis, with more females (18%) diagnosed with arthritis than males (12%) (ABS 2018e).

Arthritis becomes more prevalent with age, particularly for women. In 2017–18, 2.7% of women and 2.3% of men aged under 45 had arthritis, rising to 57% of women and 40% of men aged 65 and over.

#### **Entrants**

About 1 in 14 (7%) prison entrants reported a history of arthritis



In 2018, 1 in 14 prison entrants (7%) reported a history of arthritis. Female prison entrants (9%) had slightly higher rates than male prison entrants (7%).

Non-Indigenous prison entrants (10%), who were almost 4 years older on average than Indigenous entrants, were 2.5 times as likely to report a previous diagnosis of arthritis as Indigenous prison entrants (4%).

The vast majority (92%) of prison entrants ever diagnosed with the condition said their condition was current.

## 6.4 Cardiovascular disease

Cardiovascular disease is the leading cause of death in Australia and worldwide, and is second only to cancer in its contribution to the burden of disease in Australia (ABS 2018e; AIHW 2016a). Risk factors include obesity, tobacco smoking, high blood pressure, high blood cholesterol, physical inactivity, poor diet, and diabetes (ABS 2018e, AIHW 2016b).

Indigenous adults (27%) suffer higher rates of cardiovascular disease than non-Indigenous adults (21%), when adjusted for the difference in age structure (AIHW 2018b).

#### **Entrants**

About **1 in 5** (19%) prison entrants **aged 45 and over** reported being told they had **cardiovascular disease at some stage in their lives** 



In 2018, 1 in 14 (7%) prison entrants reported a prior diagnosis of cardiovascular disease, and 1 in 24 (4%) reported a current diagnosis. Female entrants (9%) were more likely to report a history of cardiovascular disease than male entrants (7%).

The rate of previous and current self-reported cardiovascular disease increased with age, as did rates in the general population (ABS 2018e).



The rate of self-reported cardiovascular disease in Indigenous prison entrants (8%) was slightly greater than in non-Indigenous prison entrants (7%), despite the difference in age structure. The difference was greater in those reporting a current diagnosis—1 in 20 (5%) Indigenous entrants reported a current cardiovascular disease diagnosis compared with 1 in 30 (3%) non-Indigenous entrants.

## 6.5 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.

There are 3 main types of diabetes:

- Type 1 diabetes is an autoimmune disease with usual onset in childhood or early adulthood
- Type 2 diabetes, the most prevalent form of diabetes, generally has a later onset than Type 1, and is considered to be largely preventable
- Gestational diabetes involves higher-than-normal blood glucose levels during pregnancy.

In 2017–18, 1 in 20 (5%) Australians had diabetes (ABS 2018e). The rate of diabetes increased with age, and almost 1 in 5 (19%) Australians aged 75 and over had diabetes (ABS 2018e). When adjusted for the difference in age structure, diabetes was almost 4 times as prevalent in Indigenous people as in non-Indigenous people. The death rate for Indigenous people with diabetes was more than 4 times that of non-Indigenous people (AIHW 2018b).

#### **Entrants**

In 2018, 1 in 15 (6%) prison entrants reported a previous diagnosis of diabetes and 1 in 17 (less than 6%) reported a current diagnosis.

About **1 in 7** (15%) Indigenous prison entrants **aged 35–44** reported a **current diagnosis of diabetes**, compared with **1 in 25** (4%) non-Indigenous prison entrants of the same age



In 2018, 1 in 15 (6%) prison entrants reported a previous diagnosis of diabetes, and almost as many (1 in 17) reported a current diagnosis.

Indigenous entrants (11%) were 3 times as likely as non-Indigenous entrants (4%) to report a history of diabetes.

The self-reported prevalence of a prior diabetes diagnosis increased with age, from less than 1% of prison entrants aged 18–24, to 1 in 6 (16%) prison entrants aged 45 and over.

For current diabetes, the reported prevalence rose from less than 1% of prison entrants aged 18–24 to 1 in 6 (14%) prison entrants aged 45 and over.

### 6.6 Cancer

Cancer encompasses a group of diseases where cells in the body grow and spread uncontrolled. Cancer is a leading cause of death and burden of disease in Australia, and the prevalence of many cancers increases with age (AIHW 2016a).

In 2017–18, almost 1 in 50 (less than 2%) people in Australia had cancer. Almost one-third (28%) of all deaths in Australia in 2017 were attributable to cancers, with cancers of the lung being the most common site causing death (ABS 2018e).

#### **Entrants**

In 2018, 1 in 50 (2%) prison entrants reported a history of cancer, with less than 1% of entrants reporting a current cancer diagnosis.

Older prison entrants were more likely to report a current or previous cancer diagnosis than younger prison entrants although the prevalences were still very low. About 1 in 16 (7%) prison entrants aged 45 and over reported a previous cancer diagnosis, and 1 in 40 (2%) reported a current diagnosis of cancer. This compared with about 1 in 80 (1%) prison entrants aged 18–44 reporting a history of cancer, and 1 in 170 (less than 1%) in that age group reporting a current cancer diagnosis.



# 7 Activity and health changes

#### **Key Findings**

- Almost 3 in 4 (73%) prison entrants, and 4 in 5 (78%) prison dischargees rated their physical health as good, very good, or excellent.
- Almost 9 in 10 prison dischargees reported that their physical health improved or stayed the same while in prison.
- When compared with the general community, prison entrants and dischargees were about twice as likely to rate their physical health as fair or poor.
- More than 3 in 4 (77%) prison dischargees reported that their activity levels increased (40%) or stayed the same (37%) while in prison, when compared with their time in the community before incarceration.
- More than one-quarter (26%) of male dischargees reported wanting to gain weight during their time in prison, while no female dischargees reported this.

# 7.1 Self-assessed physical health

Prison entrants and prison dischargees were asked to rate their current physical health, and prison dischargees were additionally asked how their physical health had changed during their time in prison.

#### **Entrants**

Almost **3** in **4** (73%) prison entrants **rated their physical health as good, very good, or excellent** 



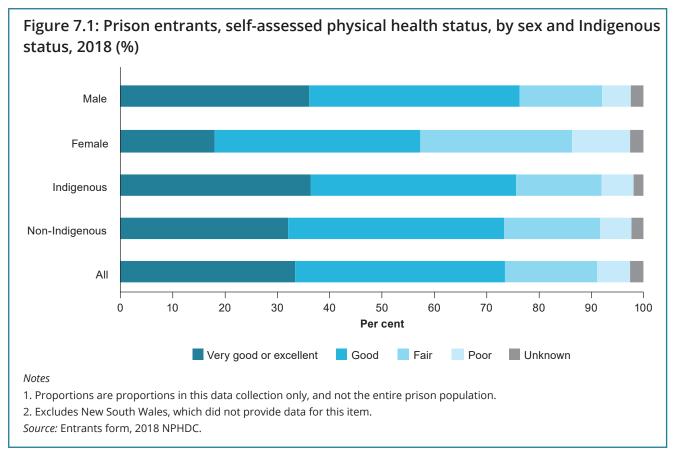
**Indicator 32:** Proportion of prison entrants who rated their physical health as good, very good, or excellent—73%

Almost three-quarters (73%) of prison entrants rated their physical health as good, very good, or excellent, while almost one-quarter (24%) rated their physical health as fair or poor (Figure 7.1).

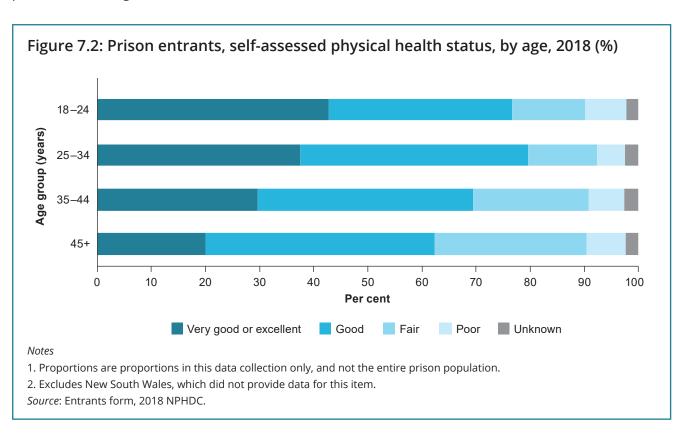
Female entrants (40%) were almost twice as likely as male entrants (22%) to rate their physical health as fair or poor.

Indigenous entrants (36%) were more likely than non-Indigenous entrants (32%) to rate their health as very good or excellent.





Self-assessed physical health rates differed by age (Figure 7.2). More than one-third (35%) of prison entrants aged 45 and over rated their physical health as fair or poor, compared with 1 in 5 (22%) prison entrants aged under 45.



### **Dischargees**

Almost **4 in 5** (78%) prison dischargees **rated their physical health as good, very good, or excellent** 

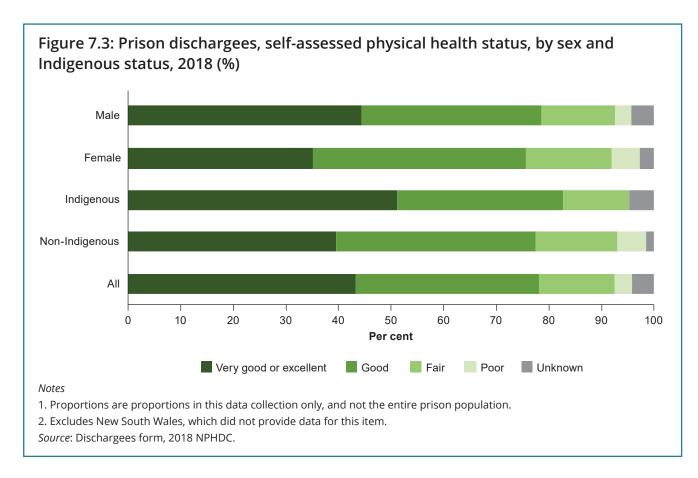


**Indicator 33:** Proportion of prison dischargees who rated their physical health as good, very good or excellent—78%

Prison dischargees (78%) were more likely than prison entrants (73%) to rate their physical health as good, very good, or excellent, and less likely to rate their physical health as fair or poor (18% compared with 24%).

Female dischargees (22%) were more likely than male dischargees (17%) to rate their physical health as fair or poor. The difference was smaller than for entrants (40% for female entrants and 22% for male entrants rated their physical health as fair or poor (figures 7.1 and 7.3).

Indigenous dischargees were more likely to rate their physical health as very good or excellent (51%) than non-Indigenous dischargees (40%), and no Indigenous dischargees rated their physical health as poor (Figure 7.3).

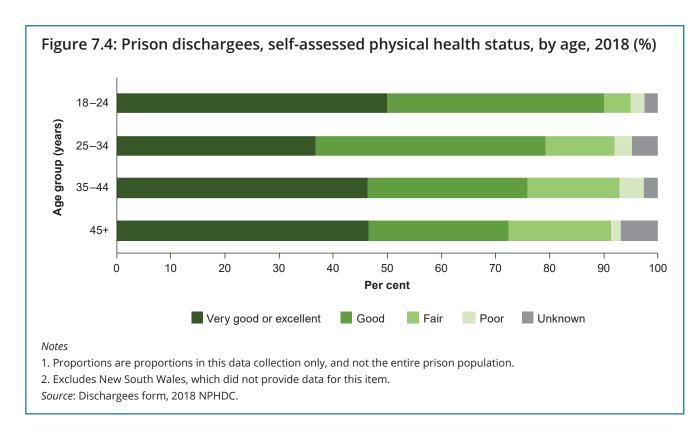


Self-assessed physical health ratings also differed by age. In every age group except those aged 25–34, prison dischargees were more likely than prison entrants to rate their health as good, very good or excellent (figures 7.2 and 7.4).

Prison entrants and prison dischargees aged 25–34 rated their physical health in similar proportions. Prison dischargees aged 45 and over were almost equally as likely to report their physical health as very good or excellent (47%) as those aged 18–24 (50%) and 35–44 (46%) (Figure 7.4).







# 7.2 Health changes

In addition to rating their current physical health, prison dischargees were asked whether their physical health had changed since entering prison.

## **Dischargees**

Almost **9 in 10** (86%) prison dischargees reported that their **physical health improved or stayed the same while in prison** 

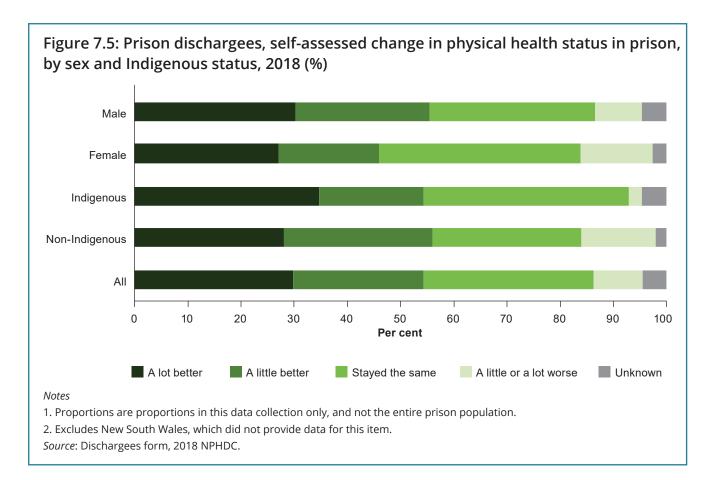


**Indicator 34:** Proportion of prison dischargees who reported that their physical health improved or stayed the same while in prison—86%

More than half (54%) of prison dischargees reported that their physical health had improved, either a little (24%) or a lot (30%), and almost one-third (32%) reported that their physical health had stayed the same in prison. Fewer than 1 in 10 (9%) reported that their health had worsened during incarceration (Figure 7.5).

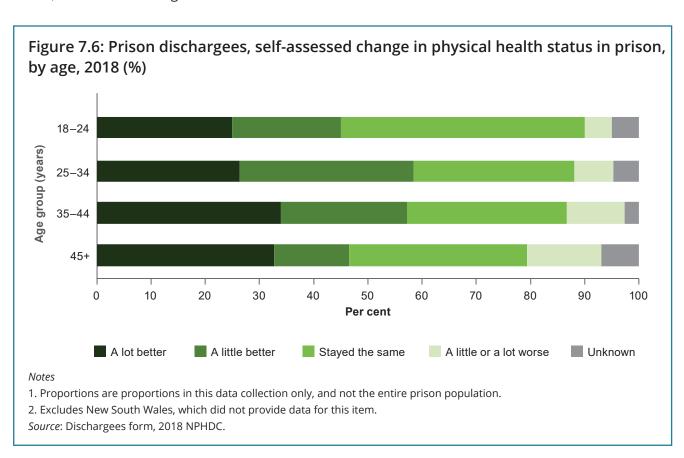
Women (46%) were less likely than men (55%) to report improved health, and were more likely than men to report their health worsened during their time in prison—14% of female prison dischargees and 9% of male prison dischargees said their health worsened.

Indigenous dischargees (35%) were more likely than non-Indigenous dischargees (28%) to report that their health had improved a lot. Indigenous dischargees (2%) were also less likely to report their health had worsened during incarceration than non-Indigenous dischargees (14%).





About one-third of prison dischargees aged 35–44 (34%) and 45 and above (33%), reported their health improved a lot during incarceration (Figure 7.6). But, the proportions of those reporting that their health worsened during prison, either a little or a lot, increased with age, from 5% of those aged 18–24, to 14% of those aged 45 and over.



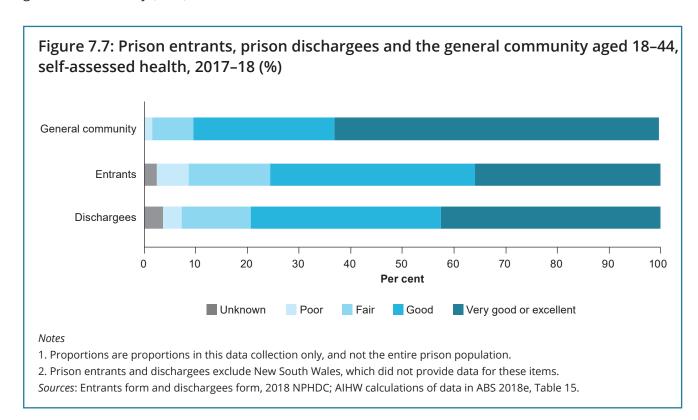
## Comparisons with the general community

The ABS National Health Survey collected self-reported data from the general Australian community in 2017-18 (ABS 2018e).

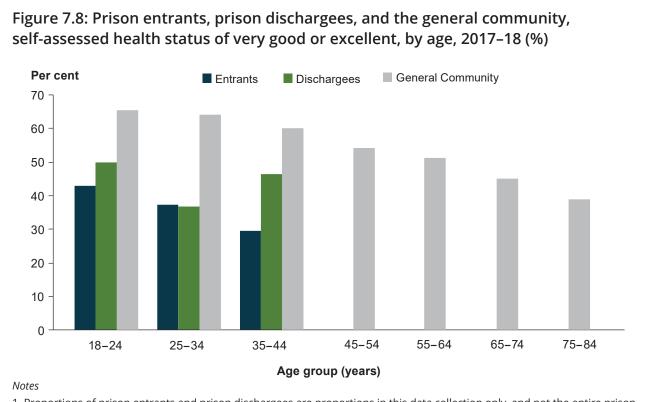
In the NPHDC surveys, participants were asked to rate their physical and mental health separately, so, any comparisons must be done so with caution. Additionally, the general Australian community has an older age structure than the prison population, making overall comparisons difficult.

Due to the small number of people aged 45 and over who completed the prison entrant or prison dischargee surveys, self-assessed health status is reported in this section only for those aged 18-24, 25-34, 35-44, and 18-44.

Adults aged 18-44 in the general community (63%) were almost twice as likely as prison entrants of the same age (36%) to rate their health as very good or excellent, and 1.5 times as likely as prison dischargees (43%) (Figure 7.7). Prison entrants (22%), and prison dischargees (17%) aged 18-44, were about twice as likely to rate their physical health as fair or poor as those of the same age in the general community (10%).



In both the general community and the prison population, the proportion of people who rated their health as very good or excellent declined with age. But, prison entrants and prison dischargees started to rate their health less positively at younger ages than those in the general community (Figure 7.8). This 'accelerated ageing' meant that prisoners' self-reported health was equivalent to someone in the general population up to 40 years older. This pattern was particularly notable among people entering prison (Figure 7.8).



- 1. Proportions of prison entrants and prison dischargees are proportions in this data collection only, and not the entire prison population.
- 2. Prison entrants and dischargees exclude New South Wales, which did not provide data for these items. *Sources*: Entrants form and dischargees form, 2018 NPHDC; AIHW calculations of data in ABS 2018e, Table 15.

# 7.3 Activity and weight changes

People's lifestyles change once they enter prison, and this can lead to changes in many of the factors that influence health. Physical activity and body weight are 2 major indicators associated with health outcomes (AIHW 2016a).

Some people are underweight when they enter prison and intend to increase their body weight and/or muscle mass in prison to improve their health. Additionally, people in prison might intentionally increase their physical activity to improve their health.

Prison dischargees were asked whether their level of physical activity had changed during their time in prison compared with when they were living in the community. Dischargees were also asked whether their weight had changed, and whether they had intentionally tried to gain weight in prison.

## **Activity changes**

More than **3** in **4** (77%) prison dischargees reported that their **level of physical activity had increased or stayed the same while in prison** 



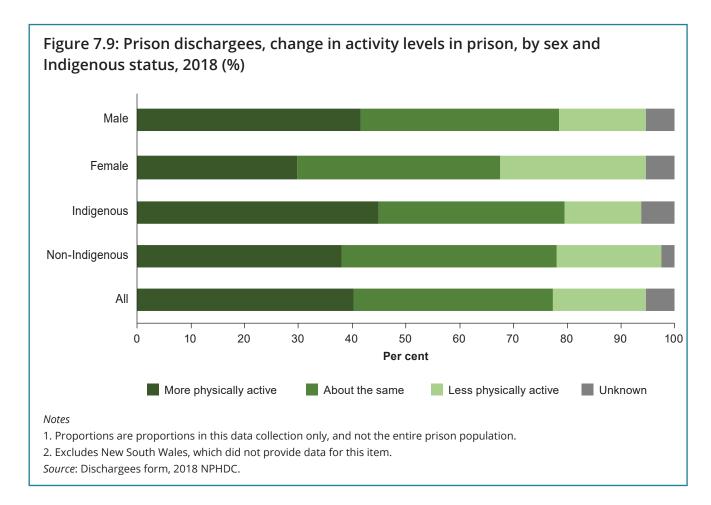
**Indicator 35:** Proportion of prison dischargees who reported that their level of physical activity increased or stayed the same while in prison—77%

More than 3 in 4 (77%) prison dischargees reported that their activity levels increased (40%) or stayed the same (37%) in prison compared with their activity levels in the community (Figure 7.9).

Indigenous dischargees (45%) were more likely to report an increase in physical activity in prison than non-Indigenous dischargees (38%).

Male dischargees (42%) were more likely than female dischargees (30%) to report an increase in

Male dischargees (42%) were more likely than female dischargees (30%) to report an increase in physical activity.



## Weight change

More than **4** in **5** (82%) prison dischargees reported that their **weight** increased or stayed the same while in prison

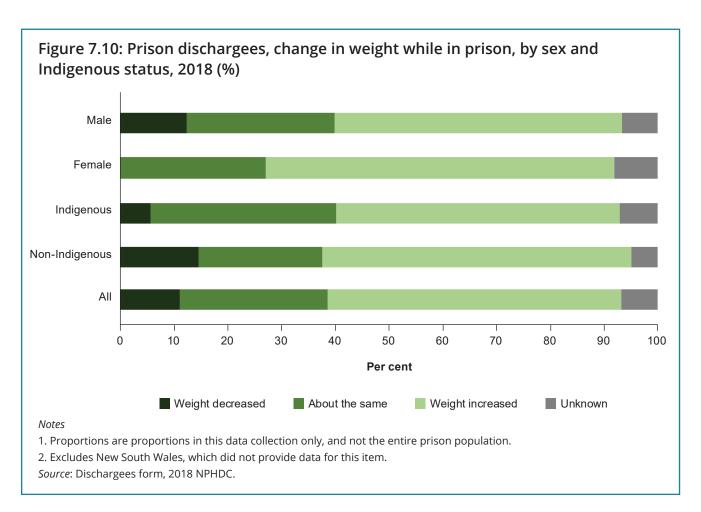


**Indicator 36:** Proportion of prison dischargees who reported that their weight increased or stayed the same while in prison—82%

When asked whether their weight had changed during their time in prison, most dischargees reported their weight had increased (55%) or stayed the same (28%). About 1 in 10 (11%) dischargees reported that their weight decreased in prison (Figure 7.10).

Non-Indigenous dischargees (58%) were more likely to report a weight gain during incarceration than Indigenous dischargees (53%). Female dischargees (65%) were more likely than male dischargees (53%) to report a weight gain during their time in prison.







Prison dischargees aged 35–44 (59%) were more likely than dischargees in any other age group to report a weight gain (52%–53%).

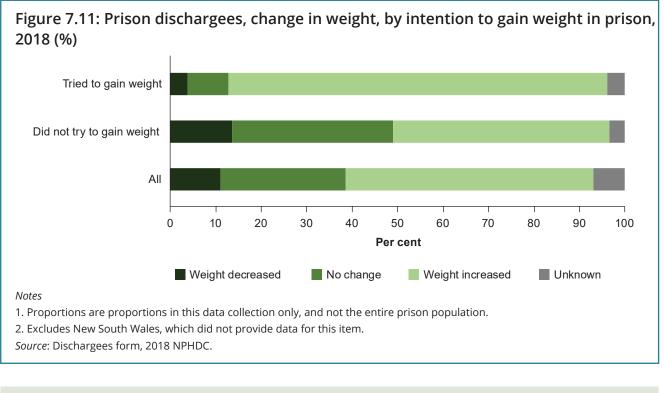
## Intention to gain weight

Almost one-quarter (23%) of prison dischargees reported they had intended to gain weight while in prison, and almost three-quarters (71%) reported they did not (Figure 7.11).

More than **4** in **5** (83%) prison dischargees who wanted to gain weight reported their weight increased while in prison



Of those who intended to gain weight, most (83%) succeeded in doing so. But, of those who did not intend to gain weight, almost half (48%) reported their weight increased during incarceration, and more than one-third (35%) reported their weight stayed the same (Figure 7.11).

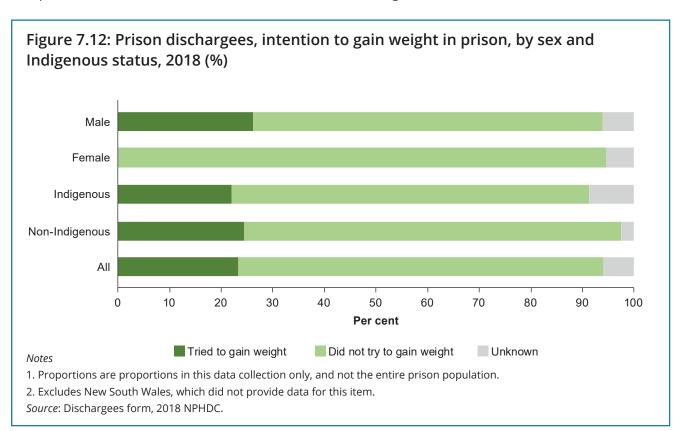


More than **1 in 4** (26%) male prison dischargees reported they **intended to increase their body weight while in prison** 



More than one-quarter (26%) of men, and no women, reported that they wanted to gain weight during their time in prison (Figure 7.12).

Female dischargees (95%) overwhelmingly reported they did not want to gain weight in prison compared with more than two-thirds (68%) of male dischargees.



# 8 Women in prison

### **Key findings**

- The majority of women in the criminal justice system are mothers.
- Women in prison were more likely to be single parents, and to be socioeconomically disadvantaged than those in the community.
- Indigenous women made up about 1 in 3 women in prison (34%).
- Almost 9 in 10 (85%) female prison entrants reported they had been pregnant at some stage, with the average age at their first pregnancy being about 19.
- The average age of Indigenous women at their first pregnancy was just over 18, compared with just over 19 for non-Indigenous women.
- Almost 1 in 50 women entering custody was pregnant.
- About 1 in 5 female prison dischargees reported they had a cervical cancer screening while in prison.
- No female prison dischargees reported having a mammogram while in prison.

Women in prison are a particularly vulnerable group (Aldridge et al. 2018), and the rate of imprisonment among women is growing substantially faster than among men (ABS 2018a; Jeffries & Newbold 2016).

Indigenous women, are imprisoned at an alarmingly high rate, at 35 times the rate of imprisonment of all women in Australia.

Women in prison experience more challenges to their health and well-being than men in prison, and, than women in the general community.

Compared with women in the general community, women in prison are far more likely to have been pregnant, to have been pregnant at a young age, and to have had multiple pregnancies, all of which take a substantial physical toll (Jones et al. 2018; Olsson et al. 2014).

Women in prison are more likely to be single parents, and more likely to be socioeconomically disadvantaged than those in the community (Earle 2018; Jones et al. 2018).

The vast majority of women in the criminal justice system are mothers, and many also have non-biological children who depend on them (Jones et al. 2018). The effects of separating mothers from their children, even for short periods of time, can be devastating for all individuals involved (Poehlmann 2005). Children of incarcerated mothers are more likely to be in out-of-home care, often permanently, and children in out-of-home care are more likely to have contact with the criminal justice system (Dowell et al. 2018; Dowell et al. 2019; Millar & Dandurand 2018; Paynter et al. 2019).

# 8.1 Pregnancies

Most women in prison are mothers—and, on average, they had their first pregnancy at a much younger age than women in the general community.

When compared with women who become pregnant after prison, women in Australia who are pregnant either before or during incarceration are more likely to have poorer birth outcomes, including having babies of low birth-weight, and to have children placed in out-of-home care by the age of 2 (Dowell et al. 2018).



### **Entrants**

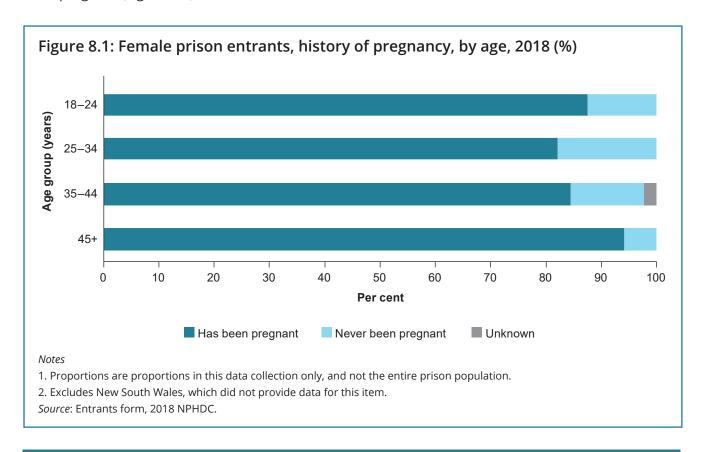
Female prison entrants were asked whether they had ever been pregnant (including live births, still births, miscarriages, and terminations), and their age at their first pregnancy.

Almost **9 in 10** (85%) female prison entrants reported they **had been pregnant at some stage in their lives** 



**Indicator 37:** Proportion of female prison entrants who reported being pregnant at some stage in their lives—85%

Women aged 25–34 were the least likely to report a history of pregnancy (82%) although the proportion was still high. Almost all female prison entrants aged 45 and over (94%) reported they had been pregnant (Figure 8.1).



### **Indicator 38:** Mean age at first pregnancy for female prison entrants—19.1 years.

The average age at first pregnancy was about 19.1—18.3 for Indigenous women, and 19.5 for non-Indigenous women.

## Women in custody

When compared with pregnant women in the community, pregnant women in prison have more mental health issues, are more likely to smoke tobacco, and are more likely to have used alcohol and other drugs while pregnant before incarceration (Dowell et al. 2018; Dowell et al. 2019; Knight & Plugge 2005; Mukherjee et al. 2014).

Imprisonment during pregnancy can provide women with better access to medical care. But, this might not be enough to mitigate the poorer health outcomes for mother and child, given the existing disadvantages. Additionally, with many women on remand and incarcerated for short periods, sometimes multiple times during the pregnancy, perinatal care might be interrupted, risking poorer outcomes for mother and child (Dowell et al. 2018; Dowell et al. 2019).

**Indicator 39:** Rate of pregnant women in custody during 2017:—1.8 per 100 women received into prison.

In 2017, 107 women in custody in participating jurisdictions were pregnant. This represented about 1.8% of the 6,272 women received into prison during that year. But, as women cycle through the criminal justice system, the same pregnant woman might be received into custody several times throughout her pregnancy, and some women will not yet know they are pregnant.

# 8.2 Cancer screenings

Australia has 2 national cancer screening programs targeting women:

- The National Cervical Screening Program targets women aged 20–69, and aims to detect early signs
  of cervical cancer.
- BreastScreen Australia provides free mammograms to women aged 40 and over.

### **Entrants**

More than half (56%) of female prison entrants reported having received a screening for cervical cancer in the previous 2 years.



**Indicator 40:** Proportion of female prison entrants who reported having a cervical cancer screening in the previous 2 years—56%

More than half (56%) of female entrants reported having a cervical cancer screening within the previous 2 years—a rate similar to that of women in the general community (AIHW 2017a). But, rates were lower among Indigenous entrants (49%) than among non-Indigenous entrants (61%).

## **Dischargees**

About **1** in **5** (19%) female prison dischargees reported receiving a cervical cancer screening in prison



**Indicator 41:** Proportion of female prison dischargees who reported receiving a cervical cancer screening in prison—19%

Indigenous female dischargees were less likely to report receiving a cervical cancer screening in prison (16%) than non-Indigenous female dischargees (22%).

The majority of female dischargees had been in prison for less than 6 months so they might not have been due for a cervical cancer screening during their period of incarceration.

# **Indicator 42:** Proportion of female prison dischargees who reported receiving a mammogram in prison—0%

No female dischargees reported receiving a mammogram (a screening test for breast cancer) during their incarceration.

The Royal Australian College of General Practitioners recommends a mammogram every 2 years for women aged 50–74 who are at average, or slightly higher, risk of breast cancer (RACGP 2018).

The prison population is young relative to the wider Australian population, and very few women in prison in Australia are aged 50 and over. Due to the small sample size in this collection, female dischargees aged 50 and over were even less likely to be captured in the dischargee survey, and might have had a mammogram on schedule in the community. The women aged 50 and over who completed the dischargee survey in 2018 were incarcerated for less than 3 months.



**Disability** 

# **Disability**

### **Key Findings**

- Almost 1 in 3 (29%) prison entrants reported having a chronic health condition that affected participation in day-to-day activities, education, or employment.
- Self-reported disability increased with age, from one-quarter (26%) of prison entrants aged 18–24, to more than 2 in 5 prison entrants aged 45 and above (42%).
- Almost half (46%) of prison entrants with an activity participation restriction or limitation rated their disability as moderate, indicating they have difficulty, but do not need help or supervision.
- The self-reported prevalence of limitations that affected education or employment participation among prison entrants aged 18-34 was 4 times that of people of the same age in the general community.

The International Classification of Functioning, Disability and Health describes disability at an individual or population level, and covers:

- · impairments—problems in body function or structure
- activity limitations—difficulties in executing activities
- participation restrictions—problems with involvement in life situations (WHO 2011).

Disability status is a spectrum—from no disability to complete disability.

The ABS Survey of Disability, Ageing and Carers defines a person with disability as someone who has 1 or more limitations, restrictions, or impairments affecting their everyday activities that have lasted, or are likely to last, at least 6 months (ABS 2016).

The severity of a person's disability can be described as mild, moderate, or severe/profound, depending on the level of assistance or supervision required to participate in activities. Core activity limitations are those that affect a person's ability to undertake the "core activities" of self-care, mobility, and/or communication, activities deemed to be essential to normal, everyday living (ABS 2016).

People living with disability can also be identified as having schooling and/or employment restrictions. If a person does not have any core activity limitations, or any schooling/employment restrictions, they can still be living with disability if they have identified limitations or restrictions with other activities. In this case, they are classified as having the lowest severity of disability (ABS 2016).

In Australia, nearly 1 in 5 (18%) people have a disability (ABS 2016). People with disability have lower rates of employment, incomes, educational attainment, and life participation rates than those without disability (AIHW 2017b).

Currently, little is known about the prevalence of physical disabilities of people in prison. But, people with intellectual disability are understood to be over-represented in prisons globally (Hellenbach et al. 2017).

While the prevalence of intellectual disability in people in prison varies across studies, several studies have found that 25%-30% of people in prison have borderline intellectual disability, and 10% have a mild intellectual disability (Hellenbach et al. 2017).

People in prison with intellectual disability are at increased risk of being disadvantaged during their time in prison, including being more likely to be socially isolated. They are also more likely to have

difficulty coping with the prison environment, and experience a higher rate of comorbid mental health disorders and physical health conditions than those without intellectual disability (Hellenbach et al. 2017).

The NPHDC collected information about people in prison living with disability using items from the AlHW's Standardised Disability Flag. Consistent with the International Classification of Functioning, Disability and Health, this method uses a standard set of questions to identify the respondent's restrictions to participation in everyday activities. The NPHDC uses 3 items from the Standard Disability Flag, including:

- the 'activity and participation need for assistance cluster'
- the 'education participation restriction flag'
- · the 'employment participation restriction flag'.

The 'activity and participation need for assistance cluster' comprised 8 questions about everyday activities—3 about core limitations and 5 about non-core limitations. Participants were asked about limitations in:

- self-care (a core limitation)
- · mobility (a core limitation)
- · communication (a core limitation)
- · learning and applying knowledge
- · managing things around the home
- managing tasks and situations
- · personal relationships
- · community life.

The Standard Disability Flag relies on self-reported impairment and restriction, and does not require a medical diagnosis (AIHW 2017b).



# 9.1 Prison entrants with disability

## **Any limitation**

Prison entrants were asked whether they had a long-term health condition or disability that affected their participation in education, employment, or everyday activities.

Almost 1 in 3 (29%) prison entrants reported they had a chronic condition or disability that affected their participation in day-to-day activities, education, or employment

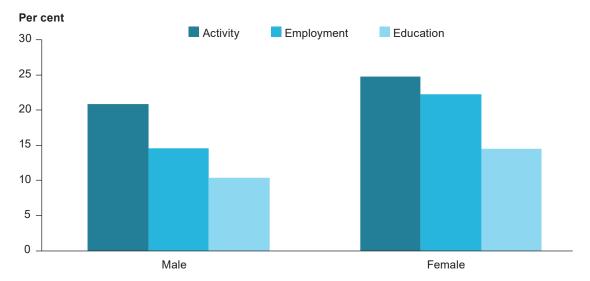


**Indicator 43:** Proportion of prison entrants reporting a long-term health condition or disability that affected their participation in activities, education, or employment—29%

Almost 1 in 3 (29%) prison entrants reported a chronic health condition that affected their participation in everyday activities (21%), education (11%), or employment (16%).

One-quarter (25%) of female prison entrants reported a limitation in everyday activities, 15% in education, and 22% in employment, while 1 in 5 (21%) male prison entrants reported a limitation in everyday activities, 10% in education and 15% in employment (Figure 9.1).

Figure 9.1: Prison entrants, self-reported chronic health condition or disability limiting their participation in activities, education, or employment, by sex and type of limitation, 2018 (%)



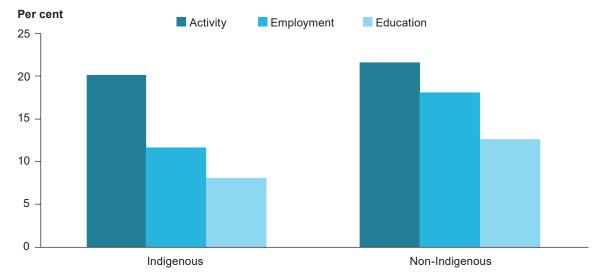
#### Notes

- 1. Proportions are proportions of prison entrants in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.

Non-Indigenous prison entrants were more likely to report restrictions to employment (18%) and education (13%) than Indigenous prison entrants (12% and 8%, respectively). There was little difference in the proportions of Indigenous prison entrants (20%) and non-Indigenous prison entrants (22%) reporting restrictions to an activity (Figure 9.2).

Figure 9.2: Prison entrants, self-reported chronic health condition or disability limiting their participation in activities, education, or employment, by Indigenous status and type of limitation, 2018 (%)



#### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item. *Source*: Entrants form, 2018 NPHDC.

The prevalence of self-reported limitations to everyday activities, education, or employment increased with age, from 1 in 4 (26%) prison entrants aged 18–24, to 2 in 5 (41%) prison entrants aged 55 and over.

Prison entrants aged 25–34 (19%) had the lowest prevalence of limitations in day-to-day activities, and those aged 55 and over (29%) had the highest

Self-reported limitations to participation in employment rose from 1 in 11 (9%) prison entrants aged 18–24, to 1 in 4 (26%) of those aged 55 and over.

Self-reported limitations to participation in education rose from 1 in 15 (7%) prison entrants aged 18–24, to 1 in 6 (18%) entrants aged 45–54 (Figure 9.3).

Figure 9.3: Prison entrants, self-reported chronic health condition or disability limiting their participation in activities, education, or employment, by age and type of limitation, 2018 (%) Per cent Activity Employment Education 30 25 20 15 10 5 0 18 - 2425 - 3435 - 4445 - 5455+ Age group (years) Notes 1. Proportions are proportions in this data collection only, and not the entire prison population. 2. Excludes New South Wales, which did not provide data for this item. Source: Entrants form, 2018 NPHDC.

### **Extent of limitation**

Prison entrants who reported having an activity restriction or limitation, in the 'activity and participation need for assistance cluster', were asked to describe the extent of their disability as:

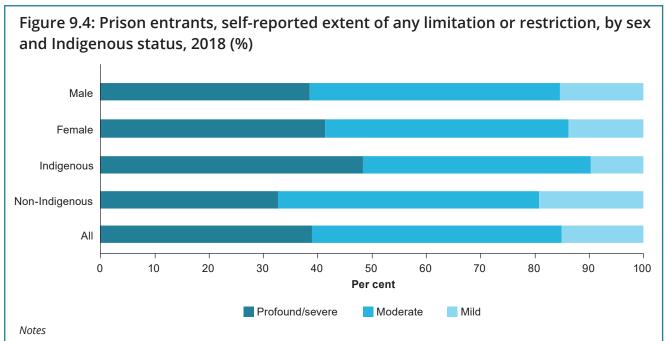
- profound/severe—always or sometimes need help and/or supervision for at least 1 activity
- moderate—have difficulty, but don't need help or supervision for at least 1 activity
- mild—don't have difficulty, but uses aids/equipment/medications for at least 1 activity
- none—have no difficulty with any of the activities.

Almost half (46%) of prison entrants who reported an activity participation restriction or limitation rated their disability as moderate, indicating they had difficulty, but did not need help or supervision (Figure 9.4).

About 2 in 5 (39%) prison entrants who reported an activity participation restriction or limitation rated it as profound or severe, and 1 in 7 (15%) rated it as mild.

Almost half (48%) of Indigenous entrants, and 1 in 3 (33%) non-Indigenous entrants rated their disability as profound or severe.





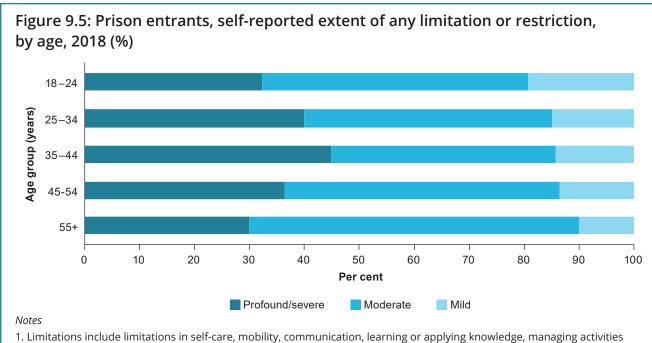
- 1. Limitations include limitations in self-care, mobility, communication, learning or applying knowledge, managing activities around the home, managing situations, or personal relationships.
- 2. Proportions are proportions in this data collection only, and not the entire prison population.
- 3. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.

Almost half (45%) of prison entrants aged 35–44 rated their disability as profound or severe, and 2 in 5 (41%) rated their disability as moderate (Figure 9.5).

Prison entrants in all other age groups were more likely to rate their disability as moderate (48%–60%), than as profound/severe (30%–40%).

Prison entrants in the oldest age group (55 and over) were least likely to describe their disability as mild (10%) and those aged 18–24 were the most likely (19%).



- Limitations include limitations in self-care, mobility, communication, learning or applying knowledge, managing activities around the home, managing situations, or personal relationships.
- 2. Proportions are proportions in this data collection only, and not the entire prison population.
- 3. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.

### Core limitations

Limitations in the areas of self-care, mobility, and/or communication were combined to form the 'core activity limitation' indicator.

### Indicator 44: Proportion of prison entrants with profound/severe core activity limitations—1.4%

Of the 803 prison entrants surveyed, 1.4% reported profound or severe core activity limitations, 3.2% reported moderate limitations, and 1.4% reported mild limitations.

Of those entrants reporting any core limitation, almost one-quarter (23%) rated the limitation as profound/severe, more than half (54%) as moderate, and almost one-quarter (23%) as mild.

# 9.2 Comparisons with the general community

In the general community, 1 in 5 (22%) people aged 18 and over reported living with a disability in 2015 (that is, any restriction on activity, employment or education) (ABS 2017). This compared with almost 1 in 3 (29%) prison entrants aged 18 and over in the 2018 NPHDC.

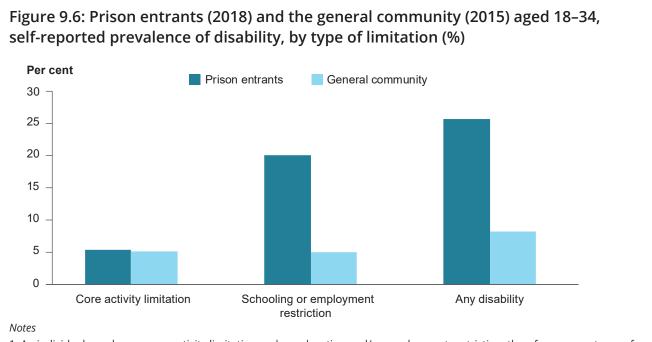
But, comparisons of the prevalence of disability between the prison population and the general community are difficult, as people in prison are younger than those in the community, and the prevalence of many types of disability, particularly core activity limitations, increases with age.

The prevalence of disability among prison entrants aged 18–34 and 35–54 was compared with people of the same age in the community.

Of those aged 18–34, 1 in 12 (8%) people in the community, and 1 in 4 (26%) prison entrants reported a disability.

The prevalence of core activity limitations among prison entrants and the general community aged 18–34 was similar, at about 5%, but prison entrants (20%) reported an education or employment limitation that was 4 times that of their counterparts in the general community (5%) (Figure 9.6).





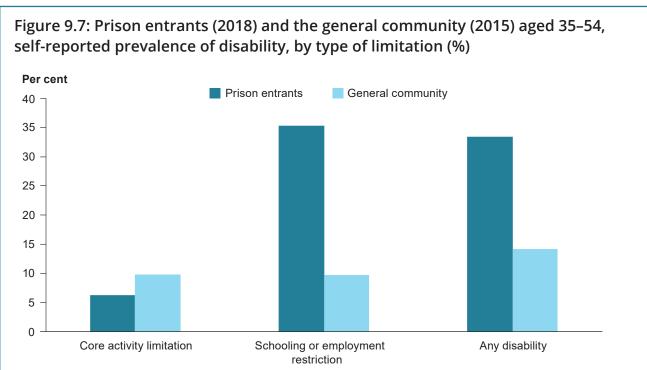
- 1. An individual may have a core activity limitation and an education and/or employment restriction, therefore, percentages of each may sum to over 100.
- 2. Proportions of prison entrants are proportions in this data collection only, and not the entire prison population.
- 3. Prison entrants' data excludes New South Wales, which did not provide data for this item. *Sources*: Entrants form, 2018 NPHDC, ABS 2017.

Of those aged 35–54, 1 in 7 (14%) people in the general community, and 1 in 3 (33%) prison entrants reported a limitation in any activity.

In that age group, almost 1 in 10 (10%) people in the community and more than 1 in 3 (35%) prison entrants reported having education or employment participation limitations, and 1 in 10 (10%) people in the community and 1 in 16 (6%) prison entrants had core limitations (Figure 9.7).

These results will be affected by the different age profile of prison entrants and people in the community. Prison entrants in the 35–54 age group were more likely to be closer to 35 than those in the general community.

As the prevalence of disability, particularly core activity limitations, increases with age, it is not surprising that core activity limitations were more prevalent in the general community aged 35–54 than among prison entrants in the same age group.



#### Notes

- 1. An individual may have a core activity limitation and an education and/or employment restriction, therefore, percentages of each may sum to over 100.
- 2. Proportions of prison entrants are proportions in this data collection only, and not the entire prison population.
- 3. Prison entrants' data excludes New South Wales, which did not provide data for this item.

Sources: Entrants form, 2018 NPHDC, ABS 2017.



# ë **1**0

# 10 Tobacco smoking

### **Key Findings**

- Three-quarters (75%) of prison entrants were current tobacco smokers.
- The average age that prison entrants tried their first cigarette was about 14.
- Prison entrants were 4–5 times as likely to be current smokers as people in the general population.
- About 2 in 5 (41%) prison entrants who were current smokers wanted to guit.
- Over half (55%–56%) of prison dischargees who were smokers on prison entry, intended to smoke on release, regardless of whether they had been in a prison that banned or allowed smoking.

Tobacco smoking is 1 of the largest single preventable causes of death and disease in Australia. It is a major risk factor for many chronic conditions including coronary heart disease, stroke, diabetes, chronic obstructive pulmonary diseases, multiple types of cancers, and asthma (AIHW 2016c). In 2016, 15% of men and 11% of women in Australia, aged 18 and over, smoked daily (AIHW 2017c).

Smoking is common in groups over-represented in the prison population (AIHW 2013). Compared with rates in the general community, smoking rates are much higher among people living in low socioeconomic areas, Indigenous people, people with mental health disorders, people with substance use disorders, and people experiencing homelessness (IGCD 2013; Twyman et al. 2014).

While smoking has decreased over time in the general community in Australia, the same is not true for people in custody, whose smoking rates, in facilities that allow smoking, remain high (AIHW 2013).

The National Tobacco Strategy 2012–2018 recognised the high smoking rates in the prison population, and that prisons were an important setting for tobacco control efforts. It recommended that people in prison be provided more support to quit, including access to nicotine replacement therapy and other pharmacotherapies (IGCD 2013). But, the majority of ex-smokers released from smoke-free prisons resume smoking. So smoking cessation support and policy attention are also required for people post-release, and to ensure continuity of care (Puljević et al. 2018).

# 10.1 Smoking status prior to prison

#### **Entrants**

Prison entrants were asked whether they had ever smoked tobacco, whether they currently smoked, and how old they were when they had their first full cigarette.

**3 in 4** (75%) prison entrants reported they **currently smoked tobacco** 



**Indicator 45:** Proportion of prison entrants who reported they currently smoked tobacco—75%

Three-quarters (75%) of prison entrants said they were current smokers, and 85% said they had smoked at some stage in their lives.

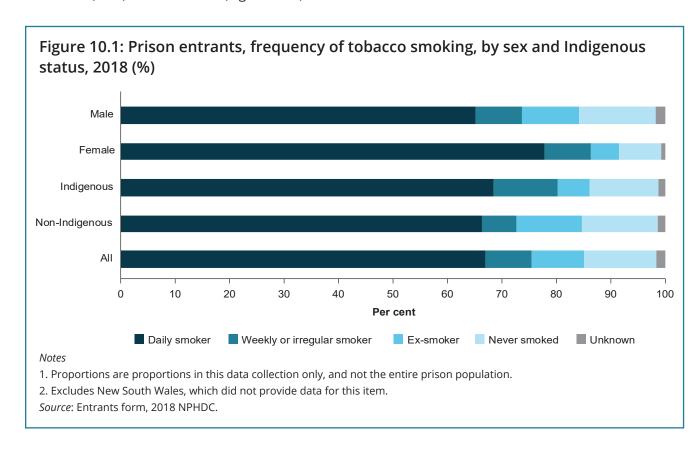
About 4 in 5 (80%) Indigenous prison entrants, and almost 3 in 4 (73%) non-Indigenous entrants reported they were current smokers.

Female prison entrants (86%) were more likely than male prison entrants (74%) to report they were current smokers. Entrants aged 18–24 were the most likely to report being current smokers (80%), and those aged 45 and over were least likely (62%).

**Indicator 46:** Average age at which prison entrants reported they had smoked their first full cigarette—14.1.

The average age prison entrants reported they began smoking was 14.1.

More than 2 in 3 (67%) prison entrants said they smoked daily—almost 4 in 5 (78%) female entrants, and 2 in 3 (65%) male entrants (Figure 10.1).





## **Dischargees**

Prison dischargees were asked whether they had smoked tobacco on prison entry, whether they smoked in prison, and their intentions to smoke on release.

Almost **3 in 4** (72%) prison dischargees reported they **smoked tobacco on entry to prison** 



**Indicator 47:** Proportion of prison dischargees who reported they were current smokers on entry to prison—72%

Almost three-quarters (72%) of prison dischargees reported they were current smokers on prison entry— 3 in 4 (76%) non-Indigenous dischargees, and more than 2 in 3 (69%) Indigenous dischargees.

Prison dischargees aged 18–24 (93%) were almost twice as likely to report they were current smokers on prison entry as those aged 45 and above (57%).

### Comparisons with the general community

Smoking rates among people entering prison were much higher than in the general community.

At least 2 in 3 (66%–69%) prison entrants aged 18–44 were daily smokers, compared with just 1 in 7 (14%–16%) people of the same age in the general community (ABS 2018e).

Indigenous people in the general community were more likely than non-Indigenous people to smoke daily (ABS 2014). About half of Indigenous people aged 18–44 in the community reported smoking daily (43%–52%), and fewer than 1 in 5 (16%–19%) non-Indigenous people of the same age were daily smokers. Prison entrants were equally likely to smoke daily, regardless of age or Indigenous status (Table 10.1).

Striking differences were found between the proportions of prison entrants and the general population aged 18–44 who were ex-smokers, or had never smoked (ABS 2014b, 2018e). Fewer than 1 in 10 (5%–10%) prison entrants said they were ex-smokers compared with 9%–28% of people in the community, and 1 in 8 (12%–13%) prison entrants said they had never smoked, compared with 55%–75% in the community (Table 10.1).

The proportion of people in the community who reported never having smoked was highest among younger people (75% of those aged 18–24 in 2017–18), suggesting that over time, fewer young people in the general population were trying and taking up smoking.

Non-Indigenous prison entrants aged 18–24 were more likely to report never having smoked than non-Indigenous entrants aged 25–34 or 35–44 (Table 10.1).

Table 10.1 Prison entrants and general community, aged 18–44, by smoking status and Indigenous status (%)

	Indigenous status	General community, 2012–13			Prison entrants, 2018		
Smoking status		18-24	25-34	35-44	18-24	25-34	35-44
Daily	Indigenous	42.6	51.5	48.3	66.2	68.1	66.7
	Non-Indigenous	15.8	18.9	18.3	66.7	68.8	71.1
Current but not daily	Indigenous	3.3	2.9	1.7	13.8	10.4	17.3
	Non-Indigenous	3.1	3.6	1.8	13.6	5.7	6.0
Ex-smoker	Indigenous	12.5	17.7	22.9	6.2	5.9	4.0
	Non-Indigenous	13.5	23.5	29.2	4.5	11.9	10.7
Never smoked	Indigenous	41.6	27.9	27.1	9.2	14.8	12.0
	Non-Indigenous	67.6	54.0	50.7	13.6	11.9	11.4

Sources: Entrants form 2018 NPHDC; ABS 2014b.

# 10.2 Smoking in prison

Smoking bans have been implemented in most prisons across Australia. Of the 7 NPHDC participating jurisdictions, 6 had some form of smoking ban (4 jurisdictions had a complete ban, and 2 had a partial ban), with only 1 allowing smoking in prisons.

Banning smoking in prison can reduce mortality rates among people in prison from smoking-related causes, particularly cardiovascular and pulmonary disease, and cancer (Binswanger et al. 2014). But, as most ex-smokers released from prisons that ban smoking relapse, smoking cessation support that continues in the community is necessary (Puljević et al. 2018).

## Dischargees

Prison dischargees were asked whether they were current smokers on prison entry, whether they were daily smokers on prison entry, and whether the amount they smoked had changed during their time in prison.

In prisons that allowed smoking, **more than half** (56%) of prison dischargees reported they **currently smoked tobacco** 



**Indicator 48:** Proportion of prison dischargees who reported they currently smoked tobacco (in prisons that allowed smoking)—56%

Less than half (44%) of all dischargees, and more than half (56%) of those from prisons that allowed smoking reported being current smokers, down from the 72% of all dischargees who said they smoked on entry to prison.

Smoking bans in prison had an impact on the proportions of people in custody who reported they currently smoked. Almost one-third (30%) of dischargees from prisons that banned smoking said they were current smokers, compared with more than half (56%) of dischargees from prisons that allowed smoking (Table 10.2).

But, there was little difference in prison dischargees' intention to smoke upon release—42% of dischargees from prisons that banned smoking, and 44% from prisons that allowed smoking intended to smoke on release (Table 10.2).

In prisons that allowed smoking:

- about 3 in 5 (58%) male dischargees, and about half of female dischargees (47%) reported they
  were current smokers
- more than 3 in 4 (77%) Indigenous dischargees, and almost half (48%) of non-Indigenous dischargees said they were current smokers
- one-third (34%) of dischargees who were current smokers on prison entry, reported they smoked less at discharge.



Table 10.2: Prison dischargees, smoking status, by smoking ban status of prison, 2018

	Prison bans smoking		Prison allows smoking		Total prison dischargees	
Smoking status	Number	%	Number	%	Number	%
Smoker on entry	111	68.1	131	76.2	242	72.2
Current smoker	49	30.1	97	56.4	146	43.6
Smokes more now	3	1.8	31	18.0	34	10.1
Smokes less now	82	50.3	58	33.7	140	41.8
Intends to smoke after release	68	41.7	75	43.6	143	42.7
Total	163	100.0	172	100.0	335	100.0

#### Notes

- 1. Totals include prison dischargees whose smoking status was unknown.
- 2. Numbers represent the number in this data collection, and not the entire prison population.
- 3. Percentages are percentages of all prison dischargees, and not only those who were smokers on entry to prison.
- 4. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

# 10.3 Quitting smoking

Quitting smoking is difficult, and people released from smoke-free prisons often relapse (Jin et al. 2018). Commonly perceived barriers to quitting successfully include poor stress management, lack of professional support, and the high prevalence and acceptability of smoking in vulnerable communities (Twyman et al. 2014).

Most prisons offer programs for those who wish to stop smoking, or to cope with quitting in a smoke-free facility. But, relapse upon release is common and smoking cessation support is required for people transitioning to the community (Brose et al. 2018; Puljević et al. 2018).

### **Entrants**

Prison entrants who reported they were current smokers were asked whether they wanted to quit smoking, and which resources they would find helpful.

About 2 in 5 (41%) prison entrants who were current smokers wanted to quit

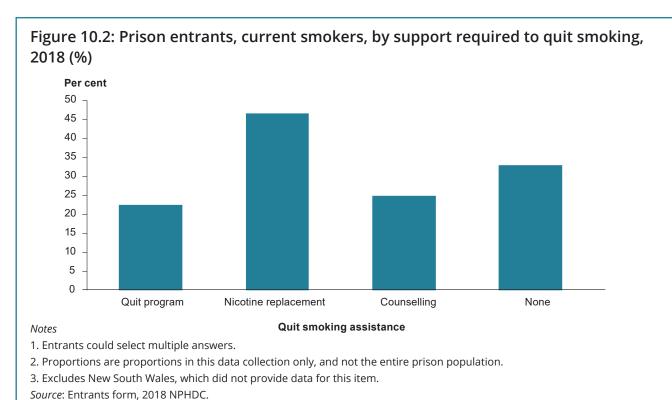


**Indicator 49:** Proportion of prison entrants who reported they currently smoke and would like to quit—41%

Of prison entrants who wanted to quit smoking:

- almost half (47%) said nicotine replacement therapy would help
- about one-quarter (25%) said counselling would help
- more than 1 in 5 (22%) said a quit program would help
- one-third (33%) said they didn't want any help (Figure 10.2).

Older prison entrants, aged 35 and over, were more likely to say that nicotine replacement therapy would be helpful (56%) than younger prison entrants, aged 18–34 (41%). Prison entrants aged 18–24 who wanted to quit smoking were most likely to report they didn't want assistance (43%).



### **Dischargees**

Prison dischargees were asked about the resources they knew were available in prison to help them quit smoking, whether they had used any of the resources, and if not, why.

Almost half (45%) of prison dischargees who said they were current smokers on prison entry didn't want help to quit smoking.



Almost half (45%) of dischargees who were current smokers said they did not want any assistance to quit.

Most dischargees who had been current smokers on prison entry were aware of services available in prison to help them quit smoking, most commonly, a quit smoking program and nicotine replacement therapy.

Of those who knew assistance was available, nicotine replacement therapy was most commonly used—with more than 2 in 5 (44%) prison dischargees choosing this option.

## Smoking intentions on release

Prison dischargees were asked about their intention to smoke upon release from prison.

More than half (56%) of prison dischargees who were current smokers on prison entry intended to smoke upon release



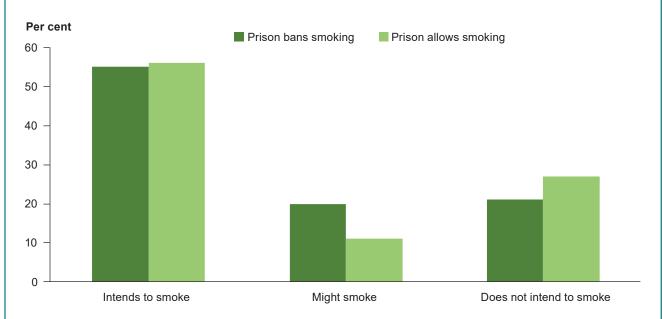
**Indicator 50:** Proportion of prison dischargees who reported they were current smokers on prison entry, and intended to smoke upon release—56%

More than half (56%) of prison dischargees who reported being current smokers on prison entry (and 43% of all prison dischargees) said they intended to smoke after release, with no difference in those who were in a prison that banned (55%) or allowed (56%) smoking.

Dischargees who were smokers on prison entry and were in prisons that banned smoking (20%) were twice as likely to say they might smoke on release as dischargees from prisons that allowed smoking (11%).

Dischargees who were smokers on entry to prison and were in prisons that allowed smoking (27%) were more likely to report they intended not to smoke on release than those in prisons that banned smoking (21%) (Figure 10.3).

Figure 10.3: Prison dischargees who were smokers on prison entry, intention to smoke on release, by smoking ban status of prison, 2018 (%)



#### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

# 11 Illicit drug use and needle-sharing

### **Key Findings**

- Almost two-thirds (65%) of prison entrants had used illicit drugs in the previous year.
- Methamphetamine was the most commonly used illicit drug, with more than 2 in 5 (43%) prison entrants having used it in the previous year.
- Almost half (46%) of prison entrants, and one-third (34%) of prison dischargees reported a history of injecting drug use.
- Prison entrants were 4 times as likely as people in the general population to report the use of illicit drugs in the previous 12 months.

Illicit drug use is the use of illegal drugs, volatile substances, and prescription drugs for non-medical purposes. Like many other chronic conditions, drug use disorder requires long-term management, often with a combination of medication and psychosocial services, and addressing any co-morbidities (Goodwin & Sias 2014).

This is especially important for people in custody who are more likely than people in the general population to have co-occurring alcohol and other drug use disorders, mental health conditions, and physical health conditions (Forsyth et al. 2018).

Illicit drug use is a primary motivating factor in many crimes—including 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 associated with unemployment, mental health issues, a criminal history, greater severity of dependence, and more extensive heroin use (Marel et al. 2013). Each year, about 1 in 7 opioid-dependent people on opioid substitution treatment programs are in prison (Degenhardt et al. 2014).

The likelihood of injecting drug use decreases with incarceration, but high-risk injecting behaviours increase, particularly among young people, as does the risk of hepatitis C and other blood-borne virus transmissions (Cunningham et al. 2018).

Illicit drug use, particularly injecting drug use, influences physical and mental health, and the majority of people in custody have a history of illicit drug use.



# 11.1 Drug use prior to prison

### **Entrants**

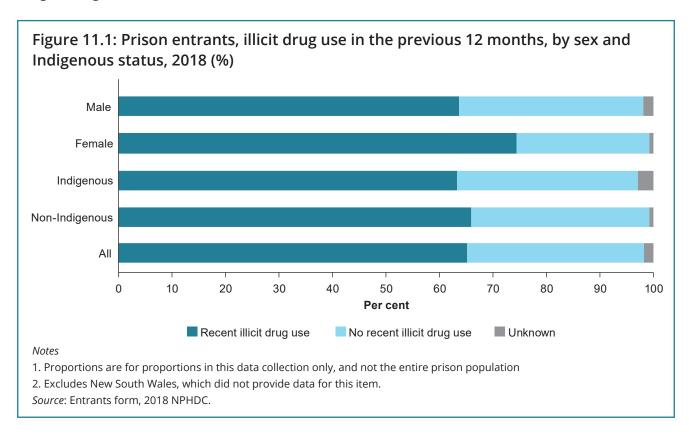
Prison entrants were asked about their drug use in the previous 12 months, also referred to as 'recent' drug use.

About **2** in **3** (65%) prison entrants reported **using illicit drugs in the previous 12 months** 

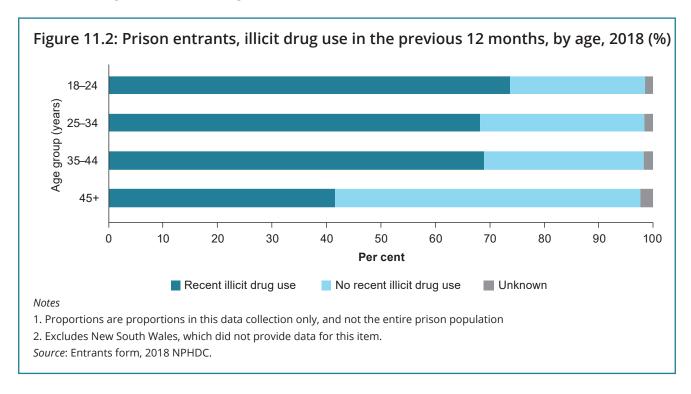


**Indicator 51:** Proportion of prison entrants who reported using illicit drugs in the previous 12 months—65%

Female prison entrants (74%) were more likely than male entrants (64%) to have reported recent illicit drug use (Figure 11.1).



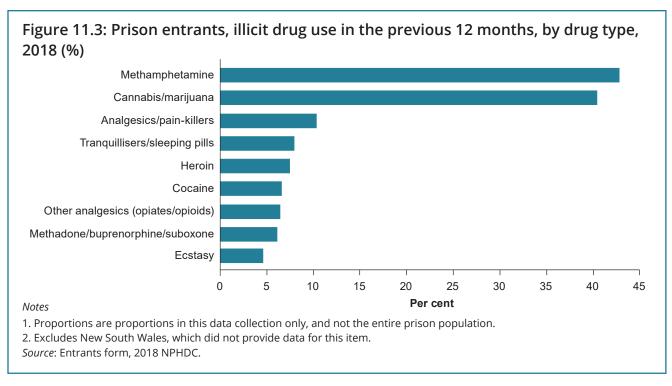
Self-reported recent illicit drug use decreased with age, from 74% of prison entrants aged 18–24, to 42% of those aged 45 and over (Figure 11.2).



The most commonly reported illicit drug used by prison entrants was methamphetamine, with more than 2 in 5 (43%) reporting having used it in the previous 12 months (Figure 11.3). This was a fall from 50% in the 2015 NPHDC.

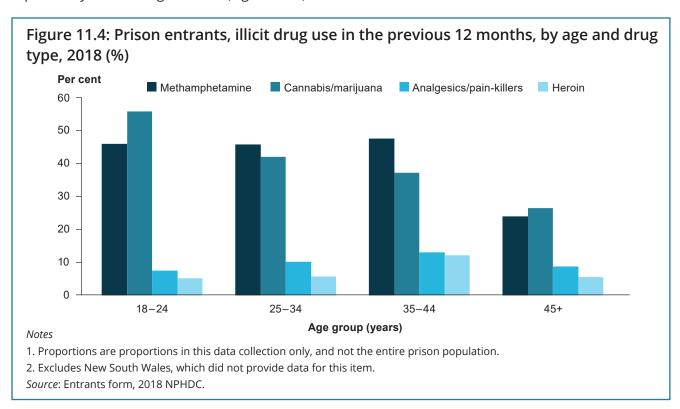
About 2 in 5 (40%) prison entrants reported using cannabis in the preceding year, and 1 in 10 (10%) reported using analyses or pain-killers illicitly.

Among prison entrants reporting recent illicit drug use, use of more than 1 drug was common—with more than 2 different types of drugs being used in the previous 12 months, on average. Of all participating prison entrants, 10% reported the recent illicit use of at least 4 different drug types.



Recent use of methamphetamine before prison entry declined with age, from almost half of entrants aged 18–44 (46%–48%), to one-quarter (24%) of those aged 45 and over.

Recent cannabis use declined with age, from 56% of those aged 18–24, to 26% of entrants aged 45 and over. Recent illicit use of analgesics and opioids, including heroin, was most commonly reported by entrants aged 35–44 (Figure 11.4).



Women entering prison were more likely than men to report using most types of illicit drugs in the previous 12 months. Female prison entrants were more likely than male entrants to report recent use of analysis or painkillers, tranquilisers or sleeping pills, methamphetamines, cocaine, and heroin.

Non-Indigenous prison entrants were more likely to report recent use of methamphetamines and cocaine than Indigenous entrants, while Indigenous entrants were more likely to report using cannabis than non-Indigenous entrants (see Supplementary table S71).

# 11.2 Injecting drug use

### **Entrants**

Information about prison entrants who had injected drugs was obtained from the 2016 NPEBBV&RBS (Butler & Simpson 2017).

**Almost half** (46%) of prison entrants reported they **had injected drugs at some stage in their lives** 



**Indicator 52:** Proportion of prison entrants who reported having injected drugs at some stage in their lives—46%

In 2016, less than half (46%) of prison entrants reported injecting drugs at some stage in their lives, with almost two-thirds (63%) of those having injected drugs within the previous month.

Methamphetamine was the most commonly reported drug injected (71% of prison entrants who reported a history of injecting drug use), followed by heroin (18%).

Most (84%) entrants who reported a history of injecting drug use had been injecting for more than 3 years.

More than half (58%) of female prison entrants, and almost half (44%) of male entrants reported a recent history of injecting drug use.

More than half (53%) of non-Indigenous entrants and one-third (32%) of Indigenous entrants were recent injecting drug users (Table 11.1).

Table 11.1: Prison entrants, recent history of injecting drug use, by sex, age group and Indigenous status, 2016

	Injecting drug use		Non-injecting drug use		Total prison entrants	
_	Number	%	Number	%	participating (number)	
Sex						
Male	148	43.8	190	56.2	338	
Female	29	58.0	21	42.0	50	
Age group						
Under 25	33	45.2	40	54.8	73	
25 and over	144	45.7	171	54.3	315	
Indigenous status						
Indigenous	42	31.8	90	68.2	132	
Non-Indigenous	134	52.5	121	47.5	255	
Total	178	45.8	211	54.2	389	

#### Notes



<sup>1.</sup> Totals exclude unknowns.

<sup>2.</sup> Numbers represent the number in this data collection only, and not the entire prison population. *Source:* AlHW analysis of Butler & Simpson 2017, Table 20.

### **Dischargees**

Prison dischargees were asked whether they had ever engaged in injecting drug use.

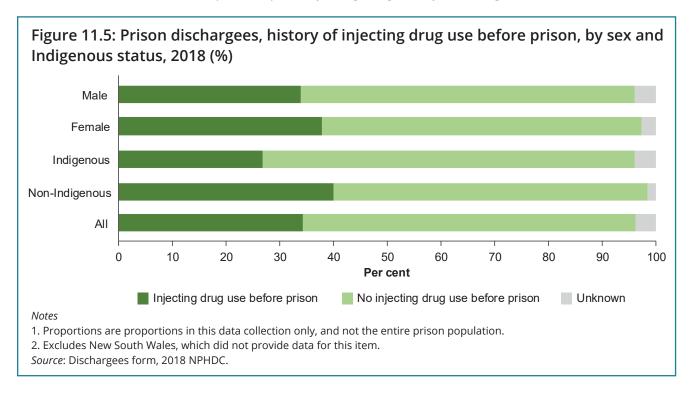
One-third (34%) of prison dischargees reported they had injected drugs at some stage in their lives



**Indicator 53:** Proportion of prison dischargees who reported they had injected drugs at some stage in their lives—34%

In the 2018 NPHDC, one-third (34%) of prison dischargees reported they had injected drugs at some stage in their lives—2 in 5 (40%) non-Indigenous dischargees, and more than one-quarter (27%) of Indigenous dischargees (Figure 11.5).

There was little difference in reports of prior injecting drug use by sex or age.



## Comparisons with the general community

People entering prison were 4 times as likely to report illicit drug use in the preceding 12 months as people in the general community (AIHW 2017c).

About 1 in 6 (16%) adults in the general community reported illicit drug use in the previous 12 months



About **2 in 3** (65%) prison entrants **reported illicit drug use** in the previous **12 months** 



In the general community, men (19%) were more likely than women (13%), and Indigenous people (27%) were more likely than non-Indigenous people (15%) to report using illicit drugs in the previous 12 months.

These trends were reversed for prison entrants—women (74%) were more likely than men (64%), and non-Indigenous people (66%) more likely than Indigenous people (63%), to report recent illicit drug use.



Men entering prison were more than 3 times as likely to report recent illicit drug use as men in the community, and women entering prison were almost 6 times as likely as women in the community.

Non-Indigenous people entering prison were more than 4 times as likely to report recent illicit drug use as non-Indigenous people in the general community, and Indigenous people entering prison were more than twice as likely as Indigenous people in the community.

Recent illicit drug use for both prison entrants and people in the community declined with age. But prison entrants were consistently more likely to report recent illicit drug use than were people of the same age in the general community.

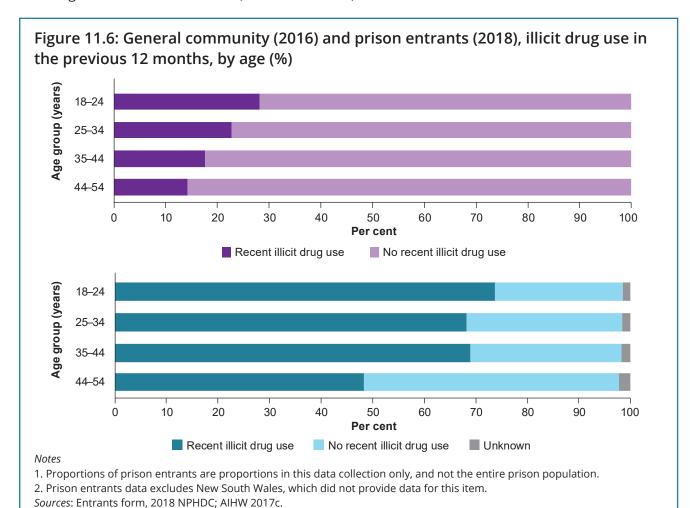
Prison entrants aged 45-54 were more than 3 times as likely to report recent illicit drug use as people of the same age in the community, while prison entrants aged 35-44 were 4 times as likely as their counterparts in the community. Prison entrants aged 25–34 were 3 times as likely to report recent illicit drug use as people of the same age in the community, and entrants aged 18-24 were 2.5 times as likely (Figure 11.6).

Cannabis was the most common illicit drug people in the community had recently used, at 10% (13% of men and 8% of women).

Men entering prison were 3 times as likely as men in the community to report recent cannabis use, and women entering prison were 6 times as likely as women in the community.

Prison entrants (43%) were more than 30 times as likely to report recent methamphetamine use as people in the community (less than 2%).

Methamphetamine use is more addictive, and more likely to lead to antisocial behaviour, such as crime, to facilitate the drug use than cannabis (Goldsmid & Willis 2016; Tait et al. 2018). It is also associated with major physical and mental health conditions with the death rate from methamphetamine use doubling between 2009 and 2015 (Darke et al. 2017).



# 11.3 Drug use in prison

There are fewer opportunities in prison to obtain and use illicit drugs compared with life in the general community. Prisons use multiple strategies to reduce the supply of illicit drugs, including drug detection dogs and urinalysis (Dolan & Rodas 2014). But, compared with people who can access sterile injecting equipment more readily, people in prison are at increased risk of sharing injecting equipment, and contracting blood-borne viruses as a result, particularly hepatitis C (Cunningham et al. 2018).

### **Dischargees**

Prison dischargees were asked whether they had used illicit drugs in prison, and whether they had injected drugs in prison.

Almost **1 in 6** (16%) prison dischargees reported **using illicit drugs in prison** 



Indicator 54: Proportion of prison dischargees who reported using illicit drugs in prison—16%

Only men reported using illicit drugs in prison, at a rate of more than 1 in 6 male dischargees (17%).

Non-Indigenous dischargees (22%) were 3.5 times as likely as Indigenous dischargees (6%) to report using illicit drugs in prison.

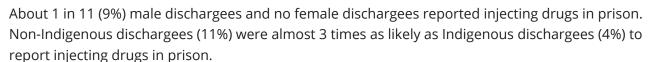
Prison dischargees aged 25–34 (22%) were over 6 times as likely as those aged 45 and over (3%) to report having used illicit drugs in prison, and dischargees aged 18–24 (15%) and 35–44 (14%) were about 4 times as likely.

About 1 in 12 (8%) prison dischargees reported injecting drugs in prison



**Indicator 55:** Proportion of prison dischargees who reported injecting drugs in prison—8%

About 1 in 12 (8%) prison dischargees reported they had injected drugs in prison, equating to about half of prison dischargees who reported using illicit drugs in prison.



Similar to patterns of illicit drug use in prison, dischargees aged 25–34 were the most likely to report injecting drugs while in prison (11%), and those aged 45 and over were the least likely (3%).

# 11.4 Needle-sharing

Sharing needles and syringes carries the risk of transmitting communicable diseases, most notably, hepatitis C (Butler & Simpson 2017). Community needle and syringe exchange programs 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, needle and syringe exchange programs have been extended to prisons, resulting in decreased needle-sharing practices and blood-borne virus transmissions, with no evidence of major negative consequences (Lazarus et al. 2018; Moazen et al. 2018; Schwitters 2014).



### **Entrants**

As part of the 2016 NPEBBVS&RBS, prison entrants were asked how often they shared injecting equipment during the previous month (Butler & Simpson, 2017).

Almost **1** in **5** (18%) prison entrants reported **sharing injecting equipment in the previous month** 



**Indicator 56:** Proportion of prison entrants who had shared injecting equipment in the previous month—18%

Almost 1 in 5 (18%) prison entrants reported they had shared injecting equipment in the previous month, and over 1 in 5 (22%) reported they used injecting equipment that was not sterile during the previous month. One-third (34%) of prison entrants reported they had shared injecting equipment at some stage in their lives. Three-quarters (76%) of prison entrants reported they had used only sterile injecting equipment during the previous month.

# **Dischargees**

About 1 in 13 (8%) prison dischargees reported sharing injecting equipment in prison



**Indicator 57:** Proportion of prison dischargees who reported using a needle that had been used by someone else while in prison—8%

Of the 8% of prison dischargees who reported injecting drugs in prison, almost all (just less than 8% of all dischargees) said they had shared injecting equipment. A further 6% of all dischargees surveyed did not know whether they had shared injecting equipment. These data were self-reported, so are likely to be an under-estimate, as participants might have been reluctant to disclose this information.

# 11.5 Opioid substitution therapy (OST)

Opioid drugs include heroin, morphine, oxycodone, and fentanyl. Dependence on them is associated with various health and social problems.

Treatment with opioid substitution therapy (OST)—such as methadone, buprenorphine and suboxone—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. They are associated with a reduction in demand for illicit drugs (Scott et al. 2015).

On a snapshot day in June 2017, about 50,000 people in Australia received pharmacotherapy treatment for opioid dependence, a rate of 20 per 10,000 people in Australia (AIHW 2018c).

Entering prison can result in a sudden withdrawal from drugs, so detoxification (for withdrawal) and longer-term treatment might be required by people in custody. The availability of OST in prison has been associated with reduced injecting drug use in prison. In turn, OST reduces the associated harms caused by needle-sharing and infections (Kinner et al. 2013; Lafferty et al. 2018; Schwitters 2014).

### **Entrants**

Prison entrants were asked whether they were currently, or had ever been, on OST.

**Indicator 58:** Proportion of prison entrants who reported currently being on opioid substitution therapy—7%

About 1 in 8 (13%) prison entrants reported they had been on OST at some stage in their lives, and 1 in 13 (7%) reported they were currently on OST.

## People in custody

Indicator 59: Proportion of people in custody who received medication for opioid dependence—1.5%

Medications for opioid dependence were reportedly dispensed to just over 1% of people in custody. But this was likely an under-estimate of the true value, as not all medications typically dispensed were captured in the NPHDC.

# Dischargees

**Indicator 60:** Proportion of prison dischargees on opioid substitution therapy while in prison with a plan to continue after release—7%

One in 13 (8%) prison dischargees reported being on OST, and most (88% of those on OST, or 7% of all dischargees) planned to continue OST after release from prison.

# 11.6 Tattooing and body piercing

In addition to injecting drug use, needle-sharing in prison might occur when people receive amateur tattoos or body piercings from other people in prison. Without the availability of sterilised equipment, tattooing and body piercing are risk behaviours for contracting blood-borne viruses (Butler et al. 2010).

From a survey of people in Queensland prisons in 2010, one-quarter (25%) of men and about 1 in 8 (13%) women reported receiving a tattoo in prison, and 1 in 7 (15%) men, and 1 in 8 (12%) women received a body or ear piercing during their time in prison (Butler et al. 2010).

**Indicator 61:** Proportion of prison dischargees who reported receiving a tattoo while in prison-6%

Indicator 62: Proportion of prison dischargees who reported receiving a body or ear piercing while in prison—less than 1%

One in 17 (6%) prison dischargees reported receiving a tattoo or body piercing while in prison, with 1 in 18 (just less than 6%) receiving a tattoo in prison, and less than 1% receiving a piercing. These data are self-reported, and are likely to be an under-estimate, as people in prison might be reluctant to disclose this information.



# 12 Alcohol consumption

### **Key findings**

- About 1 in 3 (34%) prison entrants were at high risk of alcohol-related harm during the previous 12 months.
- Prison entrants were more likely to report abstaining from alcohol than people in the general community.
- · Prison entrants who did drink were more likely to drink at high-risk levels than people in the general community.
- Among prison entrants who did drink, heavy drinking was more likely to persist across age than among those who drink in the general community

Alcohol use, particularly high-level consumption, is a major risk factor for death and disease, and has been linked to numerous acute and chronic health conditions (GBD 2016 Alcohol collaborators 2018). There are strong and persistent links between alcohol use disorder and adverse psychosocial outcomes affecting physical and mental health, family violence, relationship instability, at-risk sexual behaviours, unemployment, violence, victimisation, and criminal activity (Fergusson et al. 2013).

# 12.1 Alcohol consumption before prison

The proportion of prison entrants who were at risk of alcohol-related harm was determined using questions on alcohol consumption from the World Health Organization's Alcohol Use Disorder Identification Test (AUDIT) screening instrument (Babor et al. 2001). The consumption component of this instrument (AUDIT-C) contains 3 consumption questions from the AUDIT, with each question scoring 0-4. Scores for the 3 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, the standard alcohol risk rating used in Australia (NHMRC 2009).

But both guidelines recognise that alcohol-related harm can be caused by different patterns of consumption, such as from a single episode of consumption, or a cumulative effect often referred to as 'lifetime risk' (Babor et al. 2001; NHMRC 2009).

### **Entrants**

About 1 in 3 (34%) prison entrants were at high risk of alcohol-related harm during the previous 12 months



**Indicator 63:** Proportion of prison entrants who were at high risk of alcohol-related harm in the previous 12 months (as measured by the AUDIT-C)—34%

About 1 in 3 (34%) prison entrants surveyed had a high-risk score of alcohol-related harm, measured by the AUDIT-C, due to their patterns of alcohol consumption over the previous 12 months.

More than 1 in 3 (35%) male prison entrants, and more than 1 in 4 (27%) female prison entrants were at high risk of alcohol-related harm (as measured by the AUDIT-C).



Indigenous prison entrants (46%) were almost twice as likely as non-Indigenous entrants (26%) to be rated as being at high risk of alcohol-related harm (Figure 12.1).

Entrants aged 35–44 (37%) were the most likely to be at high risk of alcohol-related harm, and those aged 18-24 (28%) were the least likely (Figure 12.2).

Over time, the proportions of prison entrants who were at high risk of alcohol-related harm declined.

Almost half (47%) of male prison entrants were scored as being at high risk of alcohol-related harm on the AUDIT-C in 2012, compared with one-third (34%) in the 2018 NPHDC. In 2012, 2 in 5 (39%) female entrants were high risk, compared with more than one-quarter (27%) in 2018 (Figure 12.1).

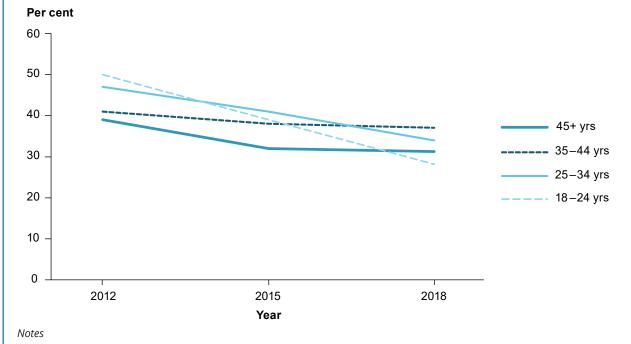
The likelihood of a high-risk score on the AUDIT-C reduced from 50% in 2012 to 28% in 2018 for prison entrants aged 18-24, and from 47% to 34% for those aged 25-34 (Figure 12.2).

Figure 12.1: Trends in prison entrants at high risk of alcohol-related harm in the previous 12 months, by sex and Indigenous status, 2012–2018 (%) Per cent 70 60 50 Male 40 Female 30 ---- Indigenous 20 Non-Indigenous 10 0 2012 2015 2018 Year 1. Proportions are proportions in this data collection only, and not the entire prison population. 2. Data from 2015 and 2018 exclude New South Wales, which did not provide data for this item. Source: Entrants form, 2012, 2015, 2018 NPHDC.





Figure 12.2: Trends in prison entrants at high risk of alcohol-related harm in the previous 12 months, by age, 2012-2018 (%)



- 2. Proportions are proportions in this data collection only, and not the entire prison population.
- 3. Data from 2015 and 2018 exclude New South Wales, which did not provide data for this item. Source: Entrants form, 2012, 2015, 2018 NPHDC.

# **Dischargees**

Prison dischargees were also asked the AUDIT-C questions. Pre-release AUDIT scores have been found to predict hazardous drinking for six months after release from prison (Thomas et al. 2014).

More than half (56%) of prison dischargees were at high risk of alcohol-related harm before prison (as measured by the AUDIT-C).



Indicator 64: Proportion of prison dischargees who were at high risk of alcohol-related harm before their current incarceration (as measured by the AUDIT-C)—56%

More than half (56%) of dischargees reported that before prison, they were consuming alcohol at high-risk levels.

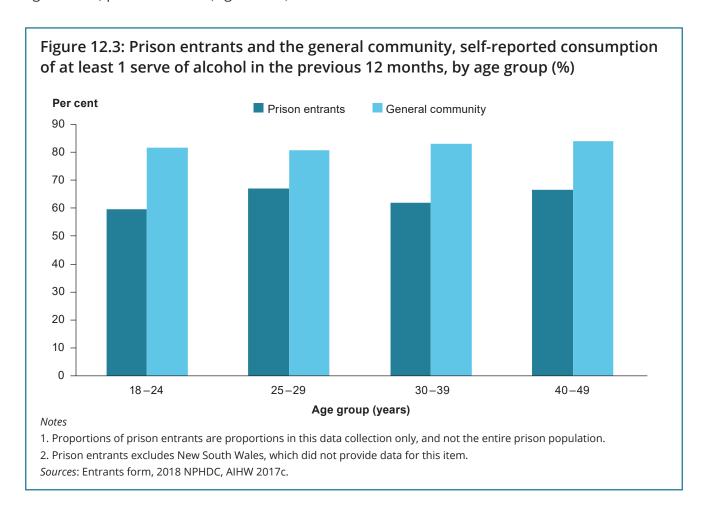
Men were more likely to report high-risk levels of alcohol consumption (58%) than women (38%). Indigenous dischargees more commonly reported high risk drinking (68%) than non-Indigenous dischargees (47%).

Abstinence was more likely for women (24%) than men (18%), and for non-Indigenous (26%) than Indigenous (9%) dischargees.

## Comparisons with general community

The proportions of prison entrants who had consumed at least 1 serve of alcohol in the previous 12 months were compared with people in the community, by age and sex. Comparisons were also made between prison entrants and people in the community who reported consuming at least 7 standard drinks on a typical day of drinking in the previous 12 months, by age and sex (AIHW 2017c).

People in the community were more likely than prison entrants to report having consumed alcohol in the previous 12 months. At least 4 in 5 (81%–84% of those aged 18–49) people in the community consumed alcohol during the previous year, compared with about 2 in 3 (60%–67% of those aged 18-49) prison entrants (Figure 12.3).



While prison entrants were more likely to report abstaining from alcohol than people in the general community, prison entrants who did drink were more likely to drink at high-risk levels.

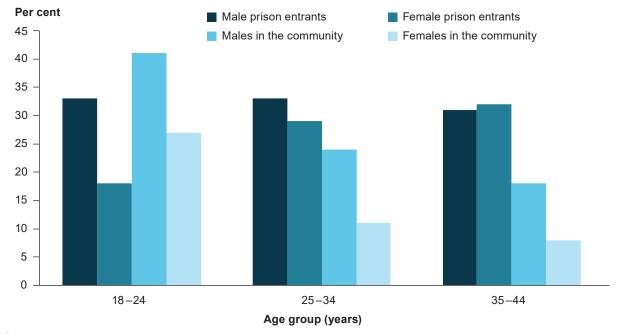


Prison entrants aged 25-44 years were about twice as likely to drink at least 7 standard drinks, on an average day of drinking, as people of the same age in the general community.

Women aged 25-34 entering prison were more than 2.5 times as likely to drink at least 7 serves of alcohol on a day of drinking as women of the same age in the general community, and those aged 35-44 were 4 times as likely (Figure 12.4).

Among prison entrants who drank, heavy drinking was more likely to persist across age than among those who drank in the general community.

This level of high-risk alcohol consumption (at least 7 standard drinks per day of drinking) decreased with age for people in the general community—from 34% of those aged 18-24 to 13% of those aged 35-44—but remained at 31%-32% for prison entrants of the same age (Figure 12.4).



### Notes

- 1. Excludes those who reported not drinking in the previous 12 months.
- 2. Proportions of prison entrants are proportions in this data collection only, and not the entire prison population.
- 3. Prison entrants excludes New South Wales, which did not provide data for this item.

Sources: Entrants form, 2018 NPHDC, AIHW 2017c.

# Alcohol treatment in prison

With the high proportion of people in custody who reported that, while in the community, they consumed alcohol at levels considered high risk for alcohol-related harm, there is a clear need for alcohol-treatment services to be available in prison, then continued into the community after release.

Of prison dischargees who were at high risk of alcohol-related harm, 1 in 10 (10%) reported accessing an alcohol treatment program in prison



Indicator 65: Proportion of prison dischargees who reported accessing an alcohol treatment program in prison—8%

More than half (56%) of prison dischargees reported at risk alcohol consumption before prison. But only 1 in 12 dischargees (8% of all dischargees, or 10% of those who were at high risk of alcohol-related harm), reported accessing alcohol-treatment programs in prison.

More than 2 in 3 (68%) dischargees who reported accessing an alcohol-treatment program in prison had a high-risk score of alcohol-related harm on the AUDIT-C.



## Injuries, assaults, and risky sexual **13** behaviours

### **Key findings**

- Almost 1 in 3 (31%) prison entrants reported a history of a head injury resulting in loss of
- About 1 in 10 (10%) prison entrants experienced ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness.
- About 1 in 9 (11%) prison dischargees reported they had been physically assaulted in prison by another person in custody.
- Of prison entrants who had casual sex in the preceding 3 months, 3 in 5 (60%) reported never using a condom.

### **Head injury** 13.1

Acquired brain injury refers to any damage to the brain that occurs after birth and/or foetal alcohol syndrome. The most common causes are stroke and other organic causes, accident, or trauma, known as traumatic brain injury (Alderman et al. 2018).

Brain injury can interfere with a developing brain, and can cause difficulties with memory, attention, information processing, and mood regulation (Alderman et al. 2018). Traumatic brain injury might result from physical abuse, falls, sport-related injuries, and motor vehicle accidents (Colantonio et al. 2014). Acquired brain injury is a risk factor for criminal behaviour and for re-offending after prison release (Alderman et al 2018).

Among the general adult population, about 17% of men and 9% of women have had a head injury leading to a loss of consciousness, an indication of possible traumatic brain injury (Frost et al. 2013). The prevalence of acquired brain injury among people in prison is much higher, at 40%–90% (Alderman et al. 2018; Colantonio et al. 2014; Kelly et al. 2018). Acquired brain injury has been associated with an increase in aggression, impulsivity, impaired judgement, and reduced empathy, all of which are also associated with criminal behaviour (Kelly et al. 2018).

Brain injury among people in prison has a substantial impact on prison health services, with an increased need for medical and psychological services (Piccolino & Solberg 2014).

### **Entrants**

Prison entrants were asked whether:



- they had ever had a head injury resulting in a loss of consciousness
- they had noticed symptoms, such as headaches, memory changes, behavioural, and/or mood changes, as a result of that head injury
- · those symptoms had persisted.

### Almost 1 in 3 (31%) prison entrants reported a history of a head injury resulting in loss of consciousness



Of prison entrants who reported a history of head injury resulting in loss of consciousness, 1 in 3 (32%) said they still experienced symptoms from the injury



**Indicator 66:** Proportion of all prison entrants who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness—10%

Almost one-third (31%) of prison entrants reported having had a head injury leading to a loss of consciousness at some stage in their lives.

More women (36%) than men (31%) reported a history of head injury resulting in loss of consciousness, and more non-Indigenous prison entrants (35%) than Indigenous prison entrants (26%) had such an injury.

Of those prison entrants who reported a history of head injury resulting in a loss of consciousness, more than 2 in 5 (43%, or 13% of all prison entrants surveyed) said they had noticeable symptoms following the injury.

Almost 1 in 3 (32%, or 10% of all prison entrants surveyed) prison entrants with a history of a head injury resulting in loss of consciousness said they were still experiencing symptoms.

# Dischargees

Prison dischargees were asked whether they had sustained a head injury resulting in loss of consciousness while in prison, and, if so, whether they experienced symptoms such as headaches, memory loss, or behavioural and/or mood changes following the injury.

About **1 in 16** (6%) prison dischargees reported **having a head injury** in prison that resulted in a loss of consciousness.



Indicator 67: Proportion of prison dischargees who had ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness while in prison—2%

About 1 in 16 (6%) prison dischargees reported they had sustained a head injury while in prison that resulted in a loss of consciousness.

Of these, half (52% of those who had a head injury, or 3% of all dischargees surveyed) said they experienced symptoms following the head injury, and 2 in 5 (38%, or 2% of all prison dischargees surveyed) were still experiencing symptoms.

# 13.2 Accidents or injuries

Accidents and injuries can have substantial health consequences and might require temporary or ongoing prison health clinic care and resources.

Prison dischargees were asked whether they had an accident or sustained an injury while they were in prison that required medical attention.



1 in 4 (25%) prison dischargees reported they had an accident or injury in prison that required medical attention



Indicator 68: Proportion of prison dischargees who had to see a doctor or nurse due to an accident or injury while in prison—25%

One-quarter (25%) of dischargees reported having to see a doctor or nurse in the prison clinic due to an accident or injury. This occurred more often for men (26%) than women (19%), and for non-Indigenous dischargees (29%) than Indigenous dischargees (21%).

### Physical and sexual assault 13.3

Assaults by prisoners on other people in custody are often under-reported, making the collection of these data, difficult. Sexual violence, in particular, can have devastating effects on the health and well-being of the person assaulted, as well as on the community to which that person returns after release (Simpson et al. 2016).

In a survey of people in Queensland prisons, more than 1 in 3 (34%) men and 1 in 5 (20%) women reported having been physically assaulted in prison, and 3% of men and 4% of women reported a sexual assault (Butler et al. 2010).

A review of health interventions for people in custody found that sexual violence does occur in prisons even though there is little available literature on the issue (Schwitters 2014).

Prison dischargees were asked whether they had been physically, or sexually, assaulted while in prison.

About 1 in 9 (11%) prison dischargees reported they had been physically assaulted in prison by another person in custody



**Indicator 69:** Proportion of prison dischargees who reported being physically assaulted or attacked by another prisoner while in prison—11%

One in 9 (11%) prison dischargees reported that they had been physically assaulted or attacked by another person in custody during their time in prison—1 in 8 (13%) non-Indigenous dischargees and 1 in 11 (9%) Indigenous dischargees.

Dischargees aged 25-34 (17%) were the most likely to report a physical assault while in prison, and those aged 45 and over were the least likely (7%).

Men and women were equally likely to report being physically assaulted in prison (11% for both).

These data were self-reported, and are likely to be an under-estimate, as people in custody might have been reluctant to disclose this information.

**Indicator 70:** Proportion of prison dischargees who reported being sexually assaulted by another prisoner while in prison—2%

Data on sexual assaults were collected by asking prison dischargees whether they had been forced by, or frightened by, another prisoner into doing something sexually that they did not want to do, during their current imprisonment.



About 1 in 56 (2%) dischargees reported they had been sexually assaulted by another person in custody. But 8% either did not respond or said they wished not to answer.

These data were self-reported, and are likely to be an under-estimate, as people in custody might have been particularly reluctant to disclose this information.

## 13.4 At-risk sexual behaviours

Engaging in at-risk sexual behaviours, particularly with new or casual sexual partners, increases the risk of sexually transmissible diseases (STIs).

Information about at-risk sexual behaviours among prison entrants was obtained from the 2016 NPEBBV&RBS (Butler & Simpson 2017)

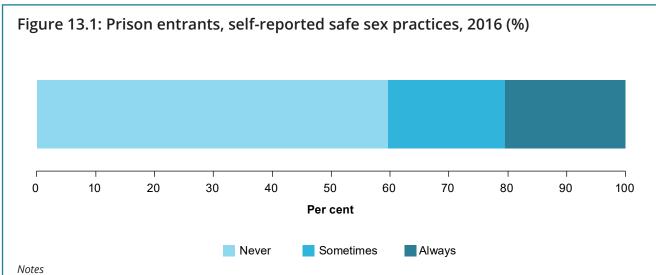
Of prison entrants who had casual sex in the preceding 3 months, 3 in 5 (60%) reported never using a condom.



**Indicator 71:** Proportion of prison entrants who had a casual sexual partner in the previous 3 months, and reported never using a condom—60%

Of prison entrants surveyed:

- almost 4 in 5 (80%) prison entrants reported they never or only sometimes used condoms during casual sex in the previous 3 months
- almost 3 in 5 (60%) reported they never used condoms
- about 1 in 5 (21%) reported they sometimes used condoms (Figure 13.1).



- 1. Percentages exclude participants reporting no regular, new or casual sex partner in the previous three months and those who did not report their sexual behaviour.
- 2. Proportions of prison entrants are proportions in this data collection only, and not the whole prison population. Source: AIHW analysis of NPEBBV&RBS 2016, Table 27.





### **General health services** 14

### **Key findings**

- The proportion of prison entrants who reported seeing a health professional in the community during the previous 12 months fell from 3 in 4 (74%) in 2012, to just over 1 in 3 (35%) in 2018.
- · Prison entrants were more likely to see an alcohol and other drug treatment professional in a previous prison stay than they were in the community.
- Almost 3 in 10 prison entrants reported they did not see a health professional in prison in the previous 12 months, despite needing to.

Despite the high level of health problems among people in prison, accessing health services in the community can be difficult. Health is often a lower priority than concerns about housing, employment, dependants, alcohol and other drug issues, and other stressful life events. Prison may provide people with an opportunity to access required health care services (Plugge et al. 2014).

The NPHDC provided information from prison entrants on their health-seeking behaviours. Data were collected about visits to health professionals both in the community, and in prison (for those prison entrants who reported being in prison on a prior incarceration in the previous 12 months). Information was also collected about when prison entrants did not seek health-care services, and reasons for not seeking health care when needed.

### Consulting health services in the community and 14.1 in prison

### **Entrants**

### Health professional seen in the community

More than 1 in 3 (35%) prison entrants reported they had seen a health professional in the community in the previous 12 months



Indicator 72: Proportion of prison entrants who reported consulting a health professional in the community in the previous 12 months—35%

In 2018, more than 1 in 3 (35%) prison entrants reported they had seen a health professional in the community in the 12 months before incarceration, a decrease from 2 in 3 (66%) in the 2015 NPHDC, and from 3 in 4 (74%) entrants in the 2012 NPHDC.

In 2018, Women entering prison (42%) more likely than men (34%) to report consulting a health professional in the community in the previous 12 months.

Indigenous prison entrants (41%) were more likely than non-Indigenous entrants (32%) to report seeing a health professional in the community in the previous 12 months.



There was little difference in the likelihood, by age, of prison entrants reporting they had seen a health professional in the community in the previous 12 months. Prison entrants aged 18–24 (32%) were the least likely to report seeing a health professional in the community, and those aged 35-44 (36%) were the most likely.

### Health professional seen in prison

Almost **half** (49%) of prison entrants who had been in prison in the previous 12 months reported **seeing a health professional in prison** during that time



Indicator 73: Proportion of prison entrants who were in prison in the previous 12 months, and reported consulting a health professional during that time in prison—49%

Almost half (45%) of prison entrants reported they had been in prison in the previous 12 months (Figure 14.1).

Male and female prison entrants were similarly likely to have been incarcerated during the previous year (about 45%).

Indigenous prison entrants (56%) were more likely than non-Indigenous prison entrants (38%) to report they had been in prison in the previous year.

The proportions of prison entrants reporting they had been in prison in the previous 12 months remained relatively stable over time.

In 2012, 44% of prison entrants reported they had been in prison in the previous 12 months, compared with 40% in 2015, and 45% in 2018.

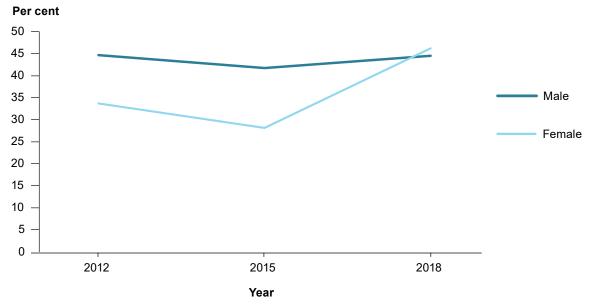
In 2018, female prison entrants (46%) were more likely to report they had been incarcerated in the preceding year than female prison entrants in either 2012 (34%) or 2015 (28%). In 2012, 2015 and 2018, male prison entrants were similarly likely to report having been in prison during the previous 12 months (Figure 14.1).

In 2018, Indigenous prison entrants (56%) were 1.5 times as likely as non-Indigenous prison entrants (38%) to report they had been incarcerated in the previous 12 months. This gap had increased between 2015 and 2018. In 2015, less than half (45%) of Indigenous prison entrants said they had been in prison in the previous year, compared with 38% of non-Indigenous entrants (Figure 14.2).

This means that, in 2018, 2 of the most vulnerable groups in the prison population—women and Indigenous people—were more likely to report a history of incarceration in the last 12 months than they had in previous years. These groups also showed poorer health outcomes than men and non-Indigenous people in the prison system.



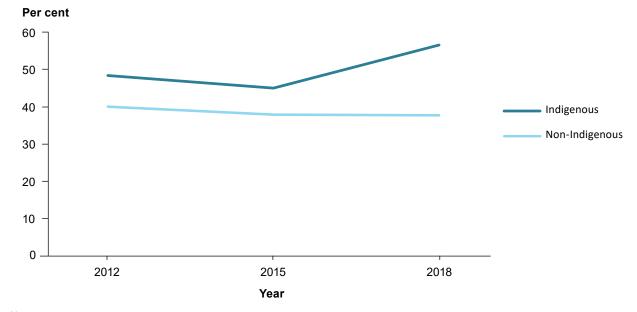
Figure 14.1: Trends in prison entrants who reported having been in prison in the previous 12 months, by sex, 2012-2018 (%)



### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Data for 2015 and 2018 exclude New South Wales, which did not provide data for this item. Sources: Entrants forms, 2012, 2015, 2018 NPHDC.

Figure 14.2: Trends in prison entrants who reported having been in prison in the previous 12 months, by Indigenous status, 2012-2018 (%)



### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Data for 2015 and 2018 exclude New South Wales, which did not provide data for this item. Sources: Entrants forms, 2012, 2015, 2018 NPHDC.



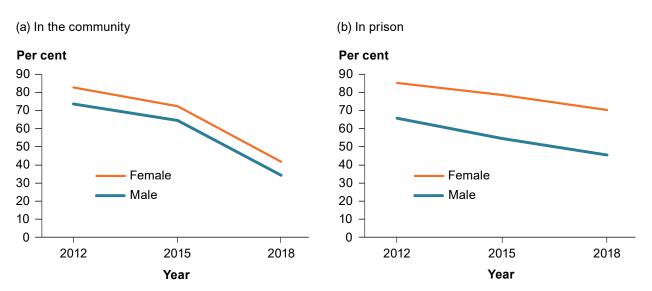
In 2018, about half (49%) of prison entrants who reported they had been in prison in the previous 12 months said they had seen a medical professional in prison during that period.

As with seeking health services in the community, this was also a decrease from previous NPHDC years, at 57% in 2015, and 67% in 2012.

Over time, female prison entrants were consistently more likely than male prison entrants to report they had seen a health professional in the community, or in prison, in the preceding 12 months (Figure 14.3).

But, the likelihood of male and female prison entrants to report having seen a health professional in the community or in prison in the past 12 months declined over time (Figure 14.3).

Figure 14.3: Prison entrants, self-reported consultation with a health professional in the community or in prison in the last 12 months, by sex and over time, 2012–2018 (%)



Notes

Sources: Entrants forms, 2012, 2015, 2018 NPHDC.

The consistently higher self-reported use of health services in prison than in the community, highlights the value of comprehensive prison health services. This is particularly important, as almost half of prison entrants reported they had been in prison in the previous year.

### Type of health professional seen

Almost 1 in 3 (30%) prison entrants reported seeing a nurse in the community in the previous 12 months, and more than one-quarter (27%) reported seeing a doctor or general practitioner (GP) (Figure 14.4; Table 14.1).



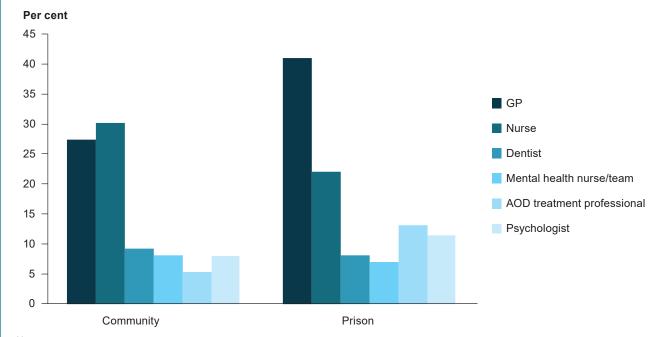
About 2 in 5 (41%) prison entrants who had been in prison in the previous 12 months reported having seen a GP in prison, and 1 in 5 (22%) said they had seen a nurse in prison.

Prison entrants who had been in prison in the previous 12 months were more likely to report seeing most types of health professionals in prison than in the community, with the exception of nurses, mental health nurses or teams, and dentists (Figure 14.4; Table 14.1).

<sup>1.</sup> Proportion of prison entrants who saw a health professional in prison in the preceding 12 months was a percentage of prison entrants who reported they had been in prison in the preceding 12 months.

<sup>2.</sup> Data for 2015 and 2018 exclude New South Wales, which did not provide data for this item.

Figure 14.4: Prison entrants, self-reported consultation with a health professional in the community or in prison in the previous 12 months, by type of health professional, 2018 (%)



### Notes

- 1. AOD treatment professional refers to alcohol and other drug treatment professional.
- 2. Proportions are proportions in this data collection only, and not the entire population.
- 3. Proportions of prison entrants who saw a health professional in prison in the past 12 months are proportions of prison entrants who reported being in prison in the past 12 months, and not all prison entrants in this data collection.
- 4. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.

Table 14.1: Prison entrants, self-reported consultation with a health professional in the community and in prison in the previous 12 months, by sex and by type of health professional, 2018 (%)

	Community			Prison		
Health professional seen	Males	Females	All	Males	Females	All
GP	26.9	30.8	27.4	39.0	51.9	40.9
Nurse	29.2	35.9	30.1	21.3	25.9	22.0
Alcohol and other drug treatment professional	5.4	5.1	5.4	11.8	20.4	13.1
Aboriginal health practitioner	4.2	4.3	4.2	8.2	5.6	7.8
Dentist	9.1	10.3	9.2	6.9	14.8	8.1
Psychologist	7.9	8.5	8.0	10.2	18.5	11.4
Psychiatrist	6.0	8.5	6.4	6.2	14.8	7.5
Social worker	6.1	12.8	7.1	6.9	16.7	8.4
Mental health nurse/team	7.2	13.7	8.1	5.9	13.0	7.0
Other	8.0	11.1	8.5	12.5	24.1	14.2
Any health professional	34.2	41.9	35.2	45.6	70.4	49.3

### Notes

- 1. Proportions are proportions of prison entrants in this data collection only, and not the entire prison population.
- 2. Percentages might not sum to 100 as individuals might have seen more than 1 type of health professional in the previous 12 months.
- 3. Other includes physiotherapists, radiographers and other unspecified health professionals.
- 4. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.



Indigenous prison entrants were more likely to report seeing a health professional in the community in the previous 12 months than non-Indigenous prison entrants. But, Indigenous and non-Indigenous prison entrants who had been in prison in the previous year were similarly likely to report consulting a health professional in prison (Table 14.2).

Almost 2 in 5 (38%) Indigenous prison entrants reported seeing a nurse in the community in the 12 months before prison, almost one-third (31%) reported seeing a doctor, and about 1 in 8 (12%) said they had seen a dentist.

This compares with about one-quarter (26%) of non-Indigenous prison entrants reporting they saw a nurse in the community in the 12 months before prison, one-quarter (25%) reporting they saw a doctor, and 1 in 13 (8%) reporting they saw a dentist.

Table 14.2: Prison entrants, self-reported consultation with a health professional in the community and in prison in the previous 12 months, by Indigenous status and by type of health professional seen, 2018 (%)

	Com	munity	Prison		
Health professional seen	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	
GP	31.8	25.4	40.2	42.0	
Nurse	37.7	25.8	24.7	19.3	
Alcohol and other drug treatment professional	7.1	4.4	10.3	16.0	
Aboriginal health practitioner	8.8	1.2	14.9	1.1	
Dentist	11.7	7.9	6.9	8.8	
Psychologist	9.4	7.3	8.0	14.9	
Psychiatrist	7.5	5.8	4.6	10.5	
Social worker	8.1	6.7	7.5	9.4	
Mental health nurse/team	10.4	6.9	5.7	8.3	
Other	10.4	5.2	10.9	17.1	
Any health professional	40.9	32.0	47.1	51.4	

### Notes

- 1. Proportions are proportions of prison entrants in this data collection only, and not the entire prison population.
- 2. Percentages might not sum to 100, as individuals might have seen more than one type of health professional in the previous 12 months.
- 3. Other includes physiotherapists, radiographers and other unspecified health professionals.
- 4. Excludes New South Wales, which did not provide data for this item.

Source: Entrants form, 2018 NPHDC.

# Comparisons with the general community

In 2017–18, most people aged 15 and over (84%) in Australia reported seeing a general practitioner in the preceding 12 months, and half (50%) said they had seen a dentist (ABS 2018f).

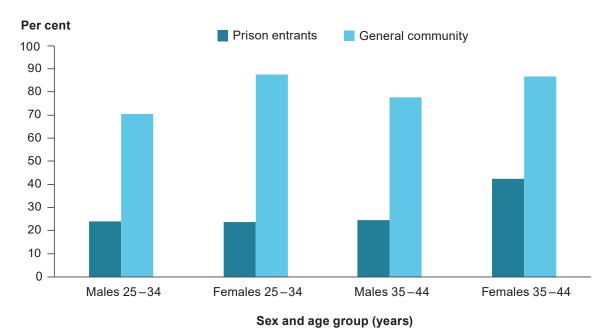
These proportions were higher than the 41% of prison entrants who reported seeing a GP in the community, and the 22% who said they saw a dentist in the past 12 months.



But the prison population is younger than the general Australian population, and health-care needs tend to increase with age.

When compared by age, men and women in the community were 2-4 times as likely to have reported consulting a GP in the preceding 12 months as prison entrants (Figure 14.5).

Figure 14.5: Prison entrants and the general community, self-reported consultation with a GP in the community in the previous 12 months, by age and sex, 2018 (%)



- 1. Proportions of prison entrants are proportions in this data collection only, and not the entire prison population.
- 2. Prison entrants excludes New South Wales, which did not provide data for this item. Sources: Entrants form, 2018 NPHDC, ABS 2018f.

# Barriers to use of health services

Improving public health requires improving prisoner health, so barriers to the use of health services need to be minimised wherever possible.

Barriers might be:

- physical, such as not being able to attend a consultation due to time constraints, lack of transport, or lack of services
- psychosocial, where an individual feels stigmatised or intimidated, there is a lack of culturally appropriate care available, or where an individual feels discouraged from seeking treatment.

For people who are incarcerated, barriers to receiving specialist treatment might be particularly problematic, especially if the person is required to travel out of the prison.

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. If an entrant indicated that they had not attended a health service when they needed to, they were asked why.

These questions were asked in relation to seeing a health professional in the previous 12 months in the community, and in prison for people who said they had been in prison at some stage in the previous year.



### **Entrants**

About 1 in 11 (9%) prison entrants reported needing to see a health professional in the community in the previous 12 months, but not doing so



**Indicator 74:** Proportion of prison entrants who reported that, in the previous 12 months, they needed to consult a health professional in the community, but did not—9%

About 1 in 11 (9%) prison entrants said they did not consult a health professional in the community when they needed to. About 1 in 16 (6%) prison entrants reported they did not see a GP in the previous 12 months despite needing to, almost 9 times the proportion of people in the general community (less than 1%) (ABS 2018f).

Almost 1 in 3 (30%) prison entrants reported needing to see a health professional in prison in the previous 12 months, but not doing so



**Indicator 75:** Proportion of prison entrants who reported they were in prison in the previous 12 months, and needed to consult with a health professional while in prison, but did not—30%

Almost one-third (30%) of prison entrants who said they had been in prison in the previous year also reported they did not see a health professional in prison despite needing to.

Almost 1 in 5 (18%) said they did not see a GP in prison despite needing to, and 1 in 11 (9%) reported not seeing a dentist in prison despite needing to.

When asked why they did not see a health professional, either in the community or in prison when needed, prison entrants were able to select multiple reasons.

The most common reasons cited by prison entrants for not seeing a health professional in the community were that:

- the waiting time was too long or the health professional was not available at the time required (30%)
- they felt it was not necessary (29%)
- it was too expensive (14%)

For prison entrants who reported they had been in prison in the previous 12 months, the most common reasons cited for not seeing a health professional in prison when required were that:

- they felt it was not necessary (63%)
- it was too expensive (38%)
- they were affected by alcohol or other drugs (38%)
- they did not have transport or it was too far (28%)

Transport to a health professional for someone in prison is more problematic than in the community if that health professional is outside the prison. Some consultations require transfer through another prison before attending, and, in the case of having to transfer through a prison perceived as dangerous, people in prison might elect to forego a necessary appointment, rather than go through the transfer process.



# 15 Prison clinic

### **Key findings**

- Almost 9 in 10 (89%) prison dischargees reported they received a health assessment when they entered prison.
- Almost 8 in 10 (79%) prison dischargees reported they could easily see a medical professional (GP or nurse) while in prison.
- Almost 1 in 4 (24%) prison dischargees reported they were diagnosed with a health condition while in prison.
- More than 1 in 4 (28%) clinic visits were initiated by the patient.
- In the 2-week data collection period, almost 19,000 prison clinic visits were recorded, attended by almost 8,000 people in prison.
- · About 9 in 10 prison dischargees were satisfied with the amount of information they received at their clinic visit.

# 15.1 Use of prison clinics

People entering prison are routinely given an initial health assessment. This health assessment provides clinicians with an indication of the health, and health needs, of the individual and whether referral for further assessment or treatment is required.

## **Dischargees**

Prison dischargees were asked whether they had received a health assessment on entry to prison, and whether they were referred for further assessment or treatment as a result.

Almost 9 in 10 (89%) prison dischargees reported they received a health assessment when they entered prison



**Indicator 76:** Proportion of prison dischargees who reported they received a health assessment upon entry to prison—89%

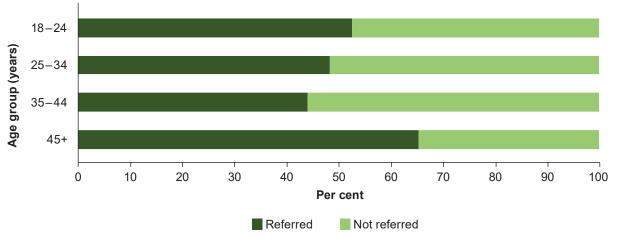
Most prison dischargees (89%) reported they had received a health assessment when they entered prison—9 in 10 men (89%) and almost as many women (86%).

Prison dischargees aged 18–24 were the most likely to report they had received an initial health assessment on prison entry (95%), and those aged 35-44 were the least likely (83%).

Of those dischargees who reported they had received an initial health assessment on prison entry, half (51%) said they had been referred for further assessment or treatment. Women (59%) were more likely to report receiving a referral than men (49%).

Dischargees aged 45 and over (65%) were the most likely to report receiving a referral on prison entry, followed by those aged 18–24 (53%), and dischargees aged 35–44 were the least likely (44%) (Figure 15.1).





### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

Prison dischargees were asked whether they could easily see a GP and/or nurse when required while they were in prison.

Almost 8 in 10 (79%) prison dischargees reported they could easily see a medical professional (GP or nurse) while in prison

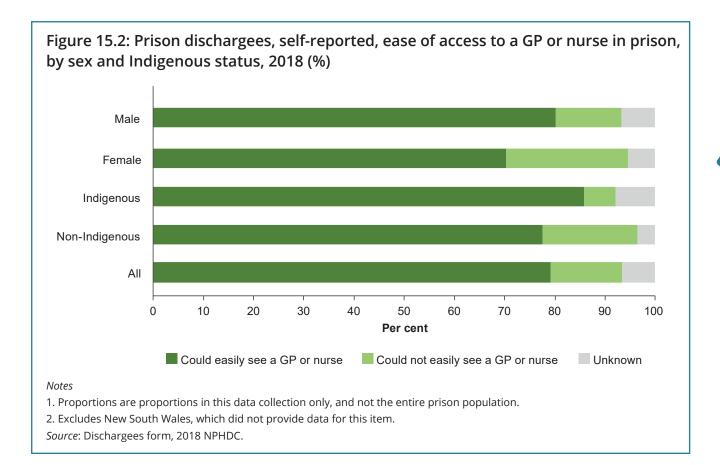


Indicator 77: Proportion of prison dischargees who reported they could easily see a medical professional (GP or nurse) in prison if they had a health problem—79%

Almost 8 in 10 (79%) prison dischargees said they could easily see a GP or nurse for a health condition in prison. About 8 in 10 (81%) prison dischargees said they could easily see a nurse in prison, but, less than two-thirds (65%) said they could easily see a doctor or GP. Prison clinics are usually a nurse-led system of care so this finding is not surprising.

Female dischargees (70%) were less likely than male dischargees (80%) to report they had been able to readily see a GP or nurse while in prison (Figure 15.2).

Indigenous dischargees (86%) were more likely than non-Indigenous dischargees (78%) to say they could easily see a GP or nurse in prison.



There was little difference by age in prison dischargees who said they could easily see a GP or nurse in prison. But, prison dischargees aged 45 and over (71%) were the most likely to report they could easily see a GP and those aged 18–24 (60%) were the least likely.

Prison dischargees were asked whether they had visited the prison clinic during their time in prison.

About 9 in 10 (90%) prison dischargees reported visiting the prison clinic while in prison



**Indicator 78:** Proportion of prison dischargees who reported they had visited the prison clinic while in prison-90%

The majority of prison dischargees (90%) said they had visited the clinic while they were in prison, with women (92%) being slightly more likely than men (89%).

Indigenous dischargees (97%) were more likely than non-Indigenous dischargees (88%) to report they had visited the prison clinic.

# People in custody

Information about how people in prison used the clinic was collected as part of the 2018 NPHDC. Health professionals completed a clinic visit form for every consultation attended by a person in custody who provided consent during the 2-week data collection. The form included demographic information about the patient, the problem managed, and the type of health professional the patient saw.

Not all clinic visits were able to be recorded and the following results are likely an under-estimate of the true proportions of people accessing the clinics. Proportions were calculated as a percentage of all people in participating prisons on a snapshot day, 30 June 2018, provided by the ABS.

### More than 1 in 4 (28%) people in custody attended the prison clinic during the 2-week data collection period



Indicator 79: Proportion of people in custody who used the prison clinic during the 2-week data collection period—28%



More women (40%) than men (27%) visited the prison clinics during the 2-week data collection period (Figure 15.3).

Indigenous people in custody (27%) and non-Indigenous people in custody (26%) were similarly likely to visit the prison clinics).

Figure 15.3: People in custody, visits to the prison clinic in the 2-week data collection period, by sex and Indigenous status, 2018 (%) Male Female Indigenous Non-Indigenous ΑII 20 30 40 50 60 70 80 90 100 Per cent Visited the prison clinic Did not visit the prison clinic Notes 1. Proportions are based on numbers in this data collection only, and are likely an under-estimate of the true proportions of people who visited the prison clinics in the 2-week data collection period.

2. Excludes New South Wales, which did not provide data for this item.

Source: Clinic visit form, 2018 NPHDC.

The proportion of people in custody who visited the prison clinic during the 2-week data collection period increased with age (Figure 15.4).

People in prison aged 45 and over (36%) were the most likely to visit the clinic, and those aged 18–24 (20%) were the least likely.

# Figure 15.4: People in custody, visits to the prison clinic in the 2-week data collection period, by age, 2018 (%) 18 - 24Age group (years)



Notes

25 - 34

35 - 44

45+

0

10

1. Proportions are based on numbers in this data collection only, and are likely an under-estimate of the true proportions of people who visited the prison clinics in the 2-week data collection period.

40

50

Per cent

60

70

Did not visit the prison clinic

80

90

100

2. Excludes New South Wales, which did not provide data for this item.

20

Visited the prison clinic

30

Source: Clinic visit form, 2018 NPHDC.

# Number of visits per patient

There were 18,804 clinic visits, attended by 7,747 people in custody (or patients) recorded on the clinic visit forms, or 2.4 clinic visits per patient, during the 2-week data collection period.

Men (2.5 visits per male patient) typically attended more clinic visits during the 2-week period than women (2.1 visits per female patient).

Both Indigenous and non-Indigenous patients attended 2.4 clinic visits, on average, during the data collection period.

The rate of clinic visits per patient increased with age, with patients aged 18-24 attending an average of 2.1 visits, and those aged 45 and over attending an average of 2.6 visits.

# Number of problems managed per patient

During the 2-week data collection periods in 2018, 1,626 general health assessments were conducted, and an additional 18,498 problems managed. This means, excluding general health assessments, 2.4 problems, on average, were managed per patient, during the 2-week data collection.

Men (2.4 problems per patient) had slightly more problems managed, on average, than women (2.3 per patient).

Indigenous patients (2.5 problems per patient) had slightly more problems managed, on average, than non-Indigenous patients (2.3 per patient).

The rate of problems managed per patient in the 2 weeks increased with age. Patients aged 18-24 had an average of 2.0 problems managed per patient, and those aged 45 and over had an average of 2.6 problems managed.

# 15.2 Health conditions managed in clinic visits

## **Dischargees**

Prison dischargees were asked whether they had ever been diagnosed with a health condition, and, if so, to specify the type of health condition. Dischargees were also asked whether they had been diagnosed with a health condition for the first time in prison, and, if so, the type of health condition.

Almost 1 in 4 (24%) prison dischargees reported they were diagnosed with a health condition in prison



**Indicator 80:** Proportion of prison dischargees who reported they were diagnosed with a health condition in prison—24%

About one-quarter (24%) of prison dischargees were diagnosed with at least 1 health condition while they were in prison, with male dischargees (25%) being more likely than female dischargees (19%) to be diagnosed with a health condition.

Indigenous dischargees (25%) and non-Indigenous dischargees (24%) were similarly likely to say they had a health condition diagnosed in prison.

Prison dischargees aged 45 and over were the most likely to report being diagnosed with a health condition in prison (33%), and those aged 18-24 were the least likely (18%).

The health conditions that prison dischargees most commonly said they had been diagnosed with at some stage in their lives were:

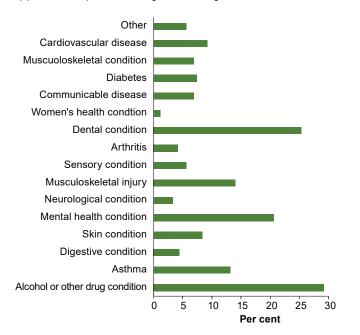
- conditions associated with alcohol and other drugs (29% of dischargees)
- dental conditions (25% of dischargees)
- mental health conditions (21% of dischargees).

The health conditions prison dischargees reported they were diagnosed with for the first time in prison were most likely to be:

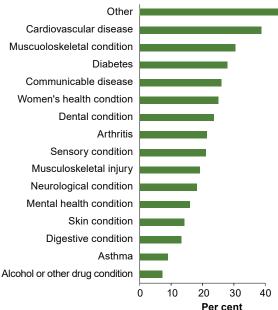
- cardiovascular disease (39% of those ever diagnosed with cardiovascular disease)
- musculoskeletal conditions (30% of those ever diagnosed with musculoskeletal conditions)
- diabetes (28% of those ever diagnosed with diabetes)
- communicable diseases (26% of those ever diagnosed with the condition) (Figure 15.5).

# Figure 15.5: Prison dischargees, self-reported health conditions ever diagnosed and diagnosed in prison, 2018 (%)

(a) Per cent of prison dischargees ever diagnosed with condition



(b) Per cent of prison dischargees with a condition who were first diagnosed with that condition in prison



- (a) Percentage of all prison dischargees in the data collection who had ever been diagnosed with a health condition.
- (b) Percentage of prison dischargees in the data collection diagnosed with a health condition that was first diagnosed during current prison stay.

### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Dischargees form, 2018 NPHDC.

# People in custody

Health professionals in the prison clinics recorded the problem or condition managed at the clinic visits during the 2-week data collection. Multiple conditions were recorded per visit, where necessary.

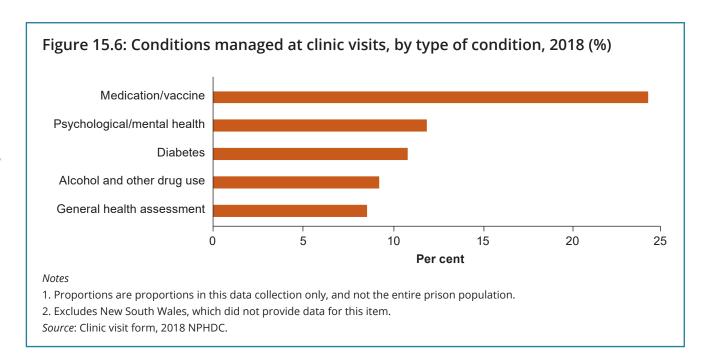
About 1 in 4 (24%) people in custody consulted the prison clinic for medication and/or vaccination requirements during the 2-week data collection period



**Indicators 81:** Proportion of people in custody who had a problem managed in the prison clinic during the 2-week data collection period, by type of problem managed—medication/vaccination, 24%; mental health conditions, 12%; diabetes, 11%.

During the data collection period, 18,498 specified conditions were managed and 1,626 general health assessments performed during 18,804 clinic visits. Of those:

- 24% were related to medication or vaccination
- 12% were mental health-related
- 11% were diabetes-related
- 9% were related to alcohol and other drug use
- 9% were general health assessments (Figure 15.6).



The types of conditions managed, as specified on the clinic visit form, differed according to the sex of the patient.

Men were more than 3 times as likely as women to be managed for a condition related to alcohol and other drug use, twice as likely to be managed for diabetes, and 1.5 times as likely to consult a clinician for medication or vaccination.

Women were 3 times as likely as men to be managed for arthritis, and about twice as likely to be managed for neurological conditions, sensory conditions, dental conditions, digestive conditions, or mental health conditions.

The types of conditions managed in the clinic also varied with age. The likelihood of conditions like diabetes, cardiovascular disease, cancer, and arthritis being managed at the clinic increased with age.

Management of conditions like communicable diseases, neurological conditions, and mental health conditions decreased with age.

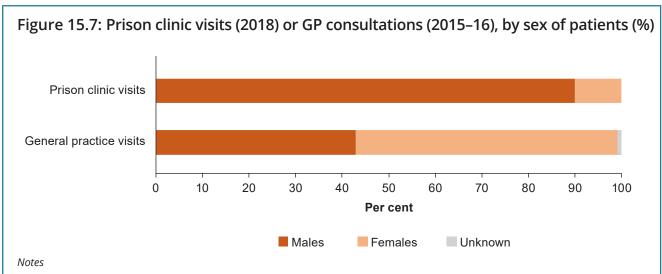
Conditions associated with drug and alcohol use were more common among patients aged 25-44 than those aged 18-24 or 45 and over.

# Comparisons with the general community

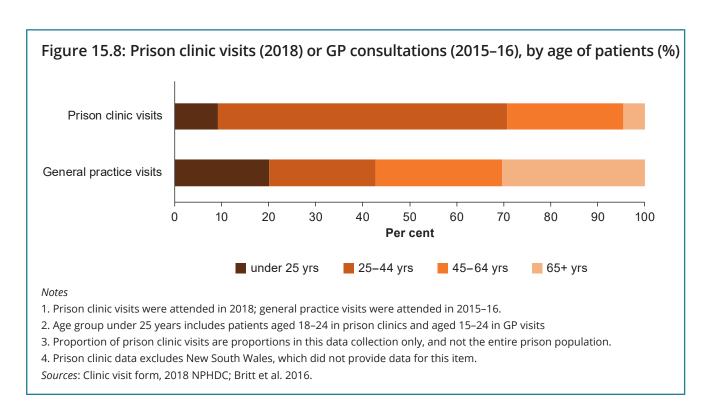
The Bettering the Evaluation and Care of Health (BEACH) dataset collected information on problems managed in a sample of visits with GPs (Britt et al. 2016).

The prison population differed from the sample of patients from the general Australian population in its sex and age structure. The prison population was predominantly male and aged 25-44.

In 2018, 90% of the patients who visited the clinic during the 2-week data collection period were male, 62% were aged 25-44, and 87% were aged 18-54. In 2015-16, GP patients were mostly female (56%), and only 23% were aged 25-44 (Britt et al. 2016) (figures 15.7 and 15.8).

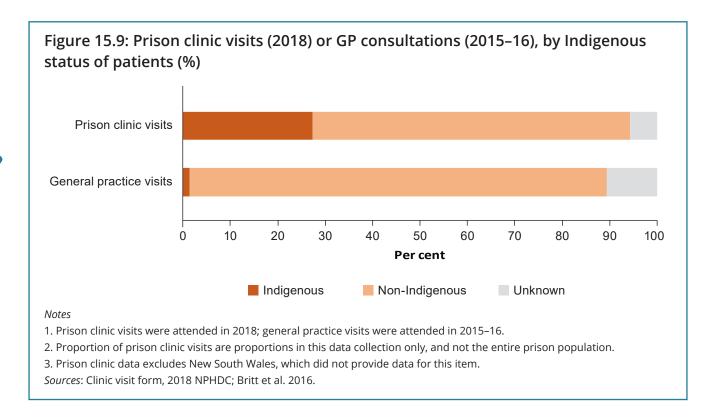


- 1. Prison clinic visits were attended in 2018; general practice visits were attended in 2015–16.
- 2. Proportion of prison clinic visits are proportions in this data collection only, and not the entire prison population.
- 3. Prison clinic data excludes New South Wales, which did not provide data for this item. *Sources*: Clinic visit form, 2018 NPHDC; Britt et al. 2016.



Indigenous people were largely over-represented in the prison population, and were under-represented in GP consultations in the community. In 2018, 27% of prison clinic patients were Indigenous, and in 2015–16, in the BEACH sample, 1% of GP patients were Indigenous (Figure 15.9). An estimated 3% of the Australian population were Indigenous from the 2016 Australian Census (ABS 2018c, Britt et al. 2016)

The prison population is also overwhelmingly more disadvantaged than the general population.



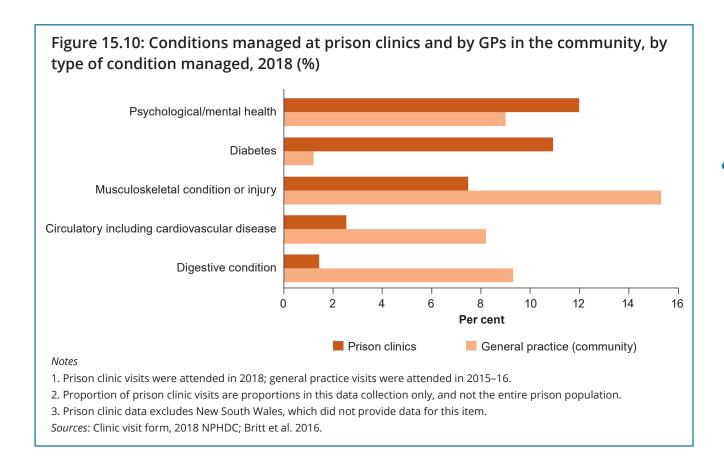
All of these factors affect the types of health problems experienced by people in custody. The problems managed in prison clinics reflect the types of health issues experienced by the patients. The services offered in prison clinics are often more diverse than those offered by GPs in the community, due to the variety of health professionals consulting with patients in prison.

Fewer problems were managed per prison clinic visit than per GP visit in the community. Almost 4 in 5 (78%) prison clinic visits managed a single problem, compared with 3 in 5 (59%) GP visits managing a single problem, and 2 in 5 (41%) managing multiple problems. This was likely due to the diverse services provided by the prison clinics, which are not restricted to GPs.

The types of health problems commonly managed in prison clinics differed from those managed by GPs due to the different needs of patients from the prison population and from the community:

- Diabetes was 9 times as likely to be managed during prison clinic visits as during GP consultations in the community.
- · Mental health conditions, and medication and vaccinations were more commonly addressed in prison clinic visits than in GP visits in the community.
- · Digestive system conditions, circulatory system diseases, and musculoskeletal conditions were more commonly addressed by GPs in the community than in prison clinics (Figure 15.10).

This was likely because of the older ages of patients attending GPs in the community than those attending prison clinics, and because these conditions generally become more prevalent with age.



# 15.3 Services received during prison clinic visits

# People in custody

For each clinic visit recorded on the clinic visit form during the 2-week data collection period, clinicians reported the service(s) a patient received.

Almost 2 in 3 (65%) people in custody received treatment when they attended the prison clinic



**Indicator 82:** Proportion of clinic visits during the 2-week data collection period by service received—treatment, 65% of clinic visits; assessment only, 37%; advice and education 32%; and referral, 11%.

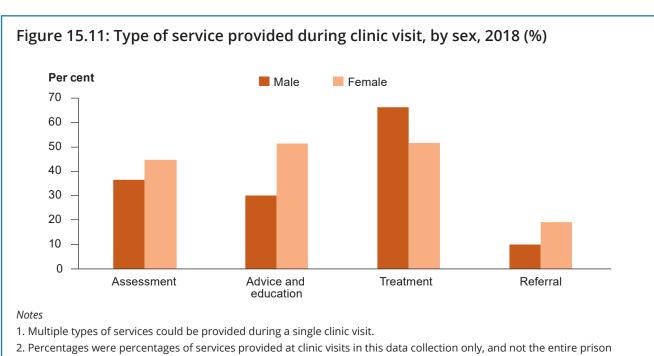
Of the 18,804 clinic visit forms completed, 27,306 services were provided—an average of 1.5 services per visit.

The services administered were:

- treatment (65% of all services)
- assessment only (37%)
- advice and education (32%)
- referrals (11%).

Men (66%) were more likely than women (52%) to receive treatment during a prison clinic visit. But women (45%) were more likely than men (37%) to receive an assessment only. Women (51%) were also more likely than men (30%) to receive advice and education at a typical clinic visit.

There was little difference in the types of treatment received by patients by age or Indigenous status.



- population.
- 3. Excludes New South Wales, which did not provide data for this item.

Source: Clinic visit form, 2018 NPHDC.

### Initiator of clinic visits 15.4

Similar to general practice in the community, a visit to the prison clinic may be initiated by the patient or by clinic staff.

A patient initiating a clinic contact indicates health-care-seeking behaviour. A health professional may initiate clinic contacts to, for example, monitor a health condition, follow up a pathology test, or for health intervention. During the 2-week NPHDC data collection, clinicians indicated on the clinic visit form whether the visit had been initiated by the patient or by staff.

# People in custody

More than 1 in 4 (28%) clinic visits were initiated by the patient



**Indicator 83:** Proportion of clinic visits initiated by the patient—28%

Almost three-quarters (71%) of clinic visits recorded during the data collection period were initiated by clinic staff, and just over one-quarter (28%) were initiated by patients.

Women in prison (37%) were more likely to initiate a clinic visit than men (27%). Non-Indigenous patients (31%) were more likely to initiate their clinic visit than Indigenous patients (22%).

Patients aged 35-44 (30%) were the most likely to initiate a clinic visit, and those aged 45 and over were least likely (26%) (see Supplementary table S118).

Patients were more likely to initiate clinic visits for:

- dental conditions (70%)
- musculoskeletal conditions (56%)
- musculoskeletal injuries (56%).

Clinicians were more likely to initiate visits for:

- pathology (83%)
- general health assessments (80%)
- diabetes (79%)
- cardiovascular disease (79%)
- mental health conditions (78%)

# 15.5 Type of health professional seen

Prison clinics usually have nurse-led health-care, with nurses responsible for providing most of a patient's primary health care through the prison clinic. If nursing staff are unable to help a patient, they can refer them to a doctor, allied health professional, or other health specialist, either in the prison clinic, or outside the prison.

Most prison clinics have GPs who either work at the prison or visit regularly. Prisons often offer other health services, such as dental services, mental health services, and alcohol and other drug treatment services.

# **Dischargees**

Prison dischargees were asked which type of health professionals they had seen in prison.

More than 4 in 5 (82%) prison dischargees reported they saw a nurse in the prison clinic



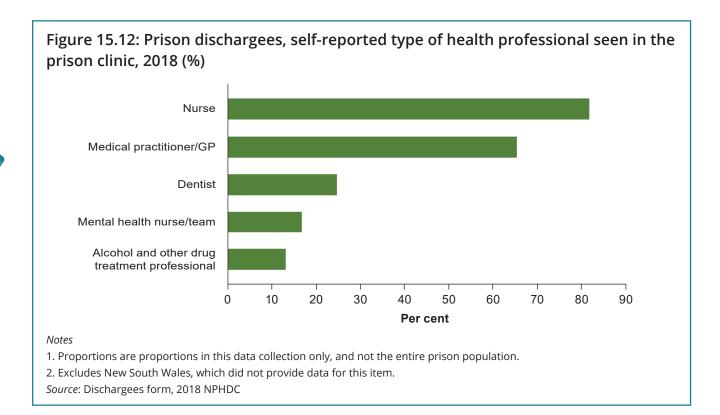
About 2 in 3 (65%) prison dischargees reported they saw a medical practitioner in the prison clinic



**Indicator 84**: Proportion of prison dischargees who reported having seen a health professional in prison, by type of health professional seen—nurse, 82%; medical practitioner, 65%.

Of prison dischargees who saw a health professional in the prison clinic:

- more than 4 in 5 (82%) reported seeing a nurse
- · almost two-thirds (65%) reported seeing a doctor
- one-quarter (25%) reported seeing a dentist
- 1 in 6 (17%) reported seeing a mental health team
- 1 in 8 (13%) reported seeing an alcohol and other drug treatment specialist (Figure 15.12).



## People in custody

Clinicians recorded the type of health professional that provided the service for each clinic visit on the clinic visit form.

The clinic visit form was completed for clinic visits attended by all consenting people in custody during the 2-week data collection period, and not only for visits by prison dischargees. So information from the clinic visit form provided types of health professionals seen by a larger proportion of the prison population.

More than 2 in 3 (68%) clinic visits were consultations by a nurse



About 1 in 7 (14%) clinic visits were consultations by a doctor



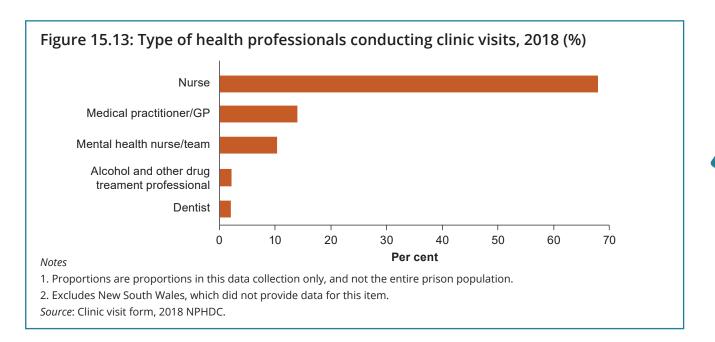
About 1 in 6 (16%) clinic visits were consultations by a mental health nurse or team, psychologist, psychiatrist, or alcohol and other drug treatment professional



Indicator 85: Proportion of clinic visits by type of health professional seen—nurse, 68%; GP, 14%; mental health team/nurse 10%.

The majority of clinic visits recorded during the 2-week data collection period (68%) were consultations with nurses. One in 7 (14%) clinic visits were consultations with a GP and 1 in 10 (10%) were with a mental health nurse or team (Figure 15.13).

Psychologists, psychiatrists, alcohol and other drug treatment professionals, and mental health nurses or teams, combined, accounted for 1 in 6 (16%) of all clinic visits recorded during the data collection period.



# 15.6 Satisfaction with health services

### Amount of information received

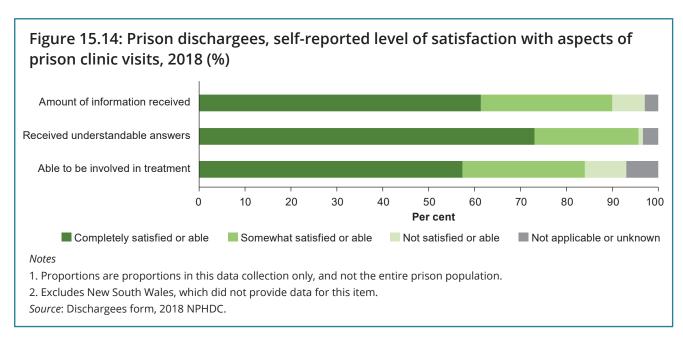
Prison dischargees were asked questions about their experiences with prison health services during their time in prison. They were asked to rate their level of satisfaction with the amount of information about their condition they received during their clinic visits.

**Most** (90%) prison dischargees reported they were **satisfied with the** amount of information on their condition they received at the clinic



**Indicator 86:** Proportion of prison dischargees who reported they were satisfied with the amount of information on their condition received at a clinic visit—90%

Almost two-thirds (61%) of prison dischargees reported they were completely satisfied with the amount of information they received at the prison clinic, and more than one-quarter (29%) reported they were somewhat satisfied (Figure 15.14).



### Answers could be understood

Prison dischargees were asked how satisfied they were that the answers they received at their clinic visits were easy to understand.

Almost all (96%) prison dischargees reported they received answers they could understand at the clinic



**Indicator 87:** Proportion of prison dischargees who reported they received answers they could understand at the prison clinic—96%

Almost three-quarters (73%) of prison dischargees reported they were completely satisfied that they could understand the answers given to them at the prison clinic, and almost one-quarter (23%) reported they were somewhat satisfied (Figure 15.14).

Women (65%) were less likely than men (74%) to report they were completely satisfied with the answers they received.

### Involvement in treatment decisions

Prison dischargees were asked how involved they were able to be in their treatment decisions at the prison clinic.

More than 4 in 5 (84%) prison dischargees reported they were able to be involved in their treatment decisions at the clinic



Indicator 88: Proportion of prison dischargees who reported they were able to be involved in their treatment decision at a clinic visit—84%

Over half (57%) of prison dischargees reported they were able to be completely involved in their treatment decisions at the prison clinic, and more than one-quarter (27%) said they were able to be somewhat involved (Figure 15.14).

Men (9%) were more likely than women (6%) to report they were unable to be involved in their treatment decisions at the prison clinic.

Non-Indigenous dischargees (12%) were more likely than Indigenous dischargees (4%) to report they were unable to be involved in their treatment decisions.

# Time spent at clinic visits

Prison dischargees were asked to rate whether they had enough time with clinicians during their clinic visits.

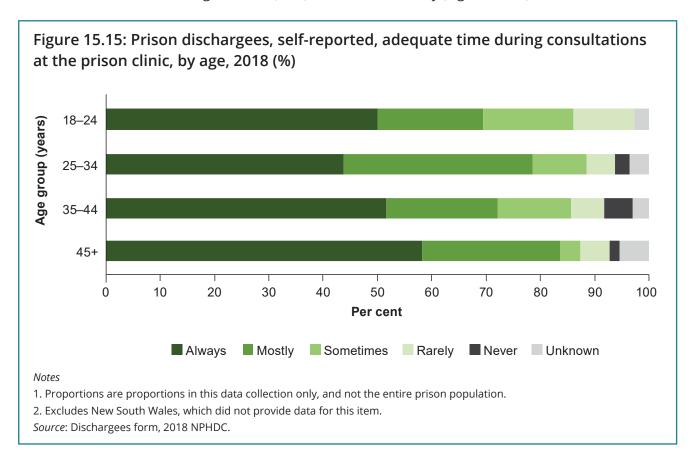
More than 3 in 4 (76%) prison dischargees reported they always or mostly had enough time during their clinic visits



Indicator 89: Proportion of prison dischargees who reported they always or mostly had enough time at a clinic visit—76%

Half (50%) of prison dischargees reported they always had sufficient time during their clinic visits, and more than one-quarter (27%) reported they mostly had enough time.

Dischargees aged 45 and over (58%) were the most likely to report they always had enough time at their clinic visits, and those aged 25-34 (44%) were the least likely (Figure 15.15).



## Patient rating of health care received at prison clinic

Prison dischargees were asked to rate the level of health care they received at the prison clinic.

About 4 in 5 (80%) prison dischargees rated the health care they received in the prison clinic as good or excellent



**Indicator 90:** Proportion of prison dischargees who rated the health care they received in the prison clinic as excellent—34%

About 4 in 5 (80%) prison dischargees rated the health care they received in the prison clinic as good (46%) or excellent (34%) (Figure 15.16).

Male dischargees (81%) were more likely than female dischargees (71%) to give a positive rating of their health care in prison.

Indigenous dischargees (85%) were more likely than non-Indigenous dischargees (77%) to rate their health care as good or excellent.

# Male Female

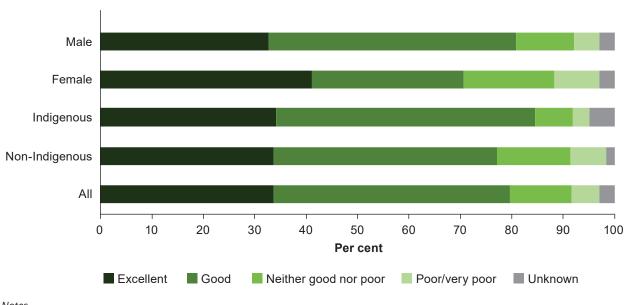


Figure 15.16: Prison dischargees, rating of the quality of health care received at the

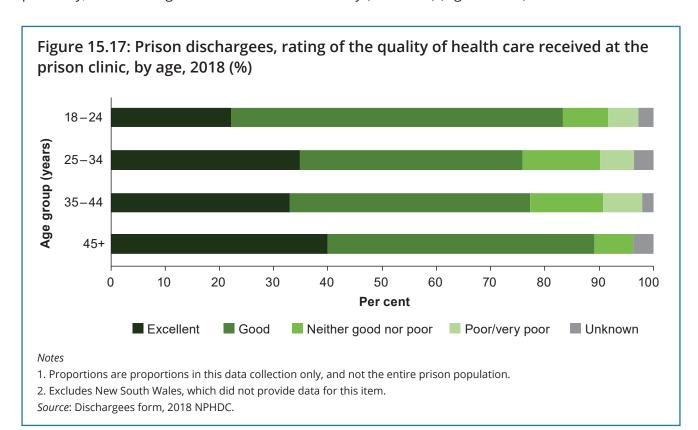
#### Notes

- 1. Proportions are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

prison clinic, by sex and Indigenous status, 2018 (%)

Source: Dischargees form, 2018 NPHDC.

Prison dischargees aged 45 and over (89%) were the most likely to rate their quality of health care positively, and those aged 25-44 were the least likely (76%-77%) (Figure 15.17).



## **Prison clinic procedures** 16

### **Key findings**

- In 2017, there were 2.92 full-time-equivalent doctors (0.32) and nurses (2.60) for every 100 people in prison in jurisdictions that provided data.
- Almost 1 in 3 (30%) prison dischargees reported attending a medical appointment outside the prison during their incarceration.
- About 1 in 10 (10%) prison dischargees reported they were admitted to a general or psychiatric hospital during their incarceration.
- About 1 in 8 (12%) prison dischargees reported visiting an emergency department during their incarceration.
- There were 325 acute (emergency) and 1,408 non-acute hospital transfers during the 2-week data collection period.
- Of Indigenous prison dischargees, 4 in 5 (80%) reported they always received culturally appropriate health care while in prison.

# 16.1 Full-time-equivalent staffing

People in custody often require more medical attention than the general population.

People in prison are more likely than those of the same age in the community to have mental health disorders or chronic physical health conditions, and are less likely to have sought, or have had access to, clinical health services in the community (Young et al. 2015).

For many, prison provides the opportunity to see health professionals, and to receive the treatment they require. When healthier people are released from prison, the entire community benefits (Kinner & Young 2018).

The provision of health care services to people in prison depends on the availability of suitably qualified staff. People in custody should have access to health care that is equivalent to that of the community, taking into consideration the need for health-care professionals that specialise in mental health, and in alcohol and other drug use disorders. Medical and allied health services should be provided on site, wherever possible (AMA 2012; UN 1990).

The number of health care staff required in a prison depends on factors such as:

- whether the prison is a reception centre where complete medical examinations are performed
- whether the prison is a women's prison, as medical requirements for men and women differ
- requirements for drug and alcohol detoxification.

In 2015, there were 1.39 full-time-equivalent (FTE) clinical doctors and nurses per 100 people in Australia (AIHW 2016d, 2016e). The rate of doctors and nurses in prison clinics in 2015 was more than twice this rate, at 2.98 FTE per 100 people in custody (AIHW 2015).

Staffing in this report was restricted to doctors and nurses, for which there was more consistent reporting across jurisdictions.



## Indicator 91: Number of full-time-equivalent doctors and nurses working within the correctional system per person in custody—2.92 per 100 people in custody(a)

(a) Excludes New South Wales, Queensland, and Victoria, which did not provide data for this item.

In 2017, there were 0.32 FTE doctors and 2.60 FTE nurses practising in prison clinics per 100 people in custody (from a total of 11,905 people in custody on 30 June 2017 in participating facilities and jurisdictions). This equated to 2.92 doctors and nurses, combined, per 100 people in custody in 2017 (Figure 16.1).

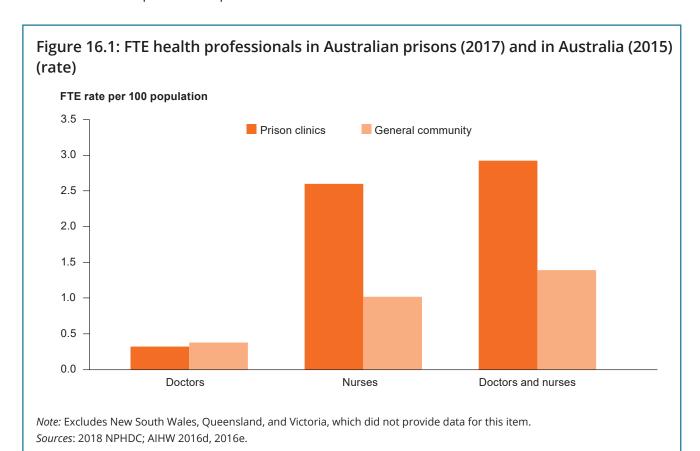


Data on FTE prison clinic staff in 2015 were collected for the 2-week data collection period only, when more staff might have been available to assist with the collection. In the 2018 collection, jurisdictions were asked to provide a standard FTE of doctors and nurses in all prison clinics for the 2017 calendar year. So, any comparisons with previous versions of this data collection should not be made.

The FTE rate of doctors and nurses in prison clinics (2.92 FTE per 100) was over twice that of the FTE rate of clinical doctors and nurses in the general population (1.39 FTE per 100) (Figure 16.1).

For doctors, the rate in prison clinics (0.32 FTE per 100 persons) was similar to that in the general community in Australia (0.38 FTE per 100 persons). But the rate of nurses in prison clinics (2.60 FTE per 100 persons) was more than 2.5 times that in the general Australian population in 2015 (1.02 FTE per 100 persons).

This likely reflects the greater need for health-care services in prisons, and the nurse-led primary health-care model provided in prison clinics.



## 16.2 Vaccination

The prison population is at high risk of vaccine-preventable and other communicable diseases, and prison can provide the opportunity to access vaccinations (Butler & Simpson 2017).

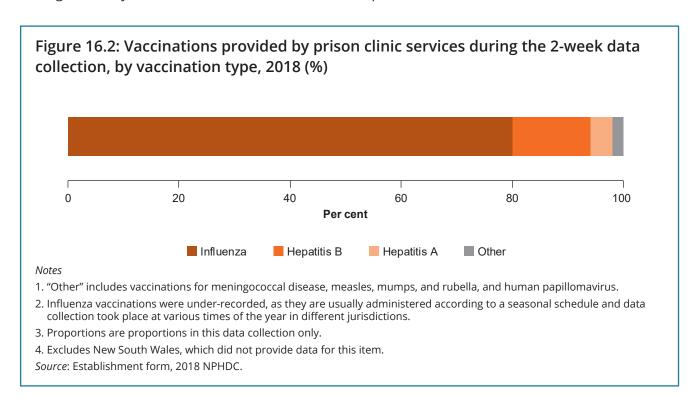
## People in custody

Indicator 92: Number of vaccinations provided by prison clinics during the 2-week data collection period—1,754.

During the 2-week data collection period, prison clinics administered 1,754 vaccinations to people in custody.

The influenza vaccination was the most prevalent vaccination type administered (1,405 or 80% of all vaccinations), followed by hepatitis B (250 or 14% of vaccinations). There were also 68 vaccinations for hepatitis A, 13 for meningococcal disease, 16 for measles, mumps, and rubella, and 2 for human papillomavirus (Figure 16.2).

Influenza vaccinations are seasonal, and, as jurisdictions collected data at various 2-week time periods throughout the year, the number of influenza vaccines provided are an under-estimate of the total.



## 16.3 Health-care referrals

In some jurisdictions, people in prison who are hospitalised, or need highly specialised health care can be managed within the prison system, as larger prisons might contain inpatient beds.

Alternatively, people in custody might be transferred to community facilities or secure wards in community hospitals for specialised treatment. Transfers to hospital might be planned, such as scheduled surgery and specialist outpatient appointments, or unplanned, in emergency situations.

## **Dischargees**

Prison dischargees were asked whether they had:

- attended a medical appointment outside the prison
- been admitted to a general or psychiatric hospital
- attended an emergency department during their incarceration.

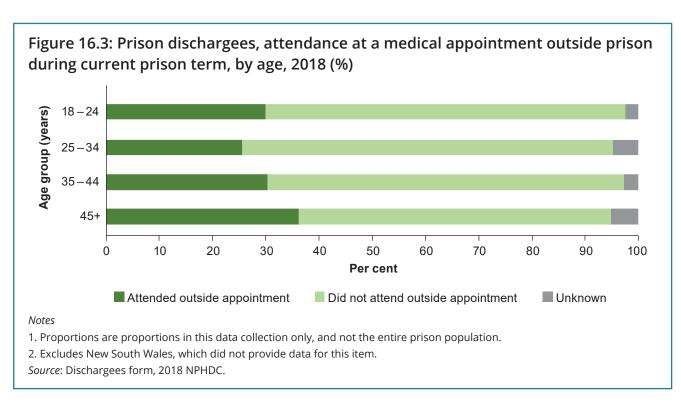
About 1 in 3 (30%) prison dischargees reported attending a medical appointment outside the prison during their incarceration



**Indicator 93:** Proportion of prison dischargees who reported they attended a medical appointment outside the prison—30%

Female prison dischargees (38%) were more likely to report attending an outside appointment than male prison dischargees (29%).

Prison dischargees aged 45 and over (36%) were the most likely to report attending a medical appointment outside the prison, and those aged 25-34 were the least likely (26%) (Figure 16.3).



Of all prison dischargees, 1 in 10 (10%) reported they were admitted to a general or psychiatric hospital during their current incarceration



**Indicator 94:** Proportion of prison dischargees who reported they were admitted to a general or psychiatric hospital during their incarceration—10%

## About 1 in 8 (12%) prison dischargees reported attending an emergency department during their incarceration

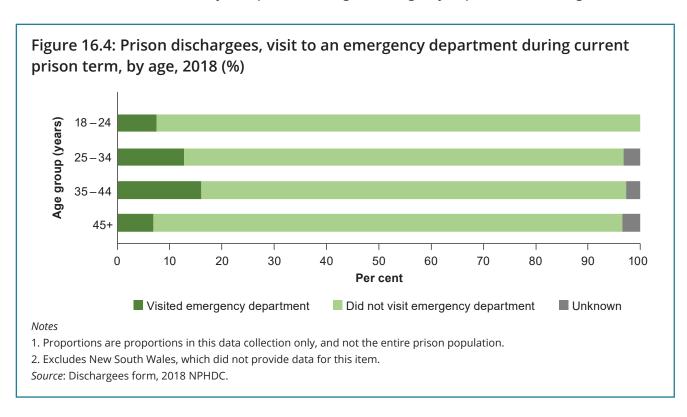


**Indicator 95:** Proportion of prison dischargees who reported they visited an emergency department during their incarceration—12%

One in 10 (10%) prison dischargees reported being admitted to a general or psychiatric hospital in the community during their period of imprisonment, and 1 in 8 (12%) reported visiting a hospital emergency department in the community.

Non-Indigenous prison dischargees were more likely than Indigenous dischargees to report a hospital admission (12% of non-Indigenous, and 9% of Indigenous dischargees), or an emergency department visit (15% of non-Indigenous, and 9% of Indigenous dischargees).

Prison dischargees aged 35-44 were the most likely to report being admitted to a psychiatric or general hospital (12%), and visiting a hospital emergency department in the community (16%). Dischargees aged 18-24 were the least likely to report admission to a hospital (5%), while those aged 45 and over were the least likely to report attending an emergency department (7%) (Figure 16.4).



## People in custody

**Indicator 96:** Number of hospital transfers for people in custody during the 2-week data collection period—1,408 non-acute and 325 acute hospital transfers.

Each of the 62 participating prison clinics reported the number of hospital transfers that occurred during the 2-week data collection period.

Of the 1,733 hospital transfers reported by participating clinics, 325 were acute, or unplanned, transfers to hospital for emergencies, and 1,408 were non-acute or planned hospital transfers.

# 16.4 Indigenous health services

'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' (National Aboriginal Community Controlled Health Organisation 2018).

An Aboriginal Medical Service (AMS) is a health service funded principally to provide services to Indigenous people. It may be either an ACCHO or state or territory government-run service. Currently in Australia, there are more than 140 ACCHOs and more than 200 AMSs and other Aboriginal and Torres Strait Islander health services.

The Royal Commission into Aboriginal Deaths in Custody recommended that corrective services, in conjunction with Aboriginal health services and other such bodies, should review and report on health service provision to Indigenous people in correctional institutions (RCIADIC 1991).

It was recommended that the review include involvement of Aboriginal health services in providing mental and physical health care for Indigenous people in custody (RCIADIC 1991). This could be achieved through visits to prisons by ACCHOs and AMSs, and by employing Aboriginal health practitioners as members of the clinic staff.

## Dischargees

Indigenous prison dischargees were asked whether they received a visit from an ACCHO or an AMS while in prison. They were also asked whether they had received culturally appropriate care in prison.

**Indicator 97:** Proportion of Indigenous prison dischargees who reported receiving treatment or consultation from an Aboriginal Community Controlled Health Organisation (ACCHO) or an Aboriginal Medical Service (AMS) while in prison—9%

Of Indigenous prison dischargees, 4 in 5 (80%) reported they always received culturally appropriate health care in prison



Indicator 98: Proportion of Indigenous prison dischargees who reported they always received culturally appropriate health care in prison—80%

Of the 127 Indigenous people who completed the dischargees form in 2018, 9% reported receiving treatment or consultation in prison from an ACCHO and/or an AMS. But many facilities have Aboriginal health practitioners and other Indigenous professionals on staff to provide culturally appropriate health care.

About 4 in 5 (80%) Indigenous dischargees reported they always received culturally appropriate health care, an increase from 45% of Indigenous dischargees in the 2012 NPHDC, and 70% in the 2015 NPHDC.

Indigenous male dischargees were more likely to report always receiving culturally appropriate health care (81%) than Indigenous female dischargees (68%).

Three-quarters (74%) of Indigenous dischargees aged 45 and over reported always receiving culturally appropriate health care in prison, and 81% of those aged under 45, reported always receiving culturally appropriate health care.

## **Prisons**

Most jurisdictions reported that some of their prisons received visits by ACCHO and/or AMS health professionals. The only jurisdiction not to report such visits was the Northern Territory where the prison clinics had full-time Aboriginal health practitioners on staff.



Visits from ACCHO and/or AMS health professionals occurred at least weekly in about half of the facilities receiving these services (47% of prisons that reported receiving ACCHO and/or AMS services).

Visiting health professionals from ACCHOs and/or AMSs were most likely to be Aboriginal health practitioners (at 11 prison facilities), but also included doctors (at 4 facilities), social workers (at 4 facilities), psychologists (at 3 facilities), alcohol and other drug practitioners (at 2 facilities), and a counsellor (at 1 facility).



#### Medication **17**

## **Key findings**

- Almost 1 in 3 (30%) people in custody were dispensed prescription medication on a typical day in prison.
- The most commonly dispensed medication types were antidepressants/mood stabilisers, which accounted for 1 in 6 (16%) medications dispensed.
- Women in custody were 1.5 times as likely as men to be dispensed prescription medication, and 4 times as likely to be dispensed anti-anxiety medication.
- Men in custody were almost twice as likely as women to be dispensed cholesterol-lowering medications.
- Indigenous people in prison were more than 3 times as likely as non-Indigenous people to be dispensed medication for diabetes.

## People in custody

The medication form of the NPHDC was used to collect information on prescription medications dispensed to people in custody on a single day during the data collection period in 2018.

This was a snapshot of prescription medications typically dispensed by the prison clinics on a given day.

The proportions of medications dispensed per 100 people in custody were calculated using the medications dispensed, and the snapshot prison population for the facilities and jurisdictions that participated in the 2018 NPHDC provided by the ABS.

As not all dispensed medications were able to be captured by all the prison clinics, the results are likely under-estimates of the true proportions of people in custody taking prescription medication.

Almost 1 in 3 (30%) people in custody were dispensed prescription medication on a typical day in prison

medications per person) than men (2.62 medications per person).



**Indicator 100:** Proportion of people in custody who were dispensed prescription medication during the data collection period—30%

Almost one-third (30%) of people in custody in 2018 were dispensed prescription medication, as recorded on the medication form. On average, almost half (46%) of women in prison, and more than one-quarter (28%) of men in prison, were dispensed regular medication.

Almost 22,000 medications were dispensed to about 8,270 people in custody in the 2018 NPHDC, or, an average of 2.65 medications on average per person in custody dispensed medication (Table 17.1). Of those dispensed medication, women were dispensed more medications on average (2.90

Table 17.1: People in custody dispensed prescription medication, by sex, 2018

	Males	Females	Persons
Number of people in custody dispensed medication	7,227	1,044	8,273
Number of medications dispensed	18,929	3,032	21,963
Number of people in custody	25,682	2,258	27,946
Percentage of people in custody dispensed medication (%)	28	46	30
Average number of medications dispensed per person dispensed any medication	2.62	2.90	2.65

#### Notes

- 1. Numbers of people in custody include only those facilities that participated in the 2018 NPHDC.
- 2. Numbers are numbers in this data collection only, and not the entire prison population.
- 3. Excludes New South Wales, which did not provide data for this item.

Source: Medication form, 2018 NPHDC.

Medications dispensed by prison clinics were placed into 23 categories. The most commonly dispensed medication types were:

- antidepressants/mood stabilisers (16%)
- analgesics (15%)
- anti-inflammatories/antirheumatic agents (10%)
- · drugs associated with digestive system disorders, such as antiemetics, antinauseants, laxatives, and antidiarrhoeals (7%)
- antihypertensive and beta-blocking medications (7%) (Table 17.2).

Table 17.2: Prescription medication dispensed to people in custody, by type of medication, 2018

Medication category	Number	%
Antidepressants/mood stabilisers	3,598	16.4
Analgesics	3,255	14.8
Anti-inflammatories/antirheumatic agents	2,142	9.8
Drugs used in acid-related disorders, antiemetics, antinauseants, laxatives, antidiarrhoeals	1,592	7.2
Antihypertensives, beta blocking agents	1,586	7.2
Antipsychotics	1,342	6.1
Cholesterol-lowering drugs (lipid modifying agents)	1,270	5.8
Vitamins and mineral supplements	1,006	4.6
Asthma relievers, preventers, symptom controllers (drugs for obstructed airway)	915	4.2
Drugs used in diabetes	834	3.8
Dermatologicals (skin, including antifungals)	722	3.3
Drugs used in opioid dependence	419	1.9
Antihistamines	411	1.9
Antiepileptics, anti-Parkinson drugs	388	1.8
Antibiotics	313	1.4
Hypnotics and sedatives	278	1.3
Hepatitis, antivirals for HIV, infectious diseases	237	1.1
Anti-anxiety (anxiolytics)	157	0.7
Diuretics	150	0.7
Thyroid therapy	112	0.5
Drugs used in nicotine dependence	90	0.4
Drugs used in benign prostatic hypertrophy (prostate)	65	0.3
Other	1,081	5.4
Total prescription medications dispensed	21,963	100.0

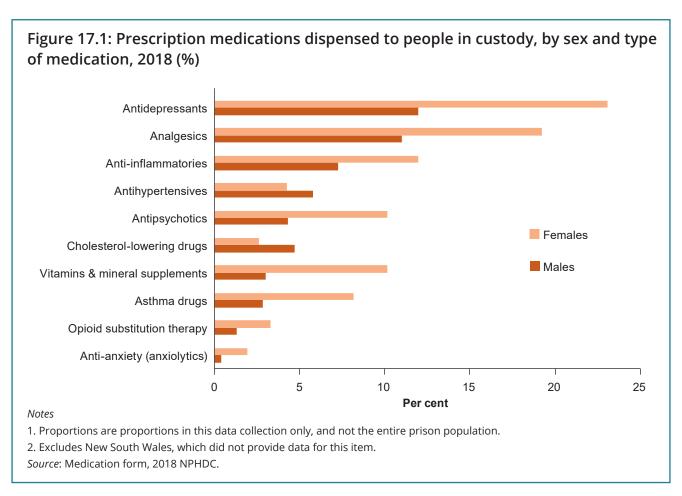
- 1. Numbers are numbers in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Source: Medication form, 2018 NPHDC.

The proportions of medications dispensed to people in prison differed by sex, Indigenous status, and age, reflecting the differing conditions that affect each population.

Men in prison were almost twice as likely as women to be dispensed cholesterol-lowering medications, and almost 1.5 times as likely to be dispensed antihypertensives or beta-blockers (Figure 17.1).

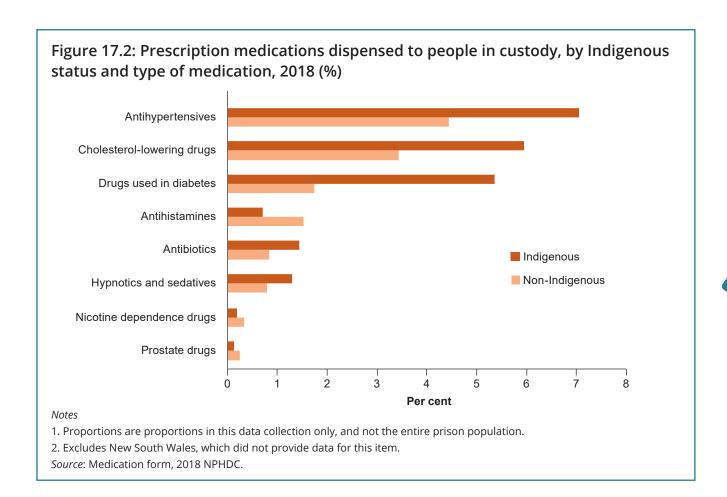
Women in prison were more than 4 times as likely as men to be dispensed anti-anxiety (anxiolytic) medications, and around 3 times as likely to be dispensed vitamin and mineral supplements, and asthma medications. Women were 2.5 times as likely as men in prison to be dispensed opioid substitution therapy.



Indigenous people in prison were more than 3 times as likely as non-Indigenous people to be dispensed medication for diabetes (Figure 17.2).

Indigenous people were more than 1.5 times as likely as non-Indigenous people to be dispensed cholesterol-lowering drugs, anti-hypertensives, antibiotics, and hypnotics and sedatives.

Non-Indigenous people were about twice as likely as Indigenous people to be dispensed antihistamines and drugs used in benign prostatic hypertrophy, and more than 1.5 times as likely to be dispensed nicotine dependence drugs.



Some medications were dispensed at rates that increased or decreased with age.

For example, the proportions of anti-hypertensives, cholesterol-lowering drugs, analgesics and anti-inflammatories, drugs for digestive system conditions, diuretics, medications for diabetes, and thyroid therapy medications dispensed increased with age.

Antipsychotics were more commonly dispensed to younger people in prison (12% of those aged 18–24) than older people (2% of those aged 55 and over). Proportions of antibiotics, antiviral drugs for hepatitis, HIV, and infectious diseases, and nicotine dependence drugs dispensed were more evenly distributed across the age groups. Opioid substitution therapy was most commonly dispensed to people in prison aged 35-44.

## Comparisons with general community

The prison population differs from the general community in terms of age, sex and Indigenous status, and this affects the types of medications typically prescribed and/or dispensed to people in prison and in the community.

The BEACH data set collected information on medications prescribed by GPs in the Australian community in 2015–16 (Britt et al. 2016).

The differences in the demographic structure between the 2018 NPHDC and the 2015–16 BEACH data set were described in Chapter 15.2.

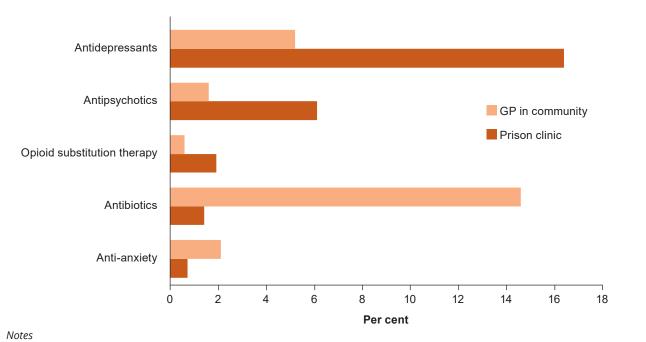
Proportions of medications dispensed to people in custody, by type of medication, were compared with proportions of medications prescribed to patients of GPs in the BEACH study.

Of the medications that appeared in both data sets, patients in custody were more likely than patients in the community to be dispensed antipsychotic medications, antidepressants and mood stabilisers, and opioid substitution therapy (Figure 17.3).

Patients of GPs in the community were more likely than patients in custody to be prescribed antibiotics and anti-anxiety (anxiolytic) drugs.

This reflects the higher proportion of people in custody with mental health conditions, including conditions associated with alcohol and other drug use, compared with patients of GPs in the community.

Figure 17.3: Prescription medications dispensed in prison clinics (2018) and prescribed by GPs in the community (2015–16), by type of medication (%)



- 1. Proportions of medications are proportions in this data collection only, and not the entire prison population.
- 2. Excludes New South Wales, which did not provide data for this item.

Sources: Medication form, 2018 NPHDC; Britt et al. 2016.

#### **Readiness for release** 18

## **Key findings**

- About 4 in 5 (81%) sentenced prisoners had a health-related discharge summary on file when they were released from prison.
- Half (50%) of prison dischargees reported they had a referral or appointment scheduled to see a health professional or health service after their release.
- Almost two-thirds (64%) of prison dischargees reported they would have a valid Medicare card from their first day of release from prison.
- Almost 9 in 10 (88%) prison dischargees reported feeling prepared or very prepared about their upcoming release from prison.

People who have been incarcerated are often at their most vulnerable upon release, and many of the health improvements made during their time in prison can quickly erode.

Release from prison might cause trauma and emotional distress, and increase the likelihood of harmful substance use, and other risk behaviours. So death rates from most causes of death, but particularly preventable causes, increase dramatically upon release (Binswanger et al. 2013; Bukten et al. 2017; Forsyth et al. 2018; Spitall et al. 2019; Thomas et al. 2016).

The rapid churn of people through the prison system means that prisoner health is public health (WHO 2012). This is particularly true with short-term incarceration, and most people in prison are in prison for relatively short periods (ABS 2018b). Additionally, the risk of reoffending is often higher when people are released from prison without medical and support plans in place (Phillips & Lindsay 2011).

So instituting comprehensive and consistent release procedures, and ensuring continuity of health care between prison clinic and community service providers, is essential for the health of people leaving prison, as well as for the health of the community.

#### Health-related discharge planning 18.1

People in prison often have multiple and complex health needs making returning to the community a time of increased risk to their health and well-being (Thomas et al. 2016; Young et al. 2015).

Discharge planning supports the continuity of health care between prison and the community, and is necessary for a successful transition (Kinner et al. 2012). A discharge plan provides an individual plan for the continuity of care of a person from prison to the community. It incorporates referrals to appropriate community-based services and ensures medications, health services, and other support services are accessible.

With an increasingly high proportion of prisoners on remand (in the 2018 NPHDC, 67% of prison entrants, and 41% of prison dischargees were remandees), the timing of release from prison is often uncertain. It is relatively common for a person on remand to leave prison to attend court, and then be released directly from court into the community.

Sentenced prisoners might also experience an unplanned release, such as from a parole hearing or appeal proceeding in court. So, it can be difficult for clinic staff to know when to begin discharge planning for many of the people in prison.

## People in custody

Prison clinics provided information about how many remand and sentenced prisoners were released during the 2-week data collection period, and whether, for sentenced prisoners, these releases were planned or unplanned.

The prison clinics also provided information on how many people had a written discharge summary on file at the time of their release.

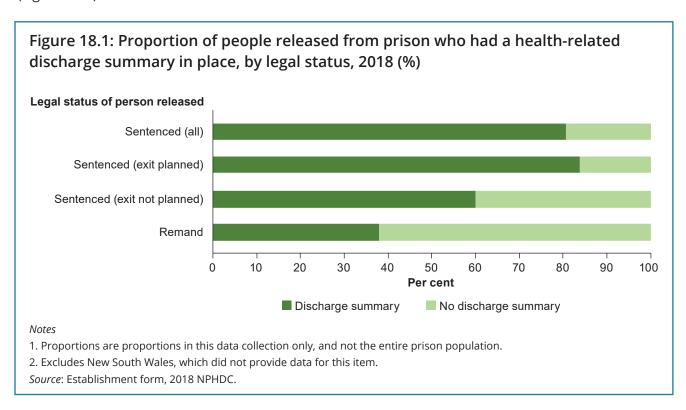
More than 4 in 5 (81%) sentenced prisoners had a discharge summary on file when they were released



Indicator 101: Proportion of sentenced people in custody who had a health-related discharge summary on file at the time of their release—81%



A total of 84% of sentenced prisoners with a planned exit, and 60% of sentenced prisoners whose release was not planned had a health-related discharge summary on file at the time of their release. Of the 290 people who were released while on remand, 38% had a discharge summary on file (Figure 18.1).



Prison clinics were asked to provide information on their typical prisoner release procedures. Release procedures and the health-related discharge summary varied according to the facility, and according to the health needs of the person in custody.

People released from prison were more likely to have a detailed health-related discharge plan if they had a history of a mental health condition, other chronic health condition, or an alcohol and other drug use disorder, or if they were on regular medication.

Prison clinics reported that, in general, the process for health-related discharge planning included:

- a review at the prison clinic of the person due to be released
- a discharge summary or discharge health report and letter for the patient's GP being prepared, and either given to the person due for release or forwarded to their GP, community clinic, or health service
- a discharge summary being prepared, containing the patient's medical history, current problems, allergies, dietary requirements or other needs, future appointments scheduled, relevant pathology and radiology tests, any current medication, vaccination record, and clinic contact details for further information
- a referral to appropriate community services such as GPs, community health clinics, Aboriginal medical services or health clinics, mental health services, psychologists, and/or accommodation support, as required
- · a referral or appointment to a specialist or hospital, for services such as opioid substitution therapy, to ensure continuity of care
- for some clinics, a limited supply of ongoing medication (1–2 weeks), or arrangements for these to be collected from a pharmacy in the community.

## 18.2 Continuing care

Continuity of care is necessary for maintaining any health improvements achieved by people in prison. Many people quickly lose any health gains they made in prison within a few months of release, which affects not only the individual, but the entire community (Kouyoumdjian et al. 2018; Wang et al. 2010).

Some of the barriers to continuity of care can be addressed by ensuring everyone released from prison has immediate access to health care, with:

- · a valid Medicare card or number, where eligible, from the day of their release
- · immediate access to required medications or treatment
- immediate access to accommodation and support services.

Compliance with a treatment plan depends on the person's knowledge of their health conditions, including the medications and other treatments they require. But this knowledge has been found to be lacking for many people released from prison (Carroll et al. 2014).

## **Dischargees**

Prison dischargees were asked whether they were taking regular medication, and whether they intended to continue the medication after release.

Almost 9 in 10 (89%) prison dischargees who were taking regular medication intended to continue the medication after release



**Indicator 102:** Proportion of prison dischargees who reported they were taking regular medication and intended to continue after release—89%

Most prison dischargees (89%) who reported taking medication for a health condition while in prison intended to continue their medication after release.

Women (96%) were more likely to report their intention to continue their medication after release than men (88%).

There was little difference in the proportion of dischargees intending to continue their medication based on age group or Indigenous status.

Half (50%) of prison dischargees reported they had a referral or an appointment to see a health professional after release



Indicator 103: Proportion of prison dischargees who reported they had a referral or appointment to see a health professional after release—50%

Women (57%) were more likely than men (49%) to report having a referral or appointment scheduled with a health professional after release from prison.

Non-Indigenous dischargees (56%) were more likely than Indigenous dischargees (43%) to report having a referral or appointment scheduled with a health professional after release.

Dischargees aged 35–44 (58%) were the most likely to have a referral or appointment scheduled with a health professional after their release from prison, and those aged 18-24 were the least likely (43%).

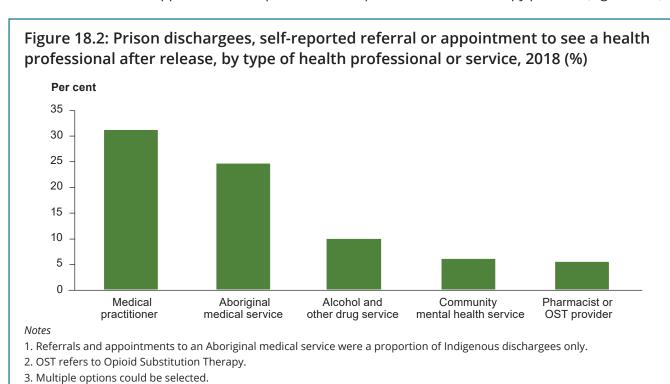
Of all prison dischargees surveyed:

- almost one-third (31%) had a referral or appointment scheduled to see a medical practitioner after release
- 1 in ten (10%) had a referral or appointment to an alcohol and other drug treatment service
- one-quarter (25%) of Indigenous dischargees had a referral or appointment to an Aboriginal medical service
- 6% had a referral or appointment to a community mental health service

4. Proportions are proportions in this data collection only, and not the entire prison population.

5. Excludes New South Wales, which did not provide data for this item.

6% had a referral or appointment to a pharmacist or opioid substitution therapy provider (Figure 18.2).



Source: Dischargees form, 2018 NPHDC.

## 18.3 Medicare card

Source: Dischargees form, 2018 NPHDC.

People in prison are currently ineligible to use Medicare and most Pharmaceutical Benefits Schemes. One reason for this is that Medicare and Pharmaceutical Benefit Schemes are federally funded, while prison clinics are funded and operated by the states and territories.

Having affordable, bulk-billed, or subsidised health services and medications is necessary for the continuity of care of people leaving prison (Cumming et al. 2018; Kinner et al. 2012).

So having a valid Medicare card (or number) immediately on release is critical for the health of the person and the community. Prison dischargees were asked whether or not they would have a valid Medicare card available on the first day of their release from prison.

Almost 2 in 3 (64%) prison dischargees reported they would have a valid Medicare card from their first day of release from prison

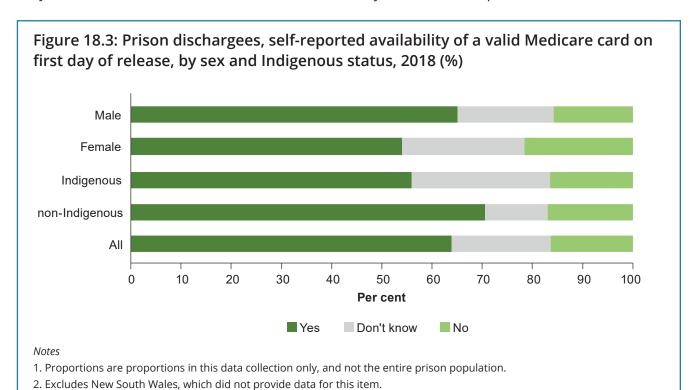


Indicator 104: Proportion of prison dischargees who reported they had a valid Medicare card available for use from their first day of release—64%

Almost two-thirds (64%) of prison dischargees reported they would have a valid Medicare card (or number) immediately upon release from prison. The remainder of dischargees were either unsure (20%), or reported they would not have one (16%) (Figure 18.3).

Male prison dischargees (65%) were more likely than female dischargees (54%) to report they would have a valid Medicare card immediately upon their release from prison.

Non-Indigenous prison dischargees (71%) were more likely than Indigenous dischargees to report they would have a valid Medicare card from the first day of release from prison.



# 18.4 Preparedness for release

Prison dischargees were asked how prepared they felt about their upcoming release from prison.

Almost 9 in 10 (88%) prison dischargees said they were prepared for their upcoming release from prison

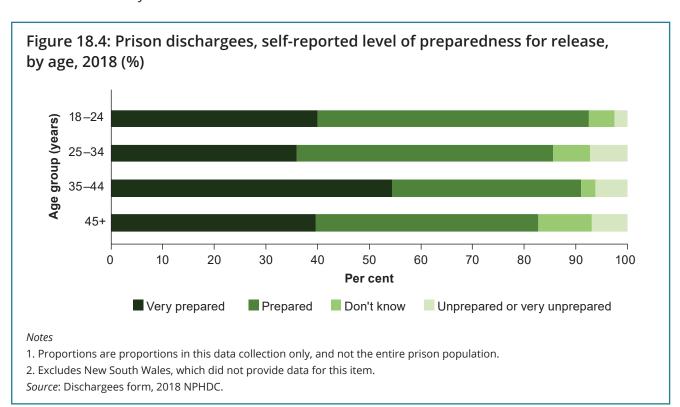


Indicator 105: Proportion of prison dischargees who reported they felt prepared for their upcoming release from prison—88%

The majority (88%) of dischargees reported that they felt either prepared (44%) or very prepared (43%), with only 6% reporting they felt unprepared or very unprepared for release from prison.

Indigenous dischargees (92%) were more likely than non-Indigenous dischargees (88%) to report feeling prepared or very prepared for their upcoming release.

Prison dischargees aged 18-24 (93%) were the most likely to report feeling prepared or very prepared for release from prison, and those aged 45 and over (83%) were the least likely (Figure 18.4). There was no difference by sex.





**Deaths** 

## 19 Deaths

#### **Key Findings**

- Between 2013–14 and 2014–15, 115 people died in prison.
- Almost 3 in 4 (71%) of these deaths were from natural causes, and 1 in 4 (25%) were due to suicide or self-inflicted causes.
- The risk of suicide among people recently released from prison is more than 6 times as high as in the general population.
- A person recently released from prison is more likely to die in the first 28 days following release than in the year following release when rates are compared by person years.
- The average (mean) age at death of people in prison in 2014–15 was 54.8.

#### 19.1 Deaths in custody



There are many reasons a person might die while in prison or in police custody. Similar to deaths in the community, people in prison die from illness, accidents and injuries, ageing, and suicide. Over the past 2 decades, with the prison population ageing at a rapid rate, deaths from natural causes have increased.

Data on deaths in custody came from the Australian Institute of Criminology report National Deaths in Custody Program: Deaths in custody in 2013-14 and 2014-15 (Ticehurst et al. 2018).

Deaths in custody comprise deaths in prison custody and in police custody. Deaths in prison custody include deaths in prison or youth detention facilities, deaths that occur during transfer to or from these facilities, and deaths in mental facilities after transfer from these facilities (Ticehurst et al. 2018). This section presents deaths in prison custody, unless otherwise specified.

Deaths in custody are monitored by the Australian Institute of Criminology, through the National Deaths in Custody Program, which was established in 1992 following the 1989 Royal Commission into Aboriginal Deaths in Custody.

The National Deaths in Custody Program found that:

- between 1979–80 and 2014–15, 2,608 people died in custody (including 1,600 in prison custody), of which 19% were Indigenous people and 81% were non-Indigenous people.
- the most common causes of death since 2000–01 were natural causes, most frequently cardiac-related (35% of all prison deaths from natural causes in 2013–14 and 2014–15)
- cause of death by hanging fell from 43% of deaths in prison in 2001–02 to 24% in 2014–15
- almost two-thirds (65%) of Indigenous people, and about half (51%) of non-Indigenous people who died in prison custody were aged under 40
- between 2003–04 and 2014–15, non-Indigenous people were more likely to die in prison custody than Indigenous people (Ticehurst et al. 2018).

## Indicator 106: Number of deaths in prison custody in 2014-15—61

Of the 61 people who died in prison custody in 2014–15:

- 15 deaths were Indigenous people (1.6 per 1,000 Indigenous people in prison)
- 46 were non-Indigenous people (1.8 per 1,000 non-Indigenous people in prison) (Ticehurst et al. 2018).

In 2014-15, 60 men (1.9 per 1,000 men in prison) and 1 woman (0.4 per 1,000 women in prison) died in prison. Due to the relatively small number of women in prison, female death rates in prison were more likely to fluctuate over time.

The average (mean) age at death of people in prison in 2014–15 was 54.8, and the most common (median) age at death was 55.

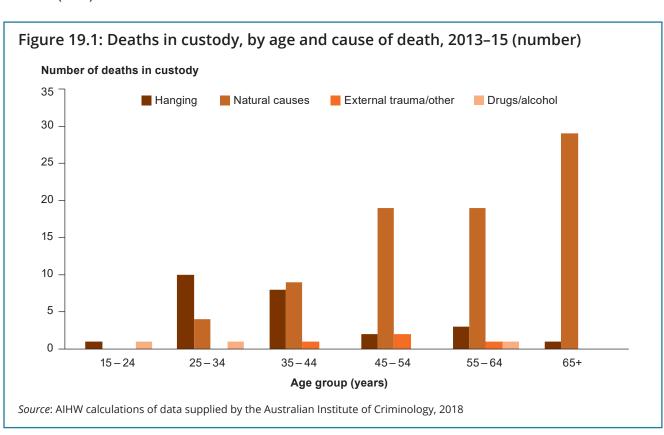
The median age of death between 2013–14 and 2014–15 was lower for Indigenous people in prison (49) than for non-Indigenous people in prison (56).

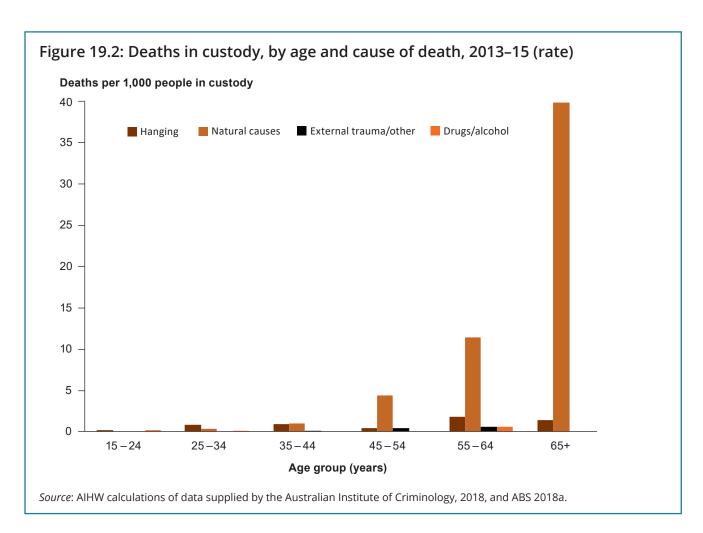
This is consistent with the younger age of Indigenous people in prison, and the lower life expectancy and higher mortality rate of Indigenous people in the community when compared with non-Indigenous people (Phillips et al. 2017).

In 2018, the mean age for Indigenous people in prison was 33.6 (median age of 32), compared with 38.0 for non-Indigenous people (median age of 35) (ABS 2018a). In 2014-15, the majority (51%) of deaths in prison were people aged 55 and over.

Between 2013–14 and 2014–15, 115 people died in prison (figures 19.1 and 19.2). Of those:

- 75% (85 people) were sentenced, and 25% (28 people) were on remand.
- 71% died from natural causes, with natural deaths increasing with age
- more than 4 in 5 (82%) Indigenous deaths, and more than two-thirds (69%) of non-Indigenous deaths were from natural causes
- more than one-third (35%) of deaths from natural causes were as a result of heart disease, and more than one-quarter (28%) were due to cancer
- one-quarter (25%) died from suicide, or self-inflicted causes of death
- no one died from homicide
- more than half (54%) died in a hospital setting, either in a public hospital (27%), or in a prison hospital (27%)
- 2 in 5 (40%) died in their cell.





#### Deaths following release from prison 19.2

People recently released from prison are at a higher risk of illness and death than the general population (Zlodre & Fazel 2012).

The risk of death is especially high in the first month after release, and the causes of death in this time are usually preventable, and include suicide, injury, and overdose (Binswanger 2007; Forsyth et al. 2018; Kariminia et al. 2007; Stewart et al. 2004).

The risk of suicide among people recently released from prison is more than 6 times as high as in the general population (Jones & Maynard 2013).

The risk of suicide is about 14 times as high for women recently released from prison, and about 5 times as high for men recently released from prison, than for women and men in the general population (Spittal et al. 2014).

Among people recently released from prison, rates of deaths from suicide are similar to rates of drugrelated deaths (Spittal et al. 2014; van Dooren et al. 2013).

People recently released from prison were more than twice as likely to die in the first 28 days as during the first year following their release. (a)

(a) when compared as death rates per 1,000 person years

Indicator 107: Crude death rate within 4 weeks of release from prison—1.6 deaths per 1,000 people released, or 20.5 per 1,000 person years

## Indicator 108: Crude death rate within 1 year of release from prison—8.5 deaths per 1,000 people released, or 8.5 per 1,000 person years

Upon release from prison, most people are eligible to apply for a crisis payment from Centrelink. In the 2018 NPHDC, more than half (55%) of prison dischargees reported they expected to receive a crisis payment from Centrelink.

People released from prison might continue to receive payments from Centrelink in the form of income support. If a death occurs, it is usually recorded as the reason for cessation of Centrelink benefits in Australian Government Department of Human Services data, which were used to estimate the number of deaths after release from prison.

This was an underestimate of the true number of deaths, because some individuals did not receive a crisis payment from Centrelink on release, and not all people who die after release from custody were receiving Centrelink benefits at the time of death.

Crude death rates for people released from prison were calculated as the number of deaths recorded in the Centrelink data divided by the total number of people recorded in the Centrelink data who had received the post-release crisis payment.

Death rates were calculated for the first 28 days following prison release, and for the first year following release.

In previous versions of the NPHDC, people who had been in prison multiple times in the preceding 28 or 365 days were counted multiple times, and this led to a larger denominator (total number of people released from prison) when calculating the crude death rate.

In 2018, the crude death rates were re-calculated with a smaller denominator, as people released from prison were only counted once, regardless of how many times they had been incarcerated over the previous month or year. As a result, the crude death rates have increased compared with previous calculations, and death rates have been recalculated for all years from 2000 to 2017 for comparison.

As the method for death rate calculation has changed, current estimates in the NPHDC should not be compared with previous estimates.

The crude death rate may be expressed as a proportion of the number of people released in the preceding 28 days (days 0–28 post-release) or 365 days (days 0–365 post-release), or as a proportion of person years.

Death rates expressed as a proportion of deaths per 1,000 people released cannot be directly compared across the time-frames of 28 and 365 days. So the crude death rate is presented as a proportion of deaths per 1,000 people released, and as a proportion of deaths per 1,000 person years. The latter enables death rates within 28 days post-release to be compared with those within 365 days post-release.

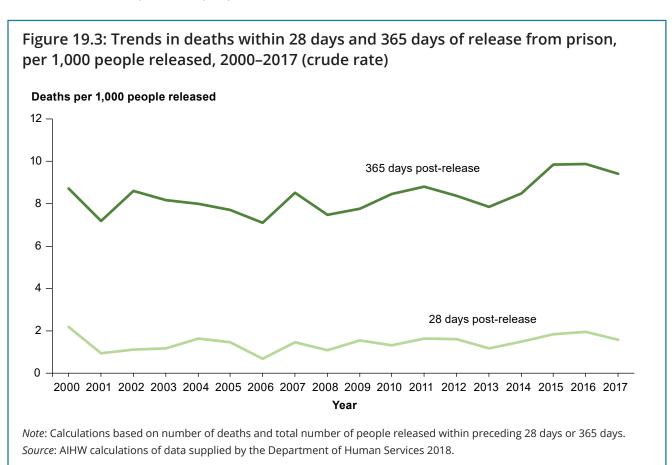
In 2017, the crude death rate for people within 28 days of release from prison was 0.16%, or 1.6 deaths per 1,000 people released from prison. This equates to 20.5 deaths per 1,000 person years (Figure 19.3).

In the same year, the crude death rate for people within 365 days of release from prison was 0.94%, or 9.4 deaths per 1,000 people released from prison. This equates to 9.4 deaths per 1,000 person years.

Due to the relatively small numbers of the post-release prison population, and the small numbers of deaths within that population, the crude death rates vary from year to year.

The average crude death rate from 2000 to 2017 for deaths within the first year of release was 0.85% or 8.5 deaths per 1,000 people, smaller than the crude death rate in 2017 alone of 0.94% or 9.4 deaths per 1,000 people.

The average crude death rate for people released from prison within 28 days from 2000 to 2017 was 0.15% or 1.5 deaths per 1,000 people released, smaller than the crude death rate in 2017 alone of 0.16% or 1.6 deaths per 1,000 people released.



Crude death rates were calculated for Indigenous and non-Indigenous people released from prison within the preceding 28 days and 365 days (Figure 19.4).

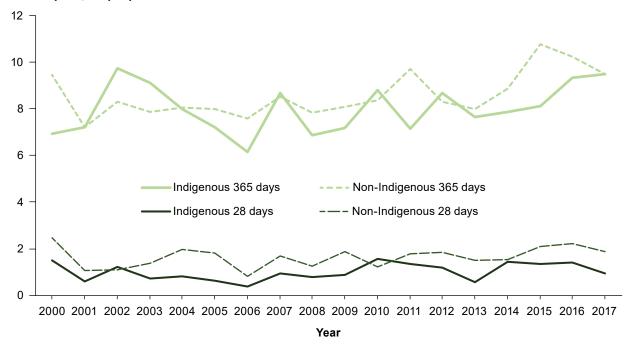
Rate ratios were calculated by dividing the non-Indigenous death rates by the Indigenous death rates over time.

On average, between 2000 and 2017, the crude non-Indigenous death rate for the first 28 days post-release from prison was 1.6 times that of the crude Indigenous death rate. This means, non-Indigenous people were 1.6 times as likely as Indigenous people to die in the first 28 days after release from prison (Figure 19.5).

Between 2000 and 2017, the crude non-Indigenous death rate for the first 365 days after release from prison was almost equal to the crude Indigenous death rate (rate ratio of 1.08).

In 2017, non-Indigenous people were twice as likely as Indigenous people to die within the first 28 days after release from prison (rate ratio of 2.02), and equally as likely to die within 365 days of release (rate ratio of 1.00).

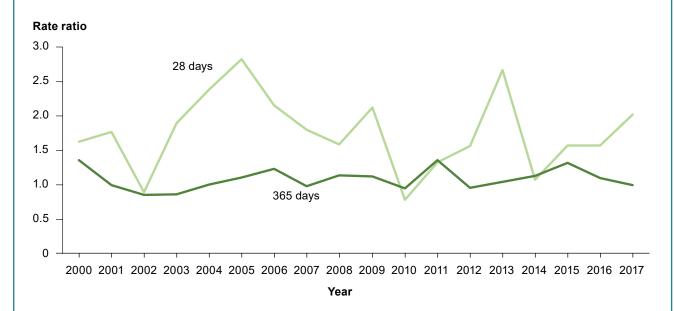
#### Deaths per 1,000 people released



Note: Calculations are based on number of deaths and the total number of Indigenous and non-Indigenous people released within the preceding 28 days or 365 days.

Source: AIHW calculations of data supplied by the Department of Human Services 2018.

Figure 19.5: Trends in deaths within 28 days and 365 days of release from prison, per 1,000 people released, by Indigenous status, 2000–2017 (rate ratio)



Note: Calculations are based on the crude death rate for non-Indigenous people divided by the crude death rate for Indigenous people within 28 days or 365 days of prison release.

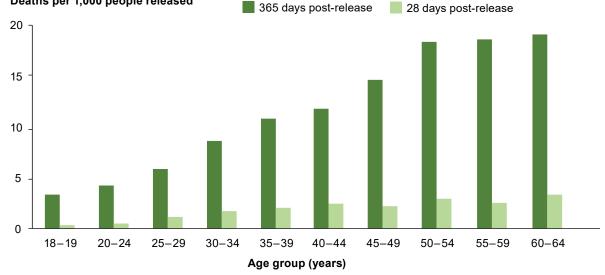
Source: AIHW calculations of data supplied by the Department of Human Services 2018.

Crude death rates for deaths occurring within 28 days and within 365 days of release from prison were calculated by age group, and averaged over 2007–2017.

Crude death rates within a year of release from prison increased with age from 3.4 deaths per 1,000 people aged 18–19 to 19.2 deaths per 1,000 people aged 60–64.

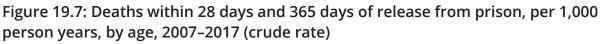
The increase in death rates was steeper for deaths within 28 days of release, from 0.3 deaths per 1,000 people aged 18–19 (4.4 deaths per 1,000 person years), to 3.3 deaths per 1,000 people aged 60–64 (43.4 deaths per 1,000 person years) (figures 19.6 and 19.7).

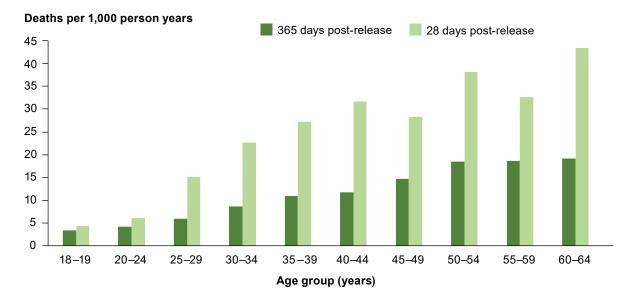
Figure 19.6: Deaths within 28 days and 365 days of release from prison, per 1,000 people released, by age, 2007–2017 (crude rate) Deaths per 1,000 people released 365 days post-release 28 days post-release 20



Note: Calculations are based on the number of deaths and the total number of people, by age, released within the preceding 28 days or 365 days.

Source: AIHW calculations of data supplied by the Department of Human Services 2018.





Note: Calculations based on number of deaths and total number of people released, by age, within preceding 28 days or 365 days, then multiplied by a factor of 13.

Source: AIHW calculations of data supplied by the Department of Human Services 2018.

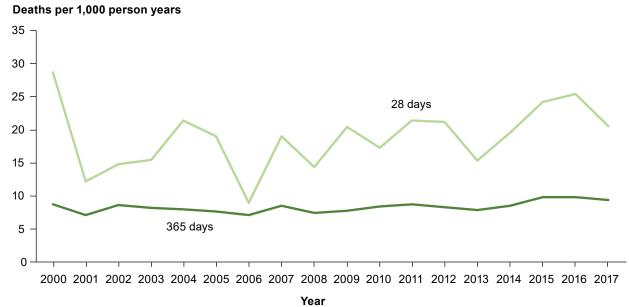
Based on the death rates per person years calculated from data provided by the Australian Government Department of Human Services, between 2000 and 2017, people released from prison were more likely to die within the first 28 days of release than in the 365 days following release (Figure 19.8).

Non-Indigenous people were more at risk of dying in the first 28 days of prison release than Indigenous people.

Older people were more likely to die both in the first 28 days and in the first 365 days after release from prison than younger people.

There was little difference in the death rates for men and women.

Figure 19.8: Trends in deaths within 28 days and 365 days of release from prison, per 1,000 person years, 2000–2017 (crude rate)



#### Notes

- 1. Calculations are based on the number of deaths and the total number of people released within the preceding 28 days or 365 days.
- 2. Crude death rates (within the preceding 28 days) per 1,000 people years were calculated by multiplying the crude death rate in 28 days by 13 to estimate an equivalent death rate per year.

Source: AIHW calculations of data supplied by the Department of Human Services 2018.

# **Appendix: Indicators**

	_	Proportion or Number			
Indi	cator	Total	Indigenous: Non-Indigenous	Male:Female	Page
Soci	oeconomic factors				
1	Proportion of prison entrants who reported that 1 or more of their parents/carers had been in prison while they were a child	18%	31%:11%	19%:17%	14
2	Proportion of prison entrants who had children who were dependent on them for their basic needs	38%	47%:33%	36%:54%	14
3	Proportion of prison dischargees who reported having contact with family, friends and/or elders in the previous 4 weeks	79%	72%:85%	77%:92%	15
4	Proportion of prison entrants whose highest year of completed schooling was Year 9 or under	33%	47%:25%	33%:35%	16
5	Proportion of prison dischargees who reported completing a qualification while in prison	17%	11%:22%	18%:11%	17
6	Proportion of prison entrants who were unemployed in the 30 days before prison	54%	64%:48%	52%:66%	18
7	Proportion of prison dischargees who reported having paid employment that will start within 2 weeks of leaving prison	22%	17%:27%	24%:5.4%	19
8	Proportion of prison dischargees who were expecting to receive a government payment through Centrelink on release	78%	76%:81%	77%:86%	20
9	Proportion of prison entrants who were homeless in the 4 weeks before prison (including short-term and emergency accommodation)	33%	42%:28%	34%:33%	22
10	Proportion of prison dischargees who expected to be homeless (including short-term and emergency accommodation) once released	54%	59%:50%	55%:41%	24
Men	tal health				
11	Proportion of prison entrants who reported being told by a health professional that they had a mental health condition (including alcohol and other drug use disorders)	40%	33%:44%	35%:65%	28
12	Proportion of prison dischargees who reported being told by a health professional that they had a mental health disorder (including alcohol and other drug use disorders)	37%	24%:47%	37%:38%	28
13	Proportion of prison entrants who rated their mental health as good, very good, or excellent	69%	75%:67%	73%:50%	30
14	Proportion of prison dischargees who rated their mental health as good, very good, or excellent	79%	87%:77%	80%:70%	30
15	Proportion of prison dischargees who reported their mental health improved or stayed the same while in prison	85%	89%:86%	85%:89%	33
16	Proportion of prison entrants with a high or very high level of psychological distress, as measured by the Kessler-10 (K10) scale	26%	20%:30%	22%:52%	35
17	Proportion of prison dischargees with a high or very high level of psychological distress, as measured by the Kessler-10 (K10) scale	14%	7.9%:18%	13%:22%	35
18	Proportion of prison entrants who reported currently taking medication for a mental health condition	23%	19%:26%	21%:40%	38
19	Proportion of people in custody who were dispensed mental health-related medication	16%	15%:14%	15%:28%	40
20	Proportion of prison entrants who, at reception, were referred to mental health services for observation and/or further assessment	18%	14%:20%	16%:30%	42
Self	harm				
21	Proportion of prison entrants who reported a history of self-harm	21%	21%:21%	20%:31%	43



		Proportion or Number			
Indi	icator	Total	Indigenous: Non-Indigenous	Male:Female	Page
22	Proportion of prison entrants who reported having thoughts of harming themselves in the previous 12 months	14%	12%:16%	14%:16%	44
23	Proportion of prison dischargees who reported having intentionally harmed themselves in prison	5.1%	3.9%:6.0%	4.7%:8.1%	45
24	Proportion of prison entrants identified by clinic staff as being currently at risk of self-harm or suicide	4.6%	3.9%:5.2%	4.8%:3.4%	47
Com	nmunicable diseases				
25	Proportion of prison entrants testing positive for a notifiable STI (chlamydia, gonorrhoea, syphilis marker) (source: NPEBBV&RBS)	chlamydia 3.9% gonorrhoea 1.5% syphilis marker 6.0%	n.a.	chlamydia 3.5%:6.7% gonorrhoea 1.7%:0.0% syphilis marker 4.3%:18%	50
26	Proportion of prison entrants testing positive for hepatitis C (source: NPEBBV&RBS)	22%	21%:23%	21%:28%	52
27	Proportion of prison dischargees who reported they were tested for hepatitis C in prison	59%	61%:59%	58%:59%	53
28	Rate of courses of treatment for hepatitis C started during 2017, per 1,000 people received into custody (source: jurisdictions)	50 per 1,000	n.a.	n.a.	54
29	Proportion of prison entrants testing positive for hepatitis B (source: NPEBBV&RBS)	16%	32%:7.6%	18%:8.3%	55
30	Proportion of prison entrants testing positive for HIV (source: NPEBBV&RBS)	0%	0%:0%	0%:0%	56
Chr	onic conditions				
31	Proportion of prison entrants who reported being told by a doctor or nurse that they had a chronic condition	30%	20%:37%	28%:45%	58
Acti	vity and health changes				
32	Proportion of prison entrants who rated their physical health as good, very good, or excellent	73%	76%:73%	76%:57%	62
33	Proportion of prison dischargees who rated their physical health as good, very good, or excellent	78%	83%:78%	79%:76%	64
34	Proportion of prison dischargees who reported that their physical health improved or stayed the same while in prison	86%	93%:84%	87%:84%	65
35	Proportion of prison dischargees who reported that their level of physical activity increased or stayed the same while in prison	77%	80%:78%	79%:68%	68
36	Proportion of prison dischargees who reported that their weight increased or stayed the same while in prison	82%	87%:81%	81%:92%	69
Wor	men in prison				
37	Proportion of female prison entrants who reported being pregnant at some stage in their lives	85%	85%:86%		73
38	Mean age at first pregnancy for female prison entrants	19.1 years	18.3 years:19.5 years		73
39	Rate of pregnant women in custody during 2017, per 100 women received into custody	1.8 per 100 women received into custody	n.a.		74
40	Proportion of female prison entrants who reported having a cervical cancer screening in the previous two years	56%	49%:61%		74
41	Proportion of female prison dischargees who reported receiving a cervical cancer screening in prison	19%	16%:22%		74
42	Proportion of female prison dischargees who reported receiving a mammogram in prison	0%	0%:0%		75
Disa	bility status				
43	Proportion of prison entrants who reported a long- term health condition or disability that affected their participation in activities, education, or employment	29%	26%:31%	29%:30%	78



	_	Proportion or Number			
Indi	cator	Total	Indigenous: Non-Indigenous	Male:Female	Page
44	Proportion of prison entrants with profound/severe core activity limitations	1.4%	1.0%:1.5%	1.3%:1.7%	82
Tob	acco smoking				
45	Proportion of prison entrants who reported they currently smoke tobacco	75%	80%:73%	73%:86%	85
46	Average age at which prison entrants reported they had smoked their first full cigarette	14.1 years	13.9 years: 14.2 years	14.1 years:14.0 years	86
47	Proportion of prison dischargees who reported they were current smokers on entry to prison	72%	69%:76%	72%:76%	86
48	Proportion of prison dischargees who reported they currently smoke tobacco (in prisons that allowed smoking)	56%	77%:48%	58%:47%	88
49	Proportion of prison entrants who reported they currently smoke and would like to quit	41%	40%:43%	40%:46%	89
50	Proportion of prison dischargees who reported they were current smokers on prison entry, and intended to smoke upon release	43%	41%:44%	41%:54%	90
Illici	t drug use				
51	Proportion of prison entrants who reported using illicit drugs in the previous 12 months	65%	63%:66%	64%:74%	92
52	Proportion of prison entrants who reported having injected drugs at some stage in their lives (source: NPEBBV&RBS)	46%	32%:53%	44%:58%	95
53	Proportion of prison dischargees who reported they had injected drugs at some stage in their lives	34%	27%:40%	34%:38%	96
54	Proportion of prison dischargees who reported using illicit drugs in prison	16%	6.3%:22%	17%:0%	98
55	Proportion of prison dischargees who reported injecting drugs in prison	8.1%	3.9%:11%	9.1%:0%	98
56	Proportion of prison entrants who had shared injecting equipment in the previous month (source: NPEBBV&RBS)	18%	n.a.	n.a.	99
57	Proportion of prison dischargees who reported using a needle that had been used by someone else while in prison	7.8%	3.1%:11%	8.7%:0%	99
58	Proportion of prison entrants who reported currently being on opioid substitution therapy	7.5%	3.2%:11%	7.7%:5.4%	100
59	Proportion of people in custody who received medication for opioid dependence	1.5%	1.3%:1.5%	1.3%:3.3%	100
60	Proportion of prison dischargees on opioid substitution therapy while in prison with a plan to continue after release	6.6%	1.6%:10%	7.1%:2.7%	100
61	Proportion of prison dischargees who reported receiving a tattoo while in prison	5.7%	5.5%:6.0%	5.7%:5.4%	100
62	Proportion of prison dischargees who reported receiving a body or ear piercing while in prison	0.9%	0.8%:1.0%	1.0%:0.0%	100
Alco	hol consumption				
63	Proportion of prison entrants who were at high risk of alcohol-related harm in the previous 12 months (as measured by the AUDIT-C)	34%	46%:26%	35%:27%	101
64	Proportion of prison dischargees who were at high risk of alcohol-related harm before their current incarceration (as measured by the AUDIT-C)	56%	68%:47%	58%:38%	103
65	Proportion of prison dischargees who reported accessing an alcohol treatment program in prison	8.4%	7.1%:9.5%	8.4%:8.1%	105
Inju	ries, assaults and risky sexual behaviours				
66	Proportion of all prison entrants who have ongoing symptoms from a head injury/blow to the head resulting in a loss of consciousness	10%	8.8%:10%	9.3%:15%	107
67	Proportion of prison dischargees who had ongoing symptoms from a head injury/blow to the head resulting in a loss on consciousness that occurred while in prison	2.4%	1.6%:3.0%	2.7%:0%	107



		Proportion or Number			
Ind	icator	Total	Indigenous:	Malo:Fomalo	Page
68	Proportion of prison dischargees who had to see a doctor	25%	Non-Indigenous 21%:29%	Male:Female 26%:19%	Page 108
00	or nurse due to an accident or injury while in prison	2570	2170.2370	2070.1370	100
69	Proportion of prison dischargees who reported being physically assaulted or attacked by another prisoner while in prison	11.0%	8.7%:13%	11%:11%	108
70	Proportion of prison dischargees who reported being sexually assaulted by another prisoner while in prison	1.8%	0.8%:2.5%	1.3%:5.4%	108
71	Proportion of prison entrants who had a casual sexual partner in the previous 3 months, and reported never using a condom (source: NPEBBV&RBS)	60%	n.a.	n.a.	109
Gen	eral health services				
72	Proportion of prison entrants who reported consulting a health professional in the community in the previous 12 months	35%	41%:32%	34%:42%	111
73	Proportion of prison entrants who were in prison in the previous 12 months, and reported consulting a health professional during that time in prison	49%	47%:51%	46%:70%	112
74	Proportion of prison entrants who reported that, in the previous 12 months, they needed to consult a health professional in the community, but did not	8.6%	11%:7.5%	8.2%:11%	118
75	Proportion of prison entrants who reported they were in prison in the previous 12 months, and needed to consult a health professional while in prison, but did not	30%	26%:33%	30%:30%	118
Pris	on clinic				
76	Proportion of prison dischargees who reported they received a health assessment upon entry to prison	89%	92%:88%	89%:86%	119
77	Proportion of prison dischargees who reported they could easily see a medical professional (GP or nurse) in prison if they had a health problem	79%	86%:78%	80%:70%	120
78	Proportion of prison dischargees who reported they had visited the prison clinic while in prison	90%	97%:88%	89%:92%	121
79	Proportion of people in custody who used the prison clinic during the 2-week data collection period	28%	27%:26%	27%:40%	122
80	Proportion of prison dischargees who reported they were diagnosed with a health condition in prison	24%	25%:24%	24%:19%	124
81	Proportion of people in custody who had a problem managed in the prison clinic during the 2-week data collection period (by type of problem managed)	Medication or vaccine 23%	Medication or vaccine 20% 23%	Medication or vaccine 24%: Mental health condition 18%	125
82	Proportion of clinic visits during the 2-week data collection period by service received	Treatment 65%	Treatment 65%:64%	Treatment 66%:52%	129
83	Proportion of clinic visits initiated by the patient (rather than initiated by clinic staff)	28%	22%:31%	27%:37%	130
84	Proportion of prison dischargees who reported having seen a health professional in prison (by type of health professional seen)	Nurse 82%	Nurse 88%:80%	Nurse 82%:81%	131
85	Proportion of clinic visits by type of health professional seen	Nurse 68%	Nurse 69%:67%	Nurse 65%:71%	132
86	Proportion of prison dischargees who reported they were satisfied with the amount of information on their condition they received at a clinic visit	90%	92%:89%	90%:88%	133
87	Proportion of prison dischargees who reported they received answers they could understand at the prison clinic	96%	93%:97%	95%:97%	134
88	Proportion of prison dischargees who reported they were able to be involved in their treatment decision at a clinic visit	84%	88%:82%	84%:85%	134
89	Proportion of prison dischargees who reported they always or mostly had enough time at a clinic visit	76%	80%:75%	76%:79%	134
90	Proportion of prison dischargees who rated the health care they received in the prison clinic as excellent	34%	34%:34%	33%:41%	135



		Proportion or Number			
Indi	cator	Total	Indigenous: Non-Indigenous	Male:Female	Page
Priso	on clinic procedures				
91	Number of full-time equivalent doctors and nurses working within the correctional system per person in custody	2.92 per 100 people in custody	n.a.	n.a.	138
92	Number of vaccinations provided by prison clinics during the 2-week data collection period	1,754	n.a.	n.a.	139
93	Proportion of prison dischargees who reported they attended a medical appointment outside the prison	30%	31%:30%	29%:38%	140
94	Proportion of prison dischargees who reported they were admitted to a general or psychiatric hospital during their incarceration	10%	8.7%:12%	10%:11%	140
95	Proportion of prison dischargees who reported they visited an emergency department during their incarceration	12%	9.4%:15%	12%:11%	141
96	Number of hospital transfers for people in custody during the 2-week data collection period	325 acute, 1,408 non-acute, 1,733 total	n.a.	n.a.	141
97	Proportion of Indigenous prison dischargees who reported receiving treatment or consultation from an Aboriginal Community Controlled Health Organisation (ACCHO) or an Aboriginal Medical Service (AMS) while in prison	9.4%		10%:5.3%	142
98	Proportion of Indigenous prison dischargees who reported they always received culturally appropriate health care in prison	80%		81%:68%	142
99	Proportion of prison clinics that received visits by an Aboriginal Community Controlled Health Organisation (ACCHO) and/or Aboriginal Medical Service (AMS)	25%		••	143
Med	ication				
100	Proportion of people in custody who were dispensed prescription medication during the data collection period	30%	31%:25%	28%:46%	144
Read	diness for release				
101	Proportion of sentenced people in custody who had a health-related discharge summary on file at the time of their release	81% sentenced, 36% unsentenced, 61% total	n.a.	n.a.	150
102	Proportion of prison dischargees who reported they were taking regular medication and intended to continue after release	89%	89%:89%	88%:96%	151
103	Proportion of prison dischargees who reported they had a referral or appointment to see a health professional after release	50%	43%:56%	49%:57%	152
104	Proportion of prison dischargees who reported they had a valid Medicare card available for use from the first day of release	64%	56%:71%	65%:54%	153
105	Proportion of prison dischargees who reported they felt prepared for their upcoming release from prison	88%	92%:88%	88%:89%	154
Dea	ths				
106	Number of deaths in prison custody in 2014–15.	61	15:46	12:01	156
107	Crude death rate within 4 weeks of release from prison	1.6 deaths per 1,000 people released from prison in 2017	0.9 deaths per 1,000:1.9 deaths per 1,000 people released in 2017	1.6 deaths per 1,000: 1.1 deaths per 1,000 people released in 2017	158
108	Crude death rate within 1 year of release from prison	9.4 deaths per 1,000 people released in 2017	9.5 deaths per 1,000:9.5 deaths per 1,000 people released in 2017	9.7 deaths per 1,000: 7.3 deaths per 1,000 people released in 2017	159



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# **Abbreviations**

ABS Australian Bureau of Statistics

**ACCHO** Aboriginal Community Controlled Health Organisation

ACT Australian Capital Territory

acquired immunodeficiency syndrome **AIDS** 

**AIHW** Australian Institute of Health and Welfare

Aboriginal Medical Service **AMS** 

**AUDIT** Alcohol Use Disorder Identification Test

AUDIT-C Alcohol Use Disorder Identification Test—Consumption

**BEACH** Bettering the Evaluation and Care of Health

DoH Australian Government Department of Health

FTE full-time equivalent

GP general practitioner

HIV human immunodeficiency virus

IDU injecting drug user

Kessler Psychological Distress Scale K10

NPEBBV&RBS National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey

National Prisoner Health Data Collection **NPHDC** 

**New South Wales NSW** 

NT Northern Territory

OST opioid substitution treatment

Qld Queensland

SA South Australia

STI sexually transmissible infection

Tasmania Tas

Vic Victoria

Western Australia WA

WHO World Health Organization

# **Symbols**

not applicable

not available n.a.

## **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.

Aboriginal or Torres Strait Islander: A person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander.

**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 well-being 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 well-being, 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 health 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

Abbott P, Lloyd JE, Joshi C, Malera-Bandjalan K, Baldry E, McEntyre E, Sherwood J, Reath J, Harris MF 2018.Do programs for Aboriginal and Torres Strait Islander people leaving prison meet their health and social support needs? The Australian Journal of Rural Health, 26(1):6-13.

Abbott P, Magin P & Hu W 2016. Healthcare delivery for women in prison: a medical record review. Australian Journal of Primary Health, 22(6): 523-9.

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 Behav 17:2878-92.

ABS 2012. Information paper: Use of the Kessler Psychological Distress Scale in ABS health surveys, Australia, 2007-08. ABS cat. no. 4817.0. 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 2016. Disability, ageing and carers, Australia: summary of findings, 2015. Cat. no. 4430.0. Canberra: ABS.

ABS 2017. Survey of disability ageing and carers: Aboriginal and Torres Strait Islander people with disability 2015. Cat. no. 4430.0. Canberra: ABS.

ABS 2018a. Prisoners in Australia, 2018. Cat. no. 4517.0. Canberra: ABS.

ABS 2018b. Corrective services, Australia, December quarter 2018. cat. no. 4512.0. Canberra: ABS.

ABS 2018c. Census of population and housing: reflecting Australia – stories from the Census, 2016. Cat. no. 2071.0. Canberra: ABS.

ABS 2018d. Education and work, Australia, May 2018. Cat. no. 6227.0. Canberra: ABS.

ABS 2018e. National health survey: first results, 2017-18. Cat. no. 4364.0. Canberra: ABS.

ABS 2018f. Patient experiences in Australia: summary of findings, 2017–18. Cat. no. 4839.0. Canberra: ABS.

AIHW 2013. Smoking and quitting smoking among prisoners 2012. Bulletin no. 119. Cat. no. AUS 176. Canberra: AIHW.

AIHW 2015. The health of Australia's prisoners 2015. Cat. no. PHE207. Canberra: AIHW.

AIHW 2016a. Australian burden of disease study: impact and causes of illness and death in Australia 2011. Australian Burden of Disease Study series no 3. BOD4. Canberra: AIHW.

AIHW 2016b. Evidence for chronic disease risk factors. Cat. no. WEB 166. Canberra: AIHW.

AIHW 2016c. Health communities: tobacco smoking rates across Australia, 2014–15 (In Focus). Cat. no. HPF 1. Canberra: AIHW.

AIHW 2016d. Medical practitioners workforce 2015. Cat. no. WEB 140. AIHW: Canberra.

AIHW 2016e. Nursing and midwifery workforce 2015. Cat. no. WEB 141. AIHW: Canberra.

AIHW 2017a. Cancer in Australia 2017. Cat. no. CAN 100. Canberra: AIHW.

AIHW 2017b. Disability in Australia: changes over time in inclusion and participation factsheets: community living, education and employment. Cat. no. DIS 67-69. Canberra: AIHW.

AIHW 2017c. National drug strategy household survey 2016: detailed findings. Drug statistics series no. 31. Cat. no. PHE 214. Canberra: AIHW.

AIHW 2018a. Chronic conditions and disability 2015. Cat. no. CDK 8. Canberra: AIHW.

AIHW 2018b. Aboriginal and Torres Strait Islander Health Performance Framework (HPF) report. Cat. no. IHW 194. Canberra: AIHW.

AIHW 2018c. National opioid pharmacotherapy statistics (NOPSAD) 2017. Cat. no. HSE 199. Canberra: AIHW.

AlHW 2019. Specialist homelessness services collection data cubes 2011–18. Cat. no. HOU 302. Canberra: AIHW.

Alderman N, Knight C & Brooks J 2018. Therapy for Acquired Brain Injury. In The Wiley Blackwell Handbook of Forensic Neuroscience (eds AR Beech, AJ Carter, RE Mann & P Rotshein). doi: 10.1002/9781118650868.ch24

Aldridge RW, Story A, Hwang SW, Nordentoft M, Luchenski SA, Hartwell G, Tweed EJ, Lewer D, Katikireddi SV & Hayward AC 2018. Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis. The Lancet, 391(10117):241-50.

AMA 2012. Position Statement on Health and Criminal Justice System. Canberra: AMA.

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.

Babor TF, Higgins-Biddle JC, Saunders JB & Monteiro MG 2001. AUDIT The Alcohol Use Disorders Identification Test. Guidelines for use in primary care. 2nd ed. Geneva: WHO.

Baidawi S 2016. Older prisoners: psychological distress and associations with mental health history, cognitive functioning, socio-demographic, and criminal justice factors. International Psychogeriatrics, 28(3):385-95.

Baldry E, Bright D, Cale J, Day A, Dowse L, Giles M, Hardcastle L, Graffam J, McGillivray J, Newton D, Rowe S & Wodak J 2018. A future beyond the wall: improving post-release employment outcomes for people leaving prison: Final Report. Sydney: UNSW Sydney.

Barton JJ, Meade T, Cumming S & Samuels A 2014. Predictors of self-harm in male inmates. Journal of Criminal Psychology 4:2-18.

Bartlett TS & Trotter CJ 2019. Did we forget something? Fathering supports and programs in prisons in Victoria, Australia. International Journal of Offender Therapy and Comparative Criminology, I–17. doi: 10.1177/0306624X19828575.

Bebbington P, Jakobowitz S, McKenzie N, Killaspy H, Iveson R, Duffield G & Kerr M 2017. Assessing needs for psychiatric treatment in prisoners: 1. Prevalence of disorder. Social Psychiatry and Psychiatric Epidemiology 52(2):221–9. doi: 10.1007/s00127-016-1311-7

Besemer KL, Van de Weijer SGA & Dennison SM 2018. Risk marker or risk mechanism? The effect of family, household, and parental imprisonment on children and adults' social support and mental health. Criminal Justice and Behavior, 45(8):1154–73.

Binswanger IA, Blatchford PJ, Mueller SR & Stern MF 2013. Mortality after prison release: opioid overdose and other causes of death, risk factors, and time trends from 1999 to 2009. Annals of Internal Medicine, 159(9):592-600. doi: 10.7326/0003-4819-159-9-201311050-00005

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. BMJ 349:g4542.

Binswanger IA, Stern MF, Deyo RA, Heagerty PJ, Cheadle A, Elmore JG & Koepsell TD 2007. Release from prison—a high risk of death for former inmates. The New England Journal of Medicine, 356:157–65.

Borschmann R, Young JT, Moran PA, Spittal MJ & Kinner SA 2018. Self-harm in the criminal justice system: a public health opportunity. The Lancet Public Health 3(1), PE10. doi: 10.1016/s2468-2667(17)30243-8

Bowen RA, Rogers A & Shaw J 2009. Medication management and practices in prison for people with mental health problems: a qualitative study. Int J Ment Health Syst 3:24.

Britt H, Miller G, Henderson J, Bayram C, Harrison C, Valenti L, Pan Y, Charles J, Pollack AJ, Wong C & Gordon J 2016. General practice activity in Australia 2015–16. General practice series no. 40. Sydney: Sydney University Press.

Brose LS, Simonavicius E & McNeill A 2018. Maintaining abstinence from smoking after a period of enforced abstinence – a systematic review, meta-analysis and analysis of behaviour change techniques with a focus on mental health. Psychological Medicine, 48(4):669-78.

Bukten A, Stavseth MR, Skurtveit S, Tverdal A, Strang J, & Clausen T. 2017. High risk of overdose death following release from prison: variations in mortality during a 15-year observation period. Addiction, 112(8):1432-9. doi: 10.1111/add.13803

Butler T, Richters J, Yap L, Papanastasiou C, Richards A, Schneider K, Grant L, Smith A & Donovan B 2010. Sexual health and behaviour of Queensland prisoners. Perth and Sydney: National Drug Research Institute.

Butler T & Simpson M 2017. National prison entrants' bloodborne virus and risk behaviour survey 2004, 2007, 2010, 2013 and 2016. Sydney: Kirby Institute, UNSW Sydney.

Butler A, Young J T, Kinner SA & Borschmann R 2018. Self-harm and suicidal behaviour among incarcerated adults in the Australian Capital Territory. Health & justice, 6(1), 13. doi:10.1186/s40352-018-0071-8

Carroll M, Kinner SA & Heffernan EB 2014. Medication use and knowledge in a sample of Indigenous and non-Indigenous prisoners. Australian and New Zealand Journal of Public Health 38:142-6.

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. J Correct Health Care 20:271-9.

CDNA (Communicable Diseases Network Australia) 2018. Australian national notifiable diseases and case definitions. Australian Government Department of Health. Accessed 4 March 2019. http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdna-cdna.htm

CSAC (Corrective Services Administers' Council) 2012. Standard Guidelines for Corrections in Australia. Revised 2012. CSAC.

Cossar R, Stoové M, Kinner SA, Dietze P, Aitken C, Curtis M, Kirwan A & Ogloff JRP 2018. The associations of poor psychiatric well-being among incarcerated men with injection drug use histories in Victoria, Australia. Health & justice, 6(1), 1. doi:10.1186/s40352-018-0059-4

Cumming C, Kinner SA, Preen DB & Larsen AC 2018. In sickness and in prison: the case for removing the Medicare exclusion for Australian prisoners. JLM, 26:140-58.

Cunningham EB, Hajarizadeh B, Amin J, Bretana N, Dore GJ, Degenhardt L, Larney S, Luciani F, Lloyd AR & Grebely J 2018. Longitudinal injecting risk behaviours among people with a history of injecting drug use in an Australian prison setting: the HITS-p study. International Journal of Drug Policy, 54:18-25.

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. Aust N Z J Public Health 38:424–9.

Darke S, Kaye S & Duflou | 2017. Rates, characteristics and circumstances of methamphetamine-related death in Australia: a national 7-year study. Addiction, 112:2191-201.

Dean K & Korobanova D 2017. Brief mental health screening of prison entrants: psychiatric history versus symptom screening for the prediction of in-prison outcomes. The Journal of Forensic Psychiatry and Psychology, 29(3):455-66. doi: 10.1080/14789949.2017.1421247

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 SM & Besemer KL 2018. Missing and missing out: social exclusion in children with an incarcerated parent. In Condry R & Smith PS (Eds). Prisons, Punishment, and the Family: Towards a New Sociology of Punishment? Oxford: Oxford University Press.

Dennison S & Smallbone H 2015. 'You can't be much of anything from inside': the implications of imprisoned fathers' parental involvement and generative opportunities for children's well-being. Law in Context: A Socio-legal Journal, 32:61–85.

DoH (Department of Health) 2014. Fourth National Hepatitis C Strategy 2014–2017. Canberra: Department of Health.

DoH 2016. Surveillance systems reported in Communicable Diseases Intelligence, 2016. Communicable Diseases Intelligence 40(1): E11-E16.

DoH 2018a. Fourth National Sexually Transmissible Infections Strategy 2018–2022. Canberra: Department of Health.

DoH 2018b. Third National Hepatitis B Strategy 2018-2022. Australian Government Department of

DoH 2018c. Fifth National Hepatitis C Strategy 2018–2022. Australian Government Department of Health.

DoH 2019. National Notifiable Diseases Surveillance System. Australian Government Department of Health. Accessed 5 March 2019 http://www9.health.gov.au/cda/source/cda-index.cfm

Dolan K & Rodas A 2014. Detection of drugs in Australian prisons: supply reduction strategies. Int | Prison Health 10:111-7.

Dowell CM, Mejia GC, Preen DB & Segal L 2018. Maternal incarceration, child protection, and infant mortality: a descriptive study of infant children of women prisoners in Western Australia. Health Justice 6(1):2. doi: 10.1186/s40352-018-0060-y.

Dowell CM, Mejia GC, Preen DB & Segal L 2019. Low birth weight and maternal incarceration in pregnancy: a longitudinal linked data study of Western Australian infants. SSM - Population Health 7:100324.

Earle J 2018. Why Focus on Reducing Women's Imprisonment?. In: Milne E., Brennan K., South N., Turton J. (eds) Women and the Criminal Justice System. Palgrave Macmillan, Cham

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.

Flynn C, Bartlett T, Arias PF, Evans P & Burgess A 2015. Responding to children when their parents are incarcerated: exploring the responses in Vitoria and New South Wales, Australia. Law in Context: A Socio-legal Journal, 32:4–27.

Forsyth SJ, Carroll M, Lennox N & Kinner SA 2018. Incidence and risk factors for mortality after release from prison in Australia: a prospective cohort study. Addiction, 113(5):937-45. doi: 10.1111/add.14106

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.

GBD 2016 Alcohol Collaborators 2018. Alcohol use and burden for 195 countries and territories 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet, 392:1015–35.

Goldsmid S & Willis M 2016. Methamphetamine use and acquisitive crime: evidence of a relationship. Trends & issues in crime and criminal justice No. 516. Canberra: Australian Institute of Criminology.

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.

Grace J, Krom I, Maling C, Butler T, Midford R & Simpson P 2013. Review of Indigenous offender health. 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. J Psychopharmacol 28:357– 62.

Hellenbach M, Karatzias T & Brown M 2017. Intellectual disabilities among prisoners: prevalence and mental and physical comorbidities. Journal of Applied Research in Intellectual Disabilities, 30(2):230-41.

Henley G & Harrison JE 2018. Trends in injury deaths, Australia, 1999–00 to 2014–15. Injury research and statistics series no. 112. Cat. no. INJCAT 192. Canberra: AIHW.

IGCD 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. Am J Public Health 103:1436-44.

Jardine C 2018. Eroding legitimacy? The impact of imprisonment on the relationships between families, communities, and the criminal justice system. In Condry R & Smith PS (Eds). Prisons, Punishment, and the Family: Towards a New Sociology of Punishment? Oxford: Oxford Universtiy Press.

Jeffries S & Newbold G 2016. Analysing tends in the imprisonment of women in Australia and New Zealand. Psychiatry, Psychology and Law 23(2):184–206.

Jin X, Kinner SA, Hopkins R, Stockings E, Courtney RJ, Shakeshaft A, Petrie D, Dobbins T & Dolan K 2018. Brief intervention on Smoking, Nutrition, Alcohol and Physical (SNAP) inactivity for smoking relapse prevention after release from smoke-free prisons: a study protocol for a multicentre, investigator-blinded, randomised controlled trial. BMJ Open, 8:e021326

Jones D & Maynard A 2013. Suicide in recently released prisoners - a systematic review. Mental Health Practice 17:20-7.

Jones J, Wilson M, Sullivan E, Atkinson L, Gilles M, Simpson PL, Baldry E & Butler T 2018. Australian Aboriginal women prisoners' experiences of being a mother: a review. International Journal of Prisoner Health 14(4):221-31.

Kariminia A, Law MG, Butler TG, Levy MH, Corben SP, Kaldor JM & Grant L 2007. Suicide risk among recently released prisoners in New South Wales, Australia. Medical Journal of Australia, 187(7):387–90.

Kelly G, Brown S & Simpson GK 2018. The Building Bridges network: linking disconnected service networks in acquired brain injury and criminal justice. Neuropsychological Rehabilitation, doi: 10.1080/09602011.2018.1479274.

Kendall A & Hopkins T 2019. Inside out literacies: literacy learning with a peer-led prison reading scheme. International Journal of Bias, Identity and Diversities in Education, 4(1):18.

Kessler RC, Andrews G, Colpe LJ & Hiripi E 2002. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychological Medicine, 32(6):959–76.

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. Int J Drug Policy 24:460-3.

Kinner SA, Streitberg L, Butler T & Levy M 2012. Prisoner and ex-prisoner health: improving access to primary care. Australian Family Physician, 41(7):535-7.

Kinner SA & Young JT 2018. Understanding and improving the health of people who experience incarceration: an overview and synthesis. Epidemiologic Reviews, 40(1):4-11. doi: 10.1093/epirev/mxx018

Knight M & Plugge E 2005. The outcomes of pregnancy among imprisoned women: a systematic review. BJOG An International Journal of Obstetrics and Gynaecology 112(11):1467–74.

Kopak AM & Hoffmann NG 2014. Pathways Between Substance Use, Dependence, Offense Type, and Offense Severity. Criminal Justice Policy Review 25:743–60.

Kouyoumdjian FG, Cheng SY, Fung K, Orkin AM, McIsaac KE, Kendall C, Kiefer L, Matheson FI, Green SE & Hwang SW 2018. The health care utilization of people in prison and after prison release: a population-based cohort study in Ontario, Canada. PLoS One, 13(8): e0201592. doi: 10.1371/journal. pone.0201592.

Kwon JA, Anderson J, Kerr CC, Thein HH, Zhang L, Iversen J et al. 2012. Estimating the costeffectiveness of needle-syringe programs in Australia. AIDS 26:2201-10.

Lafferty L, Wild TC, Rance J & Treloar C 2018. A policy analysis exploring hepatitis C risk, prevention, testing, treatment and reinfection within Australia's prisons. Harm Reduction Journal, 15:39. doi: 10.1186/s12954-018-0246-6.

Lazarus JV, Safreed-Harmon K, Hertherington KL, Bromberg DJ, Ocampo D, Graf N, Dichtl A, Stöver H & Wolff H 2018. Health outcomes for clients of needle and syringe programs in prisons. Epidemiological Reviews, 40(1):96–104.

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.

Martin MS, Wells GA, Crocker AG, Potter BK & Colman I 2018. Mental health screening, treatment, and institutional incidents: a propensity score matched analysis of long-term outcomes of screening. International Journal of Forensic Mental Health, 17(2):133-44. doi: 10.1080/14999013.2018.1451415.

McIntyre | 2017. Mother-and-infant facilities at Adelaide Women's Prison: a cost effective measure in the best interests of the child. Technical Report. University of South Australia.

Millar H & Dandurand Y 2018. The best interests of the child and the sentencing of offenders with parental responsibilities. Criminal Law Forum 29:227-77.

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.

Moazen B, Moghaddim SS, Silbernagl MA, Lotfizadeh M, Bosworth RJ, Alammehrjerdi Z, Kinner SA, Wirtz AL, Bärnighausen W, Stöver HJ & Dolan K 2018. Prevalence of drug injection, sexual activity, tattooing, and peircing among prison inmates. Epidemiologic Reviews, 40(1):58-69.

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. Psychol Med 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.

Murnion BP 2018. Neuropathic pain: current definition and review of drug treatment. Australian Prescriber, 41(3):60-3

National Aboriginal Community Controlled Health Organisation (2018). www.naccho.org.au. Accessed 21/02/2019.

NHMRC 2009. Australian guidelines to reduce health risks from drinking alchol. Canberra: National Health and Medical Research Council.

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.

Paynter M, Drake EK, Cassidy C & Snelgrove-Clarke E 2019. Maternal health outcomes for incarcerated women: a scoping review. Journal of Clinical Nursing. doi: 10.1111/jocn.14837.

Pettus-Davis C, Veeh CA, Davis M & Tripodi S 2018. Gender differences in experiences of social support among men and women releasing from prison. Journal of Social and Personal Relationships, 35(9):1161-82.

Phillips B, Daniels J, Woodward A, Blakely T, Taylor R & Morrell S 2017. Mortality trends in Australian Aboriginal peoples and New Zealand Maori. Population Health Metrics, 15:25.

Phillips LA & Lindsay M 2011. Prison to society: a mixed methods analysis of coping with re-entry. International Journal of Offender Therapy and Comparative Criminology, 55(1):136–54. doi: 10.1177/0306624X09350212

Piccolino AL & Solberg KB 2014. The Impact of Traumatic Brain Injury on Prison Health Services and Offender Management. J Correct 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 well-being. Int J Prison Health 10:38-46.

Poehlmann J 2005. Representations of attachment relationships in children of incarcerated mothers. Child Development 76(3):679-96.

Productivity Commission 2019. Report on government services 2019. Canberra: Productivity Commission.

Puljević C, de Andrade D, Carroll M, Spittal MJ & Kinner SA 2018. Use of prescribed smoking cessation pharmacotherapy following release from prison: a prospective data linkage study. Tobacco Control, 27(4):474-8.

Puljević C, de Andrade D, Coomber R & Kinner SA 2018. Relapse to smoking following release from smoke-free correctional facilities in Queensland, Australia. Drug and Alcohol Dependence, 187(1):127–33.

Ramakers A, Apel R, Nieuwbeerta P, dirkzwager AJE & Van Wilsem J 2014. Imprisonment length and post-prison employment prospects. Criminology 52:399-427.

RCIADIC 1991. Royal Commission into Aboriginal Deaths In Custody. Canberra: Australian Government Publishing Service.

RACGP (The Royal Australian College of General Practitioners) 2018. Guidelines for preventative activities in general practice, 9th edn, updated. Melbourne: RACGP.

Schwitters A 2014. Health interventions for prisoners update of literature since 2007 WHO. 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.

Shepherd S 2016. Criminal engagement and Australian culturally and linguistically diverse populations: challenges and implications for forensic risk assessment. Psychiatry, Psychology and Law, 23(2):256-74.

Simpson PL, Reekie J, Butler TG, Richters J, Yap L, Grant L, Richards A & Donovan B 2016. Factors associated with sexual coercion in a representative sample of men in Australian prisons. Archives of Sexual Behavior, 45(5):1195-205.

Skues J, Pfeifer J, Olivia A & Wise L 2019. Responding to the needs of prisoners with learning difficulties in Australia. International Journal of Bias, Identity and Diversities in Education, 4(1):9.

Spittal MJ, Forsyth S, Borschmann R, Young JT, Kinner SA 2019. Modifiable risk factors for external cause mortality after release from prison: a nested case-control study. Epidemiology and Psychiatric Sciences, 28(2):224-33. doi: 10.1017/S2045796017000506

Spittal MJ, Forsyth S, Pirkis J, Alati R & Kinner SA 2014. Suicide in adults released from prison in Queensland, Australia: a cohort study. J Epidemiol Community Health 68:993-8.

Stewart AC, Cossar R, Dietze P, Armstrong G, Curtis M, Kinner SA, Ogloff JRP. Kirwan A & Stoové M 2018. Lifetime prevalence and correlates of self-harm and suicide attempts among male prisoners with histories of injecting drug use. Health & justice, 6(1):19. doi:10.1186/s40352-018-0077-2

Stewart LM, Henderson CJ, Hobbs, MST, Ridout SC, Knuiman MW 2004. Risk of death in prisoners after release from jail. Australian and New Zealand Journal of Public Health, 28(1):32–7.

Stojkovic S 2007. Elderly prisoners: a growing and forgotten group within correctional systems vulnerable to elder abuse. Journal of Elder Abuse & Neglect, 19(3–4):97–117.

Sullivan EA, Kendall S, Chang S, Baldry E, Zeki R, Gilles M, Wilson M, Butler T, Levy M, Wayland S, Cullen P, Jones J & Sherwood J 2019. Aboriginal mothers in prison in Australia: a study of social, emotional and physical well-being. Australian and New Zealand Journal of Public Health. doi: 10.1111/1753-6405.12892

Tait RJ, Whetton S, Shanahan M, Cartwright K, Ferrante A, Gray D, Kaye S, McKetin R, Pidd K, Ritter A, Roche A & Allsop S 2018. Quantifying the societal cost of methamphetamine use to Australia. International Journal of Drug Policy, 62:30–6.

The Kirby Institute 2017. HIV, viral hepatitis and sexually transmissible infections in Australia: annual surveillance report 2017. Sydney: The Kirby Institute, UNSW Sydney.

Thomas E, Degenhardt L, Alati R & Kinner S 2014. Predictive validity of the AUDIT for hazardous alcohol consumption in recently released prisoners. Drug Alcohol Depend 134:322-9.

Thomas EG, Spittal MJ, Heffernan EB, Taxman FS, Alati R & Kinner SA 2016. Trajectories of psychological distress after prison release: implications for mental health service need in ex-prisoners. Psychological Medicine, 46(3):611-21. doi: 10.1017/S0033291715002123.

Thompson W, Quay TAW, Rojas-Fernandez C, Farrell B & Bjerre LM 2016. Atypical antipsychotics for insomnia: a systematic review. Sleep Medicine, 22:13-7.

Ticehurst A, Napier S & Bricknell S 2018. National deaths in custody program: deaths in custody in Australia 2013–14 and 2014–15. Statistical Report 05. Canberra: AIC.

Troy V, McPherson KE, Emslie C & Gilchrist E 2018. The faesibility, appropriateness, meaningfulness, and effectiveness of parenting and family support programs delivered in the criminal justice system: a systematic review. Journal of Child and Family Studies, 27:1732–47.

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. BMJ Open 4:e006414.

UNAIDS 2018. Translating community research into global policy reform for national action: a checklist for community engagement to implement the WHO consolidated guidelines on the sexual and reproductive health and rights of women living with HIV. 3rd Ed. Geneva: UNAIDS.

United Nations 1990. Basic principles for the treatment of prisoners. A/RES/45/111.

United Nations 2015. United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules). Vienna: United Nations Office on Drugs and Crime.

van Dooren K, Kinner SA & Forsyth S 2013. Risk of death for young ex-prisoners in the year following release from adult prison. Australian and New Zealand Journal of Public Health 37:377–82.

Wallace J, Richmond J, Ellard J, Power J & Lucke J 2018. Eradicating hepatitis C: the need for a public health response. Global Public Health, 13(9):1254-64.

Wang EA, Hong CS, Samuels L, Shavit S, Sanders R & Kushel M 2010. Transitions clinic: creating a community-based model of health care for recently released California prisoners. Public Health Reports, 125(2):171-7. doi: 10.1177/003335491012500205

Watt K, Hu W, Magin P & Abbott P 2018. "Imagine if I'm not here, what they're going to do?"-Health-care access and culturally and linguistically diverse women in prison. Health Expectations, 21:1159–70.

WHO 2011. World report on disability 2011. Geneva: WHO.

WHO 2012. The new European policy for health – Health 2020: policy framework and strategy. Copenhagen:WHO.

Wildeman C, Goldman AW & Turney K 2018. Parental incarceration and child health in the United States. Epidemiologic Reviews, 40(1):146-56.

Williams BA, Ahalt C & Greifinger RB 2014. The older prisoner and complex chronic medical care. In: Prisons and health. Copenhagen: WHO, 165–70.

Winter RJ, Stoove M, Agius PA, Hellard ME & Kinner SA 2019. Injecting drug use is an independent risk factor for reincarceration after release from prison: a prospective cohort study. Drug and Alcohol Review, 38(3):254-63.

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.

Young JT, Arnold-Reed D, Preen D, Bulsara M, Lennox N & Kinner SA 2015. Early primary care physician contact and health service utilisation in a large sample of recently released ex-prisoners in Australia: prospective cohort study. BMJ Open, 5:e008021. doi: 10.1136/bmjopen-2015-008021.

Yu SS, Sung HE, Mellow J & Koenigsmann CJ 2015. Self-perceived health improvements among prison inmates. Journal of Correctional Health Care 21(1):59-69.

Zlodre J & Fazel S 2012. All-cause and external mortality in released prisoners: systematic review and meta-analysis. American Journal of Public Health, 102(12):e67–e75.

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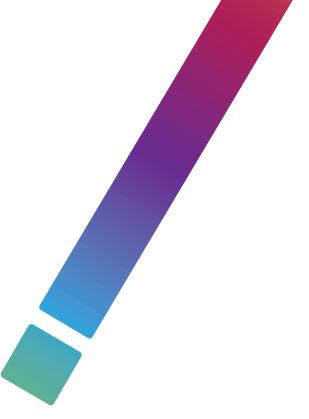
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#### **Related publications**

This report, The health of Australia's prisoners 2018, is part of a series. The four earlier editions and any published subsequently can be downloaded for free from the AIHW website https://www.aihw. gov.au/reports-data/population-groups/prisoners/overview. The website also includes information on ordering printed copies.

The following AIHW publications relating to the health and well-being of people in Australia might also be of interest:

- AIHW 2019. Specialist homelessness services annual report 2017–18. Cat. no. HOU 299. Canberra:
- AIHW 2018. Australia's health 2018. Cat. no. AUS 221. Canberra: AIHW.
- AIHW 2018. Alcohol, tobacco & other drugs in Australia. Cat. no. PHE 221. Canberra: AIHW.
- AIHW 2017. National drug strategy household survey 2016: detailed findings. Cat. no. PHE 214. Canberra: AIHW.
- AIHW 2017, Cancer in Australia 2017, Cat. no. CAN 100, Canberra: AIHW.
- AIHW 2017. Australia's welfare 2017. Australia's welfare series no. 13. AUS 214. Canberra: AIHW.
- AIHW 2016. Australian burden of disease study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2011. Cat. no. BOD 7. Canberra: AIHW.
- AIHW 2016. Australian burden of disease study: impact and causes of illness and death in Australia 2011. Cat. no. BOD 4. Canberra: AIHW.
- AIHW 2016. Evidence for chronic disease risk factors. Cat. no. WEB 166. Canberra: AIHW.
- AIHW 2016. Health communities: tobacco smoking rates across Australia, 2014-15 (In Focus). Cat. no. HPF 1. Canberra: AIHW.
- AIHW 2016. Medical practitioners workforce 2015. Cat. no. WEB 140. AIHW: Canberra.
- AIHW 2016. Nursing and midwifery workforce 2015. Cat. no. WEB 141. AIHW: Canberra.
- AIHW 2014. Alcohol and other drug treatment and diversion from the criminal justice system. Bulletin 125. Canberra: AIHW.
- AIHW 2013. Smoking and quitting smoking among prisoners 2012. Bulletin no. 119. Cat. no. AUS 176. Canberra: AIHW.



People in prison usually come from disadvantaged backgrounds, with poorer physical and mental health than the general population. They are less likely to have accessed health care services, and more likely to have a history of risk behaviours. Most people in prison are there for short periods, and many cycle through prison and the community multiple times. So, the health of people in prison is public health.

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