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The health of Australia's prisoners

2009

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Foreword

An estimated 50,000 people are released from prison each year in Australia. This means that the health of prisoners has a significant impact on the health of the wider community, yet until now very little was known about the health of prisoners nationally. In response to the paucity of national data in the prisoner health area, the Prisoner Health Information Group led by the AIHW has been working for several years to develop a set of indicators and data collection that will allow us to monitor the health of prisoners and their access to services over time.

The health of Australia's prisoners 2009 report represents a major milestone. The report presents information on the health of prisoners at the time of entry to prisons, their use of health services while in prison as well as some information on the prison environment. While the current report is national in scope, we expect jurisdictional data to be available for subsequent reports.

This report confirms some of the research findings that a high proportion of prison entrants have mental health problems, high levels of psychological distress and a history of head injury leading to a loss of consciousness. Rates of hepatitis B and C are significantly higher among prison entrants than the wider community as well as high levels of smoking, alcohol consumption and illicit drug use.

Other findings show that a quarter of prisoners visited a prison health clinic—with most visits being for health checks or to manage specific conditions such as diabetes or mental illness. Over 40% of prisoners in the prison census reported taking some form of prescribed medication.

Aboriginal and Torres Strait Islander prisoners are over-represented within the prison system with 26% of prison entrants being Indigenous. Indigenous prison entrants were found to have higher levels of communicable diseases than their non-Indigenous counterparts but reported lower levels of mental health issues and were less likely than non-Indigenous prisoners to take prescribed medication.

I would like to thank the PHIG for their expert advice and leadership in the development of the prisoner health indicators. Many thanks also to the Australian Health Ministers Advisory Council, who provided funding for this project through the (former) Standing Committee on Aboriginal and Torres Strait Islander Health and the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data.

Finally, thanks to the data providers in each jurisdiction who co-ordinated data collection within their states and territories—such a major undertaking would not have been possible without your ongoing support.

Penny Allbon
Director

Contents

Contents

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This project has been developed over five years, during which time many people have made contributions, including staff members of the AIHW who worked on the early stages of the project and previous members of the Prisoner Health Information Group (PHIG). These include Mieke Van Doeland, Denise Arnold, Josephine Belcher, Soula Macfarlane, David Green, Mike Taylor and Jim Birch.

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Symbols

—	null
..	not applicable
n.a.	not available

Summary

The health of Australia's prisoners 2009 is the first report relating to the National Prisoner Health Indicators, which were developed to assist in monitoring the health of prisoners and to inform and evaluate the planning, delivery and quality of prisoner health services.

Most data for this report come from the National Prisoner Health Census (the Census), which was conducted in 87 of the 93 public and private prisons throughout Australia during mid 2009. Data were collected over a one week period on all prison entrants, all prisoners who visited a clinic, all prisoners who were taking prescribed medication while in custody, prison clinic services and staffing levels.

During the Census week, there were over 27,000 prisoners in custody in Australia. Detailed data were collected for 549 prison entrants, over 3,700 prisoners in custody who visited a clinic, and over 4,900 prisoners who were taking prescribed medication. The denominator for the indicators sourced from the clinic and medications data is the total number of prisoners in custody on 30 June 2009 (within the prisons included in the Census). These data were sourced from the Australian Bureau of Statistics data Prisoners in Australia (ABS 2009b). The Census dates were chosen to include 30 June 2009 to ensure that this denominator was as accurate as possible.

Additional data on prison entrants were sourced from the 2007 National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (NPEBBV&RBS) (Butler & Papanastasiou 2008). This survey included 740 prison entrants from all jurisdictions except the Northern Territory.

The results in this first report form a baseline for national prisoner health in Australia. Trends over time and state/territory comparisons will be available in future reports.

Social determinants

Of the 549 prison entrants in the Census:

- 89% were male, the median age was 29 years and 26% were Indigenous
- 75% had completed Year 10 or less schooling, with Indigenous entrants having lower educational attainment than non-Indigenous entrants
- 68% had been previously imprisoned and 24% had previously been in juvenile detention. A history of imprisonment, especially juvenile detention, was more common among Indigenous than non-Indigenous entrants.

Health conditions and risk behaviours

As shown below, prisoners have significant health issues, with high rates of mental health problems, communicable diseases, alcohol misuse, smoking and illicit drug use.

Mental health and head injury

- 37% of prison entrants reported having a mental health disorder at some time and 18% reported that they were currently taking medication for a mental heath related condition.
- A history of self-harm was reported by 18% of prison entrants.
- 43% of prison entrants reported having had a head injury resulting in a loss of consciousness.

Communicable diseases

- 35% of prison entrants tested positive to hepatitis C, 21% tested positive to the hepatitis B antibody and less than 1% tested positive to HIV (Butler & Papanastasiou 2008).

Smoking, alcohol and illicit drugs

- 81% of prison entrants were current smokers and 74% smoked daily.
- 52% of prison entrants reported drinking alcohol at levels placing them at risk of alcohol-related harm.
- 71% of prison entrants had used illicit drugs during the 12 months prior to their current incarceration.

Chronic conditions

- 25% of prison entrants self-reported that they have a current chronic condition—asthma, arthritis, cardiovascular disease (CVD), diabetes or cancer.
- Asthma was the most common chronic condition, affecting 16% of prison entrants.

Health service use

- During the Census, over 6,400 prisoners visited a clinic (25% of all prisoners in all jurisdictions except the NT and Tasmania) and over 4,900 prisoners were taking prescribed medication (41% of all prisoners in Qld, WA, SA and ACT).
- Prisoners made an average of 2 visits each to prison clinics during the Census week and were taking an average of 2.3 medications per day.
- The most common problems managed in the prison clinics were health check (19%), diabetes (14%) and mental health issues (12%).
- Based on the medication audit, 21% of prisoners were taking medication for mental health related issues. The proportion of prisoners referred to prison mental health services was 31%.
- Prison clinics were staffed at an average of 3 full-time equivalent (FTE) health professionals for every 100 prisoners in custody.
- Most primary health care in prison was provided by nurses (71%), with just under one-fifth (18%) of clinic visits being with a medical practitioner.
- Clinic visits for drug and alcohol or mental health related issues were most likely to be initiated by staff (70%), whereas clinic visits for chronic conditions and related conditions were most likely to be initiated by the prisoner (65%).

Aboriginal and Torres Strait Islander prisoners

- There were 141 Aboriginal and Torres Strait Islander prison entrants during Census week (26% of prison entrants).
- Indigenous prison entrants had lower levels of mental health issues than non-Indigenous prisoners. Of Indigenous prison entrants, 26% reported mental health issues, compared with 41% of non-Indigenous prison entrants. Nine per cent of Indigenous prison entrants reported that they were currently taking medication for mental health related conditions, compared with 20% of non-Indigenous prison entrants.
- The prevalence of communicable diseases was higher among Indigenous prison entrants than non-Indigenous prison entrants. For hepatitis C, 43% of Indigenous prison entrants tested positive, compared with 33% for non-Indigenous entrants, and for hepatitis B, the figures were 42% and 17% respectively.
- Sixty-five per cent of Indigenous entrants consumed alcohol at levels which placed them at risk of alcohol-related harm, compared with 47% of non-Indigenous prison entrants. Around 80% of Indigenous and non-Indigenous prison entrants were current smokers, and around 71% of Indigenous and non-Indigenous prison entrants had used illicit drugs in the last 12 months.
- The type of illicit drug used varied between Indigenous and non-Indigenous entrants. Indigenous entrants were more likely than non-Indigenous entrants to have used cannabis (59% and 50%), while non-Indigenous entrants were more likely than Indigenous entrants to have used meth/amphetamines (33% and 21%), heroin (21% and 15%) and ecstasy (21% and 9%).
- The proportion of Indigenous and non-Indigenous prison entrants currently with a chronic condition were similar. Indigenous prison entrants were more likely to currently have diabetes than non-Indigenous prison entrants (4% compared with 2%).
- During Census week, the same proportion of Indigenous and non-Indigenous prisoners visited a clinic. The types of problems managed were also similar.
- A greater proportion of non-Indigenous prisoners were taking medication. However, Indigenous prisoners were more likely to take diabetic medication than non-Indigenous prisoners (5% compared with 2%).

Deaths in custody

- According to the National Deaths in Custody Monitoring Program, during 2007 there were 45 deaths in prison custody, 5 of whom were Indigenous. This is a rate of 0.8 per 1,000 Indigenous prisoners and 2.0 per 1,000 non-Indigenous prisoners. Most of these deaths (32) were due to natural causes.

Conclusions

The health of prisoners is poorer than people in the general community in a number of areas including certain chronic conditions, communicable diseases, mental health and alcohol and drug use.

This first national report provides a baseline for monitoring these indicators of the health of Australia's prisoners, to inform policy making and service delivery.

Snapshot of the health of Australia's prisoners

This table presents a snapshot of the indicators of prisoner health which are presented in detail in the report. The overall number, and the number for Indigenous and non-Indigenous prisoners are presented, along with the source of the data and the page reference within this report where details of the indicator are found.

Indicator	Proportion	Indigenous comparison	Data source	Page
Educational attainment				
Highest level of completed education: Year 10 or below	75%	86% Indigenous 71% non-Indigenous	Entrants form	21
Health conditions				
Self-reported mental health disorder	37%	26% Indigenous 41% non-Indigenous	Entrants form	25
Currently taking medication for mental health	18%	9% Indigenous 20% non-Indigenous	Entrants form	25
High or very high level of psychological distress as measured by the Kessler 10 (K10) scale	29%	26% Indigenous 31% non-Indigenous	Entrants form	26
Distress related to current incarceration	42%	34% Indigenous 44% non-Indigenous	Entrants form	29
History of self-harm	18%	18% Indigenous 18% non-Indigenous	Entrants form	31
Self-harm thoughts in 12 months	10%	9% Indigenous 11% non-Indigenous	Entrants form	31
Head injury with a loss of consciousness	43%	39% Indigenous 44% non-Indigenous	Entrants form	33
Notifiable diseases (prisoners)	n.a.	n.a.	Entrants form	34
Hepatitis C antibody positive	35%	43% Indigenous 33% non-Indigenous	NPEBBV&RBS	35
Hepatitis B core antibody positive	21%	42% Indigenous 17% non-Indigenous	NPEBBV&RBS	37
HIV antibody positive	<1%	n.a.	NPEBBV&RBS	39

Indicator	Proportion	Indigenous comparison	Data source	Page
Currently have asthma	16%	16% Indigenous 16% non-Indigenous	Entrants form	40
Currently have arthritis	6%	4% Indigenous 6% non-Indigenous	Entrants form	42
Currently have cardiovascular disease	3%	3% Indigenous 3% non-Indigenous	Entrants form	43
Currently have diabetes	3%	4% Indigenous 2% non-Indigenous	Entrants form	44
Currently have cancer	<1%	n.a.	Entrants form	45
Women's health				
Ever been pregnant	84%	79% Indigenous 85% non-Indigenous	Entrants form	46
Average age of first pregnancy	19 years	17 years Indigenous 20 years non-Indigenous	Entrants form	46
Pregnant women in custody (2007–08)	235	n.a.	Establishment form	47
Cervical screening in the last 2 years	46%	57% Indigenous 43% non-Indigenous	Entrants form	47
Deaths				
Number of deaths in custody in 12 months	45	5 Indigenous 40 non-Indigenous	National Deaths in Custody Program (NDICP)	51
Number of deaths post-release	n.a.			51
Health behaviours				
Mean age of smoking first full cigarette	13.9 years	13.9 years Indigenous 13.8 years non-Indigenous	Entrants form	54
Current tobacco smokers	81%	82% Indigenous 80% non-Indigenous	Entrants form	55
Self-reported consumption of alcohol at risky levels in last 12 months	52%	65% Indigenous 47% non-Indigenous	Entrants form	56
Illicit drug use in last 12 months	71%	72% Indigenous 71% non-Indigenous	Entrants form	58
Ever injected drugs	55%	61% Indigenous 53% non-Indigenous	NPEBBV&RBS	62
Injecting drug users who shared injecting equipment in the previous month	20%	n.a.	NPEBBV&RBS	62
Unprotected sex with a new or casual partner in the last month	57%	n.a.	NPEBBV&RBS	64

Indicator	Proportion	Indigenous comparison	Data source	Page
Health service use				
Consultation with medical professional in the community in last 12 months	72%	62% Indigenous 76% non-Indigenous	Entrants form	65
Consultation with medical professional in prison in last 12 months	29%	38% Indigenous 26% non-Indigenous	Entrants form	65
Consultation with medical professional in the community in last 12 months required but not completed	42%	42% Indigenous 43% non-Indigenous	Entrants form	68
Consultation with medical professional in prison in last 12 months required but not completed	5%	4% Indigenous 5% non-Indigenous	Entrants form	68
Reasons for not seeking medical contact in the past 12 months when required	10% too busy 9% cost	n.a.	Entrants form	70
Prison health services				
Visits by an Aboriginal community controlled health organisation or Aboriginal medical service at least once a month	25%	..	Establishment form	72
Referred to mental health services for observation and further assessment	31%	27% Indigenous 32% non-Indigenous	Entrants form	73
Identified during reception process as being currently at risk of suicide or self-harm	7%	3% Indigenous 8% non-Indigenous	Entrants form	74
Hospital transfers during census week	264	n.a.	Establishment form	75
Immunisation available	100%	..	Establishment form	76
Health-related discharge plan for >75% of prisoners upon release	25%	..	Establishment form	76
Proportion of prisoners using the prison clinic during the census week	25%	22% Indigenous 22% non-Indigenous	Clinic form	77
Proportion of clinic visits initiated by the prisoner	41%	37% Indigenous 43% non-Indigenous	Clinic form	79
Proportion of clinic visits initiated by clinic staff	55%	59% Indigenous 54% non-Indigenous	Clinic form	79
Proportion of clinic visits by medical practitioner type	71% nurse 18% GP	75% nurse Indigenous 70% nurse non-Indigenous	Clinic form	81
Proportion of prisoners visiting clinic during census week for health check	9%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for blood/urine test or result	2%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for malignancy	<1%	<1% Indigenous <1% non-Indigenous	Clinic form	82
Proportion of prisoners visiting clinic during census week for skin complaint	2%	n.a.	Clinic form	82

Indicator	Proportion	Indigenous comparison	Data source	Page
Proportion of prisoners visiting clinic during census week for musculoskeletal injury	2%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for communicable disease	1%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for arthritis	<1%	<1% Indigenous <1% non-Indigenous	Clinic form	82
Proportion of prisoners visiting clinic during census week for musculoskeletal issues	2%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for asthma	1%	<1% Indigenous 1% non-Indigenous	Clinic form	82
Proportion of prisoners visiting clinic during census week for respiratory complaint	1%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for digestive complaint	1%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for psychological/mental health	5%	n.a.	Clinic form	82
Proportion of prisoners visiting clinic during census week for diabetes	2%	3% Indigenous 2% non-Indigenous	Clinic form	82
Proportion of prisoners visiting clinic during census week for cardiovascular disease	1%	1% Indigenous 1% non-Indigenous	Clinic form	82
Current or past pharmacotherapy medication for opioid dependence	19%	10% Indigenous 22% non-Indigenous	Entrants form	86
Number of prisoners taking medication for opioid dependence (2007–08)	4,120	n.a.	Jurisdictions	86
Proportion of prisoners taking prescribed medication	41%	36% Indigenous 45% non-Indigenous	Medication form	89
Number of prisoners taking medication for hepatitis C (2007–08)	114	n.a.	Jurisdictions	94
Ratio of FTE health staff to prisoners	1:33	..	Establishment form	96

1

Introduction

1 Introduction

This report presents the results of the first national data collection on prisoner health in Australia, and reports against the National Prisoner Health Indicators. It provides information on the health of people entering prison (prison entrants), conditions and problems managed by prison health clinics, regular medications taken by prisoners and the operation of prison health clinics.

In October 2009, the first set of national indicators for prisoners' health was published (AIHW 2009b). The first National Prisoner Health Data Collection (NPHDC) for these indicators was conducted during 2009. The NPHDC is designed to monitor indicators of the health of Australian prisoners, with the aim of helping to ensure that appropriate health services are in place to meet the needs of the prisoner population.

The NPHDC includes a set of indicators that intends to cover key health issues in the four key stages of a prisoner's cycle: at prison entry (reception), while in custody, on release from prison and post-release. At this stage of the data collection, the indicators relate mainly to information about prisoners at reception and while in custody. Indicators relating to release and post-release will be developed over time.

The choice of indicators in the NPHDC was influenced by their policy relevance in monitoring key aspects of prisoner health and by the likelihood of being able to collect the data. The indicators are aligned to the National Health Performance Framework (see AIHW 2009b for further details).

The indicators and data collection are the first of their kind in Australia, and have been developed by the AIHW with assistance and advice of the Prisoners Health Information Group (PHIG). The PHIG includes representatives from each state and territory department responsible for prisoner health and other experts in the field.

1.1 Background

Research indicates that prisoners have far greater health needs than the general population, with high levels of mental illness, chronic disease, injury, communicable diseases and disabilities (Butler et al. 2004c; Condon et al. 2007b; Hockings et al. 2002). Several Australian studies have demonstrated increased mortality among prisoners (Hobbs et al 2006b; Karaminia et al 2007c).

Around 90% of prisoners spend less than 12 months on remand, and the median expected length of time to serve on a sentence is less than 2 years (ABS 2009b). This means that each year, thousands of prisoners are released back into the community. The health issues and concerns of prisoners are therefore health issues and concerns of the general population. The World Health Organization's Health in Prisons Project supports this view of prisoner health as an aspect of community health, and recommends that issues such as mental health, overcrowding and reduction of drug-related harm be prioritised in prisons worldwide (WHO 2009).

The Australian Medical Association's position statement on the health care of prisoners and detainees states that 'prisoners and detainees have the same right to access, equity and quality of health care as the general population. Because prisoners will return to society after their imprisonment, their health is an issue of concern to the general population' (AMA 1998).

1.2 Prisoner health services in Australia

Correctional systems in Australia are the responsibility of state and territory governments. Services may be delivered directly or purchased from private providers. Responsibility for the provision of health services to prisoners also rests with state and territory governments, and varies between jurisdictions—ranging from private health care delivery (NT) to the provision of health services by the department responsible for corrective services (WA). In most jurisdictions, however, health departments deliver prisoner health services.

Differences exist in how prison clinics function both between and within jurisdictions. For example, specialists and mental health practitioners treating prisoners may be internal or external providers, prisoners may consult specialist services based in hospitals and in some prisons clinical contacts may be provided 'in the units' (i.e. away from the clinic). Some prison clinics have the capacity to deliver dental services and perform X–rays, whereas other smaller clinics are staffed by a single nurse. See below for details in selected jurisdictions.

New South Wales

Justice Health (NSW) is responsible for providing health care in a complex environment to adults and juveniles in the criminal justice system across four key areas:

- Pre-custody: including diversion for people with mental illness in the adult or juvenile court system away from custody into appropriate treatment, including the Court Liaison Service (in 21 adult courts), the Adolescent Community and Court Team (in 3 children's courts), Adult Drug Court and Youth Drug and Alcohol Court.

- Custody: for adult prisoners (in 31 correctional centres) and juvenile detainees (in 8 juvenile justice centres and 1 juvenile detention centre), periodic detainees (11 centres), and police cell complexes (10 centres). The care provided includes screening, triage, treatment and monitoring in areas such as clinical and nursing services, primary health, population health, drug and alcohol, women's health, Aboriginal health and adolescent health.
- Inpatient: inpatient health-care services including the Long Bay and Forensic Hospitals (primarily responsible for mentally unwell people), as well as organising inpatient and specialist care for people in custody in community-based hospitals.
- Post-release: including community forensic mental health (for adults), Community Integration Team (for juveniles) and the Connections Project which supports integrating people with a drug and alcohol problem into community-based services.

Victoria

The Justice Health business unit was established in 2007 and is responsible for the planning, coordination and delivery of contracted health services across police, courts, corrections and community corrections, to ensure an integrated and coordinated approach for health services within the Department of Justice. Justice Health is overseen by a committee comprising senior representatives of the Department of Justice (Victoria Police, Courts, Corrections and Justice Health), the Department of Human Services and the Department of Health.

Primary, secondary and tertiary health and mental health services in Victoria's government-run prisons are delivered by third-party providers contracted by Justice Health. The operators of Victoria's two privately operated prisons also subcontract health services. Victoria is in the process of transitioning to a single-lead service provider for all health services delivery across police, courts, corrections and community corrections.

Queensland

The responsibility for the provision of primary health care services for prisoners in Queensland's publicly run correctional centres transitioned from Queensland Corrective Services to Queensland Health in a machinery-of-government change on 1 July 2008. The newly established Offender Health Services provides primary clinical services, with other parts of Queensland Health providing secondary and tertiary services. Mental health services are provided by the Forensic Mental Health Service, and are provided by Prison Mental Health Services in south-east Queensland. The primary clinical services to the two privately run prisons are provided directly by those prisons. The clinical services to youth detention centres, and to prisoners in police custody are provided by other parts of Queensland Health.

Western Australia

The Health Services Directorate is a part of the Offender Management and Professional Development Division of the Department of Corrective Services. It provides a comprehensive range of health care services comparable to general community standards to over 4,000 adults and juveniles at any one time. It employs approximately 200 full time equivalent (FTE) staff across Western Australia.

Services are organised around four principal areas of health care:

- Chronic Disease
- Infectious Disease
- Co-Morbidity and
- Primary Care.

There are six metropolitan and seven regional public prisons and two metropolitan juvenile detention centres in Western Australia, each of which has a Health Centre. The service uses a combination of in-house services from doctors, psychiatrists, nurses and pharmacists, supported by medical records staff, medical receptionists and medication assistants with external services from visiting general practitioners (GPs) and allied health professionals. Acacia Prison, east of Perth, is administered by a private contractor with responsibility for staffing and providing health services to its prisoners.

There are three Crisis Care Units in WA metropolitan prisons that are managed by Adult Custodial Services. The function of these is to care for prisoners who are at risk of self harm and require psychological care. Health Services clinical staff provide input into the systems at all prisons that manage at-risk prisoners.

Casuarina Prison in the southern Perth metropolitan area has an Infirmary, the role of which is now under review.

Tasmania

The Department of Health and Human Services currently supplies health services to the Department of Justice based on a memorandum of understanding. The services are provided by Correctional Primary Health Services (CPHS), including prison outpatient primary health, limited inpatient care and forensic mental health services. CPHS is part of Statewide Mental Health Services which coordinates services for Correctional Health, Forensic Community Mental Health, Wilfred Lopes Centre for Forensic Mental Health and the Tasmanian Alcohol and Drug Service.

Psychology services to behaviourally disturbed prisoners are supplied by Therapeutic Services who are part of the Tasmania Prison Service.

CPHS currently operates in six centres: Risdon Prison Complex, Mary Hutchison Women's Prison, Ron Barwick Men's Minimum Prison, Hayes Prison Farm (all of which are close to Hobart) and two reception prisons in Hobart and Launceston.

There is a large unmet need relating to drug and alcohol use in Tasmania among forensic clients.

Australian Capital Territory

The ACT Corrections Health Program provides health services to detainees at the ACT court cells, the Alexander Maconochie Centre, the Symonston Temporary Remand Centre and the Bimberi Youth Justice Centre.

The service provides primary- and secondary-level clinical services through registered nurses and sessional visiting medical officers. Mental Health ACT and the gastroenterology clinic at the Canberra Hospital provide tertiary services; imaging and pathology are predominantly provided through the Canberra Hospital, as are inpatient and outpatient services.

Pharmacy services are provided through a dedicated service at the Canberra Hospital. Allied health services are provided on a case-by-case basis, according to community levels of access.

The program has teaching and training links to the Australian National University Medical School and the University of Canberra Nursing School; additionally, the program sponsors the custodial medicine unit of the Diploma of Forensic Medicine run by the Victorian Institute of Forensic Medicine.

Northern Territory

In the Northern Territory, primary health care is provided in both adult facilities and juvenile detention centres, through a contract delivered by a third-party health-care provider and managed by the Department of Health and Families (DHF). The contract provides for:

- a culturally appropriate primary health care and emergency medical service to offenders in Darwin and Alice Springs
- overnight medical observation of offenders who do not require hospitalisation but require health care and/or monitoring
- adequate and appropriate referrals to, and liaison with, all health services, including those currently provided within the prisons, such as oral health, physiotherapy, podiatry, mental health, and any other off-site services
- routine annual adult health assessments (well-women's and well-men's screening) for offenders over the age of 15, serving sentences or on remand for a period in excess of one year
- effective brief intervention strategies for a range of issues and provision of relevant education to offenders on presenting health problems
- specific health services and programs responsive to the needs of women and juveniles
- effective multidisciplinary health management care plans for offenders with high care needs, chronic diseases and/or disabilities, in collaboration with other allied health teams within and outside the prison environment.

The principles underpinning the operation of prisoner health services in the Northern Territory are:

- Recognition that the provision of health care, while it is the responsibility of DHF cannot be achieved without a collaborative approach with the Department of Justice (DoJ).
- Intersectoral and intrasectoral collaboration and cooperation occurs to ensure that the health needs of the offender population are met.
- There is effective cooperation between the DHF and the DoJ, consistent with the government's expectation of a 'whole of government' approach.
- The parties share information promptly and openly through a formalised process.
- The health needs of offenders are effectively monitored and managed. This includes monitoring and managing the potential risks to the health of offenders.

1.3 Key policy directions

Commonwealth

One of the key Australian Government strategies set in 2008 was 'closing the gap on Indigenous disadvantage'. This strategy has six targets, including closing the life expectancy gap (estimated to be around 10–12 years) within a generation, and halving the gap in mortality rates for Indigenous children under 5 within a decade (currently 3 times higher than for non-Indigenous children). The Australian Government is working with its state and territory counterparts through the National Partnership on Indigenous Health Outcomes to address these targets. Given the high proportion of Indigenous prisoners, this policy objective has relevance for prisoner health and health services.

Because of the high number of Indigenous Australians in prisons, the health of prisoners has also been a key strategic area for development in the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID) 2005–2008 strategic plan. It will continue to be a key priority area in future plans.

Another strategy directly relevant to prisoner health is the National Mental Health Strategy. This is a commitment by the Australian Government, state and territory governments to improve the lives of people with a mental illness. The National Mental Health Policy 2008 aims to ensure 'that Australia has a mental health system that detects and intervenes early in illness, promotes recovery, and ensures that all Australians with a mental illness have access to effective and appropriate treatment' (APO 2009).

New South Wales

Key policy directions relating to prisoner health care in New South Wales include:

- identifying the health-care needs of the client group
- providing high-quality clinically appropriate services, informed by best practice and applied research
- making health care part of the rehabilitative endeavour
- facilitating continuity of care to the community
- developing an organisational culture that supports service delivery
- promoting fair access to health services
- providing strong corporate and clinical governance.

Victoria

Key current priorities relating to prisoner health care in Victoria include:

- managing the transition to a single lead service provider to manage health services across the justice system to create and ensure a streamlined, coordinated and integrated health service model
- implementation of an electronic health records system within the justice system to improve health information management
- developing a framework for meeting the needs of prisoners with mental health issues, intellectual disability or other cognitive impairment

- implementing aspects of the Victorian Government's Mental Health Reform Strategy 2009–2019 that relate to the mental health issues facing Victorian prisoners.

Queensland

Since the transition in responsibility for the provision of health services from Queensland Corrective Services to Queensland Health on 1 July 2008, the direction of Offender Health Services has followed the Queensland Health Strategic Plan and is focused on initiatives in the following four areas:

- improving access to safe and sustainable offender health services
- better meeting offenders' needs across the health continuum
- enhancing organisational work processes and systems to support service delivery and business effectiveness
- developing staff in a way that recognises and supports their role in the delivery of health services.

Western Australia

Four priority areas have been identified in the Western Australian Health Services Business Plan:

- Improve the Health of Prisoners by Providing Evidence Based Health Care

  Health care provision is organised around Chronic Disease Management, Infectious Disease Management, Co-Morbidity Services and Primary Care. Time in custody is used as an opportunity to improve the health of prisoners. Throughcare planning will improve the long term health prospects of patients who have been in custody.

- Partnerships

  Health Services participates in formal and informal partnerships with key stakeholders and collaborates in the delivery of consistent best practice care. Our partnerships promote successful reintegration into the community.

- Positioning

  Active promotion within the Department of Corrective Services and with external agencies and stakeholders to heighten awareness that improved health is recognised as a major contributor to achieving justice outcomes.

- People

  The key to achieving the aims of the Department of Corrective Services Justice Health Plan Strategic Directions 2005-2010 will be through the continued personal and professional development of Health Services staff. High priority will be given to ensure the recruitment and retention strategies are focused on a competency based training and development framework.

Tasmania

Tasmania's key policy directions focus on the following five areas:

- provision of improved drug and alcohol services to forensic clients
- provision of improved hepatitis C virus/hepatitis B virus treatment services to prisoners

- improved linkages with Corrections—a health promoting prison
- further development of the electronic database
- workforce enhancement—education, training and professionalism.

Australian Capital Territory

Key policy directions relating to prisoner health care in the Australian Capital Territory include:

- developing primary care provision for detainee health care
- developing the pharmacy services, including pharmacist-led clinics
- expanding access to hepatitis treatment
- applying human rights principles to health care for detainees
- strengthening links to academic institutions—Australian National University Medical School and University of Canberra School of Pharmacy and School of Nursing
- commissioning of a secure forensic mental health facility
- integrating services with the police watch-house.

Northern Territory

Key policy directions relating to prisoner health care in the Northern Territory include:

- DHF and DoJ take a population approach to identify areas where intervention will make a contribution to improve the health of a population.
- An aggregate population may be a specific population and a population approach involves assessing a population to identify opportunities to improve the overall health status and participation of that population.
- Working to improve the health of a population means connecting all areas of service delivery, (Public Health Services, Corrections Health, Prisoner Services, Community Corrections, Mental Health and Disability Support Services etc) to respond as a whole system to changes in priorities or new evidence.
- The health sector has explicit responsibilities under legislation to deal with public health and prevention issues on a 'whole population' basis because of the impact on the wider population, even if a relatively small group is affected.
- At times DoJ might have responsibilities either under its primary health obligations or its own strategic goals, such as 'safe, secure and humane containment', to deliver preventative services.

1.4 National Prisoner Health Census methodology

Most data within this report are sourced from the National Prisoner Health Census (the Census), which was conducted during the week 29 June to 5 July 2009 in all states and territories apart from Victoria, which undertook the Census during the week 5–11 October 2009 due to delays in obtaining ethical clearance. Tasmania and Northern Territory only completed part of the Census.

The denominator for the indicators sourced from the clinic and medications data is the total number of prisoners in custody on 30 June 2009 (within the prisons included in the Census).

These data were sourced from the ABS's *Prisoners in Australia 2009* (ABS 2009b). The Census dates were chosen to include 30 June 2009 to ensure than this denominator was as accurate as possible.

Correctional centres

The Census collected information from 87 public and private prisons throughout Australia. Although all prisons were in scope, in some jurisdictions resource limitations prevented their participation. Participation varied among jurisdictions, depending upon the availability of data and resources to participate (see Appendix 4 and Table 1.1). In Victoria, 5 of the 14 prisons did not participate in this Census, and in South Australia one prison did not participate.

In contrast to the ABS's *Prisoners in Australia* report, periodic detention centres and court cells were excluded, as were juvenile detention centres, immigration detention centres and secure psychiatric facilities.

Prisoners

Prisoners were defined as adults aged 18 years or over held in custody, whose confinement is the responsibility of a corrective services agency. This definition includes sentenced prisoners and prisoners held in custody awaiting trial or sentencing—that is, remandees. Juvenile offenders, persons in psychiatric custody, police cell detainees, asylum seekers or Australians held in overseas prisons were not included (AIHW 2006).

Health service contact

During the census week, prison entrants, prisoners in custody using the prison clinic and prisoners on prescribed medication were invited to participate in the Census. A prison clinic visit was defined as any face-to-face consultation for which an entry was made in the health service record. This excluded routine household-type treatment such as band-aids or paracetamol. Similarly, data were captured on all prescribed medications administered on one day during the census week. Depot medications (injected so absorption occurs over a prolonged period) were included, whether or not they were administered on the census day, while routine household-type medications taken on an as-needed basis were not included.

Census forms

Following the development of the indicators, draft survey forms for collecting this information were field tested in 2008 in four prisons in the Australian Capital Territory, Western Australia and South Australia. Following the field test, appropriate revisions were made to the census forms and guidelines.

The forms for the 2009 Census are shown at Appendix 5. These consist of:

- **prison entrants form**—completed for all prisoners entering prison in the census week. Included questions relating to demographics of the prison entrant, mental health, chronic diseases, substance and alcohol use, use of health services and pregnancy.
- **clinic form**—completed for all prisoners in custody using the prison clinic during the census week. Included questions regarding demographics of the prisoner, who initiated the visit, problem managed at the clinic and who the prisoner was seen by.

- **repeat medications form**—completed for all prisoners in custody who were administered repeat medications on a designated day of the census week. Included questions regarding prisoner demographics and repeat medications administered.
- **prison establishments form**—completed once for each prison. Included questions regarding whether health services are provided by Aboriginal community controlled health organisations or Aboriginal medical services, discharge planning, immunisation, FTE staff members, hospital transfers and prison entrants into the facility.

The Census was conducted using a combination of paper forms and electronic data, with jurisdictions given the choice of the data collection method (Table 1.1).

Table 1.1: Jurisdiction participation in the Census, by category, 2009

	Number of prisons	Establishments	Entrants	Clinic	Medications
NSW	34	√ (paper)	√ (paper)	√ (electronic)	√ (electronic)
Vic	9	√ (paper)	√ (paper)	√ (paper)	×
Qld	13	√ (paper)	√ (paper)	√ (paper)	√ (paper)
WA	14	√ (paper)	√ (electronic)	√ (paper)	√ (electronic)
SA	8	√ (paper)	√ (paper)	√ (paper)	√ (paper)
Tas	6	×	×	√ (electronic)	√ (electronic)
ACT	1	√ (paper)	√ (paper)	√ (paper)	√ (paper)
NT	2	√ (paper)	×	×	×

Source: National Prisoner Health Census 2009.

Supplementary electronic data

Jurisdictions were also asked to complete a supplementary aggregate data request to determine deaths in custody, prisoners on treatment for hepatitis C, prisoners on opioid pharmacotherapy treatment, notifications of notifiable diseases, and receptions and releases from prison during the 2007–08 financial year.

Ethics

Ethical clearance for this project was obtained by the AIHW's Ethics Committee. Each jurisdiction was then responsible for ensuring that, where required, ethics approval was gained from the relevant jurisdictional ethics committee(s).

Jurisdictional comparisons, community comparison and international comparison

This first national report does not include data on individual jurisdictions due to the varied levels of participation among jurisdictions, the small numbers for some indicators and the variable quality of some of the data collected at the jurisdiction level for some indicators. It is anticipated that jurisdictional-level data will be included in future reports.

Where possible, comparisons with the general Australian population and with prisoner health data from state, national and international surveys have been presented. Comparisons were made with appropriate age groups where data were available. The data sources used for these comparisons as well as for additional supplementary information for the report are provided in Appendix 2.

1.5 Report structure

This report consists of eight chapters.

Chapter 2 includes some statistics about prisoners in Australia and an overview of the participants in the National Prisoner Health Census. It also contains some information on the prison environment.

Chapters 3, 4 and 5 address each of the indicators of the health of Australia's prisoners:

- Chapter 3 focuses on prisoners' health conditions at reception, including mental health, communicable diseases, chronic conditions and women's health.
- Chapter 4 relates to deaths including deaths in custody and post-release deaths.
- Chapter 5 focuses on health behaviours, including smoking, alcohol and illicit drug use and condom use. It also covers the use of health services in prison and the community before entering prison.
- Chapter 6 relates to prison health services including visits from Aboriginal medical services or Aboriginal community controlled health services, referral of prison entrants to mental health services, identification of suicide or self-harm risk, transfers to community hospitals, availability of immunisations, discharge planning, medication and prison clinic use, and health staff-to-prisoner ratios.

For each area, relevant indicators are disaggregated (where possible) by sex, age and Indigenous status.

Chapter 7 provides comparisons between the prisoner population and the general Australian population, as well as with prisoners in other countries, where data are available.

Chapter 8 discusses gaps in the currently available data and future directions for this collection.

The report concludes with five appendixes on:

- the indicators included in this report
- external data sources
- prisoner health legislation in Australia
- prisons in Australia
- prisoner health census forms.

2

Overview

2 Overview

2.1 Prison health related environment

Prisons are not generally considered to be environments which are conducive to good health. They are often overcrowded and hostile. During 2007–08, the average daily number of prisoners in prison meant that prisons were used at 105 per cent of the capacity they were designed for (SCRGSP 2008).

Prisoners often arrive with a number of physical and mental health problems, and opportunities for exercise and fresh air outside cells is limited. During 2007–08, the average time prisoners spent not confined to their own cells was 10 hours per day (SCRGSP 2008). For the remaining 14 hours in each 24-hour period, prisoners were locked in their cells.

There are also a number of issues specific to health in a prison environment, including tobacco smoking, injecting equipment, dependent children, condom availability and mental health.

Tobacco smoking in prisons

Smoking is banned or restricted in most enclosed public places in Australia, and increasingly in outdoor public areas and even private vehicles. The issue of whether or not to allow smoking in prisons is complex, given the very high proportion of prisoners who are smokers (see Chapter 5).

Partial or total smoking bans in prisons have been introduced in Australian states and territories and other Western countries (McCarthy & Brewster 2009). In New South Wales, Victoria, Queensland and Western Australia, programs or interventions are in place to assist prisoners to give up smoking or reduce the amount they smoke. Interventions include education and communication campaigns, increasing the cost of tobacco, limiting places where prisoners can smoke, nicotine replacement therapy and cessation support (Department of Corrective Services WA 2009; McCarthy & Brewster 2009, Queensland Corrective Services 2009, Stockman 2009). The National Health and Medical Research Council (NHMRC) has also funded a smoking cessation project (from 2005–2009) among New South Wales male prison inmates (UNSW 2009).

Interest in quitting smoking among prisoners is high. The 2009 NSW Inmate Health Survey found that 85% of current smokers wanted to quit, and over half (55%) had attempted to quit or reduce the amount they smoked in the previous year (Indig et al. 2010). The 2003 Victorian Prisoner Health Survey found 50% of prisoners wanted to address their smoking, drinking, drug or gambling problems (Deloitte Consulting 2003).

Barriers to quitting among this population include a strong smoking culture in prison, high levels of nicotine dependence, mental illness, limited access to nicotine replacement therapy and cessation programs, boredom and stressful events such as prison transfer, family and legal stressors (McCarthy & Brewster 2009).

Mental health

It is well established that people with mental illness are incarcerated at a higher rate than the general population, and that prisoners have higher rates of psychological distress and mental illness than the general population (Senate Committee on Mental Health 2006, Butler et al. 2005). The difference is particularly pronounced for serious mental illness (Ogloff et al. 2006). The experience of incarceration and the prison environment itself may also have a detrimental effect on mental health (Velamuri & Stillman 2007), and imprisonment can be a more onerous experience for people with mental illness than for those without.

The desirability of reducing the number of people with a mental illness who are incarcerated, and avoiding imprisonment of people because of their mental illness, has contributed to an increased interest in alternative approaches to people whose offending is linked to mental illness, such as mental health courts and police-based diversion programs.

For those people with mental health problems who are imprisoned, the National Statement of Principles for Forensic Mental Health (2002) affirms that health services available in prison should be equivalent to that available in the general community. The Standard Guidelines for Corrections in Australia (2004) stipulate that prisoners with mental health issues should be provided with appropriate services, discharge planning for the continuation of treatment after release and access to specialist mental health care facilities as required.

Injecting equipment

Blood-borne viruses can be transmitted via the sharing of needles (Butler et al. 2004b). According to a report by the National Centre in HIV Epidemiology and Clinical Research (NCHECR), needle and syringe exchange programs (NSP) in the general population have directly averted an estimated 32,000 new HIV infections and almost 97,000 new hepatitis C virus infections during 2000–2009 (NCHECR 2009b). The report estimated that for every dollar invested in NSPs, more than four additional dollars were returned during the 10 years in direct health care related cost savings. NSPs have been available in prisons in some countries for over 10 years, including Switzerland, Germany, Spain, Moldova, Belarus and Kyrgyzstan. These programs have been shown to consistently improve prisoner health and reduce needle sharing in prison while not undermining institutional safety or security (Lines et al. 2005). Currently there are no regulated NSPs in Australian prisons.

While no Australian prison provides access to sterile injecting equipment, in some jurisdictions bleach or bleach alternatives (which can be used to sterilise some injecting equipment) are available (Dolan 2000). Disinfection of used injecting equipment can theoretically reduce the likelihood of transmission of blood-borne viruses and other pathogens. Laboratory studies indicate that bleach may reduce viral infectivity, but studies on the effectiveness of bleach in inactivating the hepatitis C virus are limited (MACASHH 2008). The method of obtaining bleach in prison is also relevant to its usefulness in preventing the transmission of blood-borne viruses. Where bleach must be requested from prison officers, prisoners may be reluctant to make requests, fearing being searched or tested for drug use.

Dependent children

Pregnant prisoners who give birth in custody may be allowed to keep their baby with them. Mother and baby units operate in some Australian prisons with children up to preschool age being able to stay with their mothers.

Many prisoners have dependent children. The 2009 NSW Inmate Health Survey found that 45% of prisoners have dependent children aged 16 years or under (Indig et al. 2010). Research has consistently identified that one of the main stressors for incarcerated women is the loss of involvement in their children's lives and concerns for their wellbeing (Justice Action 2010, Defence for Children International - Australia 2010).

Condom availability

Condoms are used both to protect against sexually transmitted infections (STIs) and as a contraceptive. The World Health Organization recommends that prisoners should have access to condoms (Moller et al. 2007). The policies on availability of condoms in prison varies among jurisdictions in Australia, from being available anonymously in most jurisdictions, to not being available at all in the Northern Territory and Queensland, and only by request in Victoria (the availability of condoms in prisons in Victoria is under review) (Table 2.1).

Note that the information in Table 2.1 represents policy in each jurisdiction and may not reflect practice, which may differ from this (even within jurisdictions). The collection of data regarding the practice of condom availability was beyond the scope of this report.

Table 2.1: Availability of condoms in Australian prisons, by state and territory, 2009

	Condom availability	
	Anonymously	On request
New South Wales	√	×
Victoria	×	√
Queensland	×	×
Western Australia	√	×
South Australia	√	×
Tasmania	√	×
Australian Capital Territory	√	×
Northern Territory	×	×

Source: Levy et al. 2007 and National Prisoner Health Census 2009.

2.2 Australia's prisoners

At 30 June 2009 there were almost 30,000 persons in prisons in Australia (not including periodic detention or court cells) (Table 2.2). The number of people who are in prison at some time during the year is much higher than this, as people are constantly entering and being released from prison. It has been estimated that there were about 50,000 releases from prison during 2007–08 (Martire & Larney 2009).

Table 2.2: Number of prisoners in custody at 30 June 2009, by state and territory

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Number in prison custody 30 June 2009	9,724	4,007	5,659	4,405	1,781	540	153	1,053	27,322

Source: ABS 2009b.

Prisoners are overwhelmingly male (93%) and young, with over two-thirds aged 20–39 years (ABS 2009b). Aboriginal and Torres Strait Islander people are significantly over-represented in the correctional system. At 30 June 2009, 26% of the prisoner population in Australia, compared with 2% in the general population, were Indigenous. Aboriginal and Torres Strait Islander people are imprisoned at a rate of 1,891 per 100,000 of the adult population, an age-standardised rate 14 times that of the non-Indigenous population (ABS 2009b).

Repeat imprisonment is common, with 56% of all prisoners at 30 June 2009 having served a sentence in an adult prison prior to the current episode (ABS 2009b).

In this report, data labelled as 'prisoners in custody' refer to the ABS's *Prisoners in Australia* data (ABS 2009b).

2.3 Prison entrants

There were 549 prison entrants who participated in the Census. They were predominately male (89%) and young (median age 29 years), with a disproportionate number being Indigenous (26%) compared with the general population. There were 61 female prison entrants (11%) and 7 transgender entrants, each of whom identified as male.

For over two-thirds of entrants (68%), this was not their first time in adult prison and almost one-quarter (24%) had been in juvenile detention at some time (Table 2.3).

Females were over-represented in the prison entrants sample (11%) compared with prisoners in custody (7%). Prison entrants also had a younger median age than prisoners in custody—29 compared with 35 years. These differences may reflect the fact that prison entrants are likely to include a higher number of those on remand or with shorter sentences, while prisoners in custody on any single day are likely to include a higher number of those on longer sentences.

Prison entrants were younger than the general population, with just over half (52%) aged 29 years or less. The median age of the general Australian population, including children, in 2008 was 37 years (the median age of the general adult population was not available but would be older than 37 years). Female prison entrants tended to be older than males—over one third (34%) of male entrants were aged 24 years or less, compared with less than half that proportion for females (15%). Almost half of female entrants (48%) were aged 25–34 years, compared with 33% of male entrants (Table 2.4).

Of the 549 prison entrants during the census period, 141 or 26% were Indigenous. The proportion of male and female prison entrants identifying as Indigenous was similar (Table 2.4).

Table 2.3: Characteristics of prison entrants, by state and territory, 2009

Characteristics	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Prison entrants	180	30	140	105	81	n.a	13	n.a	549
Male	163	19	128	94	71	n.a	11	n.a	486 (89%)
Indigenous	37	2	36	44	21	n.a	1	n.a	141 (26%)
Median age (years)	30	35	28	28	28	n.a	23	n.a	29
Age range (years)	19–70	18–65	18–57	18–58	18–63	n.a	19–44	n.a	18–70
Been in juvenile detention	34	8	33	31	22	n.a	5	n.a	133 (24%)
Been in prison before	108	18	115	74	53	n.a	6	n.a	374 (68%)

Source: National Prisoner Health Census 2009.

Table 2.4: Prison entrants and prisoners in custody, by sex, age group and Indigenous status 2009

	Number of prison entrants	Per cent of prison entrants	Per cent of prisoners in custody
Sex			
Male	486	89	93
Female	61	11	7
Age group			
18–24	180	33	19
25–34	188	34	36
35–44	126	23	27
45+	54	10	18
Indigenous status			
Indigenous	141	26	26
Non-Indigenous	401	73	74
Total	**549**	**100**	**100**

Notes

1. Prison entrant data include New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 2 prison entrants of unknown sex, 1 prison entrant of unknown age and 7 of unknown Indigenous status.
3. There were 7 transgender entrants, each of whom identified as male and were included in the male row.

Sources: National Prisoner Health Census 2009; ABS Prisoners in Australia 2009.

The age profiles of the Indigenous and non-Indigenous prison entrants were similar, with 36% of Indigenous entrants aged 18–24 years, compared with 30% of non-Indigenous entrants. A slightly higher proportion of non-Indigenous entrants (24%) were aged at least 35 years compared with 14% of Indigenous entrants.

The majority of prison entrants were born in Australia (85%) and nominated English as their main language spoken at home (93%). Among those entrants born outside Australia and/or speaking a language other than English at home, there was a broad range of countries and languages nominated (Table 2.5).

A higher proportion of prison entrants were born in Australia, compared with prisoners in custody (81%) (ABS 2009b). New Zealand (2% of entrants and 3% of prisoners in custody) and Vietnam (1% and 3%) were among the next most common countries of birth for both groups.

Table 2.5: Prison entrants and prisoners in custody, country of birth and main language spoken at home, 2009

	Number of prison entrants	Per cent of prison entrants	Per cent of prisoners in custody
Country of birth			
Australia	467	85	81
New Zealand	12	2	3
England	6	1	n.a.
Vietnam	4	1	3
Other	58	11	n.a.
Total	**549**	**100**	**100**
Main language spoken at home			
English	509	93	n.a.
Vietnamese	6	1	n.a.
Aboriginal Australian	5	1	n.a.
Arabic/Lebanese	4	1	n.a.
Other	25	5	n.a.
Total	**549**	**100**	

Notes

1. Prison entrants data include New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Country of birth total includes 2 prison entrants of unknown country of birth.
3. Other country of birth includes the Philippines, Germany, Sudan, Costa Rica, Papua New Guinea, Scotland, Ireland, South Africa, Sierra Leone, China, Cambodia, Denmark, Zimbabwe, Brazil, Fiji, Thailand, Malaysia, India, Sri Lanka, Lebanon, Iraq, Netherlands, Romania, Zambia, Bosnia, Herzegovina, Russia, former Yugoslav Republic of Macedonia, Turkey, Afghanistan, Egypt and other not specified.
4. Other languages spoken at home include Dinka, Spanish, Filipino Tagalog, Cantonese, African languages, Korean, Brazilian, Portuguese, Fiji, Mandarin, Samoan, Albanian, Djaru, Russian, Sudanese, Macedonian, Turkish and other not specified.

Sources: National Prisoner Health Census 2009; ABS Prisoners in Australia 2009.

Detention history

Prison entrants were asked whether this was their first time in prison or detention and, if not, how many times they had previously been incarcerated. Many of those entrants who had previously been in prison or detention had been there numerous times (Table 2.6). Almost one in ten entrants (9%) had been in juvenile detention at least 5 times, and almost one-quarter (23%) had been in prison at least 5 times.

A history of incarceration was more common amongst male entrants, and this difference was most pronounced in relation to previous adult imprisonment. Almost 70% of male entrants had been in prison before, compared with more than half (57%) of female entrants.

Table 2.6: Prison entrants, previous detention history, by sex, 2009

	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Number of times in juvenile detention						
Never	357	73	51	84	410	75
1–2	56	12	5	8	61	11
3–4	19	4	2	3	21	4
5+	49	10	2	3	51	9
Total	**486**	**100**	**61**	**100**	**549**	**100**
Number of times previously in prison						
Never	144	30	26	43	172	31
1–2	107	22	13	21	120	22
3–4	113	23	12	20	125	23
5+	119	24	10	16	129	23
Total	**486**	**100**	**61**	**100**	**549**	**100**

Notes

1. Includes New South Wales, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 6 prison entrants for whom juvenile detention history was unknown, and 3 for whom prison history was unknown, and 2 prison entrants of unknown sex.

Source: National Prisoner Health Census 2009.

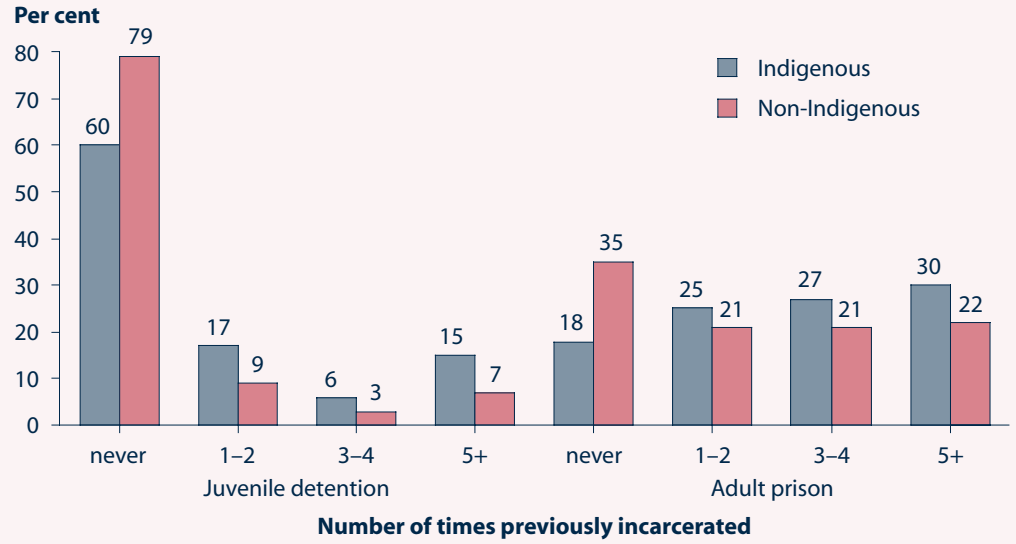
Having a history of previous incarceration was more common among Indigenous than non-Indigenous prison entrants (Figure 2.1). This difference was most pronounced for prior juvenile detention, which was twice as likely for Indigenous (38%) than non-Indigenous (19%) prison entrants. This history of previous incarceration was also more extensive for Indigenous than non-Indigenous entrants. For example, having previously been in detention at least 5 times was more common among Indigenous than non-Indigenous entrants for both juvenile detention (15% compared with 7%) and prison (30% compared with 22%).

Education level

Education and health are related—generally, those with the lowest health status also have low educational and literacy levels. Higher levels of educational attainment are thought to directly impact on health by improving a person's health-related knowledge and their ability to efficiently use this information. Educational attainment is also associated with better employment prospects and higher income which, in turn, may serve to increase access to health-related services and products (AMA 2007).

Studies have also found a relationship between level of education, repeat imprisonment and criminal activity. Research indicates that prisoners with more imprisonments have, on average, lower levels of education (Rawnsley 2003). Similarly, a higher level of schooling is associated with a lower probability of arrest and incarceration (Lochner & Moretti 2004).

Figure 2.1: Prison entrants, history of previous incarceration, by Indigenous status, 2009



Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. There were 6 prison entrants whose juvenile detention history was unknown, 3 whose prison history was unknown and 7 whose Indigenous status was unknown.

Source: National Prisoner Health Census 2009.

Educational attainment among the 549 prison entrants was generally low. For three-quarters (75%) of all prison entrants, Year 10 or lower was the highest level of schooling completed. The highest level of completed schooling was similar for male and female entrants. A slightly higher proportion of females had completed Year 10 (43%) than males (38%), and males were more likely than females to have a highest completed schooling of Year 9 (22% and 18% respectively).

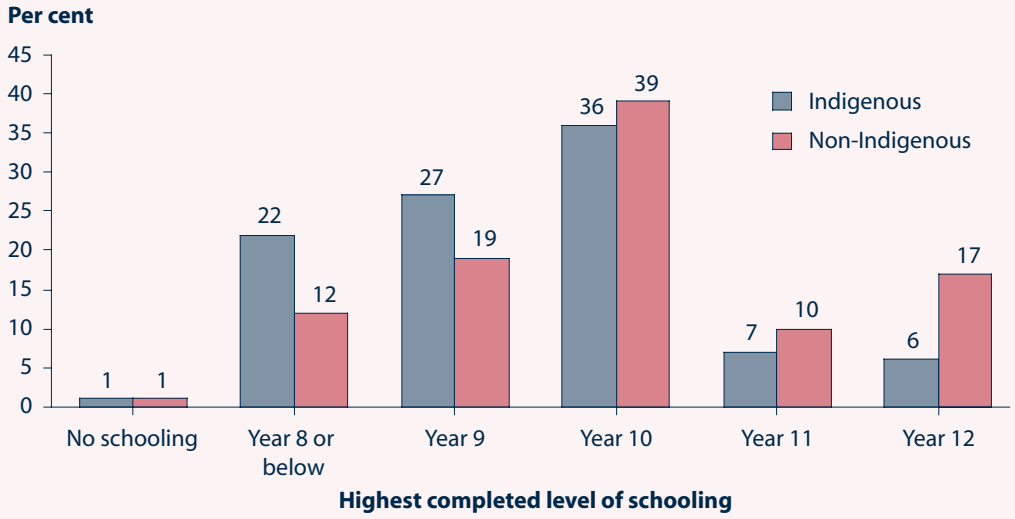
INDICATOR: Proportion of prison entrants by highest completed level of education.

NUMERATOR: Number of prison entrants by highest completed level of education.

DENOMINATOR: Total number of prison entrants during the census week.

Level of educational attainment was lower for Indigenous than non-Indigenous prison entrants. Half (50%) of Indigenous entrants had a highest completed level of education of Year 9 or lower, compared with just under one-third (32%) of non-Indigenous entrants (Figure 2.2). Non-Indigenous prison entrants were almost three times as likely as Indigenous entrants to have a highest completed level of education of Year 12 (17% and 6% respectively).

Figure 2.2: Prison entrants, highest completed level of schooling, by Indigenous status, 2009



Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. There were 6 prison entrants whose highest completed level of schooling was unknown and 7 entrants whose Indigenous status was unknown.

Source: National Prisoner Health Census 2009

Just over one-quarter (26%) of prison entrants had a non-school qualification, with trade certificates most common (19%), followed by diplomas (5%) and bachelor degrees (2%) (Table 2.7). While non-school qualifications were more common among those who had completed a higher level of schooling, 13% of those who had not completed Year 10 had a trade certificate.

Table 2.7: Prison entrants, highest level of completed schooling by non-school qualifications, 2009

Level of schooling	Trade certificate	Diploma	Bachelor degree	Postgraduate degree	No other education	Unknown	Total
	%	%	%	%	%	%	%
Year 12	29	20	10	—	27	14	100
Year 11	21	0	2	—	58	19	100
Year 10	20	5	—	0	62	13	100
Year 9	14	2	—	—	71	14	100
Year 8 or below	12	—	—	—	79	9	100
No schooling	17	—	—	—	83	–	100
Total	19	5	2	0	61	14	100

Source: National Prisoner Health Census 2009.

3

Health conditions

3 Health conditions

This chapter contains information on the health conditions of Australian prisoners, including mental health, head injures, communicable diseases, chronic conditions and women's health. This chapter is organised based on the prevalence of the health condition in the prisoner population, with the most prominent conditions discussed at the beginning of the chapter. Data for this section come mostly from the National Prisoner Health Census; however, data for communicable diseases was obtained from the National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (NPEBBV&RBS) 2004 & 2007 (Butler & Papanastasiou 2008). Information is disaggregated (where possible) by sex, age and Indigenous status.

3.1 Mental health

Mental health is an Australian national health priority area, and there has been concerted government action in recent years to reduce the burden and to improve the lives of people with mental health problems (AIHW 2009c).

Mental health is defined as 'a state of emotional and social well-being in which the individual can cope with the normal stress of life and reach his or her potential'. Mental health problems refer to 'the range of cognitive, emotional and behavioural disorders that interfere with the lives and productivity of people' (AHM 2003).

There is a higher incidence of mental health problems in the Australian prison population than in the general population (Senate Committee on Mental Health 2006), with similar situations found internationally. This has been attributed to a range of factors including a lack of, or poor access to, mental health services; the misconception that all people with mental health problems are a danger to the public; the intolerance of many societies to difficult or disturbing behaviour; and the failure to promote treatment, care and rehabilitation (WHO 2009).

Information on behaviours related to mental health problems is shared with custodial authorities to ensure appropriate placement and checks within the system, but only after a prisoner has signed a release form except when the prisoner is considered to be at imminent risk of harm (AIHW: Belcher & Al-Yaman 2007).

Incarceration may provide an opportunity for those with mental health problems to be screened and treated and, for some individuals, it may be the only time they are in contact

with treatment services (Butler et al. 2006). For example, a study of mental health in US inmates found that, when arrested by police, less than one-third of inmates with a mental health problem were taking medication. Almost 70% were medicated after being received into jail or prison, however (Wilper et al. 2009).

A study of mental health in the NSW prisoner population in 2001 found 43% of those screened had at least one of the following diagnoses: psychosis, anxiety disorder or affective disorder. Women had higher levels of psychiatric morbidity than men (61% and 39%) (Butler et al. 2005). Definitions of psychological terms are provided in the Glossary.

Mental health disorders and current medication

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

NUMERATOR: Number of prison entrants who report that they have ever been told by a doctor, psychiatrist, psychologist or nurse that they have a mental health disorder.

DENOMINATOR: Total number of prison entrants during the census week.

During the census week prison entrants were asked whether they had ever been told they have a mental health disorder and whether they were currently taking medication for a mental disorder. Prison entrants were asked whether have been told they have a mental health disorder by a doctor, psychiatrist, psychologist or nurse. Such disorders include those relating to drug and alcohol abuse. A nurse was included because prisoners most often see nurses, including mental health nurses, in prison clinics (see Chapter 6) and many entrants had been in prison previously.

Over one-third of entrants (205 or 37%) reported having been told they have a mental health disorder (Table 3.1). A history of mental health problems was more common among female entrants (57%) than male entrants (35%).

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

NUMERATOR: Number of prison entrants who are currently taking medication for a mental health disorder.

DENOMINATOR: Total number of prison entrants during the census week.

A total of 98 prison entrants (18%) reported being currently on medication for a mental health disorder. This represents 48% of those who reported ever having been told they have a mental illness. As with mental health disorders, a greater proportion of female entrants (28%) were currently on medication than male entrants (17%).

Prison entrants aged 18–24 years were less likely than entrants of other ages to have been told they have a mental health disorder or to be on current medication for such a condition (Table 3.1). One-third (33%) of 18–24 year olds had been told they have a mental health disorder,

compared with 37–40% of other entrants, and 12% were on medication compared with 17–21% of other entrants.

Non-Indigenous prison entrants (41%) were more likely than Indigenous prison entrants (26%) to have been told they have a mental health disorder, and to be currently taking medication for a mental health condition. Non-Indigenous entrants (20%) were more than twice as likely as Indigenous entrants (9%) to be currently taking medication for a mental illness (Table 3.1). This may in part reflect problems associated with the cultural appropriateness of mental health screening, assessment and diagnostic tools (Heffernan et al 2009).

Table 3.1: Prison entrants, ever told they have a mental illness and current medication, by sex, age group and Indigenous status, 2009

	Ever told they have a mental illness		Currently on mental health medication		Total prison entrants
	Number	Per cent	Number	Per cent	Number
Sex					
Male	170	35	81	17	486
Female	35	57	17	28	61
Age group					
18–24	60	33	21	12	180
25–34	76	40	40	21	188
35–44	48	38	27	21	126
45+	20	37	9	17	54
Indigenous status					
Indigenous	36	26	13	9	141
Non-Indigenous	164	41	81	20	401
Total	**205**	**37**	**98**	**18**	**549**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. There were 8 entrants whose diagnosis history was unknown and 29 whose current medication status was unknown.

Source: National Prisoner Health Census 2009.

Psychological distress

INDICATOR: Proportion of prison entrants reporting psychological distress experienced in the past 4 weeks (self-report).

NUMERATOR: Number of prison entrants by level of psychological distress.

DENOMINATOR: Total number of prison entrants during the census week.

The Kessler 10 (K10) scale was used as part of the Census to measure the levels of psychological distress experienced by prison entrants in the four weeks prior to entry to prison. The K10 is a 10-item self-report questionnaire intended to yield a global measure of 'psychosocial distress'

based on questions about the level of anxiety and depressive symptoms in the most recent four-week period (ABS 2003; Andrews & Slade 2001).

The scoring used in this report is the same as that used in the ABS national health surveys, to allow for comparability between the prisoner and general Australian populations:

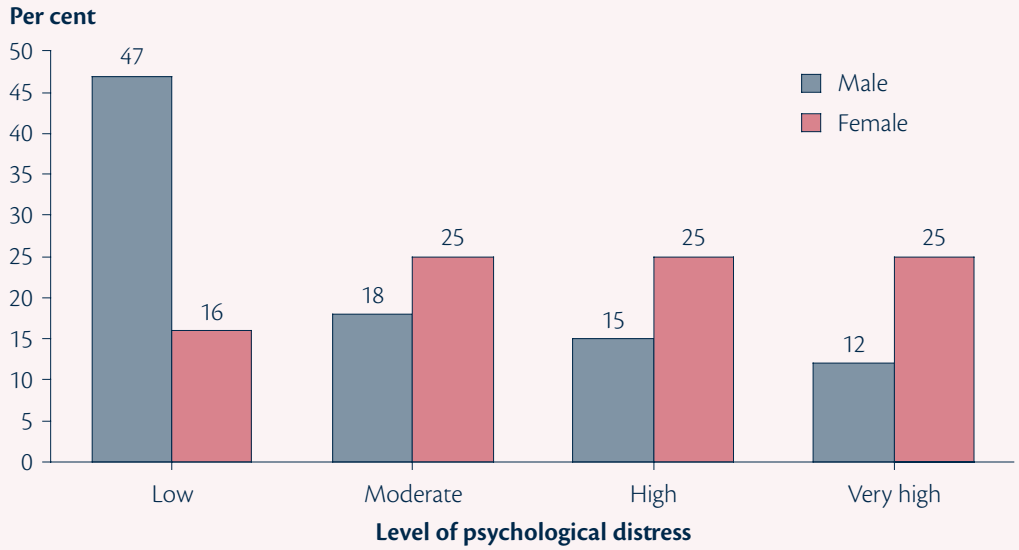
- low—indicated by a score of 10–15
- moderate—indicated by a score of 16–21
- high—indicated by a score of 22–29
- very high—indicated by a score of 30–50.

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

Less than half of prison entrants (44%) had experienced low levels of psychological distress during the four weeks immediately preceding entry to prison (Table 3.2). Almost one-third (29%) had high or very high levels of distress. The K10 score was invalid or unknown for 8% of entrants.

Levels of psychological distress were higher among female than male prison entrants (Figure 3.1). Half (50%) of female entrants and 27% of male entrants experienced high or very high levels of distress. Conversely, almost half (47%) of male entrants experienced low levels of distress in the four weeks preceding prison entry, compared with 16% of female entrants.

Figure 3.1: Prison entrants, level of psychological distress by sex, 2009



Notes

1. Figure includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Levels of distress as indicated by scores on the K10: low (10–15), moderate (16–21), high (22–29) and very high (30–50).
3. Percentages do not add up to 100% as 8% of males and 10% of females had an unknown level of psychological distress.

Source: National Prisoner Health Census 2009.

Levels of psychological distress differed by age group, with older prison entrants reporting generally higher distress than younger entrants. Almost half (49%) of entrants aged 18–24 years had low levels of distress, compared with around 40% of entrants 24 years or older. The clearest trend was in the very high level of distress, which was experienced by increasingly higher proportions of entrants by age. Among entrants aged 18–24 years, 8% experienced very high distress, compared with one in five (20%) of entrants aged 45 years or older (Table 3.2).

Table 3.2: Prison entrants, level of psychological distress by age group, 2009

Level of psychological distress	18–24		25–34		35–44		45+		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Low	89	49	79	42	50	40	22	41	241	44
Moderate	34	19	35	19	26	21	7	13	102	19
High	26	14	34	18	22	17	7	13	89	16
Very high	15	8	25	13	22	17	11	20	73	13
Invalid	—	—	1	1	—	—	—	—	1	0
Unknown	16	9	14	7	6	5	7	13	43	8
Total	**180**	**100**	**188**	**100**	**126**	**100**	**54**	**100**	**549**	**100**

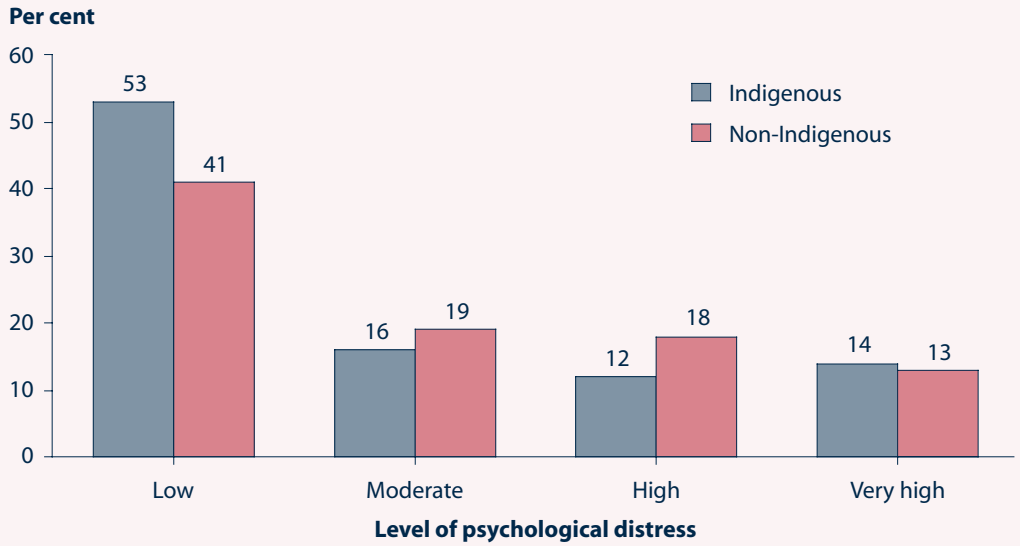
Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Levels of distress as indicated by scores on the K10: low (10–15), moderate (16–21), high (22–29) and very high (30–50).
3. Percentages do not add up to 100 as there are individuals with unknown level of psychological distress and unknown age.

Source: National Prisoner Health Census 2009.

Consistent with the results for ever having been told you have a mental illness and current medications for mental health problems, distress was lower for Indigenous than non-Indigenous prison entrants. In the four weeks prior to incarceration one-quarter (26%) of Indigenous entrants experienced high or very high distress compared with 31% of non-Indigenous entrants. A higher proportion of Indigenous than non-Indigenous prison entrants experienced low distress (53% and 41% respectively) (Figure 3.2).

Figure 3.2: Prison entrants, level of psychological distress by Indigenous status, 2009



Notes

1. Figure includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Levels of distress as indicated by scores on the K10: low (10–15), moderate (16–21), high (22–29) and very high (30–50).
3. There were 7 entrants of unknown Indigenous status and 43 entrants with unknown or an invalid level of distress score.

Source: National Prisoner Health Census 2009.

Distress related to current incarceration

INDICATOR: Proportion of prison entrants who indicate their current distress is related to the present incarceration.

NUMERATOR: Number of prison entrants who report that their current distress is related to their current incarceration.

DENOMINATOR: Total number of prison entrants during the census week.

Distress experienced by prison entrants overall was almost equally likely to be related to the current incarceration (42%) as not related to the current incarceration (43%) (Table 3.3). However, the relationship between current incarceration and distress was very different for males and females. Over two-thirds (69%) of females (who also had higher levels of distress overall) reported their distress was related to their current incarceration, compared with 38% of male entrants. Leaving behind children for whom prisoners have care responsibilities may be a factor in this finding.

Where entrants felt they were not experiencing any distress, this question could be answered as 'not applicable'. This response was chosen by 14% of male entrants but only 2% of female entrants.

Although older entrants had higher levels of psychological distress (Table 3.3), they were less likely than younger entrants to say that their distress was related to their current incarceration. Just over one-third (35%) of entrants aged 45 years or older related their distress to their current incarceration, compared with 42% of younger entrants.

For non-Indigenous entrants, 44% related their distress to their current incarceration, compared with 34% of Indigenous entrants (Table 3.3). Similar proportions of Indigenous (11%) and non-Indigenous (13%) entrants responded to this question as 'not applicable'.

Table 3.3: Prison entrants, distress related to current incarceration, by sex, age group and Indigenous status, 2009

	Distress related to current incarceration		Distress not related to current incarceration		Not applicable (not distressed)		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Sex								
Male	185	38	217	45	66	14	486	100
Female	42	69	18	30	1	2	61	100
Age group								
18–24	80	44	69	38	27	15	180	100
25–34	74	39	85	45	24	13	188	100
35–44	55	44	52	41	12	10	126	100
45+	19	35	28	52	5	9	54	100
Indigenous status								
Indigenous	48	34	74	52	15	11	141	100
Non-Indigenous	175	44	161	40	51	13	401	100
Total	**228**	**42**	**235**	**43**	**68**	**12**	**549**	**100**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 2 entrants of unknown sex, 1 entrant with unknown age, 7 entrants with unknown Indigenous status and 18 for whom the relationship between recent distress and the current incarceration was unknown.

Source: National Prisoner Health Census 2009.

Self-harm

Self-harm is when a person deliberately inflicts physical harm to themselves, often in secret and without anyone else knowing about it. Self-harm is not necessarily a suicide attempt, although it may include suicidal behaviour. Methods to achieve self-harm include cutting or slashing, blunt force, burning, hanging, strangulation, suffocation, biting, refusing food/water, binge eating or self-poisoning (Kraemer et al. 2009, Berry & Harrison 2007). Females are more likely than males to self-harm. Self-harm is often used as a method for coping with painful or difficult feelings (Reachout 2009).

Prisoner populations exhibit high levels of self-inflicted harm and injury, suicidal thoughts and suicide attempts (Kirchner et al. 2008). Risk factors for self-harm are common among prisoners and include a range of behavioural and social characteristics: young adults, mental health problems, chronic physical illness, drug and alcohol abuse, history of childhood sexual abuse and previous suicide attempts (Butler & Milner 2003, Fliege et al. 2008, Kenny et al. 2008).

Prisoners identified as being at risk are monitored at a frequency commensurate with the level of assessed risk until a risk management plan is prepared. Prisoners considered at high risk of self-harm may be placed in an observation or medical observation cell.

INDICATOR: Proportion of prison entrants who report that they have ever intentionally harmed themselves.

NUMERATOR: Number of prison entrants who report that they have ever intentionally harmed themselves.

DENOMINATOR: Total number of prison entrants during the census week.

INDICATOR: Proportion of prison entrants who report that they have thought of harming themselves in the last 12 months.

NUMERATOR: Number of prison entrants who report that they have thought of harming themselves in the last 12 months.

DENOMINATOR: Total number of prison entrants during the census week.

At reception, prison entrants were asked whether they had ever intentionally harmed themselves and whether or not they had thought of harming themselves in the last 12 months. Of prison entrants, 97 (18%) had a history of self-harming and 57 (10%) had thought about harming themselves during the previous 12 months. Thirty-six prison entrants (7%) had both intentionally harmed themselves in the past and had thoughts of self-harm in the last 12 months.

A history of self-harm was found for almost one-third (31%) of female prison entrants, compared with 16% of male entrants. There was less difference seen in recent self-harm thoughts, with 15% of females and 10% of males reporting having such thoughts (Table 3.4).

A history of self-harm was more common among younger than older prison entrants, but recent thoughts of self-harm was more common among older prison entrants (Table 3.4). A history of self-harm behaviour was reported by 21% of entrants aged 18–24 years, and decreased to a low of 11% of entrants aged 45 years or older. Self-harm thoughts in the last 12 months were reported by 11% of entrants aged 18–24 years, generally increasing to a high of 15% of entrants aged 45 years or older.

The proportions of Indigenous and non-Indigenous entrants reporting a history of self-harm (18% of each) and recent thoughts (9% and 11% respectively) were similar (Table 3.4).

Table 3.4: Prison entrants, self-harm history and recent thoughts, by sex, age group and Indigenous status, 2009

	History of self-harm		Self-harm thoughts in last 12 months		Total prison entrants
	Number	Per cent	Number	Per cent	Number
Sex					
Male	78	16	48	10	486
Female	19	31	9	15	61
Age group					
18–24	37	21	20	11	174
25–34	35	19	14	7	191
35–44	19	15	15	12	125
45+	6	11	8	15	58
Indigenous status					
Indigenous	26	18	12	9	141
Non-Indigenous	71	18	45	11	401
Total	**97**	**18**	**57**	**10**	**549**

Note: Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
Source: National Prisoner Health Census 2009.

3.2 Head injury

Injury morbidity and mortality tends to be highest amongst disadvantaged young men, who constitute the majority of the prisoner population. The combination of a population with a high prevalence of violent and impulsive behaviour, large numbers of persons with a history of traumatic brain injury (TBI) (Butler & Milner 2003) or a current mental illness (Butler et al. 2007a) and the stress and frustration of prison life further increase the likelihood of injury (AIHW: Belcher & Al-Yaman 2007).

In 2003 Justice Health NSW implemented a prison injury surveillance system, which allowed patterns of injury among prisoners to be examined. A pilot study of the system was conducted at Windsor and Goulburn gaols from July to December 2002, based on prisoners attending their prison clinic. The study found injuries were most commonly caused by sports (33%), assault (24%) and machinery (11%). Over two-thirds (68%) of injuries were accidental and just under one-quarter (24%) were intentional harm by others (Butler et al. 2007b).

Many people in prisons have been exposed to TBI (Schofield et al. 2006), which is characterised by a blow or other force to the head which results in damage to the brain or an alteration in brain function (Helps et al. 2008). People with TBI may experience long-term changes in one or more of the following areas—physical and sensory abilities, cognition, behaviour and personality, communication and medical difficulties (Brain Injury Australia 2006).

Previous studies have found TBI to be highly prevalent among prisoners (Slaughter et al. 2003). Estimates of the proportion of prisoners with TBI range from 25% (Morrell et al. 1998) to 82% of

the prison population (Schofield et al. 2007). This may be attributed to the neuropsychological deficits and aggressive, violent, criminal behaviours that can result from TBI.

INDICATOR: Proportion of prison entrants who report that they have ever received a blow to the head resulting in a loss of consciousness.

NUMERATOR: The number of prison entrants who report that they have ever received a blow to the head resulting in a loss of consciousness

DENOMINATOR: Total number of prison entrants during the census week.

Prison entrants were asked whether they had ever received a blow to the head resulting in a loss of consciousness (LOC) or blacking out. Loss of consciousness following an injury to the head is an indication that there has been an effect on the brain. Over two-fifths (43%) of prison entrants in the census week reported that they had received a blow to the head resulting in a LOC. This was more common among male (44%) than female (33%) entrants (Table 3.5).

There was no particular pattern of head injury by age. The proportion of entrants with a head injury was highest for those aged 35–44 years (50%) and lowest for those aged 45 years or older (35%) (Table 3.5).

The proportion of prison entrants who reported a blow to the head resulting in a loss of consciousness was slightly higher for non-Indigenous (44%) than Indigenous prison entrants (39%) (Table 3.5).

Table 3.5: Prison entrants' head injury, by sex, age group and Indigenous status, 2009

	Ever had head injury		No head injury		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Sex						
Male	216	44	265	55	486	100
Female	20	33	40	66	61	100
Age group						
18–24	77	43	102	57	180	100
25–34	78	41	107	57	188	100
35–44	63	50	62	49	126	100
45+	19	35	34	63	54	100
Indigenous status						
Indigenous	55	39	85	60	141	100
Non-Indigenous	178	44	218	54	401	100
Total	**237**	**43**	**306**	**56**	**549**	**100**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 2 entrants of unknown sex, 1 entrant with unknown age, 7 entrants with unknown Indigenous status and 6 whose head injury history was unknown.

Source: National Prisoner Health Census 2009.

3.3 Communicable diseases

Communicable diseases are those which are capable of being transmitted between individuals, including infectious and parasitic disease (Healey 2004). Examples of communicable diseases are AIDS, HIV, bacterial infection, hepatitis C, hepatitis B, malaria, meningitis and meningococcal infections, STIs, viral infections and vaccine-preventable diseases such as chickenpox and influenza.

In Australia, due to high levels of sanitation and the use of antibiotics and immunisation programs, communicable diseases are not among the leading contributors to the burden of disease. In 2004–05, infections and immunisation accounted for about 7% of all GP consultations, and in 2005–06, 4% of deaths were attributed to infection (AIHW 2008c).

The Australian Government monitors communicable diseases through the National Notifiable Diseases Surveillance System (NNDSS). The NNDSS was established in 1990 and coordinates the surveillance of over 50 communicable diseases. This includes information on bloodborne viruses, gastrointestinal diseases, quarantinable diseases, STIs, vaccine preventable diseases, vectorborne diseases, zoonoses and other bacterial infections (DoHA 2009).

INDICATOR: Number of notifications of a notifiable disease for prisoners in custody.

The Australian Department of Health and Ageing (DoHA) National Hepatitis C Strategy 2005–2008 and the National Sexually Transmissible Infections Strategy 2005–2008 recognises prisoner populations as priority populations for bloodborne viruses such as hepatitis C and STIs. In response the Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis has produced national guidelines for the prevention, treatment and care of hepatitis C in custodial settings (MACASHH 2008). Australian and international studies have consistently found high levels of exposure to bloodborne viruses (e.g. hepatitis C, hepatitis B and HIV) and STIs (Butler et al. 2004a; Vescio et al. 2008) in the prison population.

As part of the Census, jurisdictions were asked to provide data regarding notifications of notifiable diseases during 2007–08. These data were only available from two jurisdictions, and therefore will not be included in this report.

Hepatitis C

Hepatitis C is a bloodborne viral disease, which is transmitted through blood-to-blood contact. It is a serious disease that can result in problems such as liver failure, liver cancer and cirrhosis. In Australia, the most common mode of exposure to hepatitis C infection is through sharing of injecting equipment (DoHA 2008a).

Hepatitis C is a notifiable disease in all Australian jurisdictions. In 2009 there were almost 13,000 notifications of hepatitis C (DoHA 2010). This equates to a national prevalence of less than 1% of the Australian population (Dyer & Tolliday 2009). The population groups at greatest risk of hepatitis C infection are injecting drug users (IDUs), people in custodial settings, women in prison, Aboriginal and Torres Strait Islander people, young people, people from culturally and linguistically diverse backgrounds and people from rural and remote areas (MACASHH 2008).

Currently, there is no national surveillance system for hepatitis C infection in prisons. Prisoner health studies have estimated the overall prevalence of hepatitis C infection amongst all Australia's prisoners to be between 23% and 47%, and even higher for females (between 50% to 70%) (Black et al. 2004, Miller et al. 2006).

A history of incarceration is a risk factor for hepatitis C transmission, not only due to the high prevalence of hepatitis C infection among the custodial population but also due to the prevalence of high-risk behaviours in prison such as sharing contaminated injecting equipment and tattooing. Prisoners are unlikely to have access to sterile equipment for injecting, piercing, tattooing and personal care, leading to prisoners sharing equipment (Dyer & Tolliday 2009; Hunt & Saab 2009).

A history of injecting drug use in prison is an independent risk factor for hepatitis C transmission. A 2008 Australian meta-analysis on hepatitis C virus (HCV) prevalence found that IDUs in prison were 24 times more likely to have HCV than prisoners who were non-IDUs, and at least 8 times more likely to contract the virus whilst in prison than non-IDUs (Vescio et al. 2008). Similarly, the 2002 Victoria Prisoner Health Study found 64% of males who were IDUs had been diagnosed with hepatitis C compared with 16% of non-IDUs, and 85% of females who were IDUs were diagnosed with hepatitis C compared with 26% of non-IDUs (Deloitte Consulting 2003).

INDICATOR: Proportion of prison entrants testing positive to hepatitis C antibody.

NUMERATOR: Number of prison entrants who tested positive to hepatitis C antibody.

DENOMINATOR: Total number of prison entrants tested.

Data on the prevalence of hepatitis C in prisons were obtained from the 2007 National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (NPEBBV&RBS) (see Appendix 2 for further explanation). The NPEBBV&RBS screened 581 prison entrants for hepatitis C antibody. Just over one-third (35%) of prison entrants tested positive for hepatitis C antibody. Female prison entrants had a higher prevalence of hepatitis C antibody (60%) compared with male prison entrants (33%) (Table 3.6).

The proportion of prisoners who tested positive to hepatitis C increased with age. Only 6% of those aged less than 20 years tested positive to hepatitis C, while 21% of those aged 20–24 years and 42% of those aged 25 or older tested positive for hepatitis C antibody (Table 3.6). Over two-thirds (69%) of female prison entrants aged 25–29 years tested positive for hepatitis C antibody (Butler & Papanastasiou 2008 Table 22).

A higher proportion of Indigenous prison entrants (43%) tested positive for hepatitis C antibody than non-Indigenous prison entrants (33%) (Table 3.6). Almost three-quarters (72%) of Indigenous female entrants tested positive for hepatitis C antibody.

Table 3.6: Proportion of prison entrants testing positive for hepatitis C antibody, by sex, age group and Indigenous status, 2007

	HCV antibody prevalence		Total prison entrants tested
	Number	Per cent	Number
Sex			
Male	175	33	533
Female	33	60	55
Age group			
<20	2	6	36
20–24	26	21	123
25–29	55	42	130
30+	125	42	299
Indigenous status			
Indigenous	47	43	110
Non-Indigenous	155	33	471
Total	**208**	**35**	**588**

Note: Totals include 7 entrants of unknown Indigenous status.
Source: NPEBBV&RBS 2007 Table 22, Table 29.

Prison entrants who had ever injected drugs (IDUs) were much more likely to test positive for hepatitis C antibody than those who had not (60% compared with 4%) (Table 3.7). This pattern was more distinct for females than males.

Table 3.7: Proportion of prison entrants testing positive for hepatitis C antibody, by drug use status and sex, 2007

Injecting status	Male		Female		Total		Total prison entrants tested
	Number	Per cent	Number	Per cent	Number	Per cent	Number
Injecting drug users	166	58	31	78	197	60	327
Non-injecting drug users	9	4	2	13	11	4	262

Source: NPEBBV&RBS 2007 Table 20.

In part, the proportion of prison entrants testing positive for hepatitis C antibody increased with the number of times they had been in prison. Of those who had only been imprisoned once, 9% tested positive for hepatitis C antibody (5% for males, 43% for females), compared with three-quarters (75%) of prison entrants who had been imprisoned ten or more times. The pattern was different for females with 88% of those imprisoned 5–9 times testing positive for hepatitis C antibody compared with 66% of males (Table 3.8).

Table 3.8: Proportion of prison entrants testing positive for hepatitis C antibody, by number of previous imprisonments, 2007

Number of previous imprisonments	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
1	9	5	9	43	18	9
2–4	66	31	13	65	79	34
5–9	54	66	7	88	61	68
10+	39	75	3	75	42	75

Source: NPEBBV&RBS 2007 Table 28.

Hepatitis B

Hepatitis B is a viral disease, which can be transmitted from one person to another through unprotected sexual intercourse, blood-to-blood contact and from mother to child during pregnancy or at birth. Hepatitis B causes inflammation of the liver and over time can lead to scarring of the liver, chronic liver damage and liver cancer (DoHA 2008). In Australia, the majority of new hepatitis B transmissions are through sharing injecting equipment and from unprotected sex (Hep C Council 2008).

In 2008 there were 245 incident and 6,591 unspecified notifications of hepatitis B[1] in Australia, and approximately 107,000 people who have ever been diagnosed with hepatitis B (DoHA 2009).

Risk factors for hepatitis B include injecting drug use and a history of imprisonment (Hunt & Saab 2009; Sutton et al. 2008). Jurisdiction-based research has found a higher level of hepatitis B in prisons than in the general population. For example, the New South Wales Inmate Health Survey (2001) found that 31% of female prisoners and 28% of male prisoners tested positive to hepatitis B core antibody (Butler & Milner 2003). Similarly, the Victorian Prisoner Health Survey (2003) found that 40% of participants were diagnosed with hepatitis, and that of that group 65% had hepatitis B (Deloitte Consulting 2003).

INDICATOR: Proportion of prison entrants testing positive to hepatitis B core antibody.

NUMERATOR: Number of prison entrants who tested positive to hepatitis B core antibody.

DENOMINATOR: Total number of prison entrants tested.

[1] Hepatitis B incident cases are defined as 'incident' or 'newly acquired' based on the detection of the virus and a previously negative test history within the last 24 months prior to diagnosis. Hepatitis B unspecified cases are based on the detection of the virus where there is no evidence to suggest that the infection is recent (i.e. within the last 24 months)—it is essentially the remainder of cases where a negative history within the last 24 months cannot be established. For further information on national case definitions, refer to <http://www.health.gov.au/casedefinitions>.

Data on hepatitis B were obtained from the 2007 NPEBBV&RBS (Butler & Papanastasiou 2008). In 2007, 119 (21%) prison entrants tested positive to hepatitis B core antibody. Female prison entrants (28%) had a higher prevalence of hepatitis B compared with male entrants (21%).

The proportion of prison entrants with hepatitis B was lowest for those aged less than 20 years (6%) and highest for those aged 30 years or older (28%). Overall, females aged over 30 years had the highest level of hepatitis B (39%) (Table 3.9).

Indigenous entrants (42%) were more likely to test positive to hepatitis B than non-Indigenous entrants (17%) (Table 3.9).

Table 3.9: Proportion of prison entrants testing positive for hepatitis B core antibody, by sex, age group and Indigenous status, 2007

	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Age group						
<20	2	6	—	—	2	6
20–24	11	10	—	—	11	9
25–29	24	22	2	13	26	21
30+	68	27	13	39	81	28
Indigenous status						
Indigenous	37	42	7	39	44	42
Non-Indigenous	67	16	8	22	75	17
Total	**105**	**21**	**15**	**28**	**120**	**21**

Note: Totals include 1 entrant of unknown Indigenous status.
Source: NPEBBV&RBS 2007 Table 45.

Prison entrants who were IDUs were more likely to test positive to hepatitis B than prison entrants who were non-IDUs. The NPEBBV&RBS found prison entrants who were injecting drug users (31%) had a higher proportion of hepatitis B compared with non-IDUs (9%). Further, prison entrants who had a long history of IDU were more likely to test positive to hepatitis B. The NPEBBV&RBS found that 38% of prison entrants who were IDUs for over ten years tested positive to hepatitis B, compared with 10% of prison entrants who were IDUs for less than three years.

HIV

HIV (human immunodeficiency virus) is a virus which weakens the human immune system, leaving an individual at risk of a number of serious infections and cancers. HIV is transmitted by sexual contact with an infected person, through blood contact or from mother to child during pregnancy. The final stage of HIV is known as the acquired immune deficiency syndrome or AIDS (AIHW 2008c).

HIV prevalence in Australia remains one of the lowest in the world, at about 0.1% (NCHECR 2009a). An estimated 17,444 people (including 12,053 people aged 15–49 years) were living with HIV infection in Australia at the end of 2008. Risk factors for HIV include male

homosexuality or bisexual contact, and injecting drug use. Some ethnic groups are also at greater risk of HIV. In 2007, of those with HIV 76% had bisexual/homosexual contact, 4% had a history of injecting drug use and 4% had both bisexual/homosexual contact and a history of injecting drug use. There was a similar rate of HIV diagnosis in the Aboriginal and Torres Strait Islander and non-Indigenous populations, although higher proportions of cases were attributed to heterosexual contact and injecting drug use in the Aboriginal and Torres Strait Islander population (NCHECR 2009a).

In the early 1990s in Australia, prisoners were indentified as a high-risk group for HIV infection. Australian authorities were concerned that the transmission of HIV would occur at a higher rate in prison and that further transmission would occur in the general population upon release. The key solution was to test all prisoners for HIV antibodies, and in 1990 compulsory HIV testing programs were established in prisons in New South Wales, South Australia, Queensland, the Northern Territory and Tasmania (Egger & Heilpern 1991). Currently, HIV screening coverage varies across the states and territories. In 2007, Queensland and the Northern Territory screened all men for HIV on entry to prison, Western Australia 47%, New South Wales 29%, Victoria 28%, South Australia 26% and Tasmania 21% (NCHECR 2009a).

INDICATOR: Proportion of prison entrants testing positive for HIV.

NUMERATOR: Number of prison entrants who tested positive for HIV.

DENOMINATOR: Total number of prison entrants tested.

Data on HIV in Australia's prisons were obtained from the 2007 NPEBBV&RBS (Butler & Papanastasiou 2008). Both the 2004 and 2007 NPEBBV&RBS reported the prevalence of HIV among prison entrants to be less than 1% nationally in both men and women. No difference was found in HIV rates for IDUs and non-IDUs.

3.4 Chronic conditions

A chronic condition is an ongoing impairment characterised by a physical or mental condition, functional limitation and service use or need beyond routine care (Sawyer & Aroni 2005). Chronic diseases contribute significantly to the burden of illness and injury in Australia. Consequently chronic conditions such as asthma, diabetes, cardiovascular disease, cancer and arthritis have been identified as National Health Priority Areas. Targeting these areas can potentially reduce the burden of disease experienced by people with these conditions and reduce the health care required and associated costs.

This section reports on findings from prison entrants in the Census, relating to self-reported chronic conditions. Information regarding the use of the prison clinics and prisoners taking prescribed medication for chronic conditions can be found in Chapter 6.

As part of the reception process, prison entrants were asked whether they had ever been told by a doctor or nurse that they had any of the following: arthritis, asthma, cancer, cardiovascular disease or diabetes, and whether they currently had the condition.

Asthma was the most common chronic condition, reported by 16% of prison entrants, followed by arthritis (6%) (Table 3.10). Overall, one-quarter (25%) of prison entrants reported currently having one or more of these chronic conditions.

Table 3.10: Prison entrants[(a)] with current chronic conditions, 2009

Current chronic condition	Number	Per cent
Asthma	89	16
Arthritis[(b)]	31	6
Cardiovascular disease[(c)]	15	3
Diabetes[(d)]	15	3
Cancer[(e)]	3	<1
Total with any current chronic condition	**137**	**25**
Total number of prison entrants	**549**	**100**

(a) Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

(b) Arthritis includes gout, rheumatism, osteoarthritis, rheumatoid arthritis, other type and arthritis type unknown.

(c) Cardiovascular disease includes coronary heart disease, heart failure, rheumatic fever and rheumatic heart disease, congenital heart disease, stroke and peripheral vascular disease.

(d) Diabetes includes Type 1 diabetes, Type 2 diabetes and gestational diabetes.

(e) Cancer excludes non-melanoma skin cancer.

Source: National Prisoner Health Census 2009.

Asthma

Asthma is 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. Asthma is triggered by a range of genetic, age and gender factors. Environmental triggers induce airway narrowing, with triggers including exercise, viral infections, irritants (such as smoking and other air pollutants), specific allergens (house dust mites and mould spores) and some food preservatives (ACAM 2008). Asthma affects all age groups and ranges in severity from intermittent mild symptoms to a severe, incapacitating and sometimes life-threatening disorder.

INDICATOR: Proportion of prison entrants who report that they have been told by a doctor or nurse that they have asthma, and who still have the condition currently.

NUMERATOR: Number of prison entrants who report that they have been told by a doctor or nurse that they have asthma, and who still have the condition currently.

DENOMINATOR: Total number of prison entrants during the census week.

Of the 549 prison entrants in the census period, 162 (30%) reported that they had ever been told they have asthma. Of these, 89 (55% or 16% of all entrants) still had the condition currently.

A higher proportion of female prison entrants (43%) than males (28%) reported ever having been told they have asthma (Table 3.15). This is consistent with reporting in the general population.

Younger prison entrants were more likely than older prison entrants to report ever having been told they have asthma. Over one-third (34%) of entrants aged 18–24 years reported ever having been told they have asthma, compared with one-fifth (20%) of entrants aged at least 44 years (Table 3.11). This observed difference may be partly due to changes in diagnostic practice for asthma over time (Magnus & Jaakkola 1997).

There was little difference between Indigenous (30%) and non-Indigenous (29%) prison entrants in reporting ever having been told they have asthma (Table 3.11). This is not consistent with the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which found that Indigenous adults were one-and-a-half times as likely as non-Indigenous adults to report having asthma (16% and 10% respectively). However, this is consistent with a comparative study of Indigenous and non-Indigenous prisoners in New South Wales which found few differences in health status between the two groups (Kariminia et al. 2007b). Nevertheless, the rates of asthma among these prison entrants are far higher than in the general population for both Indigenous and non-Indigenous people.

Table 3.11: Prison entrants' history of asthma, by sex, age group and Indigenous status, 2009

	Ever had asthma		Never had asthma		Unknown		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Sex								
Male	135	28	322	66	29	6	486	100
Female	26	43	30	49	5	8	61	100
Age group								
18–24	62	34	112	62	6	3	180	100
25–34	57	30	118	63	13	7	188	100
35–44	32	25	86	68	8	6	126	100
45+	11	20	36	67	7	13	54	100
Indigenous status								
Indigenous	42	30	94	67	5	4	141	100
Non-Indigenous	118	29	255	64	28	7	401	100
Total	**162**	**30**	**353**	**64**	**34**	**6**	**549**	**100**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 2 entrants of unknown sex, 1 entrant with unknown age, and 7 entrants with unknown Indigenous status

Source: National Prisoner Health Census 2009.

Arthritis

Arthritis is an umbrella term for more than 100 medical conditions that affect the musculoskeletal system, specifically joints. The three most common forms of arthritis—osteoarthritis, rheumatoid arthritis and gout—account for more than 95% of cases in Australia. Females are at a greater risk than males for developing osteoarthritis and rheumatoid arthritis (AIHW 2008b). Rheumatoid arthritis occurs most often in people aged between 35 to 64 years (AIHW 2009d).

The treatment and management of arthritis and other musculoskeletal conditions results in the frequent use of primary care, hospital and allied health services (AIHW 2008b).

INDICATOR: Proportion of prison entrants who report that they have been told by a doctor or nurse that they have arthritis, and who still have the condition currently.

NUMERATOR: Number of prison entrants who report that they have been told by a doctor or nurse that they have arthritis, and who still have the condition currently.

DENOMINATOR: Total number of prison entrants during the census week.

Of prison entrants, 38 (7%) reported ever having been told they have arthritis. The majority of them (31 or 6% of all entrants) reported that they still had the condition.

Proportionally, twice as many female prison entrants (13%) reported ever having been told they have arthritis as males (6%) (Table 3.12).

As may be expected for a condition affecting joints, the higher proportions of entrants reporting having arthritis were found in the older age groups. Just 1% of entrants aged 18–24 years had been told they have arthritis, compared with almost one-quarter (24%) of entrants aged 45 years and over (Table 3.12).

A smaller proportion of Indigenous prison entrants (4%) reported having ever been told they have arthritis than non-Indigenous entrants (8%) (Table 3.12).

Table 3.12: Prison entrants' history of arthritis, by sex, age group and Indigenous status, 2009

	Ever had arthritis		Never had arthritis		Unknown		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Sex								
Male	30	6	408	84	48	10	486	100
Female	8	13	43	70	10	16	61	100
Age group								
18–24	1	1	164	91	15	8	180	100
25–34	10	5	156	83	22	12	188	100
35–44	14	11	99	79	13	10	126	100
45+	13	24	33	61	8	15	54	100
Indigenous status								
Indigenous	6	4	125	89	10	7	141	100
Non-Indigenous	31	8	323	81	47	12	401	100
Total	**38**	**7**	**453**	**83**	**58**	**11**	**549**	**100**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 2 entrants of unknown sex, 1 entrant with unknown age, and 7 entrants with unknown Indigenous status

Source: National Prisoner Health Census 2009.

Cardiovascular disease

Cardiovascular disease (CVD) includes coronary heart disease, heart failure, rheumatic fever and rheumatic heart disease, congenital heart disease, stroke and peripheral vascular disease (AIHW 2004). CVD is the largest cause of premature death in Australia and one of the leading causes of disability.

Most people need medicines to treat their cardiovascular conditions—65% of people who reported a cardiovascular condition in 2004–05 also reported using medicines for it (ABS 2006b). Medications to treat CVD include cholesterol-lowering agents, certain blood pressure-lowering medicines and clot-preventing medicines.

The major preventable risk factors for CVD are smoking, high blood pressure, high blood cholesterol, insufficient physical activity, being overweight or obese, poor nutrition and diabetes (AIHW 2008c).

The prisoner population has a high prevalence of risk factors for CVD including high cholesterol, high blood pressure, obesity and smoking (see Chapter 5), compared with the general Australian population (AIHW: Belcher & Al-Yaman 2007). Mortality from CVD in prisoners has been found to be higher than that of the general community (Kariminia et al. 2007a).

INDICATOR: Proportion of prison entrants who report that they have been told by a doctor or nurse that they have cardiovascular disease, and who still have the condition currently.

NUMERATOR: Number of prison entrants who report that they have been told by a doctor or nurse that they have cardiovascular disease, and who still have the condition currently.

DENOMINATOR: Total number of prison entrants during the census week.

Of the 549 prison entrants in the census week, 27 (5%) reported ever having been told they have CVD, and just over half of them (15 or 3% of all entrants) still had the condition.

A higher proportion of female (10%) than male (4%) entrants reported ever having been told they have CVD. This was more common among older than younger prison entrants, with 15% of entrants aged at least 45 years having been told they have CVD, compared with just 2% of those aged 18–24 years. There was no difference between Indigenous and non-Indigenous entrants in CVD.

Diabetes

Diabetes mellitus (diabetes) is a disease marked by high blood glucose levels resulting from defective insulin production, insulin action or both (WHO 1999). The three main types of diabetes are Type 1 diabetes, Type 2 diabetes and gestational diabetes. When diabetes is left undiagnosed or unchecked for too long, it can be responsible for a number of complications such as heart disease, kidney disease, blindness, limb amputation, erectile dysfunction and persistent infections.

Type 2 diabetes accounts for about 85–90% of all cases of diabetes in Australia and is largely preventable. The prevalence of Type 2 diabetes increases with age, particularly for those over 55 years or those over 45 years of age who are overweight or have high blood pressure. Aboriginal or Torres Strait Islander people are considered at higher risk if they are over 35 years of age (Diabetes Australia 2009).

The management of diabetics in prison can be difficult due to their special dietary requirements, the need for regular access to health clinics (particularly for those who are insulin dependent) and the need to closely monitor the condition (Martin 1989).

INDICATOR: Proportion of prison entrants who report that they have been told by a doctor or nurse that they have diabetes, and who still have the condition currently.

NUMERATOR: Number of prison entrants who report that they have been told by a doctor or nurse that they have diabetes, and who still have the condition currently.

DENOMINATOR: Total number of prison entrants during the census week.

Of the 549 prison entrants in the census week, 20 (4%) reported ever having been told they have diabetes and 15 (3%) still had the condition at the time of reception assessment.

Diabetes was more common among female (7%) than male (3%) entrants. Consistent with the increasing prevalence of diabetes with age, diabetes was reported by 11% of entrants aged 45 years and over, compared with just 2% of those aged less than 35 years. Diabetes was also more common among Indigenous (5%) than non-Indigenous (3%) entrants.

Cancer

Cancer is 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. Tumours can be benign (not a cancer) or malignant (a cancer). Benign tumours do not invade other tissues or spread to other parts of the body, although they can expand to interfere with healthy structures. Cancers are distinguished from each other by the specific type of cell involved and the place in the body in which the disease begins (AIHW & AACR 2008). The age of onset of cancer varies with the type of cancer but generally the risk of getting cancer increases with age.

The type and stage of the cancer will determine the treatment required. Treatment may include chemotherapy (such as oral, injection or intravenous), radiation therapy, biological therapy or surgery.

In Australia, prisoners requiring treatment for cancer will either receive medication from the prison clinic or be transferred to the local hospital for treatment.

Cancer pain management among prison inmates is an emerging problem. A commentary from the United States of America (USA) on the management of incarcerated cancer patients reported that the median overall survival for cancer patients in prison was inferior to that of a non-incarcerated, age, sex and race matched cohort (Markman 2007).

INDICATOR: Proportion of prison entrants who report that they have been told by a doctor or nurse that they have cancer, and who still have the condition currently.

NUMERATOR: Number of prison entrants who report that they have been told by a doctor or nurse that they have cancer, and who still have the condition currently.

DENOMINATOR: Total number of prison entrants during the census week.

Few prison entrants reported having cancer. Of the 549 entrants taking part in the census, only 9 (2%) reported ever having been told they have cancer and 3 (less than 1%) currently had cancer.

3.5 Women's health

Women represent a minority of the Australian prisoner population, at less than 10%. Women in prison internationally frequently come from deprived backgrounds, have often experienced physical and sexual abuse, alcohol and drug dependency and inadequate health care prior to their imprisonment (PRI 2007). Many women in prison also have young children, for whom they were often the primary or sole carer before they entered prison (WHO 2008).

Women constitute a special group within prisons due to their gender. This report will focus on two aspects of women's reproductive health—pregnancy and cervical screenings.

Pregnancies

Pregnancy affects many areas of a woman's life, including health, diet and exercise requirements (Robertson 2008).

Early pregnancies, in particular, have numerous health, psychological and socioeconomic consequences. The long-term health implications of becoming pregnant during teenage years include pelvic inflammatory disease, infertility, cervical cancer and susceptibility to HIV infection (Amu & Appiah 2006). For women aged less than 15 years, pregnancy is associated with a higher risk for gestational hypertension, anaemia, poor nutritional status, preterm delivery and both maternal and neonatal mortality (Amy & Loeber 2007).

Teenage parenthood has been linked to lower levels of completed education, poverty, welfare dependence, domestic violence and poor partner relationships (Fergusson et al. 2007). Women who become parents during adolescence have also been found to be more likely to have repeat teenage pregnancies (Raneri & Wiemann 2007).

In Australia in 2006, 4% of women giving birth were aged less than 20 and 15% were aged 20–24 years. One in five (21%) Indigenous mothers were teenagers, compared with 4% of non-Indigenous mothers. The average age of mothers giving birth to their first child was 28.2 years (Laws & Hilder 2008).

Pregnancy history

INDICATOR: Proportion of female prison entrants who report that they have ever been pregnant.

NUMERATOR: Number of female prison entrants who report that they have ever been pregnant.

DENOMINATOR: Total number of female prison entrants during the census week.

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

Prison entrants were asked whether they had ever been pregnant and, if so, their age at first pregnancy. Most female prison entrants reported that they had been pregnant (51 out of 61 or 84%). The average age of first pregnancy was 19 years (ranging from 14 years to 36 years). A slightly lower proportion of Indigenous female entrants (79%) reported having ever been pregnant than non-Indigenous female entrants (85%). However, the average age of first pregnancy for Indigenous entrants was 17 years compared with 20 years for non-Indigenous entrants.

Pregnant prisoners

Some women are pregnant while imprisoned. Imprisonment may place pregnant women and their unborn child at increased health risk due to prison related stressors. Alternatively, it may enhance pregnancy outcomes for women from disadvantaged backgrounds as prison provides shelter, regular meals, protection from abusive partners, access to antenatal care and moderates the use of alcohol and drugs (Scott & Gerbasi 2005; Knight & Plugge 2005; Kyei-Aboagye et al. 2000).

A systematic review by Knight and Plugge (2005) showed evidence that pregnant prisoners are a socially disadvantaged group at high risk of poor perinatal outcomes. The review identified risk factors associated with adverse pregnancy outcomes in imprisoned women. Pregnant prisoners were more likely to:

- be single
- smoke, drink alcohol to excess and take illegal drugs
- not have completed high school
- have a medical problem which could affect the pregnancy outcome.

Despite these factors, they were less likely to receive adequate antenatal care.

The Mothers and Gestation in Custody project conducted by the NSW Perinatal and Reproductive Epidemiological Research Unit recently completed a study of pregnancy outcomes in prisoners in Australia. The study investigated the impact of imprisonment during pregnancy on birth and neonatal outcomes. This study was due to conclude in December 2009.

INDICATOR: Number of pregnant female prisoners in custody.

There were 235 pregnant prisoners in custody (excluding Tasmania) during 2007–08.

Cervical screening

Women in prison are a high-risk group for sexual and reproductive health diseases, including particular cancers and sexually transmitted diseases. This is particularly due to the typical background of women in prison, which can include injecting drug use, sexual abuse, violence, sex work and unsafe sexual practices (UNODC 2007).

Early detection and treatment of cervical cancer can reduce morbidity and mortality due to the disease. It is recommended that women aged 18–69 years, who have ever had sex, have a cervical screening every two years (DOHA 2006).

In 2006–07, the two-year participation rate for the National Cervical Screening Program was 62% of women in the age group of 20–69 years (AIHW 2009a).

INDICATOR: Proportion of female prison entrants who report that they have had a cervical screening in the last two years.

NUMERATOR: Number of female prison entrants who reported having a cervical screening in the last two years.

DENOMINATOR: Total number of female prison entrants during the census week.

Prison entrants were asked whether they had had a cervical screening in the last two years. Of the 61 female prison entrants in the census week, just under half (28 or 46%) of the women had had a cervical screening in the last two years, which is lower than the general population (62%). A higher proportion of Indigenous (57%) than non-Indigenous (43%) entrants had a cervical screening in the last two years (Table 3.13).

Table 3.13: Proportion of female prison entrants who report that they have had a cervical screening in the last two years, by Indigenous status, 2009

Cervical screening status	Indigenous		Non-Indigenous		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Had cervical screening	8	57	20	43	28	46
No cervical screening	6	43	22	48	29	48
Total	14	100	46	100	61	100

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 1 female entrant whose Indigenous status was unknown and 4 whose cervical screening status was unknown

Source: National Prisoner Health Census 2009.

4

Deaths

4 Deaths

This chapter contains information on the number of deaths in custody and deaths following release from prison. Data for this section come from the Australian Institute of Criminology (AIC) Deaths in Custody report (AIC 2009). Information is disaggregated (where possible) by Indigenous status and cause of death.

4.1 Deaths in custody

A Royal Commission into Aboriginal Deaths in Custody (RCIADIC) was established in 1989 following concern over the deaths of 99 Aboriginal people in police custody and prisons between 1 January 1980 and 31 May 1989. The RCIADIC made 339 recommendations. The RCIADIC found, amongst other things, that:

- the high number of Aboriginal deaths in custody was due to the overrepresentation of Aboriginal people in custody
- Indigenous persons were no more likely to die in custody than non-Indigenous persons
- Aboriginality was a significant factor in the person's placement and eventual death in custody.

Recommendations to reduce the number of deaths in custody included the removal of hanging points from cells, increasing awareness of custodial and medical staff of issues concerning the proper treatment of prisoners and a greater commitment to cross-cultural training for criminal justice staff (Cunneen 2006).

The RCIADIC also recommended an ongoing program be established to monitor both Indigenous and non-Indigenous deaths in prison, police custody and juvenile detention, to gauge the impact of the recommendations regarding the rates of death in custody. The AIC, through the National Deaths in Custody Program (NDICP), monitors deaths in custody. This is the main data source in Australia on deaths in custody, including prison, police and juvenile detention.

Since 1989, 1,206 deaths have been recorded in prison custody (Curnow & Larsen 2009). From 1999 the death rates for both non-Indigenous and Indigenous prisoners have followed similar trends, with both trending downward until 2007 when slight increases occurred in death rates for both. Since 1980, 17% of deaths in prison custody have been of Indigenous prisoners. Each year, male deaths have outnumbered female deaths. Death rates for those aged 55 and over have been higher than for other age groups since 1982.

The most common causes of death in prison between 1980 and 2007 have been hanging, followed by natural causes, drugs/alcohol and external/multiple trauma (Curnow & Larsen 2009).

INDICATOR: Number of deaths in custody.

According to the NDICP, there were 45 deaths in prison custody during 2007, and 5 of these were Indigenous prisoners. This is a rate of 0.8 per 1,000 Indigenous prisoners and 2.0 per 1,000 non-Indigenous prisoners. Most of the deaths (32) were due to natural causes, 9 were self-inflicted (including 7 due to hanging) and 1 death was considered an accident. For 3 deaths, the cause has not yet been determined (AIC 2009).

4.2 Deaths following release from prison

Prisoners are at markedly increased risk of death following release from custody, especially in the weeks immediately following release. The risk of mortality decreases exponentially with increasing time in the community (Kariminia et al. 2007a, Stewart et al. 2004, Graham 2003). The main causes of death among ex-prisoners, particularly in the first few weeks, are related to drug and alcohol use, suicide and injury (Hobbs et al. 2006a, Kariminia et al. 2007d). The risk of suicide among recently released prisoners has been found to be close to that of discharged psychiatric patients (Pratt et al. 2006) and, in the weeks immediately following release, the majority of deaths are drug related (Farrell & Marsden 2008).

A study of 85,203 adults imprisoned in New South Wales between 1988 and 2002 found higher mortality among those hospitalised for mental health problems during imprisonment, those with a larger number of imprisonment episodes and for those in the first year of their sentence. Among women, increased mortality was also observed in those aged under 25 years. Mortality risk was lower for both men and women of non-English speaking backgrounds, while Aboriginal status was associated with lower drug-related mortality and suicide (Kariminia et al. 2007c).

INDICATOR: Number of deaths post-release.

In Australia there is very limited information available regarding mortality among recently released prisoners. While coroners' reports often mention a recent release from prison where it is seen as relevant to the circumstances surrounding death, there is a lack of consistency in both police and coronial reports in this area rendering coronial data inadequate for monitoring post-release mortality. Current national data on the mortality of ex-prisoners are therefore unavailable at this time, and require data development.

5

Health behaviours

5 Health behaviours

This chapter relates to the health behaviours of prison entrants, such as smoking, alcohol, drug use and unprotected sex, as well as the use and non-use of health services prior to prison entry. It is organised based on the prevalence of risky health behaviour. Data for this section comes from the National Prisoner Health Census, with additional data for injecting drug users coming from the NPEBBV&RBS 2007 (Butler & Papanastasiou 2008). Comparisons with the general population and with prison populations elsewhere are made in Chapter 7.

5.1 Tobacco smoking

Smoking is a major source of illness and death in Australia, and contributes to more deaths and drug-related hospitalisations than alcohol and illicit drug use combined. It is a major risk factor for coronary heart disease, stroke, cancer and a variety of other diseases and conditions (AIHW 2006). Passive smoking is a public health issue as it causes coronary heart disease and lung cancer in non-smoking adults and induces and exacerbates a range of mild to severe respiratory effects (Scollo & Winstanley 2008). Given the adverse effects of smoking on smokers and non-smokers, smoking is now banned in most indoor public spaces in the community.

Smoking prevalence is higher among prisoners than in the non-incarcerated adult population. The prisoner population is more likely to be from poorer backgrounds, have a history of mental illness and substance abuse, and be of Aboriginal or Torres Strait Islander background. All of these groups have much higher smoking prevalence than the general population (Scollo & Winstanley 2008).

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

Prison entrants were asked whether they had ever smoked a full cigarette and, if so, the age at which they smoked their first cigarette and their current smoking status.

Of the 91% of prison entrants who said they had ever smoked a full cigarette, the mean age they first smoked was 13.9 years and the oldest age was 42 years. Around 9% of entrants reported being aged less than 10 years when they smoked their first full cigarette. This was

similar to the results of the 2009 NSW Inmate Health Survey which found that of those in custody, the average age that prisoners first started smoking was 14.0 years (13.9 years for males and 14.6 years for females) (Indig et al. 2010).

INDICATOR: Proportion of prison entrants who report that they currently smoke tobacco.

NUMERATOR: Number of prison entrants who report that they currently smoke tobacco.

DENOMINATOR: Total number of prison entrants during the census week.

There was a high prevalence of smoking amongst prison entrants, with 81% being current smokers and almost three-quarters (74%) being daily smokers (Table 5.1). In comparison, 9% had never smoked and 6% said they were ex-smokers. These findings are similar to those reported by the Office of the Inspector of Custodial Services WA (2008) which found that in Western Australia, around 80 per cent of prisoners smoked compared with around 15 per cent of people in the community (OICS 2008). Similarly the 2009 NSW Inmate Health Survey found that 75% of male and 80% of female prisoners were current smokers (Indig et al. 2010). A higher proportion of male (75%) than female (69%) entrants in the Census were daily smokers (Table 5.1).

Table 5.1: Prison entrants, smoking status by sex, age group and Indigenous status, 2009

	Daily smoker		Weekly smoker		Irregular smoker		Ex-smoker		Never smoked		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sex												
Male	362	74	21	4	11	2	31	6	40	8	486	100
Female	41	67	2	3	6	10	1	2	7	11	61	100
Age group												
18–24	136	76	11	6	7	4	11	6	9	5	180	100
25–34	142	76	6	3	4	2	7	4	17	9	188	100
35–44	94	75	4	3	5	4	5	4	13	10	126	100
45+	32	59	2	4	1	2	9	17	8	15	54	100
Indigenous status												
Indigenous	102	72	10	7	4	3	6	4	11	8	141	100
Non-Indigenous	296	74	13	3	13	3	26	6	36	9	401	100
Total	**405**	**74**	**23**	**4**	**17**	**3**	**32**	**6**	**47**	**9**	**549**	**100**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 2 entrants whose sex was unknown, 1 entrant whose age was unknown, 7 entrants whose Indigenous status was unknown and 25 whose smoking status was unknown or invalid.

Source: National Prisoner Health Census 2009.

Three-quarters (75%) of prison entrants aged 18–44 years were current daily smokers, compared with 59% of entrants aged 45 years or older. In contrast, prison entrants aged 45 years or older were almost three times as likely as those in the younger age groups to be ex-smokers (17% compared with 4–6%).

There was little difference between Indigenous and non-Indigenous entrants in their smoking status, with around 80% of each being current smokers. This finding is inconsistent with the ABS 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) which found that Indigenous people aged 18 years and over were more than twice as likely as non-Indigenous people to be current daily smokers. This may be related to the higher overall level of smoking in prisons compared with the general population (see Chapter 7).

5.2 Risky alcohol use

Risky alcohol consumption is a well-known contributing factor to poor health. Risky alcohol use can cause serious health problems including brain damage, cirrhosis and liver failure, liver and breast cancer, malnutrition and stroke (Australian Drug Foundation 2009).

In Australia alcohol use has been associated with violent crime (AGD 2004). The link between alcohol and criminal behaviour is well documented (Kraemer et al. 2009).

The prisoner population is characterised by very high rates of risky drinking (AIHW 2006).

INDICATOR: The proportion of prison entrants who report a risk of alcohol-related harm in the past 12 months (self-report).

NUMERATOR: Number of prison entrants who received a consumption score of at least 6 on the AUDIT-C, indicating a risk of alcohol-related harm.

DENOMINATOR: Total number of prison entrants during the census week.

The proportion of prison entrants 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. The AUDIT is a reliable and simple screening tool which is sensitive to the early detection of risky and high-risk (or hazardous and harmful) drinking. The AUDIT-C contains the three consumption questions from the AUDIT, with each question scoring 0–4. Scores for the three questions are summed, with a maximum possible score of 12. A score of 6 or more may indicate a risk of alcohol-related harm. It may also indicate potential harm for those groups more susceptible to the effects of alcohol, such as young people, women, the elderly, people with mental health problems and people on medication. Further inquiry may reveal the necessity for harm reduction advice.

Data from the Census show that just over half (283 or 52%) of prison entrants were at risk of alcohol-related harm (Table 5.2). A higher proportion of males (52%) than females (44%) reported consuming alcohol at risky levels; however, for 30% of females the score was invalid. Scores were considered invalid when not all questions were answered or where responses were contradictory (e.g. have not had any alcohol in the last 12 months, but drink alcohol 4 times per week).

There was no definite trend in risk of alcohol-related harm by the age of prison entrants. The entrants with the highest proportion at risk were aged 18–24 years (57%). Around 46–47% of entrants aged 25–34 years and 45 years or older were considered to be consuming alcohol at levels which left them at risk of alcohol-related harm (Table 5.2).

Consumption of alcohol at levels considered to place a person at risk of alcohol-related harm was found in almost two-thirds of Indigenous entrants (65%), compared with less than half of non-Indigenous entrants (47%) (Table 5.2). However, there was a high proportion (18%) of invalid scores for non-Indigenous entrants.

Table 5.2: Prison entrants, risk of alcohol-related harm, by sex, age group and Indigenous status, 2009

	At risk of alcohol-related harm		Not at risk of alcohol-related harm		Invalid		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Sex								
Male	254	52	170	35	62	13	486	100
Female	27	44	16	26	18	30	61	100
Age group								
18–24	102	57	62	34	16	9	180	100
25–34	88	47	70	37	30	16	188	100
35–44	67	53	37	29	22	17	126	100
45+	25	46	17	31	12	22	54	100
Indigenous status								
Indigenous	91	65	43	30	7	5	141	100
Non-Indigenous	188	47	140	35	73	18	401	100
Total	**283**	**52**	**186**	**34**	**80**	**15**	**549**	**100**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Risk of alcohol-related harm is indicated by a score of 6 or more on the three consumption questions from the AUDIT.
3. Totals include 2 entrants whose sex was unknown, 1 entrant whose age was unknown, and 7 entrants whose Indigenous status was unknown

Source: National Prisoner Health Census 2009.

5.3 Illicit drug use

Illicit drug use may affect users' health, and injecting drugs may result in bloodborne viruses and mental health problems due to the effects of the drugs, injecting practices and lifestyle (DOHA 2007).

In Australia illicit drug use has been associated with both violent and property crime. In 2004, one in ten sentenced prisoners was incarcerated for drug-related offences (AGD 2004). The 2003 Drug Use Careers of Offenders study determined that two-thirds of female prisoners reported using an illicit drug in the six months prior to their arrest and that 55 per cent were classified as dependent on drugs (AIHW 2005).

Most prisoners have used illicit drugs at some time in their life, with two-thirds regularly using drugs at the time of incarceration. Drug use poses risk in itself through impure or overly-pure content, as well as through shared use of injecting equipment and the associated transmission of bloodborne viruses (AIHW 2006).

INDICATOR: Proportion of prison entrants who report that they engaged in illicit drug use in the last 12 months.

NUMERATOR: Number of prison entrants who report that they engaged in illicit drug use in the last 12 months.

DENOMINATOR: Total number of prison entrants during the census week.

Prison entrants were asked about their non-medical drug use in the last 12 months. Just under three-quarters (71%) of prison entrants had used illicit drugs in the last 12 months, with illicit drug use being slightly more common among female (75%) than male (71%) prison entrants (Table 5.3).

As in the general population, recent illicit drug use was found most frequently in the younger age groups of prison entrants. The highest proportion of illicit drug use in the last 12 months was by prison entrants aged 25–34 years (77%) and the lowest by entrants aged 45 years or older (43%) (Table 5.3).

Table 5.3: Prison entrants, illicit drug use in last 12 months by sex, age group and Indigenous status, 2009

	Used illicit drugs in last 12 months		No illicit drug use in last 12 months		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Sex						
Male	346	71	135	28	486	100
Female	46	75	14	23	61	100
Age group						
18–24	134	74	45	25	180	100
25–34	145	77	41	22	188	100
35–44	89	71	37	29	126	100
45+	23	43	28	52	54	100
Indigenous status						
Indigenous	102	72	39	28	141	100
Non-Indigenous	286	71	109	27	401	100
Total	**392**	**71**	**151**	**28**	**549**	**100**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Totals include 2 entrants whose sex was unknown, 1 entrant whose age was unknown, 7 entrants whose Indigenous status was unknown and 6 whose recent drug use was unknown.

Source: National Prisoner Health Census 2009.

The proportion of Indigenous and non-Indigenous prison entrants who had used illicit drugs in the last 12 months was similar (72% and 71% respectively) (Table 5.3).

Using more than one type of illicit drug was common among prison entrants. Almost three-fifths (59%) of those who had used illicit drugs during the last 12 months had used more than one type of drug. At least 6 different types of drugs had been used by 12% of prison entrants.

Of the 392 prison entrants who had used drugs in the last 12 months, the median number of drugs used by each entrant was two, with the number of drugs used per person ranging from 1 to 12.

The most frequently used substances for non-medical purposes in the last 12 months by prison entrants were cannabis/marijuana (284/549 or 52% of all prison entrants), followed by meth/amphetamine (30%), heroin (19%), analgesics/pain killers (18%) and ecstasy (18%) (Table 5.4).

Table 5.4: Number and proportion of prison entrants who used substances for non-medical purposes in the last 12 months, 2009

Substance used	Number	Per cent
Cannabis/marijuana	284	52
Meth/amphetamine	164	30
Heroin	106	19
Analgesics/pain killers	101	18
Ecstasy	97	18
Tranquillisers/sleeping pills	74	13
Methadone/buprenorphine/Suboxone	67	12
Other analgesics	56	10
Cocaine	54	10
Hallucinogens	26	5
Barbituates	19	3
GHB	12	2
Ketamine	8	1
Inhalants—petrol/volatile solvents	6	1
Steroids	4	1
Inhalants—anaesthetic, nitrates, butyle, other	1	0
Total number of prison entrants	**549**	**100%**

Notes

1. Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
2. Percentages are of all prison entrants. Percentages do not add to 100% as prison entrants may have used more than one type of drug.

Source: National Prisoner Health Census 2009.

There were differences in the illicit drugs used by male and female prison entrants during the 12 months prior to incarceration (Table 5.5). Cannabis/marijuana was the most common drug, used by over half of both male (51%) and female (56%) prison entrants. For females, the next most common drug was heroin, which was used by 38% of females compared with 17% of

males. Analgesics/pain killers (33% and 17%) and tranquillisers/sleeping pills (28% and 12%) were also used more commonly among female than male entrants. Ecstasy was the only drug used by proportionally more males (19%) than females (10%). These results may be partly attributable to females representing a small minority of prison entrants and to their being a highly disadvantaged group.

Table 5.5: Prison entrants, types of drugs used by sex, 2009

	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Cannabis/marijuana	250	51	34	56	284	52
Meth/amphetamine	145	30	19	31	164	30
Heroin	83	17	23	38	106	19
Analgesics/pain killers	81	17	20	33	101	18
Ecstasy	91	19	6	10	97	18
Tranquillisers/sleeping pills	57	12	17	28	74	13
Other drugs	215	44	38	62	253	46

Notes

1. Percentages do not add to 100% as prison entrants may have used more than one type of drug.
2. Other drugs includes other analgesics, methadone/buprenorphine/Suboxone, barbiturates, ketamine, inhalants—petrol/volatile solvents, inhalants—anaesthetics/nitrates/other inhalants, steroids, cocaine, GHB, hallucinogens and other drugs not specified.
3. Table includes New South Wales, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

The types of illicit drugs used by prison entrants also differed by the age of the entrant (Table 5.6). In each age group, cannabis/marijuana was the most commonly used drug, followed by meth/amphetamines. Cannabis/marijuana had been used by 60% of entrants aged 18–24 years, but only by 30% of entrants aged 45 years or older. Meth/amphetamines were used by around 35% of entrants aged 25–34 years and by 19% of those aged at least 45 years. For entrants aged 25 years or older, heroin was the next most commonly used drug, followed by analgesics/pain killers. For the youngest entrants, however, ecstasy was used by almost one-quarter (24%) and was more common than heroin (12%) or pain killers (15%).

The illicit drugs of choice differed for Indigenous and non-Indigenous prison entrants (Table 5.7). Cannabis/marijuana was the only drug used by a greater proportion of Indigenous (59%) than non-Indigenous (50%) entrants. The differences were notable for synthetic drugs such as meth/amphetamines (33% and 21% respectively) and ecstasy (20% compared with 9%).

Injecting drugs

Injecting drug use is a risk factor for viral hepatitis in inmates, with the rates of injecting drug use among inmates being found to be the most important cause of the marked variability of seroprevalence rates for exposure to hepatitis C virus. Needle exchange programs and methadone maintenance programs are strategies that have been identified to reduce the transmission of hepatitis B and C to other prisoners (Hunt & Saab 2009).

Table 5.6: Prison entrants, types of drugs used by age group, 2009

	18–24		25–34		35–44		45+		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Cannabis/marijuana	108	60	102	54	57	45	16	30	284	52
Meth/amphetamine	51	28	65	35	38	30	10	19	164	30
Heroin	21	12	51	27	25	20	9	17	106	19
Analgesics/pain killers	27	15	41	22	24	19	9	17	101	18
Ecstasy	43	24	32	17	17	13	5	9	97	18
Tranquillisers/ sleeping pills	14	8	39	21	15	12	6	11	74	13
Other drugs	79	44	104	55	58	46	12	22	253	46

Notes

1. Percentages do not add to 100% as prison entrants may have used more than one type of drug.
2. Total includes 1 prison entrant with unknown age.
3. Other drugs includes other analgesics, methadone/buprenorphine/Suboxone, barbiturates, ketamine, inhalants—petrol/volatile solvents, inhalants—anaesthetics/nitrates/other inhalants, steroids, cocaine, GHB, hallucinogens and other drugs not specified.
4. Table includes New South Wales, Queensland, Western Australia, South Australia and the Australian Capital Territory

Source: National Prisoner Health Census 2009.

Table 5.7: Prison entrants illicit drug use, by drug type and Indigenous status, 2009

	Indigenous		Non-Indigenous		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Cannabis/marijuana	83	59	199	50	284	52
Meth/amphetamine	30	21	133	33	164	30
Heroin	21	15	84	21	106	19
Analgesics/pain killers	18	13	81	20	101	18
Ecstasy	13	9	83	21	97	18
Tranquillisers/sleeping pills	12	9	62	15	74	13
Other drugs	53	38	197	49	253	46

Notes

1. Percentages do not add to 100% as prison entrants may have used more than one type of drug.
2. Total includes 7 prison entrants with unknown Indigenous status.
3. Other drugs includes other analgesics, methadone/buprenorphine/Suboxone, barbiturates, ketamine, inhalants—petrol/volatile solvents, inhalants—anaesthetics/nitrates/other inhalants, steroids, cocaine, GHB, hallucinogens and other drugs not specified.
4. Table includes New South Wales, Queensland, Western Australia, South Australia and the Australian Capital Territory

Source: National Prisoner Health Census 2009.

Strategies for reducing risk in relation to injecting drug use, which have been shown to be effective without leading to negative consequences for the health of prison staff or prisoners, include needle and syringe programs and opioid substitution therapies (Jurgens et al. 2009).

INDICATOR: Proportion of prison entrants who report that they have injected drugs.

NUMERATOR: Number of prison entrants who report that they have injected drugs.

DENOMINATOR: Total number of prison entrants.

INDICATOR: Proportion of prison entrants who report that they have shared injecting equipment.

NUMERATOR: Number of prison entrants who report that they have shared injecting equipment.

DENOMINATOR: Total number of prison entrants.

Data on prison entrants who have injected drugs and shared injecting equipment were obtained from the 2007 NPEBBV&RBS (Butler & Papanastasiou 2008).

Overall, 55% of the 740 prison entrants had ever injected drugs. Female prison entrants were more likely than males to have injected drugs—almost three-quarters (73%) of females had injected drugs compared with just over half (53%) of male entrants (Table 5.8).

Injecting drug use was more prevalent in prisoners aged over 25 years (61%) than under 25 years (37%), and was more common among Indigenous (61%) than non-Indigenous (53%) prison entrants (Table 5.8).

Table 5.8: Prison entrants injecting drug status, by sex, age group and Indigenous status, 2007

	Injecting drug user		Non-injecting drug user		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Sex						
Male	354	53	315	47	669	100
Female	52	73	19	27	71	100
Age group						
<25	70	37	120	63	190	100
25+	335	61	214	39	549	100
Indigenous status						
Indigenous	78	61	50	39	128	100
Non-Indigenous	320	53	283	47	603	100
Total	**406**[(a)]	**55**	**334**[(b)]	**45**	**740**	**100**

(a) Total includes 8 prison entrants whose Indigenous status was unknown and 1 prison entrant whose age was unknown.
(b) Total includes 1 prison entrant whose Indigenous status was unknown.
Source: NPEBBV&RBS 2007 Table 9.

Of the 248 prison entrants who had injected drugs in the previous month, one-fifth (46 or 20%) had re-used someone else's used needle or syringe, and 38 (15%) had shared injecting equipment with one or more people. The majority of those who shared equipment did so with one other person (Table 5.9).

The Health of Prisoner Evaluation project sampled 146 prisoners in Western Australia and found that drug use in prison was common, with 45% or 66 prisoners using drugs in prison, and over half (54%) of prisoners injecting drugs. About 40% of prisoners reported that the last time they injected drugs was in the community and 32% of prisoners reported that it was in prison (Kraemer et al. 2009). The 2009 NSW Inmate Health Survey found that 43% of inmates had ever used illicit drugs in prison, and 17% had ever injected illicit drugs in prison.

Table 5.9: Prison entrants who reported that they have shared injecting equipment in the last month, by injecting behaviour, 2007

Times shared injecting equipment	Number	Per cent
Re-used someone else's used needle or syringe		
None	198	80
Once	10	4
Twice	10	4
3–5 times	7	3
>5 times	19	8
Total	**248**[(a)]	**100**
Number of people needle & syringe was re-used after		
None	198	78
One	31	12
Two	3	1
3–5	4	2
>5	—	—
Total	**248**[(b)]	

(a) Total includes 4 prison entrants who did not know if they re-used someone else's needle or syringe.

(b) Total included 19 prison entrants who did not know the number of people who had previously used the needle or syringe.

Note: Total may not add up to 100% due to rounding.

Source: NPEBBV&RBS 2007 Table 10.

5.4 Unprotected sex

Unprotected sex can involve risks such as unintended pregnancies, the transmission of STIs and hepatitis B.

Sexual activity in prisons is risky because it is usually unprotected due to a lack of available condoms and commonly occurs between same sex prisoners with high rates of IDU, hepatitis B virus and HCV (Hunt & Saab 2009).

INDICATOR: Proportion of prison entrants who report having had unprotected sex with a new or casual partner in the last month.

NUMERATOR: Number of prison entrants who report having had unprotected sex with a new or casual partner in the last month.

DENOMINATOR: Total number of prison entrants.

The 2007 NPEBBV&RBS found that of the 150 prison entrants that had had sex with a casual partner(s) in the month prior to entry to prison, over half (85 or 57%) did not use a condom. Of these, a higher proportion of IDUs than non-IDUs did not use a condom (69% compared with 35% respectively). Further, just over one-fifth (33 or 22%) sometimes used a condom. A higher proportion of non-IDUs than IDUs sometimes used a condom (33% compared with 16% respectively) (Table 5.10).

Table 5.10: Condom use with casual sex partner(s) in the last month[a,b], by IDU, 2007

Condom use	IDU		Non-IDU	
	Number	Per cent	Number	Per cent
No	66	69	19	35
Sometimes	15	16	18	33
Always	15	16	17	31

(a) Percentages excludes participants reporting no regular, new or casual sex partner respectively in the previous month.

(b) The number of prison entrants surveyed included 406 IDUs and 334 non-IDUs.

Source: NPEBBV&RBS 2007 Table 13.

5.5 Health service use

Use of health services

Many factors influence the amount of health services used for a particular disease or condition. These include disease incidence and prevalence, disease severity, treatment patterns, health service availability and accessibility, as well as cultural and personal choices about seeking and accepting medical assistance. The use of health services will vary as these factors change, both over time and across different population groups (AIHW 2008c).

Access to health services is central to supporting people's health. Patterns of health service use reflect a combination of need for, demand for and access to care. Prisoners are entitled to the same access and standard of health care as the general population.

Prisoners typically make little use of health services in the community, but extensive use of available services within prison (Condon et al. 2007a). A qualitative study of prisoners'

experiences of the prison health clinic found that the majority considered prison a time to 'catch up on health care' and use the services offered (Condon et al. 2007b).

Prisoner use of health services may be dependent upon whether a service is provided on site or whether the prisoner is required to be transported to it. Some services are not generally provided in the community but are provided in the prison, such as the mental health nurse (Kraemer et al. 2009).

Prisoners are entitled to have access to:

- evidence-based health services provided by a competent, registered health professional who will provide a standard of health services comparable to that of the general community
- 24-hour health services either on an on-call or stand-by basis
- specialist medical practitioners as well as psychiatric, dental, optical and radiological diagnostic services.

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

NUMERATOR: Number of prison entrants by professional health contact sought in the community.

DENOMINATOR: Total number of prison entrants during the census week.

INDICATOR: Proportion of prison entrants who, in the last 12 months, consulted a health professional for their own health in prison.

NUMERATOR: Number of prison entrants by professional health contact sought in prison.

DENOMINATOR: Total number of prison entrants during the census week.

The Census collected information from all prison entrants on their health-seeking behaviours both in the community and in prison, in the 12 months prior to their current incarceration—health professional consultations, non-use of health-care professionals and reasons for not seeking health care when needed.

In the last 12 months, 72% of prison entrants consulted a health professional for their own health in the community. Of these, almost two-thirds of prison entrants (350 or 64%) had seen a doctor or GP in the community, almost one-quarter (133 or 24%) had seen a nurse and one-fifth (115 or 21%) had seen an alcohol and drug worker (Table 5.11).

Consultations with a health professional had occurred in prison in the last 12 months for 29% of entrants—almost one-quarter (24%) had seen a nurse and over one-fifth (22%) had seen a doctor or GP in prison during the previous 12 months (Table 5.11). It should be noted that the proportions for prison consultations may be expected to be lower than for community consultations, as not all prison entrants will have been in prison during the previous 12 months.

Table 5.11: Number and proportion of prison entrants who reported that they had consulted a health professional in the last 12 months, in the community and in prison, by health professional, 2009

Health professional	Community		Prison	
	Number	Per cent	Number	Per cent
Doctor/GP	350	64	121	22
Nurse	133	24	130	24
Alcohol and drug worker	115	21	45	8
Dentist	94	17	46	8
Psychologist	94	17	36	7
Social worker/welfare officer	79	14	52	9
Psychiatrist	63	11	29	5
Aboriginal health worker	23	4	11	2

Notes

1. Percentages do not add to 100% because each prison entrant may have seen more than one health professional.
2. Percentages are calculated from the total number of prison entrants (549).
3. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

In general, a greater proportion of female than male entrants had seen health professionals in the community during the 12 months prior to the current incarceration (Table 5.12). Females were more likely than males to have seen a GP (72% of female entrants compared with 63% of males), nurse (30% compared with 23%) or a dentist (25% compared with 16%).

Consultations with health professionals in prison during the previous 12 months showed a similar pattern, with female entrants being more likely than male entrants to have attended consultations. A difference was seen for consultations with mental health professionals. In the community, similar proportions of males and females saw a psychologist or psychiatrist during the previous 12 months. However, in prison, more than twice as many females (15%) as males (6%) saw a psychologist, or a psychiatrist (11% compared with 5%).

There were few patterns by age other than a slightly higher proportion of entrants aged at least 35 years (70%) having consulted with a GP in the community, compared with younger entrants (61%). Visits with an alcohol and other drug worker in the community were fewer among entrants aged at least 45 years (13%), compared with younger entrants (22%). Visits in prison to each of these types of professionals had no apparent relationship to the age of the prison entrant.

Overall, 62% of Indigenous entrants had consulted with a health professional in the community in the previous 12 months, compared with over three-quarters (76%) of non-Indigenous entrants. Aboriginal health workers were the only type of health professional seen in the community by a greater proportion of Indigenous (16%) than non-Indigenous (0%) prison entrants during the previous 12 months (Table 5.13). More non-Indigenous than Indigenous entrants saw each of the other types of health professionals, including 69% of non-Indigenous entrants having consulted with a GP, compared with less than half (47%) of Indigenous entrants.

Table 5.12: Number and proportion of prison entrants who reported that they had consulted a health professional in the last 12 months, in the community and in prison, by health professional and sex, 2009

Health professional	Community				Prison			
	Male		Female		Male		Female	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Doctor/GP	304	63	44	72	103	21	18	30
Nurse	114	23	18	30	109	22	21	34
Alcohol and drug worker	100	21	15	25	38	8	7	11
Dentist	78	16	15	25	35	7	11	18
Psychologist	84	17	10	16	27	6	9	15
Social worker/welfare officer	68	14	11	18	43	9	9	15
Psychiatrist	55	11	8	13	22	5	7	11
Aboriginal health worker	21	4	2	3	9	2	2	3

Notes

1. Percentages do not add to 100% because each prison entrant may have seen more than one health professional.
2. Percentages are calculated from the total number of prison entrants (549).
3. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

Table 5.13: Number and proportion of prison entrants who reported that they had consulted a health professional in the last 12 months, in the community and in prison, by health professional and Indigenous status, 2009

Health professional	Community				Prison			
	Indigenous		Non-Indigenous		Indigenous		Non-Indigenous	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Doctor/GP	66	47	278	69	38	27	83	21
Nurse	29	21	104	26	45	32	85	21
Alcohol and drug worker	21	15	93	23	14	10	31	8
Dentist	18	13	75	19	15	11	31	8
Psychologist	15	11	77	19	9	6	27	7
Social worker/welfare officer	16	11	62	15	14	10	38	9
Psychiatrist	11	8	51	13	6	4	23	6
Aboriginal health worker	23	16	0	0	11	8	0	0

Notes

1. Percentages do not add to 100% because each prison entrant may have seen more than one health professional.
2. Percentages are calculated from the total number of prison entrants (549).
3. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

For consultations with health professionals in prison in the previous 12 months, the pattern is reversed, with a greater proportion of Indigenous (38%) than non-Indigenous entrants reporting having made such visits (26%). For each type of health professional, the proportion of Indigenous entrants who had made consultations in prison was higher than or similar to the proportion of non-Indigenous entrants. This may reflect incarceration history, as Indigenous entrants were more likely than non-Indigenous entrants to have previously been in prison (see Figure 2.1).

Non-use of health services when needed and reasons

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

NUMERATOR: Number of prison entrants by type of health professional contact required in the community, yet not sought.

DENOMINATOR: Total number of prison entrants during the census week.

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

NUMERATOR: Number of prison entrants by type of health professional contact required in prison, yet not sought.

DENOMINATOR: Total number of prison entrants during the census week.

Over 40% of prison entrants reported that they needed to consult a health professional in the community during the previous 12 months, but did not. Almost one-quarter (24%) needed to see a doctor or GP but did not attend, and 17% needed to see a dentist but did not (Table 5.14).

In contrast, only 5% of prison entrants indicated that during the last 12 months they had needed to consult a health professional in prison but had not done so. The health professional most often not seen in prison was a dentist (3% of entrants). Many of the most common reasons for not attending required consultations (Table 5.16), such as cost and too busy, may not apply in prison, suggesting that for some prisoners, access to health care is improved in prison compared with in the community.

A greater proportion of female than male entrants reported that they needed to see each type of health professional but did not (Table 5.15). Female entrants (21%) were twice as likely as male entrants (11%) to report not seeing an alcohol and drug worker, or a psychologist (16% compared with 8%).

There were no patterns by age for not seeing a health professional in the community when required, and there was no difference between Indigenous and non-Indigenous entrants.

Table 5.14: Prison entrants who reported that in the last 12 months they needed to see a health professional in the community and in prison but did not, by health professional, 2009

Health professional	Community		Prison	
	Number	Per cent	Number	Per cent
Doctor/GP	134	24	10	2
Nurse	16	3	4	1
Alcohol and drug worker	65	12	3	1
Dentist	92	17	19	3
Psychologist	47	9	3	1
Social worker/welfare officer	37	7	2	0
Psychiatrist	39	7	3	1
Aboriginal health worker	13	2	–	–

Notes

1. Percentages do not add to 100% because each prison entrant may have needed to see more than one health professional.
2. Percentages are calculated from the total number of prison entrants (549).
3. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

Table 5.15: Prison entrants who reported that in the last 12 months they needed to see a health professional in the community but did not, by health professional and sex, 2009

Health professional	Male		Female	
	Number	Per cent	Number	Per cent
Doctor/GP	110	23	24	39
Nurse	11	2	5	8
Alcohol and drug worker	52	11	13	21
Dentist	75	15	17	28
Psychologist	37	8	10	16
Social worker/welfare officer	29	6	8	13
Psychiatrist	32	7	7	11
Aboriginal health worker	11	2	2	3

Notes

1. Percentages do not add to 100% because each prison entrant may have needed to see more than one health professional.
2. Percentages are calculated from the total number of prison entrants (549).
3. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

INDICATOR: Proportion of prison entrants by reason for not seeking health contact in the last 12 months when required.

NUMERATOR: Number of prison entrants by reason for not seeking health contact when required.

DENOMINATOR: Total number of prison entrants during the Census week.

Overall, almost half (45%) of prison entrants reported that there was a time during the previous 12 months when they had needed to consult with a health professional, either in the community (42%) or in prison (5%), but did not. Prison entrants were asked why they had not attended and given a list of possible reasons to choose from; they could also nominate another reason. Over 40% of those who did not attend a consultation did not provide a reason why. Of those who did answer the question, the most common reasons given for not attending a required medical contact were: too busy (10% of all entrants), cost (9%) and decided not to seek care (8%) (Table 5.16).

Table 5.16: Number and proportion of prison entrants who reported that in the last 12 months they had not consulted a health professional in the community or prison when they needed to, by reason, 2009

Reason	Number	Per cent
Too busy	70	10
Cost	66	9
Other reason	61	9
Decided not to seek care	57	8
Waiting time too long or not available at time required	41	6
Transport/distance	30	4
Dislikes (service/professional, afraid, embarrassed)	31	4
Felt it would not help	24	3
Discrimination/service not culturally appropriate/language problems	15	2
Not available in area or prison	11	2
Unknown (no reason provided)	302	43
Total reasons for not attending	**708**	**100**

Notes

1. Of the prison entrants who reported that in the last 12 months they had not consulted a health professional when they needed to, 302 did not give a reason for not attending.
2. Percentages add to 100% of reasons for not attending.
3. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

6

Prison health services

6 Prison health services

This chapter covers prison health services, focusing on the effectiveness and responsiveness of the services, the continuity of care and the accessibility of prison health services. Data for this chapter comes from the National Prisoner Health Census, and is reported for both prisons and prisoners. Information is disaggregated (where possible) by sex, age and Indigenous status.

6.1 Visits by Aboriginal community controlled health organisations

INDICATOR: Proportion of prisons that receive visits by an Aboriginal community controlled health organisation or an Aboriginal medical service at least once a month.

NUMERATOR: Number of prisons that receive visits by an Aboriginal community controlled health organisation or an Aboriginal medical service at least once a month.

DENOMINATOR: Total number of prisons.

The RCIADIC recommended that corrective services in conjunction with Aboriginal health services, and such other bodies as may be appropriate, should review and report upon the provision of health services to Aboriginal prisoners in correctional institutions, and that this review should include, amongst other things, the involvement of Aboriginal health services in the provision of general and mental health care to Aboriginal prisoners.

The Census collected information on whether prisons received visits by an Aboriginal community controlled health organisation (ACCHO) or an Aboriginal medical service (AMS) at least once a month. ACCHOs are controlled by, and accountable to, Aboriginal people in those areas in which they operate. ACCHOs aim to deliver holistic, comprehensive and culturally appropriate health care to the community that controls it (The University of Melbourne 2007). An AMS is a health service funded principally to provide services to Aboriginal and Torres Strait Islander individuals, and 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.

Of the 68 prisons for whom these data were collected, ACCHO/AMS services were provided in 17 (25%) (excluding Tasmania).

The types of health services provided by the visiting AMS/ACCHOs most commonly were an Aboriginal health worker or a medical practitioner. Other services included drug and alcohol worker, registered nurse, midwife and sexual health worker.

6.2 Referrals to prison mental health services

Prison mental health services are one of the target areas under the Council of Australian Governments (COAG) National Action Plan on Mental Health 2006–2011. Under the Action Plan jurisdictions have committed to improve services for people with mental illness in the criminal justice system, through measures such as stronger case management, more mental health workers, increased mental health beds and post-release support to people with mental illness (Council of Australian Governments 2006).

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

NUMERATOR: Number of prison entrants who, at reception, were referred to mental health services for observation and further assessment.

DENOMINATOR: Total number of prison entrants during the census week.

As a result of the reception assessment, almost one-third (31%) of prison entrants were referred to prison mental health services for observation and further assessment. A higher proportion of females (43%) than males (29%) were referred to prison mental health services (Table 6.1). This is consistent with the findings regarding mental health history and current use of medication (see Chapter 3).

The highest proportion of prison entrants referred to prison mental health services was found in those aged 25–34 years (38%), compared with 20% of entrants aged 45 years or older.

A smaller proportion of Indigenous entrants (27%) were referred to prison mental health services than non-Indigenous entrants (32%).

Table 6.1: Prison entrants, referral to prison mental health service by sex, age group and Indigenous status, 2009

	Referred to prison mental health services		Not referred		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Sex						
Male	143	29	311	64	486	100
Female	26	43	32	52	61	100
Age group						
18–24	49	27	119	66	180	100
25–34	71	38	110	59	188	100
35–44	38	30	75	60	126	100
45+	11	20	40	74	54	100
Indigenous status						
Indigenous	38	27	100	71	141	100
Non-Indigenous	129	32	240	60	401	100
Total	**169**	**31**	**345**	**63**	**549**	**100**

Notes

1. Totals include 2 entrants whose sex was unknown, 1 entrant whose age was unknown, 7 entrants whose Indigenous status was unknown and 35 for whom referral status was unknown.
2. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

6.3 Identification of suicide or self-harm risk

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

NUMERATOR: Number of prison entrants identified as currently at risk of suicide or self-harm.

DENOMINATOR: Total number of prison entrants during the census week.

Prisoners identified as being at risk of self-harm or suicide are placed under a management regime appropriate to their individual needs and designed to ensure their wellbeing, including more frequent observations.

The Census recorded whether or not each prison entrant was identified as being currently at risk of suicide or self-harm at the time of entry to prison. Prison health staff identified 37 prison entrants (7%) as being at risk of suicide or self-harm (excluding Tasmania and Northern Territory). Such identification was more common among female (16%) than male (6%) prison

entrants. Among non-Indigenous entrants, 8% were identified as being at risk, compared with 3% of Indigenous entrants. There was no observed pattern by age, which ranged from a low of 5% of entrants aged 18–24 years to a high of 9% of entrants aged 25–34 years being identified as at risk of suicide or self-harm.

6.4 Transfers from prison clinic to public hospitals

In some jurisdictions prisoners who are hospitalised or who require highly specialised health care can be managed within the prison system, as larger prisons may contain a number of inpatient beds for prisoners who require care. Alternatively, prisoners may be transferred to community facilities and secure wards in community hospitals for specialised treatment. Transfers to hospital may be planned transfers for inpatient care such as surgery, or specialist outpatient appointments. Unplanned transfers may occur in emergency situations.

INDICATOR: Number of hospital transfers for prisoners in custody during the census week.

The Census collected information on the number of hospital transfers which occurred during the census week, and whether they were planned or not planned. There were a total of 264 hospital transfers during the census week (excluding Tasmania). Almost one-quarter (24%) of these transfers were not planned, and the remaining 76% were planned (this does not include New South Wales which was unable to indicate whether their transfers were planned or not).

6.5 Immunisation

Immunisation is generally regarded as being highly effective in reducing morbidity and mortality caused by vaccine-preventable diseases. The *Australian immunisation handbook* provides clinical recommendations regarding the administration of vaccines. These recommendations were developed by the Australian Technical Advisory Group on Immunisation and endorsed by the National Health and Medical Research Council (NHMRC). The *Australian immunisation handbook* recommends vaccinations for special groups as follows (DoHA 2008b):

1. Inmates of correctional facilities should be vaccinated against influenza, hepatitis A and hepatitis B given their risk of acquiring these infections (Weinbaum et al. 2005; Crofts et al. 1997)
2. Aboriginal and Torres Strait Islander adults aged 15 years or older should have yearly influenza vaccinations; and the 23-valent pneumococcal polysaccharide vaccine is recommended for all Aboriginal and Torres Strait Islander people aged 50 years or older, and for those aged 15–49 years who have high-risk underlying conditions, such as diabetes, renal disease and excessive alcohol use. A single revaccination is recommended after five years and a second revaccination is recommended in some circumstances.

INDICATOR: Proportion of prisons that offer immunisation programs according to the current national immunisation guidelines.

NUMERATOR: Number of prisons that offer immunisation programs according to the current national immunisation guidelines.

DENOMINATOR: Total number of prisons.

The Census asked whether or not immunisation programs which meet the current national immunisation guidelines were offered to prisoners. All prisons which responded to this question offer immunisations.

6.6 Discharge planning

Discharge planning supports the continuity of health care, between the health-care setting and the community, based on the individual needs of the patient (Borzycki & Baldry 2003). As most prisoners return to the community, it is important to the overall health of the community that health needs are addressed while in prison and support is continued while in the community. Planning and managing prisoner re-entry or reintegration into the community, including continuity of health services, can benefit both the prisoner and the community.

A discharge plan provides a plan for the continuity of care from prison to the community, and therefore incorporates referrals to appropriate community-based services. A discharge summary is a summary of the care provided to the prisoner while in prison.

Where a prisoner is under medical or psychiatric treatment at the time of release, the prison health service is required to make arrangements with an appropriate agency for the continuation of such treatment after release (Standard Guidelines for Corrections in Australia 2004).

INDICATOR: Proportion of prisons that have a health-related discharge plan in place for more than 75% of prisoners at the time of their release.

NUMERATOR: Number of prisons that have a health-related discharge plan in place for more than 75% of prisoners at the time of their release.

DENOMINATOR: Total number of prisons.

The Census collected information from each prison on the estimated proportion of prisoners who have a health-related discharge plan in place at the time of their release. One quarter (25% or 17 prisons) of prisons estimated that discharge plans were in place for more than 75% of their prisoners at the time of their release (all jurisdictions except Tasmania).

The Census also collected information about the approach taken by prisons in relation to health-related discharge planning. While prisons may provide limited discharge planning, prisoners with mental illness, chronic disease, drug and alcohol problems or on medication would be more likely to have a health-related discharge plan prepared.

Prisons reported that in general, health-related discharge planning includes the following process:

- The prison health service is notified of the impending discharge and the prisoner is interviewed, usually the week prior to discharge by prison health staff.
- A discharge summary or discharge health report and letter for the prisoner's GP is prepared and either given to the prisoner or forwarded to the prisoner's GP, community clinic or health centre. The discharge summary contains information on the prisoner's medical history including current problems, allergies, scheduled appointments, any investigations (i.e. blood tests, current medications, vaccination record) and contact details for further information on the prisoner.
- The prison clinic will coordinate referrals and make appointments that are required for specialist consults or hospital appointments.
- Prisoners with drug and alcohol issues may be referred to addiction services, and those with mental health disorders may be referred to the community mental health clinics/ agencies or community forensic unit.
- On discharge prisoners may be given up to two week's supply of medication to ensure adequate supplies until the ex-prisoner is reviewed by their GP.
- Prisoners with chronic diseases may be provided with chronic disease management education and care plans.

6.7 Use of prison clinic

INDICATOR: Proportion of prisoners in custody who used the prison clinic.

NUMERATOR: Number of prisoners in custody who used the prison clinic.

DENOMINATOR: Total number of prisoners in custody.

The Census collected information on prisoners' use of prison clinics during the census week. For each prisoner encounter a one-page questionnaire was completed by prison clinic staff. Data collected included demographic information, details of who initiated the visit, the problem managed and who the prisoner was seen by.

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

Data on prisoners in custody who used the prison clinic were collected by all states and territories except the Northern Territory, although in New South Wales the available data on the problem managed was not of a sufficient quality to be used and Tasmania provided only the number of clinic visits.

New South Wales provided data directly from their database, which showed the number of clinic appointments. Unfortunately the data did not meet the Census categories and there was insufficient detail to provide meaningful results for this report, thus it has been excluded from the rest of the prison clinic analysis.

The following tables, which describe those prisoners who visited the clinic, focus on those jurisdictions from which these details were available (Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory).

During the census week 6,476 prisoners (25% of the 26,269 prisoners in custody on 30 June 2009 in all jurisdictions except the Northern Territory and Tasmania) used the prison clinic. A higher proportion of female (34%) than male prisoners (21%) used the clinic (Table 6.2).

Prisoners aged 18–44 years used the prison clinic at similar rates with around 21–23% of prisoners in these ages using the clinic during the census week. The proportions of Indigenous and non-Indigenous prisoners who visited the clinic were the same (22% for both Indigenous and non-Indigenous) (Table 6.2).

Table 6.2: Prisoners in custody visiting the prison clinic, by sex, age group and Indigenous status 2009

	Number of prisoners who used the prison clinic	Number of prisoners in custody	Proportion of prisoners who used the prison clinic (%)
Sex			
Male	3,197	14,928	21
Female	382	1,130	34
Age group			
18–24	606	3,097	20
25–34	1,291	5,872	22
35–44	922	4,325	21
45+	756	3,281	23
Indigenous status			
Indigenous	891	4,054	22
Non-Indigenous	2,615	11,842	22
Total	**3,707**	**16,005**	**23**

Notes

1. Total includes 128 prisoners whose sex was unknown, 132 prisoners whose age was unknown and 201 prisoners whose Indigenous status was unknown.
2. Table includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009 and ABS 2009b.

During the census week, prisoners made multiple visits to the clinic and had a number of problems managed (Table 6.3). The 3,707 prisoners made an average of almost 2 visits each to their clinic and had on average 1 or 2 problems managed in each visit. The highest number of problems managed in one visit was 9. Females made more visits to their clinics, at an average of 2.7 visits per prisoner, compared with 1.8 visits per male prisoner during the census week.

Most prisoners (85%) using the clinic visited once or twice during the census week, with 92% visiting 1 to 3 times (Table 6.4). A small proportion of prisoners (5%) made greater use of the prison clinic, visiting 5 or more times. The highest number of visits by one prisoner during the census week was 37.

Table 6.3: Clinic visits by sex, 2009

	Male	Female	Total
Number of prisoners who used the prison clinic	3,197	382	3,707
Number of clinic visits	5,714	1,013	6,868
Number of problems managed	7,765	1,460	9,406

Notes

1. Total includes 128 prisoners whose sex was unknown. These prisoners made 141 visits and had 181 problems managed.
2. Table includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

Table 6.4: Prisoners using the prison clinic during the Census week, by number of visits, 2009

Number of visits per prisoner	Number of prisoners	Per cent	Cumulative per cent
1	2502	67	67
2	667	18	85
3	255	7	92
4	88	2	95
5+	195	5	100
Total	**3,707**	**100**	**100**

Note: Includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

Initiator of clinic visits

INDICATOR: Proportion of clinic visits initiated by prisoner.

NUMERATOR: Number of prisoners who initiated clinic visits.

DENOMINATOR: Total number of clinic visits.

Similar to general practice in the community, prisoners may initiate their use of the prison clinic or prison clinic staff may initiate the visit. Prisoners initiate clinic visits for many reasons including lack of access to informal health care, such as pharmacies, to relieve boredom, to obtain medication for anxiety or sleep disturbances related to imprisonment and for administrative purposes (Feron et al. 2005).

Prison clinic visits were most often initiated by staff (55%) rather than by prisoners (41%). While this was the case for visits by both male and female prisoners, visits by female prisoners were initiated by prisoners only 20% of the time, compared with 45% for visits by male

prisoners (Table 6.5). Female prisoners visited the prison clinic more often, and usually at the initiation of staff rather than the prisoners themselves.

Older prisoners were more likely than younger prisoners to initiate prison clinic visits, with 48% of visits by prisoners aged 45 years or older being initiated by the prisoner, compared with 37% of visits by prisoners aged 18–34 years. For Indigenous prisoners, 59% of clinic visits were initiated by staff, compared with 54% for non-Indigenous prisoners.

Table 6.5: Clinic visits, initiated by staff or prisoners, by sex, age group and Indigenous status, 2007

	Clinic visits initiated by prisoner		Clinic visits initiated by staff		Total clinic visits	
	Number	Per cent	Number	Per cent	Number	Per cent
Sex						
Male	2,583	45	2,919	51	5,714	100
Female	202	20	800	79	1,013	100
Age group						
18–24	349	37	559	59	946	100
25–34	924	37	1,471	59	2,491	100
35–44	719	44	888	54	1,649	100
45+	784	48	798	49	1,632	100
Indigenous status						
Indigenous	598	37	952	59	1,609	100
Non-Indigenous	2,144	43	2,714	54	5,012	100
Total	**2,843**	**41**	**3,789**	**55**	**6,868**	**100**

Notes

1. Totals include 236 clinic visits whose initiator was unknown, 141 where the sex of the prisoner was unknown, 247 where the Indigenous status of the prisoner was unknown and 150 where the age group of the prisoner was unknown.
2. Table includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory

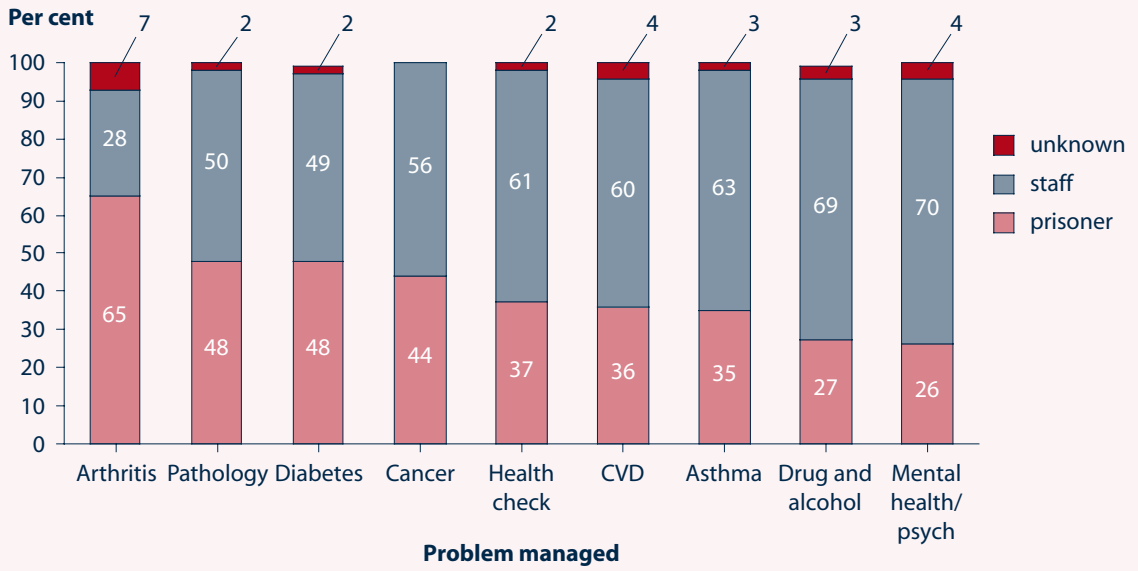
Source: National Prisoner Health Census 2009

There are differences in clinic initiation depending on the type of problem managed at those visits. While almost two-thirds (65%) of visits for arthritis were initiated by the prisoner, this was the case for less than half of the other problems managed. For drug and alcohol issues and psychological or mental health issues, around 70% of visits were initiated by staff rather than by the prisoner (Figure 6.1).

Type of health professional seen in clinic visits

In prison, nurses are responsible for providing most of an individual's primary health care through the prison clinic. If nursing staff are unable to assist a prisoner, they can refer them to a prison doctor or allied health worker. Most prisons have GPs who either work at the prison or visit on a regular basis (AIHW 2006). Some prisons offer dental services and mental health services.

Figure 6.1: Clinic visits, by initiator and selected problems managed, 2009



Note: Includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
Source: National Prisoner Health Census 2009.

INDICATOR: Proportion of clinic visits by type of health professional.

NUMERATOR: Number of clinic visits by type of health professional.

DENOMINATOR: Total number of clinic visits.

During the census week, 71% of primary health care was provided by nurses, and just under one-fifth (18%) by a medical practitioner. Another 4% of clinic visits were with a psychiatrist. A greater proportion of visits by male prisoners (20%) were with a medical practitioner than for visits by female prisoners (12%). The visits by female prisoners were more likely to be with a nurse than for male prisoners (80% and 70% respectively) (Table 6.6).

There were few differences among age groups in the types of health professionals seen at clinic visits. Three-quarters (75%) of clinic visits by older prisoners (those aged 45 years or older) were with a nurse, compared with 69–71% of those by prisoners in the younger age groups. The proportion of visits with a medical practitioner fluctuated from a high of 21% of visits by prisoners aged 35–44 years to 17% of visits by those aged 45 years or older. Psychiatrists were seen in fewer of the visits by prisoners in the oldest age group (45+ years) at 2%, compared with 5% of visits by prisoners aged 18–34 years.

The clinic visits of Indigenous and non-Indigenous prisoners were similar in terms of the health professional seen at the visits. Three-quarters (75%) of clinic visits by Indigenous prisoners were with a nurse, compared with 70% of visits by non-Indigenous prisoners.

Table 6.6: Clinic visits, by health professional seen and sex, 2009

Health professional	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Medical practitioner	1,137	20	118	12	1,275	18
Psychologist	33	1	9	1	42	1
Psychiatrist	222	4	41	4	268	4
Nurse	4,050	70	815	80	4,970	71
Aboriginal health worker	2	0	—	0	2	0
Other	250	4	19	2	277	4
Total	**5,813**	**100**	**1,014**	**100**	**6,968**	**100**

Notes

1. Totals include 134 clinic visits where the type of health professional seen was unknown.
2. Totals are higher than the overall number of visits because there were 100 visits where 2 health professionals were seen (99 for male and 1 for female prisoners).
3. Other includes dentist, optometrist, physiotherapist, occupational therapist and radiologist.
4. Table includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009

6.8 Problems managed in prison clinics

INDICATOR: Proportion of prisoners in custody by type of problem managed at clinic visits.

NUMERATOR: Number of prisoners in custody by type of problem managed at clinic visits.

DENOMINATOR: Total number of prisoners in custody.

During the census week, in the 6,868 clinic visits there were 9,406 problems managed. At most clinic visits, only one problem was managed, with the maximum number of problems managed in one visit being 9. The most common problem managed in the prison clinics was a health check (19%), followed by diabetes (14%), psychological/mental health issues (12%) and pathology including blood and urine testing (11%). Drug and alcohol issues made up 5% of problems managed in prison clinic visits.

The pattern for the proportion of prisoners in custody who visited the clinic for each type of problem saw diabetes move from the second most common problem managed to the fifth most common. This is primarily because diabetes was a problem for which prisoners tended to make multiple visits during the week. Among prisoners in custody, 9% visited the prison clinic for a health check, 5% for psychological or mental health issues and 2% each for diabetes, pathology, skin, drug and alcohol issues and musculoskeletal/injury (Table 6.7).

Health checks may be performed for a number of reasons specific to the prison environment, which contributes towards them being the most common reason for attending the clinic. Prisoners who are entering prison, have returned to prison (e.g. from being transported to and from court), are on suicide or self-harm alert or have been in segregation may be given a routine health check.

Table 6.7: Problems managed in prison clinics, 2009

Problem managed	Number of problems managed	Per cent of problems managed	Number of prisoners	Per cent of prisoners in custody
Health check	1,809	19	1,345	9
Diabetes	1,320	14	308	2
Psychological/mental health	1,147	12	833	5
Pathology	995	11	660	2
Skin	484	5	377	2
Drug and alcohol issue	478	5	282	2
Medication	413	4	252	2
Musculoskelatal injury	354	4	303	2
Musculoskelatal	324	3	283	2
Other	224	2	202	1
Cardiovascular disease	222	2	182	1
Respiratory	218	2	183	1
Communicable disease	217	2	199	1
Dental	201	2	178	1
Digestive	200	2	169	1
Wound care	166	2	111	1
Asthma	160	2	110	1
Sensory	116	1	100	1
Vaccination	99	1	97	1
Neurological	78	1	71	<1
Malignancy	59	1	42	<1
Arthritis	46	0	45	<1
Women's health	36	0	27	<1
Total	**9,406**	**100**		**(total number of prisoners in custody) 16,005**

Notes

1. Totals include 40 clinic visits with unknown problem managed.
2. Table includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009

Clinic visits where multiple problems were managed were more common among female than male prisoners. At over one-third (34%) of clinic visits by female prisoners, more than one problem was managed, compared with 28% for visits by males. Indigenous and

non-Indigenous prisoners both had around 30% of visits where more than one problem was managed.

As may be expected, clinic visits by older prisoners were more likely to have more than one problem managed than visits by younger prisoners (Table 6.8). During the census week, over three-quarters of visits by prisoners aged 18–24 years were managing one problem only, compared with just over two-thirds (67%) of visits by prisoners aged at least 45 years. In almost 10% of visits by prisoners in the oldest age group, 3 or more problems were managed.

Table 6.8: Prison clinic visits, number of problems managed per visit, by age group, 2009

Visits	18–24		25–34		35–44		45+		Total	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
1	723	76	1,853	74	1,143	69	1,093	67	4,930	72
2	182	19	505	20	404	24	396	24	1,508	22
3+	41	4	133	5	102	6	143	9	430	6
Total	**946**	**100**	**2,491**	**100**	**1,649**	**100**	**1,632**	**100**	**6,868**	**100**

Note: Includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.
Source: National Prisoner Health Census 2009.

The problems managed in clinic visits by male and female prisoners were broadly similar. The greatest difference was for drug and alcohol issues, which made up 14% of problems managed for female prisoners compared with 3% for males (Table 6.9). This may be partly attributable to the small number of female prisoners, and to the finding that the association between drug use and criminal activity may be stronger in women than men (Loxley & Adams 2009).

The problems managed at prison clinic visits differed by the age of the prisoner (Table 6.10). The three most commonly managed problems differed between age groups. For those aged 18–24 years, health check (23%), psychological or mental health issues (20%) and pathology (8%) were most common. For prisoners aged 25–34 years and 35–44 years, health check (19–20%) and psychological or mental health issues (12–14%) were followed by diabetes (12%) as the third most commonly managed problem. For prisoners aged 45 years or older, diabetes became the most common problem managed, at almost one-quarter (24%), followed by health check (16%) and pathology (14%).

As the prevalence of diseases such as diabetes and CVD increased with age, older prisoners were more likely than younger prisoners to visit the clinic for these conditions. Diabetes increased from 5% of problems managed for prisoners aged 18–24 years to 24% for those aged 45 years and older. Cardiovascular disease also increased from 1% for those aged under 35 years to 5% for the oldest age group. Psychological or mental health issues showed the opposite pattern, decreasing from representing 20% of problems managed at prison clinic visits for 18–24 year olds, to just 6% for those aged 45 years or over.

Table 6.9: Problems managed in clinic visits, by type of problem and sex, 2009

Problem managed	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Health check	1,450	19	327	22	1,809	19
Diabetes	1,127	15	173	12	1,320	14
Psychological/mental health	940	12	186	13	1,147	12
Pathology	852	11	129	9	995	11
Skin	408	5	69	5	484	5
Drug and alcohol issue	270	3	201	14	478	5
Cardiovascular disease	200	3	20	1	222	2
Asthma	111	1	47	3	160	2
Malignancy (cancer)	56	1	2	0	59	1
Arthritis	43	1	3	0	46	0
All other conditions	2,276	29	298	20	2,646	28
Total	**7,765**	**100**	**1,460**	**100**	**9,406**	**100**

Notes

1. Totals include 40 clinic visits with unknown problem managed, and 181 problems managed at visits where the sex of the prisoner was unknown.
2. Table includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009

Table 6.10: Problems managed in prison clinics, by type of problem and age group, 2009

Problem managed	18–24		25–34		35–44		45+		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Health check	286	23	637	19	461	20	388	16	1,809	19
Diabetes	56	5	390	12	274	12	581	24	1,320	14
Psychological/mental health	244	20	469	14	281	12	131	6	1,147	12
Pathology	98	8	295	9	264	11	321	14	995	11
Skin	75	6	189	6	118	5	92	4	484	5
Drug and alcohol issue	49	4	261	8	120	5	40	2	478	5
Asthma	22	2	74	2	26	1	35	1	160	2
Cardiovascular disease	9	1	41	1	57	2	114	5	222	2
Malignancy (cancer)	2	0	3	0	18	1	35	1	59	1
Arthritis	-	0	9	0	8	0	28	1	46	0
All other conditions	378	31	927	28	662	29	605	25	2,646	28
Total	**1,223**	**100**	**3,312**	**100**	**2,299**	**100**	**2,377**	**100**	**9,406**	**100**

Notes

1. Totals include 40 clinic visits where the type of problem managed was unknown and 352 problems managed at visits where the age of the prisoner was unknown.
2. Table includes Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

The problems managed in clinic visits were similar for Indigenous and non-Indigenous prisoners, with equal or almost equal proportions in each of the problem managed categories.

For further information on specific conditions refer to Chapter 3 (for physical and mental health conditions) and Chapter 5 (for alcohol and other drug issues).

6.9 Opioid pharmacotherapy treatment

INDICATOR: Proportion of prison entrants who report being on pharmacotherapy medication for opioid dependence.

NUMERATOR: Number of prison entrants who report being on pharmacotherapy medication for opioid dependence.

DENOMINATOR: Total number of prison entrants during the census week.

INDICATOR: Number of prisoners in custody who received medication for opioid dependence.

In 1993 the WHO issued guidelines on HIV infection and AIDS in prisons. The guidelines stated that 'drug-dependent prisoners should be encouraged to enrol in drug treatment programmes while in prison, with adequate protection of their confidentiality. Such programmes should include information on the treatment of drug dependency and on the risks associated with different methods of drug use. Prisoners on methadone maintenance prior to imprisonment should be able to continue this treatment while in prison. In countries in which methadone maintenance is available to opiate dependent individuals in the community, this treatment should also be available in prisons' (Kastelic et al. 2008).

Opioid pharmacotherapy treatment (OPT) is one form of treatment for heroin- and other opiate-dependent people which alleviates withdrawal symptoms and blocks the craving for illicit opiates by using prescribed opioid agonists, which have some properties similar or identical to those of heroin and morphine, including the effect on the brain. The most common form of pharmacotherapy treatment is methadone maintenance treatment, while buprenorphine is also quite common in some countries (Kastelic et al. 2008).

Incarceration may provide an opportunity to access drug treatments, including pharmacotherapy and counselling programs. A significant reduction has been found in the frequency of injecting and sharing of injecting equipment by inmates enrolled in methadone maintenance programs, in contrast to those who were not provided with substitution therapy (Dolan et al. 1996).

The physical and psychological effects of sudden withdrawal for an opiate-addicted person may exacerbate the already vulnerable situation of someone entering prison. This may have not only physical health consequences such as an increased risk of sharing needles; for someone entering prison, such withdrawal effects may also diminish their capacity to make informed legal decisions (Bruce & Schleifer 2008).

As of January 2008, Australia was one of 29 countries offering OPT in prisons (Larney & Dolan 2009). In some jurisdictions, however, this is restricted to prisoners who were on OPT in the community prior to entering prison.

Methadone is the most commonly available treatment in Australian prisons, with maintenance and treatment programs offered in all jurisdictions except Queensland, which only provides maintenance programs for female prisoners. The use of buprenorphine is less common, with New South Wales, Victoria and South Australia the only jurisdictions providing this treatment in prisons. Buprenorphine with naloxone is only provided in Victoria and Western Australia and only for prisoners who were on this treatment prior to entering prison (Table 6.11).

Table 6.11: Availability of opioid substitution treatment in Australian prisons, states and territories, 2009

	Methadone		Buprenorphine		Buprenorphine/naloxone	
	Maintenance	Initiation	Maintenance	Initiation	Maintenance	Initiation
NSW	√	√	√	√	×	×
Vic	√	√	√	×	√	×
Qld	√ (females only)	×	×	×	×	×
WA	√	√	×	×	√	×
SA	√	√	√	√	×	×
Tas	√	×	×	×	×	×
ACT	√	√	×	×	×	×
NT	√	×	×	×	×	×

Source: Levy et al. 2007 and National Prisoner Health Census 2009.

On a snapshot day during 2008, there were 41,347 people across Australia receiving pharmacotherapy treatment for opioid addiction, and 7% of these were in correctional facilities (AIHW 2008d).

In the Census, prison entrants were asked whether they were currently on an OPT or had been in the past. Almost one-fifth (19%) of entrants reported having ever been on an OPT. A small proportion of entrants indicated that they were currently on a methadone program (5%) or other opiate replacement program (3%). Just over one in ten entrants (11%) had been on a methadone program at some time in the past, and 8% had been on another OPT in the past (Table 6.12).

One in ten (10%) Indigenous prison entrants had been on a program at some time, compared with one in five (22%) non-Indigenous entrants.

Table 6.12: Prison entrants, opioid pharmacotherapy treatment history, 2009

Opioid pharmacotherapy treatment	Currently		In the past	
	Number	Per cent	Number	Per cent
Methadone	27	5	58	11
Other opiate replacement program	16	3	42	8
Total prison entrants	**549**	**100**	**549**	**100**

Notes

1. Percentages are of all prison entrants. Note that prison entrants may have been on a program both in the past and currently.
2. Table includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

As part of the Census, jurisdictions were asked to provide data regarding the number of prisoners on OPT during 2007–08. New South Wales, Victoria, Queensland and Western Australia were able to provide data. There were 4,120 prisoners on OPT during 2007–08 (Table 6.13). Methadone was the most frequently used pharmacotherapy treatment with both Subutex and Suboxone being less available to prisoners. Females were over-represented among prisoners on OPT, with one-fifth (20%) of prisoners on OPT being female. This discrepancy will be in part due to methadone being available only to females in Queensland (Table 6.11).

Details on age and Indigenous status of prisoners on OPT were not available from some jurisdictions and will not be reported here.

Table 6.13: Prisoners on opioid pharmacotherapy treatment by program and sex, 2007–08

Opioid pharmacotherapy treatment	Male	Female	Total
Methadone program	2,716	692	3,408
Subutex program	318	77	395
Suboxone program	259	58	317
Total	**3,293**	**827**	**4,120**

Note: Includes New South Wales, Victoria, Queensland and Western Australia.

Source: National Prisoner Health Census 2009; ABS Prisoners in Australia 2008.

6.10 Medication

The Prisoners in Custody—Repeat Medications form (see Appendix 5) was used to collect information on all prescribed medications administered to prisoners on one day during the census week. Depot medications (such as antipsychotics) were included, regardless of whether or not they were actually administered on the census day, while routine, household-type medications taken on an as-needed basis (such as paracetamol) were not included.

Data on medications were collected by the Australian Capital Territory, Queensland and South Australia (through the census forms) and provided by Western Australia electronically. Limited aggregate data on medication were provided by New South Wales and Tasmania electronically.

INDICATOR: Proportion of prisoners in custody who received prescribed medication.

NUMERATOR: Number of prisoners in custody who received prescribed medication.

DENOMINATOR: Total number of prisoners in custody on 30 June 2009.

Over two-fifths of prisoners in custody (41%) were taking regular medication during the census week (Table 6.14). Almost three-fifths (56%) of all females in prison were taking prescribed medication, compared with just under two-fifths (39%) of males. Many prisoners were taking more than one type of medication. Prisoners took an average of 2.3 medications each with females taking an average of 2.5 medications compared with 2.3 for males. Three fifths (60%) of males taking medication and 69% of females took more than one type of medication. At least 5 different medications were taken by 10% of prisoners, up to a maximum of 15 medications.

Table 6.14: Prisoners in custody taking medication, by sex, 2009

	Male	Female	Total
Number of prisoners who took prescribed medication	4,386	502	4,929
Number of prisoners in custody	11,263	897	11,998
Number of medications	10,194	1,280	11,580
Proportion of prisoners who received prescribed medication (%)	39	56	41
Average number of medications per prisoner	2.3	2.5	2.3

Notes

1. Totals include 41 prisoners and 106 medications records where the sex of the prisoner was unknown.
2. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

The number of prescribed medications administered to prisoners during the census week is shown in Table 6.15. It includes data from the Census for Queensland, Western Australia, South Australia, Tasmania and the Australian Capital Territory. Tables 6.15 and 6.16 are the only tables in the medications section which include Tasmania, as details required in the remaining tables were not available from that jurisdiction.

Two out of the three most common types of medication were for mental health issues. The most common type of medication administered was for depression or mood stabilisation (16% of all medications), followed by antipsychotics (10%), pain medication and anti–inflammatories or arthritis medication, each at 9% of medications prescribed.

Of the 12,538 prisoners in custody in Queensland, Western Australia, South Australia, Tasmania and the Australian Capital Territory, 17% were taking medication for depression or

mood stabilisation, and 10% each for psychoses and pain. A further 9% of prisoners in custody were taking anti–inflammatories or medication for arthritis and related conditions.

Table 6.15: Number and proportion of prescribed medications administered during the census week, 2009

Medication category	Number	Per cent of prescribed medications	Per cent of prisoners in custody
Depression/mood stabilisers	1,967	16	16
Psychoses	1,143	9	9
Pain (analgesics—repeat only)	1,132	9	9
Anti-inflammatories/arthritis	1,097	9	9
Digestive	987	8	8
High blood pressure/angina/heart conditions	910	7	7
Cholesterol	609	5	5
Asthma	535	4	4
Methadone	503	4	4
Infection (antibiotics)	429	3	3
Infectious diseases	428	3	3
Diabetes	407	3	3
Vitamins	345	3	3
Anxiety	343	3	3
Sleep disturbance	249	2	2
Neurological	212	2	2
Allergies	214	2	2
Antifungals	173	1	1
Skin	136	1	1
Nicotine	84	1	1
Other not elsewhere defined	251	2	2
Total prescribed medications	**12,414**	**100**	..

Notes

1. Total includes 14 unknown medications.
2. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

The number of repeat ongoing medications administered during the census week (without short-term prescribed medications such as antibiotics, anti-infectives and antifungals) is shown in Table 6.16. Mental health related medications made up one-third (33%) of all repeat medications (depression/mood stabilisers 18%, antipsychotics 10%, anti-anxiety medication 3% and medication for sleep disturbance 2%).

Table 6.16: Number and proportion of repeat medications administered during the census week, 2009

Medication category	Number	Per cent of repeat medications
Depression/mood stabilisers	1,967	18
Psychoses	1,143	10
Pain (analgesics—repeat only)	1,132	10
Anti-inflammatories/arthritis	1,097	10
Digestive	987	9
High blood pressure/angina/heart conditions	910	8
Cholesterol	609	5
Asthma	535	5
Methadone	503	5
Diabetes	407	4
Vitamins	345	3
Anxiety	343	3
Sleep disturbance	249	2
Neurological	212	2
Allergies	214	2
Skin	136	1
Nicotine	84	1
Other not elsewhere defined	251	2
Total repeat medications	**11,124**	**100**

Notes

1. Total includes 14 unknown medications.
2. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

There were differences in the medications taken by male and female prisoners (Table 6.17). During the census week, just under one-quarter (24%) of the 897 female prisoners in custody were taking prescribed medication for depression or mood stabilisation, compared with 14% of the 11,263 male prisoners. Antipsychotic medications were taken by 15% of female prisoners compared with 9% of male prisoners during the census week. A higher proportion of female (10%) than male (4%) prisoners were also taking asthma medications.

The proportion of prisoners taking certain types of medication was greater in older age groups than younger age groups of prisoners (Table 6.18). Of the 2,417 prisoners aged 18–24 years, 11% were taking medication for depression or mood stabilisation. This proportion rose to 15% of the 4,342 prisoners aged 25–34 years, and to 17% each for the 3,145 prisoners aged 35–44 years and the 2,057 aged 45 years or older. The trend was especially noticeable for medications for physical conditions such as heart conditions (which rose from 0% of those aged 18–24 years to almost one-quarter (24%) of those aged 45 years or older), arthritis (3% of 18–24 years to 18% of 45 years and older), digestive complaints (which rose from 2% for the youngest prisoners to 16% of those in the oldest age group) and diabetes (from 0% to 10%).

Table 6.17: Prisoners in custody taking selected prescribed medications, by sex, 2009

	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Depression/mood stabilisers	1,573	14	217	24	1,811	15
Psychoses	968	9	134	15	1,107	9
Anti-inflammatories/arthritis	942	8	67	7	1,020	9
Pain (analgesics—repeat only)	943	8	79	9	1,033	9
Digestive	819	7	79	9	909	8
High blood pressure/angina/heart condition	724	6	60	7	791	7
Cancer	15	0	1	0	17	0
Asthma	443	4	87	10	535	4
Diabetes	354	3	32	4	387	3

Notes

1. Totals include 14 medications of unknown type and 106 medications for prisoners whose sex was unknown.
2. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

Table 6.18: Prisoners in custody taking selected prescribed medications, by age group, 2009

	18–24		25–34		35–44		45+		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Depression/ mood stabilisers	262	11	643	15	548	17	346	17	1,811	15
Psychoses	183	8	468	11	311	10	139	7	1,107	9
Anti-inflammatories/ arthritis	74	3	243	6	327	10	371	18	1,020	9
Pain (analgesics— repeat only)	90	4	294	7	312	10	329	16	1,033	9
Digestive	56	2	245	6	266	8	336	16	909	8
High blood pressure/angina/ heart condition	12	0	87	2	201	6	486	24	791	7
Cancer	–	–	5	0	4	0	7	0	17	0
Asthma	75	3	172	4	151	5	132	6	535	4
Diabetes	5	0	61	1	119	4	201	10	387	3

Notes

1. Totals include 14 medications of unknown type and 81 medications for prisoners whose age was unknown.
2. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

A greater proportion of the 8,174 non-Indigenous were taking each type of prescribed medication (except for diabetes medication), compared with the 3,824 Indigenous prisoners (Table 6.19). Almost one-fifth (18%) of non-Indigenous prisoners were taking medication for depression or mood stabilisation, compared with 9% of Indigenous prisoners. Medication for pain was taken by 10% of non-Indigenous prisoners and by 4% of Indigenous prisoners. Diabetic medication was taken by 5% of Indigenous prisoners, compared with 2% of non-Indigenous prisoners.

Table 6.19: Prisoners in custody taking selected prescribed medications, by Indigenous status, 2009

Prescribed medications	Indigenous		Non-Indigenous		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Depression/mood stabilisers	326	9	1,435	18	1,811	15
Psychoses	274	7	807	10	1,107	9
Anti-inflammatories/arthritis	218	6	780	10	1,020	9
Pain (analgesics—repeat only)	145	4	854	10	1,033	9
Digestive	163	4	722	9	909	8
High blood pressure/angina/ heart condition	233	6	537	7	791	7
Cancer	—	0	16	0	17	0
Asthma	101	3	424	5	535	4
Diabetes	186	5	196	2	387	3

Notes

1. Totals include 14 medications of unknown type and 271 medications for prisoners whose age was unknown.
2. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census 2009.

Mental health related medication

The 2007 National Health Survey (NHS) found that antidepressants were the most commonly used mental health medication (19%), followed by sleeping tablets or capsules (8%) and tablets or capsules for anxiety or nerves (5%). A higher proportion of females than males used antidepressants (22% and 15% respectively). About half (49–50%) of both males and females did not use any medications for a mental health related condition.

There were 2,569 prisoners taking mental health related medication during the census week (21% of the 11,998 prisoners in Queensland, Western Australia, South Australia and the Australian Capital Territory). One-third (33%) of female prisoners were taking some form of medication for mental health conditions, compared with only one-fifth (20%) of male prisoners. A greater proportion of female than male prisoners was taking each type of mental health related medication (Table 6.20).

For each type of mental health related medication, and in each age group, a greater proportion of non-Indigenous than Indigenous prisoners was taking the medication (Table 6.21 on page 95). Overall, almost one-quarter (24%) of the 8,174 non-Indigenous prisoners were taking a mental health related medication, compared with 13% of the 3,284 Indigenous prisoners. Medications for depression or mood stabilisation were taken by proportionally more than twice as many non-Indigenous prisoners as Indigenous prisoners. For prisoners aged 18–34 years, 7% of the Indigenous prisoners took this medication, compared with 16% of non-Indigenous prisoners. A smaller proportion of the 2,340 prisoners aged 18–24 years was taking mental health related medication (22%), compared with prisoners in the other age groups (31–34% of the 8,941 prisoners aged 25 years or older).

Table 6.20: Prisoners in custody taking mental health related medication, by medication type and sex, 2009

Medication type	Male		Female		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Anxiety	281	2	40	4	328	3
Depression/mood stabilisers	1,573	14	217	24	1,811	15
Psychoses	968	9	134	15	1,107	9
Sleep disturbance	214	2	34	4	249	2
Total taking any mental health medication	**2,244**	**20**	**298**	**33**	**2,569**	**21**

Notes

1. A prisoner taking more than one type of medication will be counted more than once.
2. Totals include 34 medications taken by prisoners whose sex was unknown.
3. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census, 2009.

6.11 Medication for hepatitis C

The management of hepatitis C is a significant issue for prisons given its high prevalence in prisoners, and pharmaceutical treatment is long term and complex. 'Combination therapy' involves injecting pegylated interferon weekly for either 6 or 12 months and taking ribavirin daily. This course of treatment must be continuous and the length depends on the strain of hepatitis C and the early response to treatment (Hepatitis Australia 2009).

Given its length, such a treatment program is difficult within a prison setting because unless it can be completed before the prisoner is released, continuity of care into the community may be problematic.

INDICATOR: Number of prisoners in custody who received medication for hepatitis C.

As part of the Census, jurisdictions were asked to provide data relating to the number of prisoners who had received medication for hepatitis C during 2007–08. These data were only available from New South Wales, Western Australia and the Australian Capital Territory. In these three jurisdictions, 114 prisoners received treatment for hepatitis C.

6.12 Full-time equivalent staffing ratios

The provision of health-care services to prisoners is dependent upon the availability of suitability qualified staff. Health services in prisons must be sufficiently staffed by trained, licensed and qualified health professionals, who provide health-care services that meet national standards of care for community clinical care settings (APHA 2003).

Table 6.21: Prisoners in custody taking mental health related medication, by medication type, age group and Indigenous status, 2009

Mental health related medication type	18–24		25–34		35–44		45+		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Indigenous										
Anxiety	13	1	25	2	22	2	8	2	68	2
Depression/mood stabilisers	59	6	122	8	102	11	43	11	326	9
Psychoses	64	6	122	8	70	7	18	5	274	7
Sleep disturbance	6	1	11	1	7	1	7	2	31	1
Total taking any mental health related medication	**94**	**9**	**209**	**14**	**147**	**15**	**53**	**14**	**503**	**13**
Non-Indigenous										
Anxiety	29	2	108	4	76	3	38	2	251	3
Depression/mood stabilisers	195	14	509	18	433	20	293	17	1,435	18
Psychoses	113	8	339	12	233	11	120	7	807	10
Sleep disturbance	28	2	78	3	51	2	55	3	213	3
Total taking any mental health related medication	**273**	**19**	**756**	**26**	**582**	**27**	**380**	**23**	**1,997**	**24**
Total										
Anxiety	42	2	135	3	100	3	48	2	328	3
Depression/mood stabilisers	262	11	643	15	548	17	346	17	1,811	15
Psychoses	183	8	468	11	311	10	139	7	1,107	9
Sleep disturbance	35	1	93	2	58	2	62	3	249	2
Total taking any mental health related medication	**378**	**16**	**983**	**23**	**747**	**24**	**445**	**22**	**2,569**	**21**

Notes

1. A prisoner taking more than one type of medication will be counted more than once.
2. Totals include 22 medications taken by prisoners whose age was unknown and 90 whose Indigenous status was unknown.
3. Table includes Queensland, Western Australia, South Australia and the Australian Capital Territory.

Source: National Prisoner Health Census, 2009.

Limited information is available on the required FTE staffing levels of prison health clinics. In the USA one full-time physician (40 hours per week) has been recommended for every 200 to 750 prisoners (APHA 2003), and one full-time physician for prisons with 500 or more inmates with another physician for each additional 1,000 inmates or a substantial percentage thereof (Puisis 2006).

The number of health-care staff required in a prison is dependent upon 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 use may be higher than in a male prison
- requirements for drug and alcohol detoxification
- trauma and emergency incidence rates that may necessitate ongoing professional staffing.

INDICATOR: Ratio of full-time equivalent health staff working within the correctional system to the total number of prisoners.

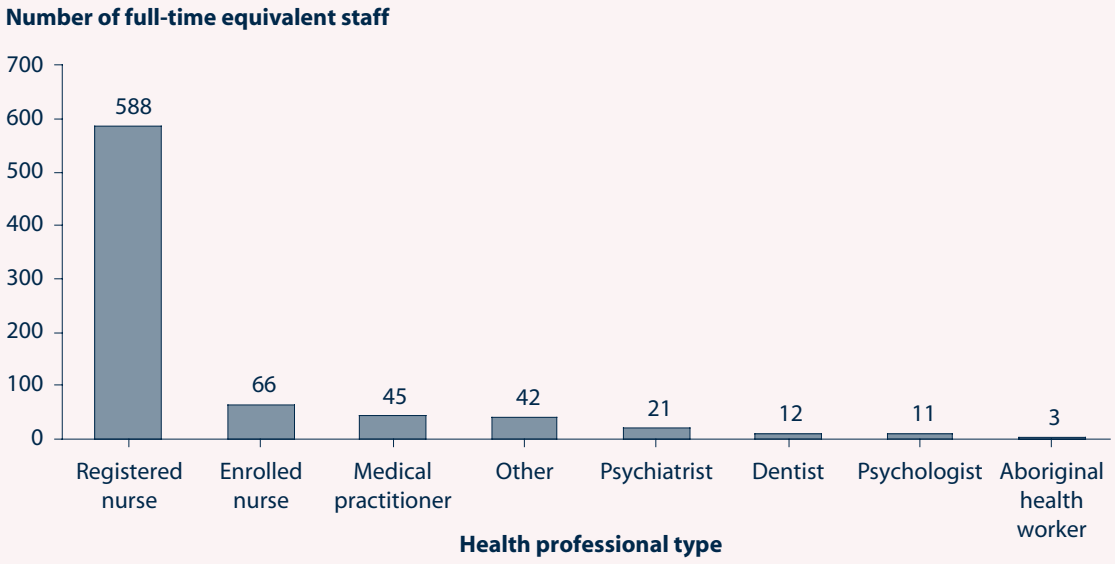
NUMERATOR: Number of full-time equivalent health staff working within the correctional system on the reference date.

DENOMINATOR: Total number of prisoners in custody on 30 June 2009.

The number of FTE[2] positions in Australia's prisons at the Census is shown in Figure 6.2. The data in this figure came from 68 prisons around Australia. Three-quarters (75%) of the FTE health staff in prisons were registered nurses (588.1 FTE). Enrolled nurses make up 8% of the FTE staff (65.8 FTE), followed by medical practitioners (6%, 44.8 FTE).

There was a total of 790.3 FTE health staff working in the 68 prisons in all jurisdictions except Tasmania. This represented a rate of 3 FTE health staff per 100 prisoners in custody, based on the 26,031 prisoners in custody on 30 June 2009 in the 68 prisons which participated in the Census.

Figure 6.2: Full-time equivalent health staff in Australia's prisons, 2009



Note: Includes New South Wales, Victoria, Queensland, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory.

Source: National Prisoner Health Census 2009.

[2] Full-time equivalent staff units are on-the-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.

7

Comparisons with the general community and prisoners internationally

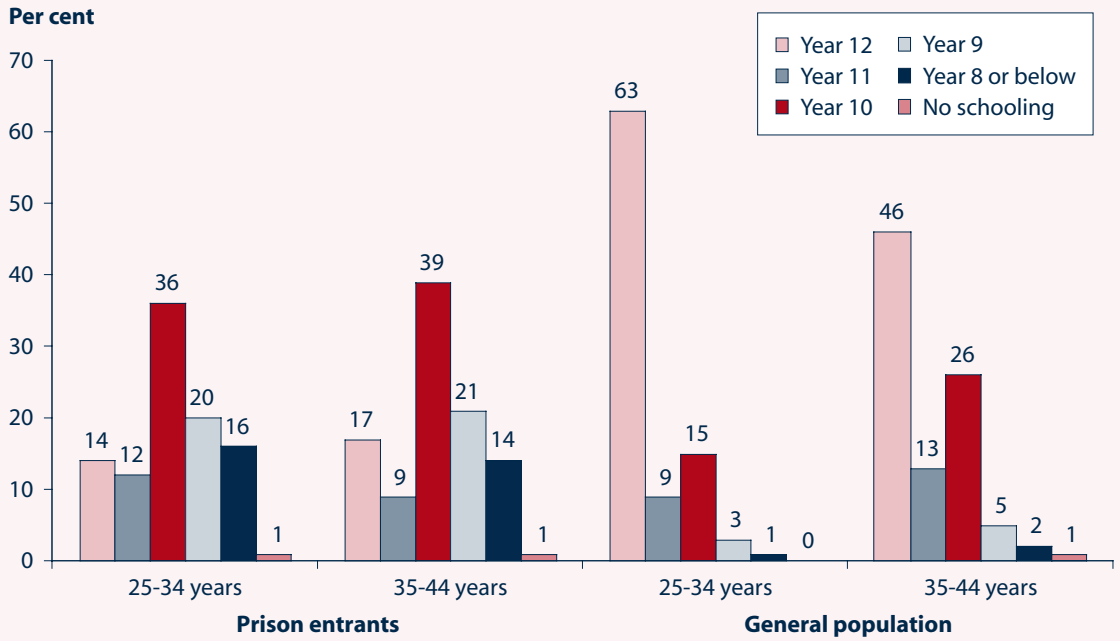
7 Comparisons with the general community and prisoners internationally

In this chapter, data from the general Australian community and from international prison populations have been presented (where available) for each indicator, to provide a comparison with the results found in this Census. Some of these data are directly comparable with the Census results, as they use similar methodologies and results for similar age groupings were available. Where appropriate, these data have been presented along with the relevant Census results. Other data which have used different methodologies or populations provide contextual information or are indicative only and should not be directly compared with the results from this Census. Caution should therefore be taken in interpreting these results.

7.1 Education

Data for the highest completed level of schooling in the general Australian household population are available from the ABS 2006 Census of Population and Housing. Prison entrants had a lower level of educational attainment than the general Australian population for those aged 25–34 years and 35–44 years (Figure 7.1). Almost two-thirds (63%) of the general population aged 25–34 years had completed Year 12, compared with just 14% of prison entrants in that age group. More than one-third of prison entrants (36–37%) had a highest completed level of schooling of Year 9 or less, compared with around one in twenty (4–8%) of the general population.

Figure 7.1: Prison entrants and general population, highest level of completed schooling, by age group, 2009 and 2006



Source: National Prisoner Health Census 2009 and ABS 2006 Census of Population and Housing

7.2 Mental health

The 2007 ABS National Survey of Mental Health and Wellbeing (NSMHWB) collected information on the prevalence of mental disorder in people who had been incarcerated. In the 12 months preceding the survey interview, the incidence of any mental disorder in individuals who had at some time been incarcerated was greater than in those who had not. Of the 100 people who reported they had ever been incarcerated, 41% had a 12-month mental disorder. This was more than twice the prevalence in people who reported they had never been incarcerated (19%). People who reported they had ever been incarcerated experienced:

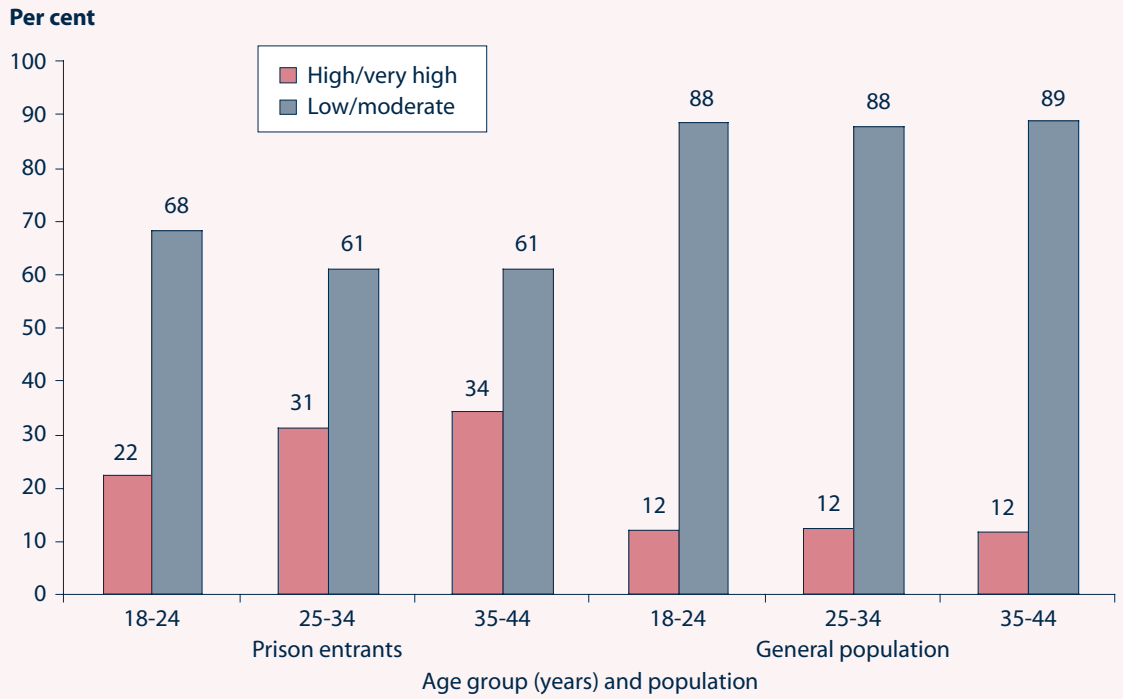
- almost five times the prevalence of 12-month substance use disorders (23% compared with 5%)
- more than three times the prevalence of 12-month affective disorders (69% compared with 19%)
- almost twice the prevalence of 12-month anxiety disorders (28% compared with 14%) (ABS 2008).

Further, rates of the major mental illnesses, such as schizophrenia and depression, have been found to be between three and five times higher in prisons than that expected in the general population (Ogloff et al. 2006).

Scores on the Kessler 10 scale were obtained in the ABS 2007–08 National Health Survey, and used the same scoring system for the distress levels as this Census. Prison entrants in this Census, particularly females, reported consistently higher levels of psychological distress than

the general Australian population. In each age group, 12% of the general population reported high or very high levels of psychological distress during the previous four weeks. Among prison entrants, this proportion ranged from over one-fifth (22%) of those aged 18–24 years, to over one-third (34%) of those aged 35–44 years (Figure 7.2). Half (50%) of female prison entrants reported high or very high levels of distress, compared with only 14% of the general female adult population. For males, this was over one-quarter (27%) compared with 10%.

Figure 7.2: Levels of psychological distress, prison entrants (2009) and general population (2007), by age group



Note: Prison entrants data include New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Sources: National Prisoner Health Census 2009; ABS National Health Survey 2007–08

In Canada, 12% of male offenders and 21% of female offenders were identified as having a mental health disorder at intake (Correctional Services Canada 2008). In comparison, the 2004 United States (US) Survey of Inmates in State and Federal Correctional Facilities found that 56% of state and 45% of federal inmates had a mental health problem[3] (James & Glaze 2006).

A study by Earthrowl and McGully (2002) of 135 New Zealand women prisoners found 14% of prisoners had a history of self-harm (Ministry of Health 2006). Similarly in a study of 1,741 sentenced male prisoners in England and Wales, 17% of men reported deliberate self-harm on at least one occasion in their life (Maden et al. 2006). The proportion of Australia's prison entrants with a history of self-harm (17%) was similar to that reported overseas.

[3] Mental health problems were defined by two measures: a recent history or symptoms of a mental health problem in the 12 months prior to the interview. A recent history of mental health problems included a clinical diagnosis or treatment by a mental health professional. Symptoms of a mental disorder were based on criteria specified in the *Diagnostic and statistical manual of mental disorders, fourth edition* (DSM–IV).

Data on self-harm in the community are difficult to obtain, as people who engage in self-harming behaviours may conceal their injuries and will not necessarily come in contact with medical or other services as a result of their self-harming behaviours. Self-harm data are limited to instances of 'hospitalised self-harm' and therefore do not capture those who have been attended to in emergency departments or by general practitioners, or have not sought medical assistance. In 2003–04 females accounted for 62% (14,228) of hospitalised self-harm cases. Three-quarters of all intentional self-harm cases were aged from 15 to 44 years (28% were aged 15 to 24 years and 47% were aged 25 to 44 years) (Berry & Harrison 2007).

7.3 Head injuries

The New Zealand Ministry of Health Prisoner Health Survey 2005 asked prisoners in custody whether they had ever had a head injury leading to a loss of consciousness (Ministry of Health 2006). A lower proportion of prison entrants in Australia (43%) were found to have sustained a head injury compared with sentenced prisoners in New Zealand (64%) (Table 7.1). In both countries, head injury was more common among male than female prisoners.

Table 7.1: Prisoners, head injury by sex, Australia (entrants) and New Zealand (sentenced), 2009 and 2005 (per cent)

Sex	Australia	New Zealand
Male	44	64
Female	33	53
Total	**43**	**64**

Source: National Prisoner Health Census 2009; New Zealand Prisoner Health Survey 2005.

7.4 Communicable disease

International research has found that there are higher rates of communicable diseases in the prison population than in the general population. One comparison study into the rates of hepatitis B and C in prison populations found that for all countries included in the analysis (Australia, USA, Greece, Denmark, India and Ireland) prisoners had higher rates of infection than the general community (Hunt & Saab 2009).

The prevalence of hepatitis C in the general community is estimated at approximately 1%. Hepatitis C is more prevalent in prisons than in the general community. The extent of this difference is unclear, with sources estimating the prevalence of hepatitis C in prisons to be between 6 and 40 times more prevalent than in the general community (DOHA 2008; Butler et al. 2004).

HCV is considered the most prevalent bloodborne infection in US prisons, with the overall seroprevalance in US prisoners estimated at 30–40%, compared to approximately 1.8% of the general population (Hunt & Saab 2009).

The 2005 New Zealand Prisoner Health Survey found that one in three prisoners had a history of being diagnosed with one or more communicable disease, including hepatitis B, hepatitis C, chlamydia, STIs, rheumatic fever and tuberculosis (Ministry of Health 2006). A study in France from November 2000 to June 2003 of 579 males entering a remand centre found that 16% of prison entrants had at least one sexually transmitted disease—4% had condyloma, 4% had chlamydia infection and 5% were positive for hepatitis C virus antibodies (Verneuil et al. 2009).

A review of information on HIV prevalence in prisons in 2003–04 found that of 76 countries studied, the prevalence of HIV was greater than 10% in 18 countries: Brazil, Burkina Faso, Cameroon, Côte d'Ivoire, Cuba, Estonia, Indonesia, Lithuania, Malawi, Malaysia, Romania, Rwanda, Slovakia, South Africa, Ukraine, Vietnam, Yemen and Zambia (Dolan et al. 2007).

In the USA at the end of 2006, 20,450 (1.8%) state inmates and 1,530 (0.9%) federal inmates were diagnosed with HIV infection or had confirmed AIDS (Maruschak 2006). This equates to a prevalence of HIV that is five times higher in prisons than in the general population (Spaulding et al. 2002). Prisoners in the USA account for less than 1% of the population, but represent 5% of reported cases of HIV (Vlahov & Putnam 2006).

7.5 Chronic conditions

The 2007–08 National Health Survey estimated the proportions of the general Australian population who have certain chronic conditions (ABS 2009a). These are presented in Table 7.2 alongside the proportion of prison entrants who currently have these conditions.

For arthritis, the proportions of prison entrants were slightly lower than the proportions in the general population for those aged 25–34 years and those aged 35–44 years. For cancer, the proportions were the same for both age groups. For asthma, cardiovascular disease and diabetes, a higher proportion of prison entrants had the condition than those in the general population by the age of 35–44 years. Asthma was found in 20% of prison entrants aged 35–44 years, compared with 10% in the general population in that age group, for cardiovascular disease the proportions were 4% and 2% respectively, and for diabetes, 5% and 2% respectively.

Table 7.2: Chronic conditions in prison entrants (2009) and the general Australian population, by age group (2007–08) (per cent)

Chronic condition	Prison entrants		General Australian population	
	25–34 years	35–44 years	25–34 years	35–44 years
Asthma	15	20	10	10
Arthritis	5	9	5	9
Cardiovascular disease	1	4	0.7	2
Diabetes	2	5	0.5	2
Cancer	1	1	0.3	1

Source: National Prisoner Health Census 2009; ABS 2009a.

The levels of chronic conditions found among prisoners in New Zealand and the USA appear to be similar or slightly higher than found in this Australian census of prison entrants. Levels of cancer and diabetes were similar in each country, while some differences were found in

relation to asthma and arthritis. Levels of heart disease were found to be higher in the US and New Zealand surveys than CVD in Australian prison entrants (Table 7.3) (Ministry of Health 2006, Maruschak 2008). Caution should be taken in interpreting these results, as they are not directly comparable and may have used different definitions for the conditions surveyed.

Table 7.3: Chronic conditions in prisoners in Australia and internationally (per cent)

Chronic condition	Australia	USA	New Zealand
Asthma	16	7–9	22
Arthritis	6	12–15	n.a.
Cardiovascular disease/heart disease	3	6	8
Diabetes	3	4–5	2
Cancer	1	<1	2

Source: National Prisoner Health Census 2009; Survey of State and Federal Correctional Facilities 2004 (USA); New Zealand Prisoner Health Survey 2005.

7.6 Women's health

The Cervical Screening in Australia 2006–2007 report prepared for the National Cervical Screen Program (AIHW 2009a) provides an outline on the national picture of cervical screening in Australia. In Australia, the proportion of women undertaking cervical screening tests is higher than in the prison population (62% compared with 46%) (Table 7.4).

A study from the United Kingdom (UK) in 2004 found that female prisoners were less likely to have been screened in the last five years than females generally. However, those who had been in prison longer than three months were much more likely to have had a Pap smear in the last five years compared with those who had been in for three months or less (79% and 38%) (Plugge & Fitzpatrick 2004). In New Zealand, 76% of female prisoners aged between 20 and 69 years had undergone a cervical screening in the last four years (Ministry of Health 2006).

Table 7.4: Proportion of female prison entrants[(a)] (2009) and female general population (2006–07) who report that they have had a cervical screening in the last two years (per cent)

	Had cervical screening
Prison entrants	46
General population[(b) (c)]	62

(a) Includes New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

(b) General population refers to women aged 20–69 years.

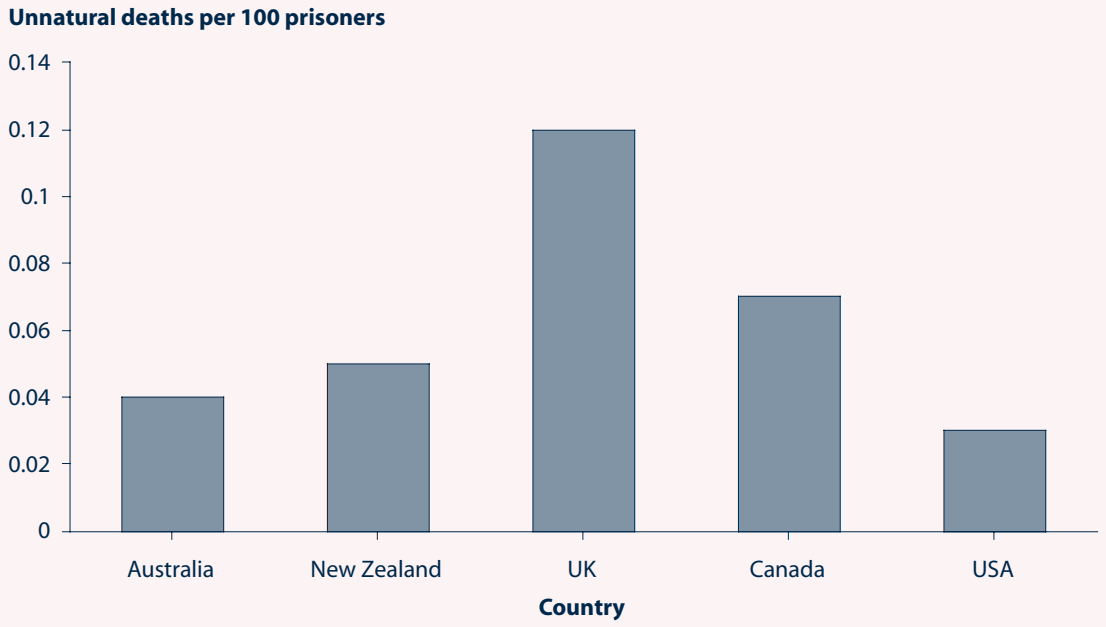
(c) The percentage is calculated as the number of women screened as a proportion of the eligible female population and age-standardised to the Australian population at 30 June 2001. The eligible female population is the average of the ABS's estimated resident population, adjusted for the estimated proportion of women who have had a hysterectomy using national hysterectomy fractions derived from the ABS 2001 National Health Survey.

Source: National Prisoner Health Census 2009; AIHW 2009a.

7.7 Deaths in custody

Many countries produce annual reports monitoring deaths in custody, similar to the NDICP in Australia. The rate of unnatural deaths in Australian, New Zealand, UK, Canadian and US prisons is small (less than 0.2% of prisoners) (Figure 7.3). Caution should be taken in comparing these rates, as each country may have different definitions of a death in 'custody'.

Figure 7.3: Rate of unnatural deaths in prison, international comparison

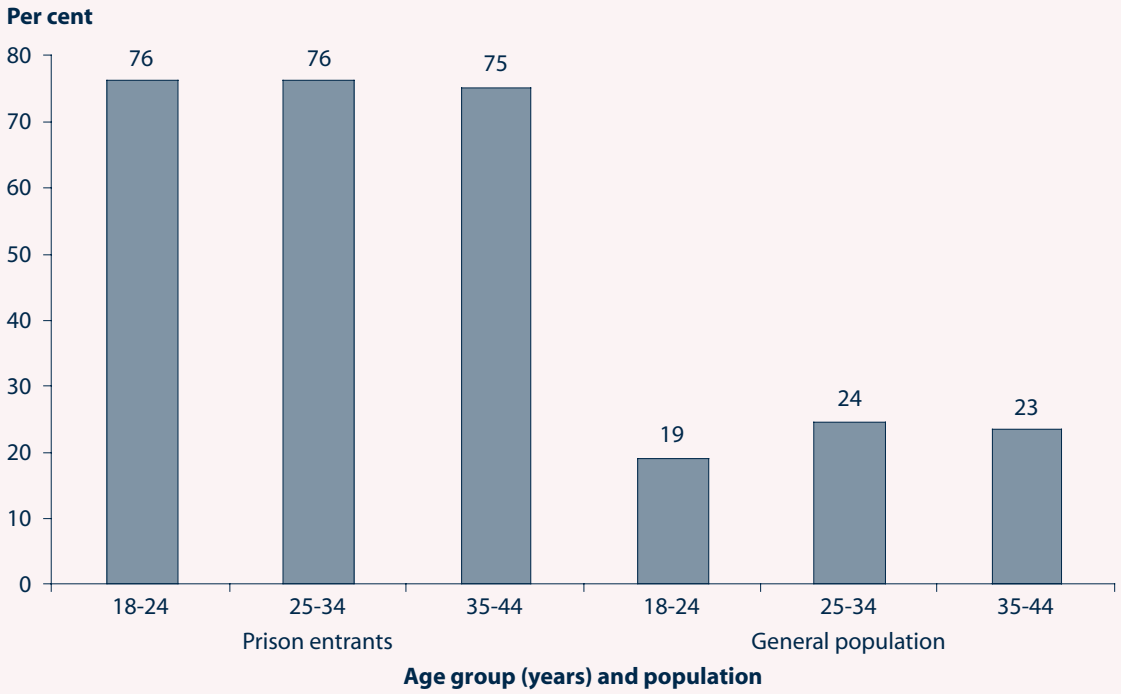


Sources: Deaths in Custody Monitoring Program 2007 Report; Corrections New Zealand 2007–08 Annual Report; Forum on Prevention of Deaths in Custody Annual Report 2007–08; Correctional Service Canada 2007–08 Performance Report; Deaths in Custody Reporting Program 2006.

7.8 Tobacco smoking

The ABS 2007–08 National Health Survey reported the same smoking status categories as this census. In each of the age groups, the proportions of daily smokers to ex-smokers/never smoked were almost reversed for prison entrants compared with the general household population. Around 75% of prison entrants in each age group were daily smokers, and around the same proportion in the general population were ex-smokers or had never smoked (Figure 7.4).

Figure 7.4: Daily smokers, prison entrants (2009) and the general population (2007), by age group



Note: Prison entrants data include New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory.

Sources: National Prisoner Health Census 2009; ABS National Health Survey 2007–08.

The prevalence of smoking in international prisons is similar to that in Australia. In the USA, smoking prevalence is 3 to 4 times higher among prisoners than in the non-incarcerated adult population. Among incarcerated men, 70–80% are current smokers while smoking prevalence among incarcerated women ranges from 42% to 91% (Cropsey et al. 2008).

In New Zealand in 2005, two-thirds of all prisoners reported being current smokers (67%), with females more likely to be current smokers than males (Ministry of Health 2006).

In European prisons, the smoking prevalence rate is estimated at between 64% and 88%. As approximately 95% of the European prison population are male, if prevalence rates in prisons are compared with the average of the male smoking population (which is 40%), the prevalence of smoking in imprisoned males is one-and-a-half to two times higher than that in the general male population (Hartwig et al. 2008).

7.9 Risky alcohol consumption

The ABS 2007–08 National Health Survey collected information on alcohol consumption. Persons were classified to a health risk level (low risk, risky or high risk) based on their estimated average daily consumption of alcohol during the previous week. Of those who drank alcohol in the previous week (59% of the total population), 21% did so at a risky or high risk level. The same proportion of males and females drank at risky or high risk levels (21%).

The 2007 National Drug Strategy Household Survey (NDSHS) found that almost one in ten (8.6%) of Australians aged 14 years or over drank alcohol at levels considered risky or high risk for both short-term and long-term harm (AIHW 2008a).

A systematic review of 13 studies into substance abuse and dependence among prisoners before they had entered prison—covering a total of 7,563 prisoners (9 surveys in the USA, two in Ireland, one in New Zealand and one in the UK)—estimated that the prevalence of alcohol abuse and dependence in male prisoners ranges from 18–30% and from 10–24% in female prisoners (Fazel et al. 2006).

The NPHDC found that 51% of males and 52% of females were at risk of alcohol-related harm. This proportion is substantially higher than that reported in the above systematic review. This difference could be attributed to the fact that alcohol abuse and dependence are mental disorders, which require specific criteria for the diagnosis. The NPHDC did not ask prison entrants whether they had been diagnosed with either of these disorders and so a direct comparison is not possible.

7.10 Illicit drug use

According to the 2007 NDSHS, 13% of Australians aged 18 years and over said they used at least one illicit drug in 2007. The most commonly used illicit drug in the past 12 months was marijuana/cannabis (9%,) followed by ecstasy (4%), pain killers/analgesics (3%) and meth/amphetamine (which includes 'ice') (2%). Aboriginal and Torres Strait Islander people were more likely than other Australians to have used an illicit drug in the previous 12 months (AIHW 2008a).

Prison entrants were 5 times as likely as those in the general population to have used illicit drugs (71% compared with 13%). In each age group (18–24 years, 25–34 and 35–44) and for each type of illicit drug, a far greater proportion of prison entrants had used the drug during the last 12 months, compared with the general population. The differences were most marked in the older age groups where, for several drug types, proportionally around ten times as many entrants had used the drug as had those in the general population. The use of heroin was also markedly different among prison entrants (12–27%) than the general population (0–1%). There were some differences, too, in the types of illicit drugs used by prison entrants and the general population. In the general population, people aged 18–34 years used cannabis/marijuana most commonly, followed by ecstasy. Among prison entrants of the same age, cannabis/marijuana was the most common drug, followed by meth/amphetamines (Table 7.5).

The 2007 NDSHS found that, of Australians aged 14 years or older, 2% had ever injected illicit drugs. Males were more likely than females to have ever injected drugs (3% and 1% respectively). Of recent injecting drug users, 38% had re-used a needle or other injecting equipment after someone else had already used it (AIHW 2008a).

Injecting drug use was substantially higher amongst prison entrants than in the general population (55% compared with 2%). Female entrants were more likely than male entrants to have injected drugs, which was the opposite to the situation in the general population. Prison entrants were, however, less likely to have shared injecting equipment (26%) than injecting drug users in the general population (38%).

Table 7.5: Use of illicit drugs during the last 12 months, prison entrants and the general population (per cent)

Age group	Cannabis/ marijuana	Meth/ amphetamine	Heroin	Analgesics/ pain killers	Ecstasy	Tranquillisers/ sleeping pills
Prison entrants						
18–24	60	28	12	15	24	8
25–34	54	35	27	22	17	21
35–44	45	30	20	19	13	12
General population						
18–24	21	5	0	3	11	3
25–34	17	7	1	3	9	3
35–44	9	2	0	3	2	1

Source: National Prisoner Health Census 2009; National Drug Strategy Household Survey 2007 (AIHW 2007).

Australia's prisons have similar proportions of prisoners who have used illicit drugs to those in international prisons. For example, 69% of New Zealand's prisoners had ever used non-prescription drugs, while approximately 67% of offenders in Canadian federal prisons have substance abuse problems (Ministry of Health 2006; Correctional Services Canada 2008). Further, 53% of all US state prisoners and 45% of all US federal prisoners met the DSM-IV criteria for drug dependence or abuse (Mumola & Karberg 2006).

7.11 Health service use

Approximately 85% of Australians in the general population see their GP at least once a year (AIHW 2008c; Kraemer et al. 2009). In this Census, 83% of prison entrants had seen a health professional at some time during the last 12 months. This was more common among females (93%) than males (82%), and non-Indigenous (85%) than Indigenous (79%) entrants.

Information about visits to GPs in the community is collected through the Bettering the Evaluation and Care of Health (BEACH) program. This program collects information on around 100,000 patient encounters from a random sample of GPs every year. It provides information on the reasons for visits to GPs and how patients' problems are managed and treated.

Between April 2007 and March 2008, females accounted for the greater proportion of GP encounters (57%), according to the BEACH study of Australian GP visits. This was reflected across all age groups.

The 2007–08 BEACH study reported that (between April 2007 and March 2008) the most frequently managed problems in Australian general practice were:

- respiratory problems, in particular upper respiratory tract infection, acute bronchitis and asthma (13% of total problems)
- musculoskeletal problems, such as arthritis and back complaints (11%)
- skin problems (11%)
- digestive problems (7%)

- check-ups (6 per 100 encounters)
- diabetes (4 per 100 encounters).

Psychological problems (depression, anxiety and sleep disturbances) represented 8% of total problems managed in Australian general practice (Britt et al. 2008).

Similar to general practice, diabetes, skin and check-ups (health checks) were common problems managed at prison clinics. The high proportion of psychological/mental health issues and drug and alcohol issues seen at prison clinics compared with general practices highlights some health issues particular to prisoners. Also, the prison clinic data includes allied health professionals, rather than just general practitioners.

In the 2007–08 BEACH survey, of the top five most frequently prescribed medications, two were antibiotics, two were plain or combination paracetamol and the fifth was atorvastatin, a lipid-modifying agent for cholesterol (Britt et al. 2008).

The 2004–05 NHS found that 19% of adults in the general population had used some form of medication to assist their mental wellbeing in the fortnight prior to the NHS interview (ABS 2006a).

In the UK, prisoners consulted primary care doctors three times more frequently than the equivalent community populations, and they saw other primary health-care workers almost 80 times more frequently than equivalent community populations. Prisoners received inpatient care at least 10 times as frequently as equivalent community populations (Marshall et al. 2001).

In New Zealand, almost one in five prisoners (18%) had seen a medical specialist (including psychiatrists) in the last year while in prison, and one in five prisoners (21%) had been to a public hospital in the same period. Levels of health service use were higher in older age groups (Ministry of Health 2006). Of Maori male prisoners, 92% had seen the prison nurse in the last 12 months while in prison, 18% had also been referred to see a medical specialist and over half (55%) had seen another health-care worker in the last 12 months in prison (Ministry of Health 2008).

Women in prison in Western Europe tend to place a greater demand on medical services than men. For instance, in Italy, approximately twice as many women in prison are asking to see a doctor or nurse each day than men in prison. Among the reasons for their higher demand on medical services are their higher needs for care related to a history of violence and abuse, drug use problems and reproductive needs (Zoia 2005).

In this Census, there were 37 clinic visits for women's health, which was less than 1% of problems managed.

A national Norwegian study found that 52% of prisoners were taking some prescription medication—16% were taking medication for both mental and physical illness, 17% mental illness only and 19% physical illness medications only (Kjelsberg & Hartvig 2005).

7.12 Immunisations

All prisoners in England are offered a hepatitis B vaccination on entry to prison (Sutton et al. 2008). In 2008, 41% of prison entrants in England and Wales were vaccinated against hepatitis B within one month of entering prison (HPA 2009). Similarly hepatitis B immunisation is provided in many US prison systems (Jacobs et al. 2004).

8

Data gaps and future directions

8 Data gaps and future directions

This chapter discusses issues regarding availability and quality of data in the prisoner health field, areas for data development, and future directions for the prisoner health census.

Over time good quality data will:

- be aligned with national and international standards to allow comparison
- be collected according to well-defined standards and evidence-based best practice and research
- be stable over time
- be fit for the purposes for which they are collected
- be used to monitor outcomes
- be relevant, complete, and free of errors (and can be validated).

8.1 Missing information and unavailable data

For some indicators, data were either not available or not of sufficient quality to be reported. PHIG is committed to developing indicators of post-release morbidity and mortality, starting with an indicator of mortality in the period immediately following release.

There are a number of indicators for which data covers a 12-month period, such as the number of pregnant prisoners, number of prisoners receiving medication for hepatitis C and the number of prisoners on an OPT. The prison population on a single day is not representative as a denominator, given the high turnover rates in prisons. However, data for a more appropriate denominator, such as receptions or releases during the 12-month period, were not available from all jurisdictions and are not currently published as national data. These data need to be available so that rates can be calculated, making the indicators comparable year to year, rather than simply numbers as in this report.

Data on the number of notifications of notifiable diseases were only available from two jurisdictions and not considered to be of suitable quality to be published. An alternative data source or collection method needs to be investigated.

8.2 Data mapping

Clinic data from New South Wales were extracted from their database. As a result the description of problems managed at the clinics in New South Wales was not consistent with the categories used in the Census. These data could not be matched closely enough to the required definitions and therefore could not be used in detail.

8.3 Indicators not included in this report

The indicator on mortality rates post-release requires significant development. Data from the National Coroners Information System (NCIS), which records whether or not the deceased person was released from an institution during the week before death, are currently only collected from four jurisdictions and are available only in hard-copy format. Recent research suggests that the NCIS is able to detect only a minority of deaths among ex-prisoners, even among those who die in the first few weeks post-release (Wade et al. 2009). Although not currently feasible, one robust and efficient way of monitoring deaths among ex-prisoners would be through routine data linkage, in a manner similar to that used by researchers in New South Wales and Western Australia.

8.4 Indicators requiring redevelopment

As data analysis progressed, it became clear that some indicators did not provide the information as originally intended. For example, immunisations available in prisons may not be the same as immunisations actually offered to prisoners. Further, the definitions for discharge planning should differentiate between sentenced prisoners and unsentenced prisoners, as the processes for these two groups are very different. The indicator reporting on visits by Aboriginal medical services or Aboriginal community controlled health organisations may not adequately capture the range of culturally appropriate services provided to prisoners. These indicators, and/or the method of collecting data for them, will need to be redefined for future collections.

8.5 Future directions for the Census

It is anticipated that in the future, the Census will move towards using fully electronic data. Ideally, these data would be a by-product of existing administrative systems, rather than a separate data collection as currently takes place. That would allow the prison entrants sample to be increased, thereby expanding the options for analysis. It is understood that this will take time to achieve, as the data requirements for the Census are built in to the administrative systems in each jurisdiction.

A shorter-term aim is for complete coverage of all prisons in all jurisdictions. Most of the prisons not included in this census have prison health services delivered by private contractors. This issue was not fully addressed in this first collection; however, it is hoped that it will not be an obstacle to participation in the future. An increase in the sample size would allow for future reports to present data disaggregated by jurisdiction.

Appendix 1: List of indicators

Indicator	Numerator	Denominator
Number of prison entrants by highest completed level of education.	Number of prison entrants by highest completed level of education.	Total number of prison entrants during the census week.
Proportion of prison entrants who report that they have been told by a doctor, psychiatrist, psychologist or nurse that they have a mental health disorder (including drug and alcohol abuse)	Number of prison entrants who report that they have ever been told by a doctor, psychiatrist, psychologist or nurse that they have a mental health disorder	Total number of prison entrants during the census week.
Proportion of prison entrants who are currently taking medication for a mental health disorder	Number of prison entrants who are currently taking medication for a mental health disorder	Total number of prison entrants during the census week.
Proportion of prison entrants reporting psychological distress experienced in the past 4 weeks (self-report)	Number of prison entrants by level of psychological distress	Total number of prison entrants during the census week.
Proportion of prison entrants who indicate their current distress is related to the present incarceration	Number of prison entrants who report that their current distress is related to their current incarceration	Total number of prison entrants during the census week.
Proportion of prison entrants who report that they have ever intentionally harmed themselves	Number of prison entrants who report that they have ever intentionally harmed themselves	Total number of prison entrants during the census week.
Proportion of prison entrants who report that they have thought of harming themselves in the last 12 months	Number of prison entrants who report that they have thought of harming themselves in the last 12 months	Total number of prison entrants during the census week.
Proportion of prison entrants who report that they have ever received a blow to the head resulting in a loss of consciousness	Number of prison entrants who reported that they have ever received a blow to the head resulting in a loss of consciousness	Total number of prison entrants during the census week.
Number of notifications of a notifiable disease for prisoners in custody		
Proportion of prison entrants testing positive to hepatitis B antibody	Number of prison entrants who tested positive to hepatitis B antibody	Total number of prison entrants tested

Appendix 1: List of indicators (continued)

Indicator	Numerator	Denominator
Proportion of prison entrants testing positive to hepatitis C antibody	Number of prison entrants who tested positive to hepatitis C antibody	Total number of prison entrants tested
Proportion of prison entrants testing positive for HIV	Number of prison entrants who tested positive for HIV	Total number of prison entrants tested
Proportion of prison entrants who report that they have been told by a doctor or nurse that they have arthritis, and who still have the condition currently.	Number of prison entrants who report that they have been told by a doctor or nurse that they have arthritis, and who still have the condition currently.	Total number of prison entrants during the census week.
Proportion of prison entrants who reported that they have been told by a doctor or nurse that they have CVD, and who still have the condition currently	Number of prison entrant who report that they have been told by a doctor or nurse that they have CVD, and who still have the condition currently	Total number of prison entrants during the census week.
Proportion of prison entrants who reported that they have been told by a doctor or nurse that they have diabetes, and who still have the condition currently	Number of prison entrants who report that they have been told by a doctor or nurse that they have diabetes, and who still have the condition currently	Total number of prison entrants during the census week.
Proportion of prison entrants who report that they have been told by a doctor or nurse that they have cancer, and who still have the condition currently.	Number of prison entrants who report that they have been told by a doctor or nurse that they have arthritis, and who still have the condition currently.	Total number of prison entrants during the census week.
Proportion of female prison entrants who report that they have ever been pregnant	Number of female prison entrants who report that they have ever been pregnant	Total number of female prison entrants during the census week.
Mean/median age at first pregnancy		
Number of pregnant female prisoners in custody		
Proportion of female prison entrants who report that they have had a cervical screening in the last two years	Number of female prison entrants who reported having a cervical screening in the last two years	Total number of female prison entrants during the census week.
Number of deaths in custody		
Number of deaths post-release		
Mean/median age at which prison entrants smoked their first full cigarette		
Proportion of prison entrants who report that they currently smoke tobacco	Number of prison entrants who report that they currently smoke tobacco	Total number of prison entrants during the census week.

Appendix 1: List of indicators (continued)

Indicator	Numerator	Denominator
Proportion of prison entrants who report a risk of alcohol-related harm (self-report)	Number of prison entrants who received a consumption score of at least 6 on the Alcohol Use Disorders Identification Test (AUDIT), indicating a risk of alcohol-related harm	Total number of prison entrants during the census week.
Proportion of prison entrants who report that they engaged in illicit drug use in the last 12 months	Number of prison entrants who report that they engaged in illicit drug use in the last 12 months	Total number of prison entrants during the census week.
Proportion of prison entrants who report that they have injected drugs	Number of prison entrants who report that they have injected drugs	Total number of prison entrants
Proportion of prison entrants who report that they have shared injecting equipment	Number of prison entrants who reported that they have shared injecting equipment	Total number of prison entrants
Proportion of prison entrants who report having had unprotected sex with a new or casual partner in the last month	Number of prison entrants who report having had unprotected sex with a new or casual partner in the last month	Total number of prison entrants
Proportion of prison entrants who, in the last 12 months, consulted a health professional for their own health within the community	Number of prison entrants by professional health contact sought in the community	Total number of prison entrants during the census week.
Proportion of prison entrants who, in the last 12 months, consulted a health professional for their own health in prison	Number of prison entrants by professional health contact sought in prison	Total number of prison entrants during the census week.
Proportion of prison entrants who, in the last 12 months, needed to consult with a health professional in the community but did not	Number of prison entrants by type of health professional contact required in the community, yet not sought	Total number of prison entrants during the census week.
Proportion of prison entrants who, in the last 12 months, needed to consult with a health professional while in prison, but did not	Number of prison entrants by type of health professional contact required in prison, yet not sought	Total number of prison entrants during the census week.
Proportion of prison entrants by reason for not seeking health contact in the last 12 months when required	Number of prison entrants by reason for not seeking health contact when required	Total number of prison entrants during the census week.
Proportion of prisons that receive visits by an Aboriginal community controlled health organisation or an Aboriginal medical service at least once a month	Number of prisons that receive visits by an Aboriginal community controlled health organisation or an Aboriginal medical service at least once a month	Total number of prisons

Appendix 1: List of indicators (continued)

Indicator	Numerator	Denominator
Proportion of prison entrants who, at reception, were referred to mental health services for observation and further assessment	Number of prison entrants who, at reception, were referred to mental health services for observation and further assessment	Total number of prison entrants during the census week.
Proportion of prison entrants identified as currently at risk of suicide or self-harm	Number of prison entrants identified as currently at risk of suicide or self-harm	Total number of prison entrants during the census week.
Rate of hospital transfers for prisoners in custody	Number of hospital transfers for prisoners in custody	Total number of prisoners in custody
Proportion of prisons that offer immunisation programs according to the current national immunisation guidelines	Number of prisons that offer immunisation programs according to the current national immunisation guidelines	Total number of prisons
Proportion of prisons that have a health-related discharge plan in place for more than 75% of prisoners at the time of their release	Number of prisons that have a health-related discharge plan in place for more than 75% of prisoners at the time of their release	Total number of prisons
Proportion of prisoners in custody who used the prison clinic	Number of prisoners in custody who used the prison clinic	Total number of prisoners in custody
Proportion of clinic visits initiated by prisoner	Number of prisoners who initiated clinic visits	Total number of clinic visits
Proportion of clinic visits by type of health professional	Number of clinic visits by type of health professional	Total number of clinic visits
Proportion of prisoners in custody by problem managed at clinic visits	Number of prisoners in custody by problem managed at clinic visits	Total number of prisoners in custody
Proportion of prison entrants who report being on pharmacotherapy medication for opioid dependence	Number of prison entrants who report being on pharmacotherapy medication for opioid dependence	Total number of prison entrants during the census week.
Number of prisoners in custody who received medication for opioid dependence		
Proportion of prisoners in custody who received prescribed medication	Number of prisoners in custody who received prescribed medication	Total number of prisoners in custody
Number of prisoners in custody who received medication for hepatitis C		
Ratio of full-time equivalent health staff working within the correctional system to the total number of prisoners	Number of full-time equivalent health staff working within the correctional system on the reference date	Total number of prisoners in custody

Appendix 2: Data sources

National Prisoner Health Census (AIHW)

The National Prisoner Health Census is the main data source for the reporting of the National Prisoner Health Indicators. The inaugural census was conducted during the week 29 June to 5 July 2009 in all states and territories apart from Victoria, which undertook the Census during the week 5–11 October 2009 due to delays in obtaining ethical clearance. The Census captured data on prison entrants and visits to the prison clinic for one week and repeat medications taken by prisoners for one day.

NPEBBV&RBS

The National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey (Butler & Papanastasiou 2008) is held biennially in all states and territories. It is a census of prison entrants conducted over two weeks and provides estimates of prevalence of bloodborne viruses. Testing is conducted for HIV, hepatitis B and hepatitis C. The data can be categorised by age, sex and Indigenous status.

Prisoners in Australia (ABS)

This publication presents national statistics on prisoners who were in custody on 30 June each year (ABS 2009b). These statistics describe the characteristics of prisoners, sentence lengths and offences for which offenders are imprisoned, and provide a basis for measuring change over time.

Deaths in Custody in Australia (AIC)

This report from the National Deaths in Custody Program is responsible for monitoring the extent and nature of deaths that have occurred in police, prison and juvenile custody since 1980 (Curnow & Larsen 2009). These statistics describe the number of deaths, the demographic characteristics of the deceased and the circumstances surrounding the deaths.

National Health Survey (ABS)

This publication surveyed approximately 22,000 people from all states and territories in Australia from August 2007 to June 2008 (ABS 2009a). In each household, one adult (aged 18 years or over) and one child (where applicable) were included. The survey was designed to obtain national benchmarks on a wide range of health issues and to enable changes in health to be monitored over time. From the survey results, estimates of population prevalence for health conditions are estimated.

National Survey of Mental Health and Wellbeing (ABS)

The 2007 National Survey of Mental Health and Wellbeing was conducted from August to December 2007 and collected information from approximately 8,800 Australians aged 16–85 years (ABS 2008). The survey provides estimated prevalence on selected lifetime and 12- month mental disorders by three major disorder groups: anxiety disorders (e.g. social phobia), affective disorders (e.g. depression) and substance use disorders. It also provides information on the level of impairment, the health services used for mental health problems, physical conditions, social networks and caregiving, as well as demographic and socioeconomic characteristics.

National Drug Strategy Household Survey (AIHW)

The National Drug Strategy Household Survey was conducted during 2007 and sampled more than 23,000 people aged 12 years and over in households throughout Australia (AIHW 2007). The survey collected information on their drug use knowledge, attitudes and behaviours.

National Aboriginal and Torres Strait Islander Health Survey (ABS)

The National Aboriginal and Torres Strait Islander Health Survey was conducted from August 2004 to July 2005 and collected information from over 10,000 Indigenous Australians (ABS 2006c). It provides information about the health circumstances of Indigenous Australians from remote and non-remote areas across Australia. Results include health status measures, health service use and other actions people had recently taken for their health, health-related aspects of lifestyle and other health risk factors, and a summary of women's health characteristics.

Bettering the Evaluation and Care of Health (BEACH) General practice activity in Australia (AIHW)

The Australian General Practice Statistics and Classification Centre is a collaborating unit of the AIHW and the University of Sydney. The BEACH study collected data from 953 GPs during April 2007 and March 2008. Each GP provided information about 100 consecutive patient encounters, giving a total of 95,300 patient encounters in the sample. They also provided information about themselves and their practice. Results are reported in terms of GP and patient characteristics, patient reasons for encounter, problems managed and management techniques used (AIHW: Britt et al. 2009).

Cervical screening in Australia 2006–07

The report prepared by the AIHW was produced in collaboration with the Screening Section of DoHA and state and territory programs (AIHW 2009a). The cervical screening report provides a national picture of cervical screening in Australia for 2006–07 by combining data provided by state and territory cervical screening programs and data sourced from the National Cancer Statistics Clearing House and the AIHW Mortality Database.

Survey of Inmates in State and Federal Correctional Facilities 2004 (USA)

The Survey of Inmates in State and Federal Correctional Facilities is made up of two surveys, one in state adult correctional facilities and one in federal correctional facilities (US Census Bureau 2005). They provide nationally representative data on state prison inmates and sentenced federal inmates. Over 14,000 inmates participated from a selection of state facilities, and over 3,600 from selected federal facilities. The survey presents findings on prisoners who reported a current medical problem, a physical or mental impairment, a dental problem or an injury since admission. It includes the prevalence of specific medical conditions and problems.

Prisoner Health Survey 2005 (New Zealand)

The Prisoner Health Survey 2005 was a national survey of 423 sentenced prisoners throughout New Zealand, conducted between May and December 2005 (Ministry of Health 2006). The objectives of the survey were to improve understanding of the extent of the health needs among New Zealand prisoners, and to inform future prisoner health service planning, policy, processes and programs. It includes chronic disease, risk and protective factors, health service use, oral health, self-reported health status and disability, communicable disease and women's health.

Appendix 3: Prisoner health legislation in Australia

New South Wales

Justice Health is a statutory corporation constituted under the *Health Services Act 1997*.

Relevant New South Wales legislation includes:

- *Justice Legislation Crimes (Administration of Sentences) Act 1999*
  - functions of Justice Health and responsibility to advise Commissioner of Corrective Services (section 236A)
  - CEO access (section 236B)
  - appointment of medical officers (section 236C)
- *Children (Criminal Proceedings) Act 1987*
- *Children (Detention Centre) Act 1987*
- *Mental Health Act 2007*
- *Mental Health (Forensic Provisions) Act 2009*

Victoria

The *Corrections Act 1986* (and associated regulations) governs the operation of Victorian prisons. The Act outlines prisoners' rights in relation to access to reasonable medical and dental care, and, in the case of prisoners who are intellectually disabled or mentally ill, access to special care and treatment as considered necessary by medical officers.

Other relevant legislation includes:

- *Drugs, Poisons and Controlled Substances Act 1981*
- *Health Act 1958*
- *Mental Health Act 1986*
- *Charter of Human Rights and Responsibilities Act 2006*

Privacy legislation including the *Information Privacy Act 2000* and the *Health Records Act 2001* also affects how prisoner health care is delivered.

Queensland

The *Corrective Services Act 2006* is the Act in force in which the administration of correctional centres in Queensland is detailed. This Act contains sections which cover health services. The legislation was written prior to the machinery-of-government changes.

Legislation specifically about health service is contained in the *Health Services Act 1991* and the *Health Act 1937*.

Legislation about prescription, supply and administration of drugs is detailed within the *Health (Drugs and Poisons) Regulation Act 1996*.

Western Australia

Relevant Western Australian legislation includes:

- *Prisons Act 1981*
- *Young Offenders Act 1994*
- *Health Act 1911*
- *Poisons Act 1964*
- *Mental Health Act 1996*

Tasmania

The *Corrections Act 1997* is the Act in force in Tasmania. The Act contains sections on treatment of prisoners and detainees, mandated examination and blood-taking, plus the application of lethal force when need.

Australian Capital Territory

The *Corrections Management Act 2007* is the Act in force in the Australian Capital Territory. Section 21 refers to the administration of health services.

Northern Territory

Relevant Northern Territory legislation includes:

- Prisons (Correctional Services) Act
- Youth Justice Act
- Mental Health and Related Services Act
- Part 2A NT Criminal Code
- Notifiable Disease Act
- Poisons and Dangerous Drugs Act
- Health Practitioners Act
- Adult Guardianship Act
- Disability Services Act

Appendix 4: Prisons in Australia

New South Wales

Bathurst Correctional Complex, Berrima Correctional Centre, Brewarrina (Yetta Dhinnakkal) Centre, Broken Hill Correctional Centre, Cessnock Correctional Centre, Compulsory Drug Treatment Correctional Centre, Cooma Correctional Centre, Dilwynia Correctional Centre (Windsor), Emu Plains Correctional Centre, Glen Innes Correctional Centre, Goulburn Correctional Centre, Grafton Correctional Centre, Ivanhoe (Warakirri) Centre, John Morony Correctional Centre (Windsor), Junee Correctional Centre, Kirkconnell Correctional Centre (Bathurst), Lithgow Correctional Centre, Long Bay Correctional Complex, Long Bay Hospital, Mannus Correctional Complex (Tumbarumba), Metropolitan Remand & Reception (MRRC), Silverwater Correctional Centre, Silverwater Women's Correctional Centre (formerly Mulawa), Metropolitan Special Programs Centre (MSPC) (Long Bay), Mid North Coast Correctional Centre (Kempsey), Nowra, Oberon Correctional Centre, Parklea Correctional Centre, Parramatta Correctional Centre, St Heliers Correctional Centre (Muswellbrook), Tabulam, Tamworth Correctional Centre, Wellington Correctional Centre

Victoria

Ararat Prison, Barwon Prison, Beechworth Correctional Centre, Dame Phyllis Frost Centre, Dhurringile Prison, Fulham Correctional Centre, Judy Lazarus Transitional Centre, Langi Kal Kal Prison, Loddon Prison, Marngoneet Correctional Centre, Melbourne Assessment Prison, Metropolitan Remand Centre, Port Phillip Prison, Tarrengower Prison

Note that data were not collected from Beechworth, Dhurringile, Judy Lazarus Transitional Centre, Langi Kal Kal or Tarrengower in this census.

Queensland

Arthur Gorrie Correctional Centre (privately run), Borallon Correctional Centre (privately run), Brisbane Correctional Centre, Brisbane Women's Correctional Centre, Capricornia Correctional Centre, Lotus Glen Correctional Centre, Maryborough Correctional Centre, Townsville Correctional Centre, Wolston Correctional Centre, Woodford Correctional Centre, Darling Downs Correctional Centre, Numinbah Correctional Centre, Palen Creek Correctional Centre (annexed to Wolston Correctional Centre)

Western Australia

Acacia Prison, Albany Regional Prison, Bandyup Women's Prison, Boronia Pre-release Centre for Women, Broome Regional Prison, Bunbury Regional Prison, Casuarina Prison, Eastern Goldfields Regional Prison, Greenough Regional Prison, Hakea Prison, Karnet Prison Farm, Roebourne Prison, Wooroloo Prison Farm

South Australia

Adelaide Remand Centre, Yatala Labour Prison, Adelaide Women's Prison, Cadell Training Centre, Port Lincoln Prison, Mobilong Prison (Murray Bridge), Port Augusta Prison, Mount Gambier Prison (private), Adelaide Pre-Release Centre

Note that data were not collected from Mount Gambier for this census.

Tasmania

Risdon Prison Complex, Mary Hutchinson Women's Prison, Hayes Prison Farm, Hobart Reception Centre, Launceston Reception Centre, Ron Barwick Minimum Security Prison

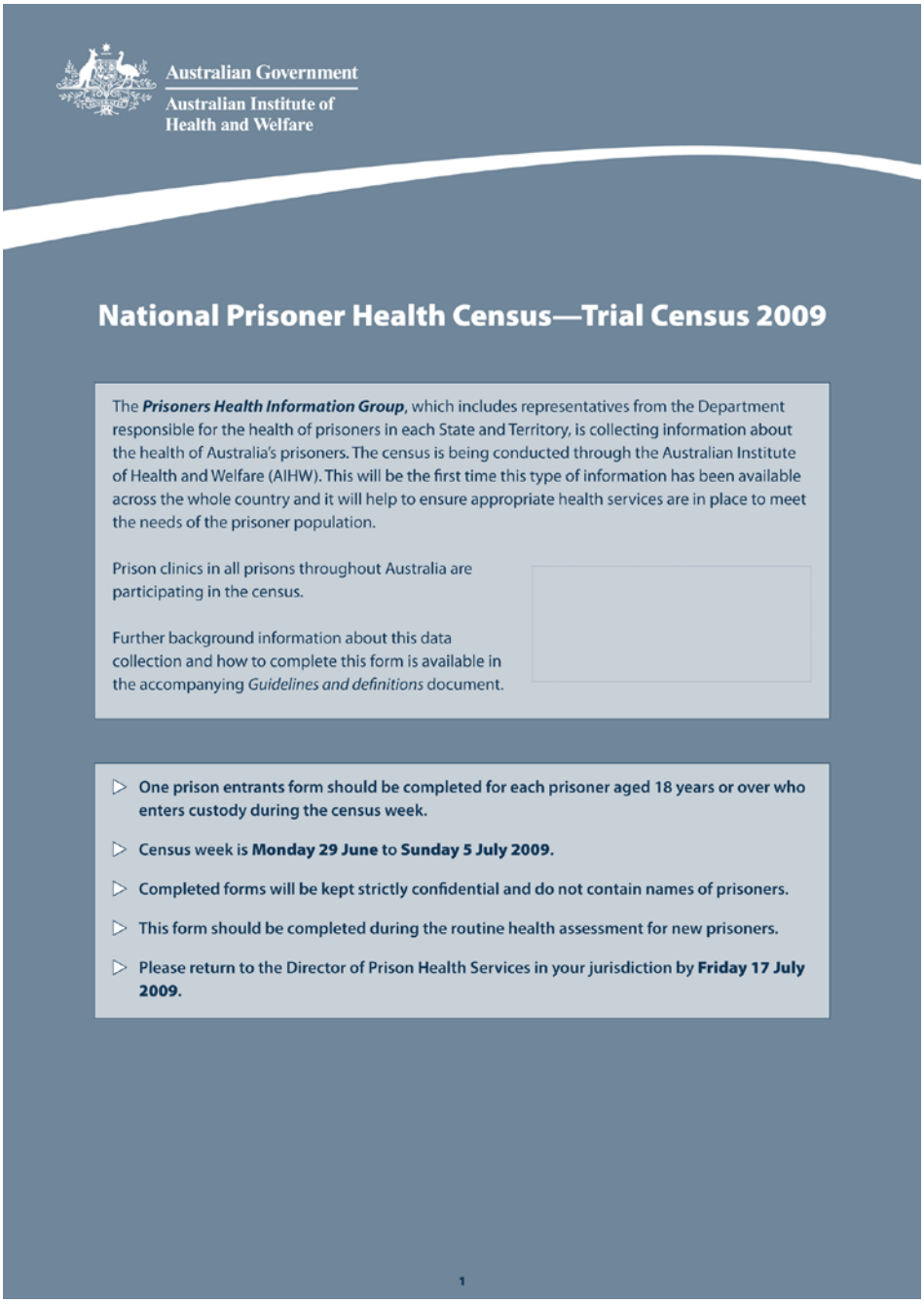
Australian Capital Territory

Alexander Maconochie Centre

Northern Territory

Darwin Correctional Centre, Alice Springs Correctional Centre

Appendix 5: Prisoner health census forms



Australian Government
Australian Institute of Health and Welfare

National Prisoner Health Census—Trial Census 2009

The ***Prisoners Health Information Group***, which includes representatives from the Department responsible for the health of prisoners in each State and Territory, is collecting information about the health of Australia's prisoners. The census is being conducted through the Australian Institute of Health and Welfare (AIHW). This will be the first time this type of information has been available across the whole country and it will help to ensure appropriate health services are in place to meet the needs of the prisoner population.

Prison clinics in all prisons throughout Australia are participating in the census.

Further background information about this data collection and how to complete this form is available in the accompanying *Guidelines and definitions* document.

- **One prison entrants form should be completed for each prisoner aged 18 years or over who enters custody during the census week.**
- **Census week is Monday 29 June to Sunday 5 July 2009.**
- **Completed forms will be kept strictly confidential and do not contain names of prisoners.**
- **This form should be completed during the routine health assessment for new prisoners.**
- **Please return to the Director of Prison Health Services in your jurisdiction by Friday 17 July 2009.**

1

National Prisoner Health Census—Trial Census 2009

Prison Entrants Form

To be completed by health professional at prison reception health assessment
Census week: 29 June 2009 to 5 July 2009

1. Correctional facility identifier

2. State or territory

3. Prisoner identifier

4. Date of birth

Day Month Year

5. Age in years
COMPLETE ONLY IF DATE OF BIRTH UNKNOWN

6. Country of birth
PLEASE TICK ONE BOX ONLY

- Australia ☐ 1
- Other (specify) ☐ 2

7. Main langauge spoken at home
PLEASE TICK ONE BOX ONLY

- English ☐ 1
- Other (specify) ☐ 2

8a. Sex
PLEASE TICK ONE BOX ONLY

- Male ☐ 1
- Female ☐ 2

8b. Transgender or currently undergoing gender reassignment? *PLEASE TICK ONE BOX ONLY*

- Yes ☐ 1
- No ☐ 2

9. Are you of Aboriginal or Torres Strait Islander origin?
PLEASE TICK ONE BOX ONLY

- Aboriginal ☐ 1
- Torres Strait Islander ☐ 2
- Both Aboriginal and Torres Strait Islander ☐ 3
- Neither Aboriginal nor Torres Strait Islander ☐ 4

10a. What was the highest year of school you have completed?
PLEASE TICK ONE BOX ONLY

- Year 12 ☐ 1
- Year 11 ☐ 2
- Year 10 ☐ 3
- Year 9 ☐ 4
- Year 8 or below ☐ 5
- No schooling ☐ 6

10b. Have you completed a trade certificate, diploma, degree or any other educational qualification?
MULTIPLE BOXES MAY BE TICKED

Yes (specify below)

- Trade Certificate ☐ 1
- Diploma ☐ 2
- Bachelors degree ☐ 3
- Postgraduate qualification ☐ 4

No ☐ 5

3

11a. Is this your first time in a prison or a juvenile detention centre?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 12*
No ☐ 2 ▶ *Go to Question 11b*

11b. If NOT the first time in prison then (please insert number in the boxes below):

Total number of times in custody in a juvenile detention centre .....
Total number of times in custody in an adult prison (including this time) .....

11c. What was your age at first detention? .....

12a. Have you ever been told by a doctor, psychiatrist, psychologist or nurse that you have a mental health disorder (including drug and alcohol abuse)?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

12b. Are you currently on medication for a mental health disorder?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

13a. In the past four weeks, how often did you feel...?
(please mark the answer that best describes the amount of time you felt that way).
PLEASE TICK ONE BOX PER LINE

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1. Tired out for no good reason?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
2. Nervous?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
3. So nervous that nothing could calm you down?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
4. Hopeless?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
5. Restless or fidgety?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
6. So restless that you could not sit still?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
7. Depressed?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
8. Like everything was an effort?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
9. So sad that nothing could cheer you up?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
10. Worthless?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

13b. If you are currently experiencing any distress, is it related to your current incarceration?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2
Not applicable ☐ 3

14a. Have you *ever* been told by a doctor or nurse that you have asthma?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 14b*
No ☐ 2 ▶ *Go to Question 15a*

14b. Do you *still* have asthma?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

15a. Have you *ever* been told by a doctor or nurse that you have cancer?
Exludes non-melanoma skin cancer
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 15b*
No ☐ 2 ▶ *Go to Question 16a*

15b. Do you *still* have cancer (including cancer which is in remission)?
Exludes non-melanoma skin cancer
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

16a. Including conditions which can be controlled by medication, have you *ever* been told by a doctor or nurse that you have cardiovascular disease?
Cardiovascular disease includes coronary heart disease, heart failure, rheumatic fever, rheumatic heart disease,congenital heart disease, stroke and peripheral vascular disease
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 16b*
No ☐ 2 ▶ *Go to Question 17a*

16b. Including conditions which you are controlling with medication, do you *currently* have cardiovascular disease?
PLEASE TICK ONE BOX ONLY

1. Yes ☐ 1
2. No ☐ 2

17a. Have you *ever* been told by a doctor or nurse that you have arthritis?
Arthritis includes gout, rheumatism, osteoarthritis, rheumatoid arthritis, other type, arthritis type unknown
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 17b*
No ☐ 2 ▶ *Go to Question18a*

17b. Do you *currently* have arthritis?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

18a. Have you *ever* been told by a doctor or nurse that you have diabetes?
Diabetes includes Type 1 diabetes, Type 2 diabetes and gestational diabetes
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 18b*
No ☐ 2 ▶ *Go to Question19a*

18b. Do you *currently* have diabetes?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

19a. In the last 12 months, have you consulted any of the following professionals for your own health?
MULTIPLE BOXES MAY BE TICKED

	While in the community	While in prison
Doctor/GP	☐ 1	☐ 9
Nurse	☐ 2	☐ 10
Alcohol and drug worker	☐ 3	☐ 11
Aboriginal health worker	☐ 4	☐ 12
Dentist	☐ 5	☐ 13
Psychologist	☐ 6	☐ 14
Psychiatrist	☐ 7	☐ 15
Social worker/ welfare officer	☐ 8	☐ 16

19b. In the last 12 months was there ever a time you needed to go to any of the following professionals for your own health but didn't?
MULTIPLE BOXES MAY BE TICKED

	While in the community	While in prison
Doctor/GP	☐ 1	☐ 9
Nurse	☐ 2	☐ 10
Alcohol and drug worker	☐ 3	☐ 11
Aboriginal health worker	☐ 4	☐ 12
Dentist	☐ 5	☐ 13
Psychologist	☐ 6	☐ 14
Psychiatrist	☐ 7	☐ 15
Social worker/ welfare officer	☐ 8	☐ 16

19c. Why didn't you go?
(please answer only if you ticked a box in question 19b)
MULTIPLE BOXES MAY BE TICKED

- Cost ☐ 1
- Discrimination ☐ 2
- Service not culturally appropriate ☐ 3
- Felt it would not help ☐ 4
- Language problems ☐ 5
- Transport/distance ☐ 6
- Waiting time too long or not available at time required ☐ 7
- Decided not to seek care ☐ 8
- Not available in area or prison ☐ 9
- Too busy (including work, personal, family responsibilities) ☐ 10
- Dislikes (service /professional, afraid, embarrassed) ☐ 11
- Other reason please specify _____ ☐ 20

20. Have you ever received a blow to the head resulting in a loss of consciousness or blacking out?
PLEASE TICK ONE BOX ONLY

- Yes ☐ 1
- No ☐ 2

21a. Have you ever intentionally harmed yourself?
PLEASE TICK ONE BOX ONLY

- Yes ☐ 1
- No ☐ 2

21b. Have you thought of harming yourself in the last 12 months?
PLEASE TICK ONE BOX ONLY

- Yes ☐ 1
- No ☐ 2

22a. Over the last 12 months, how often did you have a drink containing alcohol?
PLEASE TICK ONE BOX ONLY

- Never ☐ 0 ▶ *Go to Question 23*
- Monthly or less ☐ 1
- 2–4 times a month ☐ 2
- 2–3 times a week ☐ 3
- 4 or more times a week ☐ 4

22b. Over the last 12 months, how many standard drinks (see table on next page), would you have on a typical day when you were drinking?
PLEASE TICK ONE BOX ONLY

- 1 or 2 ☐ 0
- 3 or 4 ☐ 1
- 5 or 6 ☐ 2
- 7 to 9 ☐ 3
- 10 or more ☐ 4

22c. In the last 12 months, how often did you have six or more standard drinks on one occasion?
PLEASE TICK ONE BOX ONLY

- Never ☐ 0
- Less than monthly ☐ 1
- Monthly ☐ 2
- Weekly ☐ 3
- Daily or almost daily ☐ 4

23a. Have you ever smoked a full cigarette?
Includes manufactured cigarettes, roll-your-own cigarettes, cigars, pipes and other tobacco products
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 23b*
No ☐ 2 ▶ *Go to Question 24a*

23b. If YES, how old were you when you smoked your FIRST full cigarette (Years) ☐

23c. Do you smoke NOW?

Yes ☐ 1
No ☐ 2 ▶ *Go to Question 24a*

23d. If YES which of the following best describes your CURRENT use of tobacco?
PLEASE TICK ONE BOX ONLY

I NOW smoke:

occasionally, but less than once a week ☐ 1
occasionally, not everyday, but at least once a week ☐ 2
regularly, every day or most days ☐ 3

Standard drinks


285ml full strength beer (4.9% alcohol) — **1** standard drink


425 ml light beer (2.9% alcohol) — **1** standard drink


375 ml Stubby or can (4.9% alcohol) — **1.4** standard drinks


425 ml full strength beer (4.9% alcohol) — **1.6** standard drink


30 ml spirits (40% alcohol) — **1** standard drink


150 ml wine (12% alcohol) — **1.5** standard drinks

24a. Have you used drugs in the last 12 months?
Excludes medical use of prescribed drugs—please see guidelines for definitions
PLEASE TICK ONE BOX ONLY

Yes ☐ 1 ▶ *Go to Question 24b*
No ☐ 2 ▶ *Go to Question 25a*

24b. Have you used any of the following substances for non-medical purposes or that were not supplied to you medically in the last 12 months?
Excludes medical use of prescribed drugs—please see guidelines for definitions
MULTIPLE BOXES MAY BE TICKED

Analgesics/pain killers *(Aspirin, Paracetamol, Mersyndol, Panadeine forte, Nurofen Plus)* ☐ 1

Other analgesics—*opiates/opioids such as morphine/oxycontin/pethidine* ☐ 2

Tranquillisers/Sleeping Pills *(Benzos, Temazzies, Tranks, Sleepers, Valium, Serapax, Serries, Mandrax, Mandies, Rohypnol, Rowies)* ☐ 3

Methadone *(Done, Junk, Jungle Juice)* / **Buprenorphine** *(Bupe, Sub)* / **Suboxone** ☐ 4

Heroin *(Hammer, Smack, Horse, H, Boy, Junk)* ☐ 5

Barbiturates *(Barbies, Barbs, Downers, Reds, Purple Hearts)* ☐ 6

Ketamine *(K, Special K, Vitamin K, KitKat, Ket)* ☐ 7

Inhalants—Petrol / Volatile solvents *(e.g. glue, butane, aerosol sprays, cleaning fluid, felt pens, liquid paper, paint thinner)* ☐ 8

Inhalants—Anaesthetics *(e.g. nitrous oxide, ether, chloroform)*/ **Nitrates** *(e.g. amyl nitrate (poppers, snappers)*/ **Butyl** *(rush, bolt, climax, video head cleaner)*/ **Other inhalants** ☐ 9

Steroids *(Roids, Juice, Gear)* ☐ 10

Cannabis/Marijuana *(Pot, Grass, Weed, Reefer, Joint, MaryJane, Acapulco gold, Rope, Mull, Cone, Spliff, Dope, Skunk, Bhang, Ganja, Hash, Chronic)* ☐ 11

Meth/amphetamine *(e.g. Speed, Crystal, Whizz, Goey, Gogo, Uppers, Amphet, Ice, Meth, Zip, Ox blood, Leopards blood, MDEA, Methylamphetamine, Eve, Shabu)* ☐ 12

Cocaine *(Coke, Crack, Flake, Snow, White lady/girl, Happy dust, Gold dust, Toot, Scotty, Charlie, Cecil, C, Freebase)* ☐ 13

Ecstasy *(XTC, E, Ex, Ecci, E and C, Adam, MDMA, PMA)* ☐ 14

GHB *(Fantasy, Liquid E, Liquid X, Grievous bodily harm)* ☐ 15

Hallucinogens *(Tabs, Liquid, Magic mushrooms, Datura or Angel's trumpet, Other)* ☐ 16

Other drugs please specify ☐ 20

25a. Have you ever been on a methadone program?
MULTPILE BOXES MAY BE TICKED

Yes (specify below)
- on it now ☐ 1
- in the past ☐ 2

No, never ☐ 3

25b. Have you ever been on any other opiate replacement program, e.g., naltrexone, buprenorphine, suboxone or LAAM?
MULTPILE BOXES MAY BE TICKED

Yes (specify below)
- on it now ☐ 1
- in the past ☐ 2

No, never ☐ 3

▶ **For female prisoners, please answer questions 26 and 27.**

▶ **For male prisoners, please go straight to question 28.**

Female prisoners only

26. Have you had a Pap smear in the last 2 years?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

27a. Have you ever been pregnant?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

27b. Age of first pregnancy ☐

▶ **Please go to question 28.**

To be filled in by health professional at completion of assessment

28. As a result of the current reception assessment, has the prisoner been referred to the prison mental health service?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

29. Has the prisoner been identified as currently at risk of suicide/self harm?
PLEASE TICK ONE BOX ONLY

Yes ☐ 1
No ☐ 2

Please indicate below who completed this form and their position within the organisation

Name ☐

Position title ☐

Thank you for completing this form

Australian Institute of Health and Welfare • National Prisoner Health Census—Trial Census 2009

CLINIC FORM

- To be completed by treating health professional at clinic visitation
- Census week: **29 June 2009** to **5 July 2009**
- Please return to the Director of Prison Health Services in your jurisdiction by **Friday 17 July 2009**

This form is to be used for all clinic contacts during the one week census, and is designed to capture information on the number of clinic contacts each prisoner makes, and the problem(s) managed during those contacts. A 'visit' is defined as 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 band-aids or panadol). One form is to be completed for each clinic contact.

i. Prisoner ID

ii. Date of birth Day Month Year

iii-a. Sex *PLEASE TICK ONE BOX ONLY*

- Male ☐ 1
- Female ☐ 2

iii-b. Transgender or currently undergoing gender reassignment? *PLEASE TICK ONE BOX ONLY*

- Yes ☐ 1
- No ☐ 2

iv. Are you of Aboriginal or Torres Strait Islander origin? *PLEASE TICK ONE BOX ONLY*

- Aboriginal ☐ 1
- Torres Strait Islander ☐ 2
- Both Aboriginal and Torres Strait Islander ☐ 3
- Neither Aboriginal nor Torres Strait Islander ☐ 4

1. Visit initiated by: *PLEASE TICK ONE BOX ONLY*

- Prisoner ☐ 1
- Staff ☐ 2

2. Problem managed *TICK AS MANY AS APPROPRIATE*

- Blood or urine test/result ☐ 1
- Health check ☐ 2
- Malignancy (cancer, excluding non-melanoma skin cancer) ☐ 3
- Skin (excluding cancer) ☐ 4
- Musculoskeletal injury ☐ 5
- Arthritis ☐ 6
- Musculoskeletal (excluding arthritis, injury or cancer) ☐ 7
- Asthma ☐ 8
- Respiratory (excluding asthma or cancer) ☐ 9
- Digestive (excluding cancer) ☐ 10
- Psychological ☐ 11
- Diabetes ☐ 12
- Cardiovascular disease ☐ 13
- Communicable disease ☐ 14
- Other reason (please specify) ☐ 20
- Other reason (please specify) ☐ 20
- Other reason (please specify) ☐ 20

3. Prisoner seen by: *PLEASE TICK ONE BOX ONLY*

- Medical practitioner ☐ 1
- Psychologist ☐ 2
- Psychiatrist ☐ 3
- Nurse ☐ 4
- Aboriginal health worker ☐ 5
- Other (please specify) ☐ 6

Australian Institute of Health and Welfare • National Prisoner Health Census—Trial Census 2009

PRISONERS IN CUSTODY—REPEAT MEDICATIONS

- To be completed by treating health professional
- Choose **ONE DAY** in the census week **(29 June 2009** to **5 July 2009)** to fill out this form
- Please return to the Director of Prison Health Services in your jurisdiction by **Friday 17 July 2009**

This form is designed to capture information on the number of prisoners on repeat medications, and the conditions those medications relate to. You only need to use this form on **one day** during the census week as repeat medications should be largely the same from day to day. It doesn't matter which day of the census week that you choose.

Routine, household type medications taken on a PRN basis (such as Panadol) are not included. Depot medications (such as antipsychotics) should be included whether or not they were actually administered on the census day. For each prisoner, please tick the boxes for each repeat medication administered.

i. Prisoner ID

ii. Date of birth Day Month Year

iii-a. Sex *PLEASE TICK ONE BOX ONLY*

Male ☐ 1
Female ☐ 2

iii-b. Transgender or currently undergoing gender reassignment? *PLEASE TICK ONE BOX ONLY*

Yes ☐ 1
No ☐ 2

iv. Are you of Aboriginal or Torres Strait Islander origin? *PLEASE TICK ONE BOX ONLY*

Aboriginal ☐ 1
Torres Strait Islander ☐ 2
Both Aboriginal and Torres Strait Islander ☐ 3
Neither Aboriginal nor Torres Strait Islander ☐ 4

Repeat medications *PLEASE TICK AS MANY AS APPROPRIATE*

Allergies
e.g. Loratadine (Claratyne, Allereze), Fexofenadine (Fexal, Telfast) ☐ 1

Antifungals
e.g. Clotrimazol (Canesten, Clozole, Femizole, Hydrozole, Topizole) ☐ 2

Anti-inflamatories, arthritis
e.g. Ibuprofen (Nurofen), Meloxicam (Mobic), Diclofenac (Voltaren), Aspirin, Glucoasmine ☐ 3

Anxiety
e.g. Diazepam (Valium) ☐ 4

Asthma
e.g. Salbutamol (Ventolin, Butamol, Rotahaler), Salmeterol (Seretide, Serevent), Symbicort, Fluticasone (Beconase, Flixotide), Intal Forte, Singulair, Prednisolone ☐ 5

Cholesterol
e.g. Atorvastatin (Lipitor, Caduet), Simvastatin (Lipex, Zocor) ☐ 6

Depression
e.g. Sertraline (Zoloft), Fluoxetine (Prozac, Lovan), Paroxetine (Aropax), Citalopram (Cipramil), Amitriptyline (Endep) ☐ 7

Diabetes
e.g. Metformin (Glucophage,Avandamet, Diabex, Diaformin, Formet, Glucovance) ☐ 8

Digestive
e.g. Omeprazole (Nexium, Probitor) ☐ 9

High blood pressure/angina
e.g. Perindopril (Conversyl, Indopril, Perindo), Irbesartan (Avapro, Karvea, Karvezide), Atenolol (Tenormin), Ramipril (Prilace,Triasyn, Tryzan), Amlodipine (Norvasc) ☐ 10

Infection (antibiotics)
e.g. Amoxycillin (Amoxil, Augmentin), Cephalexin (Keflex), Roxithromycin (Rulide, Roximycin), Doxycycline (Vibramycin) ☐ 11

Infectious diseases
e.g. Pegasys, Stocrin, Truvada ☐ 12

Methadone ☐ 13

Nicotine
e.g. QuitX ☐ 14

Pain (Analgesics -repeat only)
e.g. Paracetamol (Panadol), Codeine (Panadeine), Oxycodone (OxyContin, Endone), Tramadol (Tramahexal, Zydol) ☐ 15

Prostate
e.g. Flomaxtra ☐ 16

Psychoses
e.g. Amisulpride (Solian), Clozapine (Clozaril, Clopine), Olanzapine (Zyprexa), Quetiapine (Seroquel), Risperidone (Risperdal), Prochlorperazine (Stemetil, Stemzine) ☐ 17

Sleep disturbance
e.g. Temazepam (Normison, Temaze, Temtabs), Venlafaxine (Effexor) ☐ 18

Other (please specify) ☐ 20

Other (please specify) ☐ 20

Other (please specify) ☐ 20

National Prisoner Health Census—Trial Census 2009

PRISON ESTABLISHMENT FORM

- To be completed by the manager of the prison's health service
- For assistance please call the Prisoner Health Census Helpline on **1800 443 182**
- Census week: **29 June 2009** to **5 July 2009**
- Please return to the Director of Prison Health Services in your jurisdiction by **Friday 17 July 2009**

1. Correctional facility identifier

2. Name of prison/remand centre

3. State or territory

4a. Does your facility receive visits by an Aboriginal Community Controlled Health Organisation (ACCHO) or an Aboriginal Medical Service (AMS) at least once a month? *PLEASE TICK ONE BOX ONLY*

Yes ☐ 1 ▶ *Go to Question 4b*

No ☐ 2 ▶ *Go to Question 5a*

4b. If yes, which health providers provide the ACCHO or AMS services at your facility? *MULTIPLE BOXES MAY BE TICKED*

Aboriginal Health Worker ☐ 1

Medical practitioner ☐ 2

Social worker ☐ 3

Psychologist ☐ 4

Counsellor ☐ 5

Drug & alcohol worker ☐ 6

Other (specify) ☐ 7

5a. Please estimate the proportion of prisoners at your facility that have a health-related discharge plan at the time of their release. *A health-related discharge plan is a plan that supports the continuity of healthcare between the prison health service and the community, based on the individual needs of the prisoner.*

PLEASE TICK THE BOX INDICATING THE APPROXIMATE PERCENTAGE

0% ☐ 1

1%–25% ☐ 2

26%–50% ☐ 3

51%–75% ☐ 4

76%–100% ☐ 5

5b. Please provide below some information about the approach, taken at your establishment, to health-related discharge planning.

6. Do you offer immunisation to prisoners in accordance with the current national immunisation guidelines?

Please see attached guidelines for a link to the Australian Immunisation handbook

PLEASE TICK ONE BOX ONLY

Yes, to some prisoners (targeted or opportunistic) ☐ 1

Yes, to all prisoners ☐ 2

No ☐ 3

1

National Prisoner Health Census—Trial Census 2009

7. Number of full-time equivalent health staff working at your correctional facility *See guidelines for definitions of full-time equivalent staff*

Medical Practitioner(s)		1
Psychologist(s) providing mental health services		2
Dental Practitioner(s)		3
Psychiatrist(s)		4
Registered Nurse(s)		5
Enrolled Nurse(s)		6
Aboriginal health worker(s)		7
Nurse practitioner(s)		8
Other please specify		9
Total number full-time equivalent health staff		10

8. Number of female prisoners who were pregnant while in prison during the 12-month period to 30th June 2009

9. How many hospital transfers have you had this week

Acute—ambulance—not planned		1
Non-Acute—planned		2

10. Total number of prison entrants into your facility during this census week by sex

Male		1
Female		2

Please indicate below who completed this form and their position within the organisation

Name

Position title

Date completed

Thank you for completing this form

2

Appendix 6: South Australia

Prisoner health services

- Adult prisoners and persons held on remand in South Australia are under the care of the Department for Correctional Services. The Department of Health through the South Australian Prison Health Service (SAPHS) provides health services in the eight State administered Correctional Services institutions: four country facilities and four metropolitan with the Adelaide Pre-release Centre and Adelaide Woman's Prison co-located at Northfield.
- SAPHS provides a range of primary services from nursing staff, salaried medical officers, visiting medical practitioners and a limited range of allied health services.
- Yatala Labour Prison and the Adelaide Remand Centre have small observation facilities capable of managing semi-acute health problems. A limited 24-hour nursing service is provided at these sites.
- On-site psychiatric clinics are provided by Forensic Mental Health Services who also have an inpatient facility at James Nash House.
- Most secondary and tertiary health care and most allied health services are provided off-site through the public health system.

Key policy directions

- To provide prisoners and offenders with health care comparable to that of the general community.
- To work with the Department for Correctional Services in developing strategies to improve identification of and response to health needs of prisoners and offenders.
- To review and develop SAPHS practices that are evidence-based and consistent with accepted standards.
- To develop and introduce electronic data management systems.
- To improve the continuity and consistency of health care in prison and during the transition back into the general community.
- To promote healthy lifestyle choices.

Abbreviations

ABS	Australian Bureau of Statistics
ACCHO	Aboriginal community controlled health organisation
AIC	Australian Institute of Criminology
AIDS	acquired immune deficiency syndrome
AIHW	Australian Institute of Health and Welfare
AMS	Aboriginal medical service
ANU	Australian National University
AUDIT	Alcohol Use Disorder Identification Test
AUDIT-C	Alcohol Use Disorder Identification Test—Consumption
BEACH	Bettering the Evaluation and Care of Health study
COAG	Council of Australian Governments
CPHS	Correctional Primary Health Services
CVD	cardiovascular disease
DHF	Department of Health and Families
DoHA	Department of Health and Ageing
DoJ	Department of Justice
FMHS	Forensic Mental Health Services
FTE	full-time equivalent
GP	general practitioner
HCV	hepatitis C virus
HoPE	Health of Prisoner Evaluation
HIV	human immunodeficiency virus
IDU	injecting drug user
K10	Kessler Psychological Distress Scale
LOC	loss of consciousness
NAGATSIHID	National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data

NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NCIS	National Coroners Information System
NDICP	National Deaths in Custody Program
NDSHS	National Drug Strategy Household Survey
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
NNDSS	National Notifiable Diseases Surveillance System
NPEBBV&RBS	National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey
NPHDC	National Prisoner Health Data Collection
NSMHWB	National Survey of Mental Health and Wellbeing
NSP	needle and syringe exchange program
OPT	opioid pharmacotherapy treatment
RCIADIC	Royal Commission into Aboriginal Deaths in Custody
PHIG	Prisoner Health Information Group
PRN	pro re nata (meaning 'as needed' or 'as the situation arises')
SARS	severe acute respiratory syndrome
STI	sexually transmitted infection
TBI	traumatic brain injury
UK	United Kingdom
USA	United States of America

Australian jurisdictions

NSW	New South Wales
Vic	Victoria
Qld	Queensland
WA	Western Australia
SA	South Australia
Tas	Tasmania
ACT	Australian Capital Territory
NT	Northern Territory

Glossary

Aboriginal community controlled health organisation (ACCHO) A health organisation controlled by, and accountable to, Indigenous people in those areas in which they operate. ACCHOs aim 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 Indigenous individuals, families and community groups.

Aboriginal medical service (AMS) A health service funded principally to provide services to Aboriginal and Torres Strait Islander individuals that is not necessarily community controlled. AMSs that are not community controlled are government health services run by a state or territory government. Non-community controlled AMSs mainly exist in the Northern Territory and the northern part of Queensland.

Adult prison A place administered and operated by a justice department, where individuals are detained while under the supervision of the relevant justice department on a pre-sentence or sentenced detention episode.

Affective disorder Disorders that involve mood disturbance. Examples include bipolar affective disorder, depressive episode and dysthymia.

Anxiety disorder Disorders that involve feelings of tension, distress or nervousness. For example, panic disorder, social phobia, agoraphobia, generalised anxiety disorder, post-traumatic stress disorder and obsessive-compulsive disorder.

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. Two common bloodborne viruses are 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).

Cancer remission A period of time when the cancer is responding to treatment or is under control.

Cardiovascular disease (CVD) 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 contact 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 band-aids or paracetemol.

Communicable disease Diseases which are capable of being transmitted between individuals, including AIDS, HIV, bacterial infection, hepatitis, malaria, meningitis and meningococcal infections, STIs, viral 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 These include 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.

Full-time equivalent (FTE) 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 to be excluded. Contract staff employed through an agency are included where the contract is for the supply of labour (e.g. nursing) rather than of products (e.g. photocopier maintenance). An FTE of 1.0 means that the person is equivalent to a full-time worker; while an FTE of 0.5 signals that the worker is only 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 This includes use of:

- any drug which 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 (e.g. Pethidine)
- any drug used for 'non medical purposes'—the term 'non-medical purposes' means drugs used
  - either alone or with other drugs in order to induce or enhance a drug experience
  - for performance enhancement (e.g. athletic)
  - for cosmetic purposes (e.g. 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 years are detained while under the supervision of the department on a pre-sentence or sentenced detention episode.

Malignancy Includes all type of cancers but excludes non-melanoma skin cancer.

Mental health A state of wellbeing in which the person realises their own abilities, can cope with normal stresses of life, can work productively and can make a contribution to their community. Mental health is the capacity of individuals and groups to interact with one another and the environment, in ways that promote subjective wellbeing, optimal development and the use of cognitive, affective and relational abilities.

Mental illness This refers to the range of cognitive, emotional and behavioural disorders that interfere with the lives and productivity of people. Mental illnesses are diagnosable and include depression, anxiety, substance use disorders, psychoses and dementia.

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 Long-term conditions to a skeletal muscle, tendon, ligament, joint or a blood vessel that services skeletal muscles and any related tissues. Includes back injuries, back pain, bone disease, bursitis, joint diseases, muscular disease, spinal diseases, tendonitis. Excludes arthritis, injury or cancer.

Musculoskeletal injury Recent/short-term injuries to a skeletal muscle, tendon, ligament, joint or a blood vessel that services skeletal muscles and any related tissues.

Opiate pharmacotherapy treatment (OPT) A form of health care 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. OPT includes methadone, buprenorphine and burprenorphine with naloxone.

Pregnancy The carrying of one or more offspring which 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 at least 18 years) 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 prison health service that provides screening of prisoners at intake, conducts psychiatric assessments, provides therapy or counselling by mental health professionals and distributes psychotropic medication.

Psychosis A mental disorder in which the person has strange ideas or experiences which 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 These 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.

Remand When a person is placed in custody while awaiting the outcome of a court hearing.

Repeat medication Refers to prescribed medication which is regularly taken by the prisoner and includes depot and oral medications. Does not include routine household-type medications such as paracetemol which are taken on an as-needed (PRN) basis.

Respiratory conditions Conditions of the respiratory system, including airways, lungs and the respiratory muscles. Examples include: 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. Asthma and cancer is excluded.

Risk factor Any factor which 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 These include burns, scalds, dermatitis, fungal skin diseases, infectious skin disease, pressure sores, psoriasis, rosacea, ulcers and warts, but exclude cancer.

Smoker 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 they regularly smoked one or more cigarettes, cigars or pipes per day
- weekly smoker—an adult who reported at the time of the interview that they smoked occasionally, not everyday, but at least once a week
- irregular—an adult who reported at the time of the interview that they smoked occasionally, but less than once a week
- ex-smoker—an adult who reported they did not currently smoke
- never smoked—an adult who reported they had never smoked a full cigarette.

Social worker A social worker provides counselling and support to prisoners. Social workers have a bachelor degree in social work.

Standard drinks A standard drink contains 12.5ml of alcohol. The serving size will determine the number of standard drinks per serve, as shown by these approximations:

- 285ml full-strength beer (4.9% alcohol)—1 standard drink
- 425ml light beer (2.9% alcohol)—1 standard drink
- 375ml stubby or can (4.9% alcohol)—1.4 standard drinks
- 425ml full-strength beer (4.9% alcohol)—1.6 standard drinks
- 30ml spirits (40% alcohol)—1 standard drink
- 150ml wine (12% alcohol)—1.5 standard drinks

Transgender A person's sex may change during their lifetime as a result of procedures known alternatively as sex change, gender reassignment, transsexual surgery, transgender reassignment or sexual reassignment. Throughout this process, which may be over a considerable period of time, sex could be recorded as either male or female. Prisoners who identified as engaging in any of these procedures or currently undergoing gender reassignment were recorded as transgender.

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List of tables

List of figures