



# YOUNG OFFENDERS ON COMMUNITY ORDERS:

## HEALTH, WELFARE AND CRIMINOGENIC NEEDS

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The true measure of a nation's standing is how well it attends to its children – their health and safety, their material security, their education and socialization, and their sense of being loved, valued, and included in the families and societies into which they are born.

UNICEF, Child poverty in perspective: An overview of child well-being in rich countries, *Innocenti Report Card 7*, 2007 UNICEF Innocenti Research Centre, Florence.



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**Note:**

*The Human Rights and Equal Opportunity Commission uses the terms 'Indigenous' and 'Aboriginal' interchangeably in their reports. NSW Health prefers the term 'Aboriginal.' Both terms are used in this book.*

# LIST OF ABBREVIATIONS

<b>AAG</b>	Australian Alcohol Guidelines	<b>JH (CHS)</b>	Justice Health (formerly Corrections Health Service)
<b>ADD</b>	Attention Deficit Disorder	<b>JJCS</b>	Juvenile Justice Community Service
<b>ADHD</b>	Attention Deficit Hyperactivity Disorder	<b>JJO</b>	Juvenile Justice Officer
<b>ALT</b>	Alanine transaminase	<b>K-10 LM</b>	Kessler Psychological Distress Scale
<b>APA</b>	American Psychiatric Association	<b>LDL</b>	Low Density Lipoprotein
<b>APS</b>	Adolescent Psychopathology Scale	<b>MCS</b>	Mental Component Summary (of SF-12)
<b>APS-SF</b>	Adolescent Psychopathology Scale – Short Form	<b>MPHQ</b>	Mental and Physical Health Questionnaire
<b>AUDIT</b>	Alcohol Use Disorders Identification Test	<b>NDSHS</b>	National Drug Strategy Household Survey
<b>BBV</b>	Blood borne virus	<b>NHMRC</b>	National Health and Medical Research Council
<b>BMI</b>	Body mass index	<b>NSSSSH</b>	National Survey of Secondary Students and Sexual Health
<b>BSL</b>	Blood sugar level	<b>OOHC</b>	Out of home care
<b>CALD</b>	Culturally and linguistically diverse	<b>OR</b>	Odds Ratio
<b>CASA</b>	Centre for Addiction and Substance Abuse (Columbia University)	<b>PCR</b>	Polymerase chain reaction
<b>CI</b>	Confidence interval	<b>PHQ</b>	Physical Health Questionnaire
<b>CIDS</b>	Client Information Data System (DJJ)	<b>PCS</b>	Physical Component Summary (of SF-12)
<b>CIMS</b>	Client Information Management System (superseded CIDS)	<b>PIQ</b>	Performance IQ
<b>CSS</b>	Composite Standard Score (WIAT-II-A)	<b>SD</b>	Standard Deviation
<b>CTQ</b>	Childhood Trauma Questionnaire	<b>SF-12</b>	Short Form Health Survey
<b>CTQ /MD</b>	Childhood Trauma Questionnaire/ Minimisation and Denial scales	<b>SPANS</b>	Schools Physical Activity and Nutrition Survey
<b>DJJ NSW</b>	Department of Juvenile Justice	<b>STI</b>	Sexually transmissible infection
<b>DSM-IV-TR</b>	Diagnostic and Statistical Manual of Mental Disorder-4 <sup>th</sup> edition-Text Revision	<b>SSH</b>	Suicidality and Self-harm
<b>DoCS</b>	Department of Community Services	<b>TAFE</b>	Technical and Further Education
<b>ESB</b>	English speaking background	<b>UNSW</b>	University of New South Wales
<b>FSIQ</b>	Full scale intelligent quotient	<b>USYD</b>	The University of Sydney
<b>GATSB</b>	Guide to the Assessment of Test Session Behaviour	<b>UWS</b>	University of Western Sydney
<b>GGT</b>	Gamma glutamyl transpeptidase	<b>VIQ</b>	Verbal IQ
<b>HBSSSS</b>	NSW Health Behaviours of Secondary School Students' Survey	<b>WASI</b>	Wechsler Abbreviated Scale of Intelligence
<b>HDL</b>	High Density Lipoprotein	<b>WIAT-II-A</b>	Wechsler Individual Achievement Test – Second Edition – Abbreviated
<b>HIV/AIDS</b>	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome	<b>YLS/CMI: AA</b>	Youth Level of Service / Case Management Inventory: Australian Adaptation
<b>HPV</b>	Human papillomavirus	<b>YPiCHS</b>	Young People in Custody Health Survey
<b>HSV-1 HSV-2</b>	Herpes Simplex Virus1 and 2	<b>YPoCOHS</b>	Young People on Community Orders Health Survey
<b>ID</b>	Intellectual Disability	<b>YRBQ</b>	Youth Risk Behaviour Questionnaire
<b>IQ</b>	Intelligence Quotient		





# FOREWORD

The 2006 NSW State Plan has clear priorities and targets to support decision making and respond to the needs of the community, amongst which are some of particular interest for the population served by the NSW Department of Juvenile Justice and Justice Health. These include reducing re-offending, improving access to quality healthcare and providing early interventions for disadvantaged populations, particularly among vulnerable young people. One key strategy to achieve these goals is through the development of effective partnerships across government, universities and the broader community.

This book is an outcome of one such partnership between the University of Sydney, the NSW Department of Juvenile Justice and Justice Health through the Australian Research Council Linkage Grant Scheme. Its findings provide important information about the health and well-being of young people on community orders. It shows that many of these young people come from very disadvantaged backgrounds and have engaged in a number of high-risk behaviours from an early age.

The results of this research will be used to assist with strategic decision making to determine the service models that best support the needs of this group of young people. Across government and non-government agencies this report has utility in its capacity to assist those who work with and plan services for young people who come into contact with the criminal justice system. This will enable the development of targeted services to assist young people in need, including ensuring for better health, educational opportunities and linkages with the broader community. It will also help to develop prevention and early intervention strategies to reduce the likelihood that these young people develop chronic health conditions.

A report of this comprehensive nature is not completed without input from numerous individuals all of whom are to be acknowledged. In particular the authors are to be congratulated for this excellent comprehensive report into the health and social issues facing young people in contact with the criminal justice system. This report will be very useful to clarify the priorities on which we will focus our future efforts to improve the health and social outcomes for this disadvantaged population.

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# EXECUTIVE SUMMARY

## Overview:

Offending behaviour in childhood is a significant predictor of subsequent offending, offending in adulthood and chronic offending. Intervention provided at an early age and stage of offending is more effective than that provided later in the offending history. This research aimed to advance understanding of juvenile crime, its health and substance abuse patterns, cognitive correlates and offence trajectories, thereby facilitating effective policies and practices to reduce recidivism, improve health and create prosocial alternatives for young Australians at risk of a criminal career.

## Sample:

800 young offenders on community orders from 22 Juvenile Justice Offices across New South Wales, Australia were assessed. Mean age was 17 years (22% were younger than 16 years); 85% were male; 66% were from English speaking backgrounds (ESB), 19% were Aboriginal and 15% were from culturally and linguistically diverse backgrounds (CALD); 75% lived in Sydney; 15% had IQ<70 (the range identifying intellectual disability). Most (83%) were born in Australia and spoke English as their first language (85%).

Most frequent charges were assault, robbery, car and other theft and break and enter. Young offenders had been charged with an average of five offences; 64% were charged with a violent offence; 90% had histories of incarceration; 61% of total sample (90% Aboriginal group) had parents or other relatives with a history of incarceration.

Only 36% were living with both their parents; 24% had a history of out of home care (OOHC); 21% lived with a person with a physical or mental health problem; 11% were living in unsettled accommodation at the time of the survey; 5% were parents of one or more children; 25% were working; 46% were receiving benefits.

## Physical health:

Chicken pox (61%), asthma (33%), ear infections (28%), tonsillitis (25%), chest infections (22%) and back problems (17%) were the most

commonly reported health conditions. The most frequently reported health concerns in past four weeks were tiredness/energy loss (39%), trouble sleeping (39%), memory problems (32%), headaches (28%) and poor appetite (25%). Health complaints were associated with substance use. Polydrug users reported more health complaints than single and non drug users.

## Sexual health:

Most young offenders (88%) reported having had sexual intercourse, including vaginal, oral and anal sex, commencing at a median age of 14 years. Most had three or more sexual partners; 3% reported either homosexual or bisexual orientation; 3% had sex in order to obtain drugs or money; 7% had experienced unwanted sex including gang, date and acquaintance rape and incest.

Twenty-three percent (23%) females and 14% males had a STI or BBV, including Herpes simplex virus-2, chlamydia, gonorrhoea and hepatitis B and C. Hepatitis C antibody positive was associated with heroin use and injecting drug use in past 12 months. There were low levels of hepatitis B vaccination.

Twenty-nine percent (29%) of the young women had been pregnant; 10% (12) were mothers of one or more children.

## Lifestyle:

Thirty-four percent (34%) young offenders were either overweight (20%) or obese (14%). Cardiovascular risk factors were significantly associated with overweight and obesity among males but not females. There were no differences between Aboriginal and non-Aboriginal young offenders on these factors.

Thirty-nine percent (39%) had either a tattoo or a body piercing.

The majority (78%) had sustained an injury that required medical treatment. Forty-one percent (41%) males and 30% females had sustained a head injury in which they had become unconscious. Head injuries and hazardous levels of alcohol consumption were strong predictors of severe violent offending.

### **Cognitive ability and educational achievement:**

The mean Full Scale IQ score of 83 fell within the low average range. The mean Verbal IQ score of 73 fell within the borderline range; the mean Performance IQ of 91 fell within the average range. Fifteen percent (15%) young offenders had Full Scale IQ Wechsler Abbreviated Scale of Intelligence (WASI) <70, placing them in the range for intellectual disability (ID); 23% had Verbal IQ <70 compared with 8% with Performance IQ <70. An additional 27% had Full Scale IQs in the range 70-79 (Borderline). Therefore, 42% young offenders on community orders were functioning in the borderline range of intellectual functioning or lower. Twelve percent (12%) had a culture fair IQ that fell in the range of intellectual disability. Eight percent (8%) had scores on both WASI and WIAT tests that fell within this range.

Young offenders indicated a very high level of disengagement with the school environment from an early age. Most had left school without achieving a minimal educational qualification (Year 10 School Certificate). Most had been suspended from school.

Educational testing using the WIAT-II-A showed that the average overall academic performance fell within the borderline range [average Wechsler Individual Achievement Test-II-Abbreviated (WIAT-II-A) Composite standard score (CSS)=77]; 30% scored <70 on WIAT CSS; 64% scored in the range of intellectual disability for numerical operations and 21% for each of word reading and spelling scored in this range. Aboriginal young offenders were more likely to score in the intellectually disabled range.

Participants with an IQ <70 had higher criminogenic needs on the YLS/CMI: AA than those with an IQ >69 and were placed in a higher category of risk on the Youth Level of Service / Case Management Inventory: Australian Adaptation (YLS/CMI:AA) (Low v Medium). Higher needs for the ID group included domains relating to peers, leisure, education, employment and attitudes.

### **Mental health:**

Forty percent (40%) scored in the severe clinical range on at least one of the scales of the

*Adolescent Psychopathology Scale-Short Form (APS-SF)*. The two highest frequencies occurred on the Substance Abuse Disorder (26%) and Conduct Disorder (19%) subscales.

Thirty percent (30%) had scores in the severe range on two scales (8% of whom were comorbid for substance abuse and Conduct Disorder) and 10% had scores in the severe range on more than two scales.

Twenty-five percent (25%) of young offenders scored in the high/very high psychological distress range on the K-10; 38% of poly-substance users scored in this range. The majority (74%) reported some form of abuse or neglect (*Childhood Trauma Questionnaire*), with females reporting higher rates than males; 23% of males and 38% of females reported some form of abuse in the severe range; 59% reported some form of neglect. Females were four times more likely than males to report three or more severe forms of abuse.

Fourteen percent (14%) of males and 32% of females had considered suicide in the past 12 months; 8% of males and 18% of females reported at least one suicide attempt in the past 12 months; 15% of males and 28% of females had self-harmed in the past 12 months.

Using Fisher's revised DSM-IV-MR-J juvenile gambling screen, 5% of males and 4% of females were identified as problem gamblers.

### **Alcohol, tobacco and other substance use:**

Most (97%) young offenders were consumers of alcohol. Using the AAG, 38% were classified as risky drinkers and 16% as high risk drinkers. Five percent (5%) drank daily or almost daily. Nine percent (9%) met AUDIT criteria for alcohol dependence. Most (81%) smoked; 93% were daily smokers. Most (89%) had also used cannabis, 46% had used amphetamines, 18% had used cocaine and 14% had used heroin; 11% had injected substances (primarily heroin and amphetamines).

Young offenders with parents or relatives who abused substances were more likely to inject substances. Forty-five percent (45%) had committed a crime to get drugs or alcohol, and 53% reported being affected by substances during the commission of their offence.

# CHAPTER 1

## OVERVIEW OF RESEARCH AND METHODS

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# 1. OVERVIEW OF RESEARCH AND METHODS

## 1.1 Rationale and aims of the research

There are a number of reasons why it is important to focus research on juvenile offenders. Firstly, offending behaviour in childhood has been found to be a significant predictor of: subsequent offending;<sup>1,2</sup> offending in adulthood;<sup>3</sup> and chronic offending.<sup>4</sup> Secondly, intervention provided at a very early age and stage of offending appears more likely to be effective than that provided later in the offending history.<sup>5</sup> There is also evidence for the need to research juvenile offenders separately from adult offenders. This is due to the number of social<sup>6</sup> and neuro-cognitive differences<sup>7</sup> between juveniles and adults. Central to this neurological difference is the incomplete development of the frontal lobes and incomplete myelination of nerve fibres in the white matter in the brains of juveniles.<sup>8</sup> This has been shown to result in differences in impulsivity and attention span between juveniles and adults, factors that have been strongly linked to offending.<sup>9</sup> Juveniles have also been found to express different base rates for various offences, display different risk factors related to offending, express different behavioural norms and show less stable individual factors.<sup>10</sup>

Complex factors interact to determine offending, its trajectory and other associated risks, including health risk behaviours such as substance use, injecting drug use, psychological risks such as early emotional, physical or sexual abuse and dysfunctional families; psychosocial risks such as deviant peer associations, low cognitive capacity, weak school connectedness and low educational achievement; and geographic location and cultural affiliation. This research aimed to advance understanding of juvenile crime, its health and substance abuse patterns and offence trajectories, thereby facilitating effective policies and practices to reduce recidivism, improve health and create prosocial alternatives for young Australians at risk of a criminal career.

## 1.2 The partner organisations

Three organisations participated in this research – the University of Sydney, NSW Department of Juvenile Justice (DJJ) and Justice Health (JH).

“The main responsibilities of the Department are the administration of youth justice conferences and the supervision of young offenders on community-based or custodial orders made by the courts. The Department’s work also includes: support for young offenders making applications for bail; supervision of young offenders who are on conditional bail; supervision of young offenders remanded in custody pending finalisation of their court matters; and the preparation of reports for the consideration of the courts in determining whether to make a control order. The Department also provides funding to a number of community agencies to assist juvenile offenders and their families.<sup>11</sup>”

Justice Health is a statutory health corporation established under the *Health Services Act* (NSW) 1997 and funded by NSW Health. Justice Health is a state wide service responsible for the provision of health services to adult and juvenile offenders in local courts, in custody and detention, and in the community. Justice Health also provides health services at locations across metropolitan, regional and remote NSW. Ongoing healthcare is provided through seven major clinical programs: Primary Health, Population Health, Mental Health, Drug and Alcohol, Women’s Health, Aboriginal Health, and Adolescent Health. Justice Health provides services to young offenders in eight juvenile justice centres and one juvenile correction centre, the Youth Drug And Alcohol Court, the community through the adolescent community forensic mental health service and the Juvenile Justice Centre Release Treatment Scheme.

*It is important to focus research on young offenders because offending behaviour in childhood is a significant predictor of:*

- subsequent offending
- offending in adulthood
- chronic offending

*Intervention provided at a very early age and stage of offending is more likely to be effective than that provided later in the offending history*

*This research aimed to advance understanding of juvenile crime, its health, substance abuse and offence patterns, thereby facilitating effective policies and practices to reduce recidivism, improve health and create prosocial alternatives for young Australians at risk of a criminal career*

### 1.3 The report

This report presents detailed analyses of the data collected during the *Young People in Custody Health Survey*<sup>12</sup> (YPiCHS), funded by the Department of Juvenile Justice and the *Young People on Community Orders Health Survey*<sup>13</sup> (YPoCOHS), funded by an Australian Research Council (ARC) Linkage Grant (2003-2006) to Professor Dianna Kenny and Dr Christopher Lennings from the University of Sydney, NSW Department of Juvenile Justice (Mark Allerton) and Justice Health (Dr Tony Butler). A summary of results from these two studies was presented in *Young People on Community Orders Health Survey: Key Findings Report 2003-2006*.<sup>13</sup>

This extended report of findings from both of these studies represents the most comprehensive profile of the physical and mental health status and needs of young offenders available in Australia. It forms the basis for policy and strategic development, clinical and rehabilitative service planning and delivery and the provision of appropriate universal, selected and targeted interventions that will improve physical and mental health and reduce recidivism in Australia's young offenders.

### 1.4 Methods, procedures and protocols

#### 1.4.1 Ethics

Ethics approval for the studies was independently granted by: University of Sydney Human Research Ethics Committee, Research Applications Subcommittee of DJJ Collaborative Research Unit, Justice Health Human Research & Ethics Committee (formerly Corrections Health at the time of study commencement), and the Aboriginal Health and Medical Research Council.

##### 1.4.1.1 Consent

Written consent was required as a condition of participation. Parental consent was required for participants under the age of 14 years. Separate consent was obtained for the different forms of assessment: questionnaire, physical measurements, psychometric and educational testing, serology and urine testing. Young offenders could participate in all or some of the

assessments. Separate consent was obtained, and pre and post test counselling was given for the HIV test.

Consent was also obtained to follow up young offenders if required and to seek further information from other departments such as Department of Community Services (DoCS) if necessary to obtain records of any of the following: notifications/reports regarding abuse or neglect; periods of out of home care (OOHC) and/or classification as a state ward, or supervision under guardianship conditions; number of foster placements.

#### 1.4.2 Notifications and confidentiality

Information provided by participants was confidential, unless permission was obtained to release information. There were two exceptions, as outlined in the informed consent (2003):

"I am assured that any information provided by me or relating to me or any personal details obtained in the course of this research are confidential and that my name or any other identifiable information will neither be used nor published without my written permission. However, if I tell you that I am at risk of harm from someone else, or at risk of injuring myself or someone else, or if I am diagnosed with a notifiable condition as a result of my involvement in the study (e.g. HIV/AIDS, hepatitis C), you must report this to the Department of Health. If you need to do this you will discuss it with me carefully beforehand. The law says you need to act on what I tell you, to protect my safety and security and that of others."

In the event that the participant disclosed information that required a mandatory notification<sup>14</sup> in relation to risk of child abuse or neglect, the interviewer reported to the YPoCOHS Project Manager for further instruction after consultation with the Principal Investigator.

##### 1.4.2.1 Protocols for positive pathology and mental health testing

All positive serology and urine test results for sexually transmitted infections (STI) and blood

Three organisations participated in this research:

- University of Sydney
- NSW Department of Juvenile Justice
- Justice Health

This report presents detailed analyses of the data collected during the *Young People in Custody Health Survey* (YPiCHS) and the *Young People on Community Orders Health Survey* (YPoCOHS)

This book provides the most comprehensive profile of the physical and mental health status and needs of young offenders available in Australia



borne viruses (BBV) were followed up with referral to appropriate agencies for treatment. A protocol for duty of care with respect to concerns about mental health was also implemented for the duration of the study.

### 1.4.3 Terminology

Various terms are used throughout the report as follows:

**Child**<sup>15</sup> means a person aged less than 16 years.

**Client**<sup>15</sup> means any person (including any child or young person) who was under the supervision of the Department of Juvenile Justice during the study period and who participated in the health survey.

**Young offender** means any person (including any child or adolescent) who was under the supervision of the Department of Juvenile Justice during the study period and who participated in the health survey. The terms 'child', 'client', 'young offender' and 'young person' are used interchangeably in this book.

**Parent**<sup>16</sup> means a person having parental responsibility for the child or young person.

**Department** means the New South Wales Department of Juvenile Justice.

**Interviewer** means a person contracted by the research team and/or the Department to provide services to the Department or its participants in the conduct of the *Young People on Community Orders Health Survey*.

**Neglect**<sup>17</sup> means neglect by a responsible person to provide, without reasonable excuse, adequate and proper food, nursing, clothing, medical aid or lodging to a participant in the person's care.

**Abuse**<sup>18</sup> means any intentional act by a person that results in:

- Physical or sexual abuse
- Emotional or psychological harm
- Harm to physical development or health

**At risk of harm**<sup>19</sup> means a current concern for the safety, welfare or wellbeing of a child or young person (which in this case may include the sibling or child of the person who is under the supervision of the department).

**Current Concern**<sup>20</sup> means that at the time of making a report employees are worried about

the safety, welfare or wellbeing of the child or young person.

**Participant** means any client who has consented to participate in the *Young People on Community Orders Health Survey*.

## 1.5 Participants

Participants for the community orders sample were all young offenders serving community orders with the NSW Department of Juvenile Justice during the study period, October 2003 and December 2005. Eligibility was limited to those on a supervised, community-based order, provided that they were seen during or within 2 months of order completion. Participants in the custody sample were young offenders serving custodial sentences in NSW Department of Juvenile Justice detention facilities between January and March 2002. Results for custody and community orders samples are compared for the majority of factors assessed. Where possible, comparisons with population data or general adolescent samples were made and have been included in relevant tables. Comparison data, where available, are presented in square brackets following YPoCOHS data; e.g. where 85% of YPoCOHS participants and 51% of the population are male, the data would be displayed as 85 [51]. Due to rounding, column and row totals may not sum to 100. Numbers used to derive percentages for table cells are presented as footnotes at the end of each table. All sources from which community based comparisons are taken are also indicated as footnotes to tables.

Sub group analyses that may have significance for policy and treatment planning are presented. Definitions of sub groups within each category are presented in relevant chapters. The sub groups are:

- **Gender:** Males and females
- **Ethnicity:**
  - ESB (English-speaking background),
  - Aboriginal (Aboriginal and Torres Strait Islander), and
  - CALD (Culturally and linguistically diverse)
- **Region** (in which client was interviewed):
  - Sydney (Greater Sydney),
  - Other metropolitan (Wollongong, Gosford, Newcastle), and
  - Regional (locations surrounding smaller

*Participants in the community orders samples were all young offenders serving community orders with the NSW DJJ (October 2003 - December 2005)*

*Participants in the custody sample were young offenders serving custodial sentences in NSW DJJ detention facilities (January - March 2002)*

*Sub group analyses that may have significance for policy and treatment planning are presented for:*

- Gender
- Ethnicity (ESB, Aboriginal, CALD)
- Region (Sydney; regional; rural/remote)
- IQ (<70; 70-84; >84)
- Age (<16; 16+)

cities and towns, e.g., Albury, Dubbo, Lismore and rural/remote areas in NSW).

- **IQ** (WASI Full-scale IQ score):
  - Less than 70 (intellectually disabled)
  - 70-84 (borderline to low average), and
  - 85 or more (low average and above).
- **Age** (at time of testing):
  - Less than 16 years of age, and
  - 16 or more years of age

#### **1.5.1.1 Cultural affiliation**

Participants were classified based on country of birth, their parents' country of birth, the main language spoken at home and whether they identified with Aboriginal or Torres Strait Islander culture. On the basis of answers to these questions, young offenders were assigned to one of three ethnic groups – English Speaking Background (ESB); Culturally and Linguistically Diverse (CALD) or Aboriginal.

#### **1.5.1.2 Regional classification**

Details of geographic classification are contained in Chapter 2.

#### **1.5.1.3 Recruitment**

Data collection took place at Sydney metropolitan and NSW regional and rural Juvenile Justice Community Services (JJCS). A list of prospective participants was provided by each office and forwarded to survey staff. In addition, eligible prospective participants were selected from the Juvenile Justice database. The survey was advertised through flyers posted throughout JJCS in NSW identified as participating centres. Prior to participation, eligible young offenders were either approached by Juvenile Justice Officers (JJO) (who distributed flyers and participant information sheets), or were contacted by one of the survey staff. Because the testing was involved and time consuming (on average four hours) young offenders were compensated for their participation. Young offenders also received permission from the Director General, DJJ to deduct eight hours from their community service order for participation in the survey.

Following the consent to participate, an appointment was arranged and contact details were collected. To ensure attendance, all young offenders received reminder calls, text messages or emails prior to the interview date.

In addition, each provided contact details of at least three people most likely to be able to locate them if necessary. There was some variability in the degree of support and cooperation with the study across the JJCS. Those that contained enthusiastic JJOs recruited more participants than less involved centres. Once a young person agreed to participate, the interviewer liaised with their assigned JJO in order to schedule a time when the young person could attend for interview.

From the list of eligible participants, interviewers documented those who agreed to attend for interview and those who refused to participate. Reasons for refusal or exclusion from the study were recorded on the exclusion form. Refusals related to work or study commitments, travel difficulties, not interested, or not available at times proposed by field staff. Exclusion criteria included inability to comprehend spoken English and failure to obtain parental consent for young offenders <14 years. Young offenders who were on bail, or who were the subject of court reports (but not currently the subject of a community order) were also excluded. Although we attempted to recruit young offenders who had been 'filed down' (ie deemed to no longer need frequent contact) by their JJO but whose order was still current, the infrequency of contact with this sub group meant that few were recruited from this category. Other young offenders who were in substance withdrawal, had serious mental health concerns or deemed too aggressive or disruptive to participate by their JJOs were also excluded. Some results may therefore underestimate mental and physical health problems.

### **1.5.2 Offence history and offence classification**

#### **1.5.2.1 Criminal history variables**

For all the young offenders who took part in the health survey, their offending history records were accessed from DJJ operational database to obtain information on the following variables: age at first offence, total number of court dates attended, total number of offences committed, and most severe penalty received. Sentences varied from fines, dismissal without penalty, suspended detention, community supervision orders and detention.

*DJJ offending history records provided: age at first offence, total number of court dates attended, total number of offences committed, and most severe sentence received*

### 1.5.2.2 Offence classification

The classification system for determining the level of violence in the criminal offence history was based on the method for violence classification developed by Kenny and Press.<sup>21</sup> This categorisation standardises the severity of violence code by capturing both the “true” nature of the violent offence, as well as its legal classification. For example, common assault is classified as violent, but in practice common assault can be a minor altercation with minimal or no violence involved. Thus, according to our classification, a young person needed at least two convictions for common assault to receive a (low) violent rating. Other offences receiving a low violence rating were assault, robbery, two or more people threaten violence, cause fear. To receive a rating of moderate violence, the young offender had a conviction for assault occasioning actual bodily harm; aggravated sexual assault; robbery with an offensive weapon; and/or aggravated assault. To be classified as a seriously violent offender, the young person had one or more of the following convictions: Homicide, attempted homicide, discharge firearm with intent to murder, malicious infliction of grievous bodily harm, and aggravated robbery with wounding. Combining the index offence (i.e. the offence that resulted in the most recent incarceration for young offenders in custody or supervision order for young offenders on community orders) and data from the Juvenile Justice database to obtain criminal history, we were able to accurately classify all young offenders with respect to their offence history. All index offences and offence histories were coded according to the level of violence in their criminal history as absent, mild, moderate or severe. Cases were then coded on the most severe offence documented from either source. Using this classification, for the custody sample, 12.8% (n=31) young offenders were categorised as non-violent offenders, 30.6% (n=74) as low violent offenders, 43.8% (n=106) as moderately violent offenders, and 12.8% (n=31) as severe violent offenders. A second classification was developed in which absent, mild and moderate violence were combined and compared with serious violence to test the hypothesis that the relationship between head injury and violence was only significant for the most severe violent offences (see Chapter 5, section 5.7.3). A similar

analysis could not be undertaken on the community orders sample because of the very small number of severely violent offenders.

## 1.6 Field staff

After completing intensive training in the administration of the survey protocol, nurses employed through Justice Health went into each of the participating Juvenile Justice Community Services to conduct the questionnaire, the physical examinations and take blood samples. Final year post graduate forensic psychology students on placement from University of New South Wales and Western Sydney administered the psychological and educational assessment protocol.

### 1.6.1 Training

Registered nurses and psychology students on placement received separate training sessions. Training sessions covered relevant aspects of the survey procedures, including working with young offenders, safety procedures with aggressive clients, child protection training and mandatory reporting requirements.

#### 1.6.1.1 Child protection training

All staff working on the survey received child protection training and clearance in accordance with the *Children and Young Persons' (Care and Protection) Act 1998*.<sup>15</sup> The training covered:

- Recognising and reporting procedures when young offenders were suspected to be at risk of harm
- How to present the results of medical examinations and assessments and refer for ongoing counselling
- Provision of advocacy services for young offenders
- Provision of crisis counselling
- Informing the young offender about preventative programs and early intervention services.

#### 1.6.2 Reporting/supervision

Mandatory notifications, both internal and external, were made if the interviewer had concerns for the participant's safety, welfare or wellbeing. Mandatory notifications were managed according to the DJJ Child Protection Policy.<sup>14</sup>

*The classification system for determining the level of violence in the criminal offence history was based on the method for violence classification developed by Kenny and Press<sup>21</sup>*

*JH nurses conducted the physical assessments and final year post graduate forensic psychology students on placement from UNSW and UWS administered the psychological and educational assessment protocol*

*All staff working on the survey received child protection training and clearance in accordance with the Children and Young Persons' (Care and Protection) Act 1998*

### 1.6.2.1 Abuse/neglect

An interviewer who believed a participant was at risk of harm or claimed to have suffered abuse or neglect was instructed to:

- Contact an appropriate person with the participant's consent
- Ensure the nurse examined the participant, in the case of apparent or suspected physical injury.

In cases where an incident or allegation of abuse was made to the interviewer, the YPoCOHS Clinical Coordinator was notified, who in turn notified the Manager of the JJCS responsible for supervision. The JJCS Manager then notified the Regional Director according to DJJ Child Protection Policy.<sup>14</sup> For ethical and legal reasons and to maintain the integrity of the data, interview staff were not permitted to carry out external reporting.

Information gathered through the interview process was not made available to JJCS without the young person's consent. All referrals made as a result of participation in the survey were also made with participants' consent. Any concerns about this process were directed to the Clinical Coordinator and resolved by the Project Manager or the Principal Investigator in consultation with relevant partner organisation personnel.

## 1.7 Measures and data collection

Testing comprised a standardised physical assessment, serology and urine samples, a health questionnaire and standardised psychological and psychometric tests.

### 1.7.1 Physical health assessment

Each nurse was provided with a kit that contained equipment and documentation to perform the required procedures. At each testing site a locked cabinet/cupboard was identified for the safe storage of all equipment and test protocols. The physical health assessment included the physical health check, serology test, and a Polymerase Chain Reaction (PCR) test. The completion of the physical health assessment took approximately 20 to 30 minutes.

### 1.7.1.1 Physical health check

To perform the required physical assessment nurses were provided with a portable sphygmomanometer, stethoscope, tape measure and set of scales. Measures included:

- Blood pressure (whilst sitting)
- Height (cm) with no shoes
- Weight (kg) with no shoes
- Waist measurement (cm)
- Visual acuity
- Blood sugar level
- Cholesterol (LDL and HDL)
- Triglycerides

Body Mass Index (BMI) was calculated based on weight and height measurements.

To evaluate visual acuity nurses were supplied with two eye charts - one for illiterate (marked E and used symbols rather than letters) and the standard eye chart for literate young offenders. Eye testing was carried out from a distance of 6 metres with the young person wearing glasses if they had them at the time of testing. Visual acuity was determined using vision at 6 metres as the reference point. For example, a person with R eye vision of 9.5/6 indicates vision loss, as respondents see a figure that the average person would see at a distance of 9.5 metres, at a distance of 6 metres. L eye – 6/6 indicates normal vision, as respondents see a figure that the average person would see at a distance of 6 metres).

Within the testing kit nurses were provided with a glucometer, testing strips, lancets and cotton wool to perform a Blood Sugar Level (BSL) test. Nurses recorded any client who was diabetic or in whom diabetes was suspected for possible follow up.

### 1.7.1.2 Serology testing

Infectious diseases and blood borne viruses (BBV) were tested after separate consent of participants. All nurses were provided with a small sharps container, box of gloves, tourniquet and small pre-packaged bags of blood collecting equipment containing: 21g butterfly needle, Luer adapter and vacutainer holder, 2 blood tubes, bandaid, cotton ball and alcohol wipes to perform the venipuncture procedure. Tests are described in detail in Table

*A protocol for reporting abuse and neglect was implemented*

*Testing comprised:*

- *standardised physical assessment*
  - *serology*
- *urine sample*
  - *health questionnaire*
- *standardised psychological tests*
- *psychometric tests*

*Serology tests and urine samples checked for sexually transmissible infections and blood borne viruses*

1.1. Additional to the list in Table 1.1, blood tests were carried out for cholesterol, electrolytes and liver functioning.

Pre-test counselling was provided to clients prior to screening for BBVs. Pre-test counselling included:

- A explanation of what the test measures
- Exploration of young offenders’ knowledge of infections and perceptions of risk
- Level of young offenders’ actual risk
- Implications of a positive result including:
  1. Implications for self and others
  2. Potential reactions
  3. Relationships of the young person with support networks
  4. Discussion of safer sex and safer injecting practices
  5. Informing current and potential partners
- Meaning of a negative result
- Confidentiality
- Mode of transmission
- Harm minimisation
- Natural history of infection
- Provision of written information (if appropriate)
- Response to individual concerns and questions

**Table 1.1 Serology testing**

Infection	Tests performed	Result value	Indicates
Hepatitis A	Antibody (IgM) Total Antibody (IgG)	Positive or negative	Positive IGM indicates current infection Positive IGG indicates past natural infection or previous immunisation
Hepatitis B	Surface Antigen, Surface Antibody and Core Antibody	Positive or negative for Surface Antigen or Core Antibody Numerical figure for Surface Antibody i.e. 0.7 or 30.	Surface Antigen: Current infection Core Antibody: If isolated, Hepatitis B core antibody invariably indicates prior infection (or co-infection with other viruses). Surface Antibody indicates level of immunity i.e. <10 no evidence of immunity and >30 good immune response
Hepatitis C	Antibody testing (Abbott AxSYM HCV version 3.0)  Antibody testing (Innogenetics-INNOTEST HCV Ab IV)	Positive, negative or indeterminate. If 1st test was positive a second test was completed to confirm diagnosis, if 2 <sup>nd</sup> test was negative the result was indeterminate.	Positive indicates the client has come into contact with the Hepatitis C virus though current status is unknown and further testing is required. Indeterminate result requires additional testing in 1 month to confirm diagnosis
HIV	Antibody (antigen)	Positive or negative	HIV positive indicates a positive antibody response. HIV RNA (or viral load) indicates antigen
Syphilis	Antibody and the sample/cut off ratio for the antibodies	Reactive or non reactive for antibodies S/co was indicated by a numerical figure i.e. 0.18	A reactive (positive) syphilis test indicates current or past infection. Further testing and history is needed if reactive to determine if current or past treated. Reactive treponemal syphilis tests (e.g. FTA-ABS) do not always indicate infection, as they remain positive despite effective treatment.
Herpes type 2	IGG Antibody	Positive or Negative	Positive result indicates Infection, but not whether infection is past or current.

### **1.7.1.3 Polymerase Chain Reaction (PCR) test**

As part of the physical health assessment, urine samples were collected from consenting participants to test for chlamydia (Chlamydia Trachomatis DNA) and gonorrhoea (Neisseria Gonorrhoea DNA). Nurses informed young offenders that no testing for illicit drug use was involved in the health assessment.

### **1.7.1.4 Pregnancy test**

When a young woman expressed concern regarding a possible pregnancy or elicited a response of 'unsure' when asked: 'Are you currently pregnant?' in the women's health section of the questionnaire, the nurse offered a urine pregnancy test on site. If a client chose to proceed with a pregnancy test, participation and results were recorded on the nursing action sheet. Nurses used *Instant pregnancy testing* kits, supplied by the Pharmacy at Justice Health. Instruction sheet to use the pregnancy tests were included in the information folder. In case of positive results, nursing staff discussed follow up options and referral with client. Nurses discussed any additional concerns raised by participants with the study's Clinical Coordinator.

### **1.7.1.5 Feedback of results to participants**

All young people who consented to testing (serology and/or urine) were informed that test results would be available through one of the nurses on the study team or through a Justice Health registered nurse. Office appointments were arranged for those with positive results. In exceptional circumstances, results were discussed over the phone. If follow up contact with a client failed after several attempts, an email was sent to the JJO, and if this follow up failed, a letter was sent to the client to the last known address, advising them to contact the survey team. All clients with positive results who completed the release of information and referral forms were provided with a copy of blood results and a referral letter to a doctor or health care provider of their choice. If they did not have a health care provider, one was recommended in geographical proximity to the young person's place of residence. Great

care was taken to ensure the follow-up and appropriate management of presenting health concerns.

Nurses working with the team followed a set of guidelines when providing positive results to young offenders, including:

- Adequate consultation time
- Identifying special needs
- Giving results directly and empathically
- Explaining what the results meant
- Discussing re-testing for confirmation
- Offering immediate support
- Discussing confidentiality and the limits of confidentiality
- Discussion of coping strategies (e.g., what was the young person planning to do when they left the consultation? What immediate support was needed and available? Who should be told?).

Nurses were also asked to address the following issues as needed:

- Partner notification
- Normalising grief reactions
- Discussing safer sex and legislative implications
- Follow up counselling
- Referring to specialist services
- Providing the young person with written material
- Arranging another appointment with the young person
- Giving the young person options for contacts in case of crisis, e.g., 24 hour hotlines.

No other person was permitted to provide participants with their results from the survey. It remained the legal responsibility of the nurse/interviewer to maintain confidentiality and provide the young person with the opportunity to ask questions of the health care professional, to seek confidential referral and follow up discussions.

### **1.7.2 Physical Health Questionnaire (PHQ)**

The PHQ comprised 387 self-report questions divided into 32 sections as follows: demographics, education/occupation, living environment, family history, health status, disability/health problem, symptom checklist, medications, asthma, dental health, physical injury, head

*All young people were seen individually for follow up interview to deliver test results*

*The Physical Health Questionnaire (PHQ) comprised 387 self-report questions divided into 32 sections*

injury, SF-12<sup>44</sup>, smoking, alcohol, drug use, drug treatment, sexual health, women's health, gambling, tattooing and body piercing, health education, physical education, sun protection, nutrition, lifestyle, body image, mental health, K-10, suicide and self harm, community health services, and health service appraisal. As far as possible and where relevant, the questionnaire followed form and content of the YPiCHS PHQ to permit comparisons with young offenders in custody. The completion of the PHQ took approximately 30 to 40 minutes. A copy of the questionnaire is contained in Appendix 1.

The PHQ was modelled on a number of adolescent health surveys addressing health care needs, risk behaviours and service utilisation. To understand the unique characteristics of this group, we adapted and added items. The instrument included questions from the:

- A. *Youth Risk Behaviour Questionnaire (YRBQ)*<sup>22, 23</sup>
- B. *Kessler Psychological Distress Scale (K-10)*<sup>24</sup>
- C. *Western Australian Child Health Survey*<sup>25</sup>
- D. *National Longitudinal Survey of Children and Youth*<sup>26</sup>
- E. *Young Offender Risk and Protective Factor Survey*<sup>27</sup>
- F. *NSW Corrections Health's Inmate Health Surveys (1996<sup>28</sup> and 2003<sup>29</sup>)*
- G. *National Drug Strategy Household Survey*<sup>30</sup>
- H. *Adolescent Health and Wellbeing Survey<sup>31</sup> Hepatitis Prevalence Study<sup>32</sup>*
- I. *Experience of Care and Health Outcomes Survey*<sup>33</sup>
- J. *The National Longitudinal Study of Adolescent Health*<sup>34</sup>
- K. *Child Use of Dental Health Services Study*<sup>35</sup>
- L. *SF-12 (version one)*<sup>36</sup>
- M. *The Health Behaviours of Secondary School Students in NSW 2002.*<sup>37</sup>

### 1.7.2.1 Section 1: Demographics

The demographic section comprised 11 questions, assessing participants' general background. The questions included suburb where young offenders spent most of their time, country of birth, ethnicity, parents' ethnicity, history of past arrests, custodial sentences, and community orders. The items were adapted from the *Young Offender Risk and Protective Factor Survey*,<sup>27</sup> the *1996 & 2001*

*Inmate Health Survey*<sup>28,29</sup> and the *Adolescent Health and Wellbeing Survey*.<sup>20</sup>

### 1.7.2.2 Section 2: Education/Occupation

The majority of questions were adapted from the *2001 Inmate Health Survey*.<sup>29</sup> Questions 2.5, 2.6 and 2.7 were also drawn from the *National Longitudinal Survey of Children and Youth*.<sup>26</sup> The section asked young offenders about school attendance and work activities. School attendance included questions about the number of schools attended, special schools and special programs, suspensions, expulsions, age left school, and trade school attendance (Technical and Further Education, TAFE). Work related questions included type of job and work arrangements (e.g., full-time, part-time).

### 1.7.2.3 Section 3: Living environment/parenting

This section was modelled on selected questions from the *Young Offender Risk and Protective Factor Survey*<sup>27</sup> and the *1996 & 2001 Inmate Health Survey*.<sup>28,29</sup> Questions included information about primary care givers, family structure (including parental separation or deceased parents), custodial sentences of relatives, and current accommodation type. Young offenders were also asked about history of care, including foster care, adoption, or care by other family members. The parenting section asked about young offenders' own children and with whom their child (children) lived at the time of the survey.

### 1.7.2.4 Section 4: Family history

This section was modelled on the *National Longitudinal Survey of Children and Youth*<sup>26</sup> and assessed the physical, mental, and emotional health of the young person's immediate family, including questions about limitations of family members and how these limitations affected the young person.

### 1.7.2.5 Section 5: Health status

Parts of the health status section were based on the *1996 & 2001 Inmate Health Survey*<sup>28,29</sup> and on the *Adolescent Health and Wellbeing Survey*.<sup>31</sup> The questions asked young offenders about previous illnesses or health conditions.

*The PHQ was modelled on a number of adolescent health surveys addressing health care needs, risk behaviours and service utilisation*

Illnesses and health conditions were presented in a list and multiple responses were allowed. Additionally, the health status section assessed the history of immunisation and asked young offenders to indicate specific vaccinations they had within the past 5 years.

#### **1.7.2.6 Section 6: Disability/health problems**

The disability/health problem section was based on the *2001 Inmate Health Survey*.<sup>29</sup> Young offenders were asked to self-assess health related difficulties for the period of 6 months prior to the survey. Questions asked whether they felt limited in carrying out activities (e.g., exercise) due to disability or health problems, and whether they had to cut down on activities during the past 2 weeks because of disability or health related problems. To ensure accurate responses, probing about activities was incorporated into the section.

#### **1.7.2.7 Section 7: Symptom checklist**

This section was based on the *2001 Inmate Health Survey*.<sup>29</sup> The checklist contained a list of physical and psychological symptoms that young offenders may have experienced 4 weeks prior to the survey. Multiple responses were permitted.

#### **1.7.2.8 Section 8: Medication**

The medication section of the YPoCOHS asked young offenders about currently prescribed medications. All forms of medications prescribed by a practising doctor or a nurse were recorded, including pills, lotions, and creams. Young offenders were asked the names of medications prescribed during the 2 weeks prior to the survey and each medication was coded separately. When a young person was unsure of the medication he or she received, general categories were coded (e.g., antibiotics). The first two questions were modelled on the *2001 Inmate Health Survey*.<sup>29</sup> Question 8.3 was taken from the *Experience of Care and Health Outcomes Survey*.<sup>33</sup>

#### **1.7.2.9 Section 9: Asthma**

The asthma section was based on the *2001 Inmate Health Survey*<sup>29</sup> and the *Adolescent*

*Health and Wellbeing Survey*.<sup>31</sup> Young offenders indicated the prevalence of asthma attacks within 1, 3, 6, and 12 months, and more than 12 months prior to completing the survey, asthma related hospitalisations, current and past asthma medication and the frequency of use ranging from daily to monthly. In line with the endorsement of the Australian Institute of Health and Welfare of written asthma action plans as part of individual care plans,<sup>38</sup> information was also collected regarding current asthma plans.

#### **1.7.2.10 Section 10: Dental health**

The dental health section of the YPoCOHS was adopted from the *Child Use of Dental Health Services Study*.<sup>35</sup> Information was collected about oral health behaviours, including brushing and frequency of brushing, toothpaste use, 12 months prevalence of toothaches, gum and other oral health problems. Dental health service utilisation was assessed for 2 weeks, 3 months, 6 months, 12 months, 2 years, and more than 2 years prior to the survey. Young offenders were asked about the last place of their dental visit and the frequency of dental visits for the 12 months prior to the survey. If a young person indicated no dental visit for 12 or more months, reasons for not visiting a dentist were probed from a list of options. Multiple responses were permitted and specific reasons were also recorded verbatim and later coded as "other."

#### **1.7.2.11 Section 11: Physical injury**

This section was adapted from the *2001 Inmate Health Survey*,<sup>29</sup> with the time period of reporting for the experience of accidents or injury altered from 3 months to 'ever'. Young offenders indicated any injuries for which they saw a doctor or went to hospital. A maximum four injuries were recorded in chronological order. Participants described the context and activity at the time of the injury, treatment, and lasting effects. Injuries were also assessed as deliberate or accidental. Question 11.3 and 11.4 were drawn from the *National Drug Strategy Household Survey*<sup>30</sup> and reported experiences of interactions with intoxicated people in the 12 months prior to the survey.



### 1.7.2.12 Section 12: Head injury

This section of the YPoCOHS was based on the *2001 Inmate Health Survey*.<sup>29</sup> A head injury describes a wide range of injuries that can occur to the scalp, skull, brain and underlying tissue and blood vessels in the head. When medical and hospital records are available, EEGs, CT scans, the *Glasgow Coma Scale*<sup>39</sup> or the *Westmead PTA scale*<sup>40</sup> are employed to provide checklists and threshold points that determine whether the head injury is mild, moderate or severe. When the injury data are self-reported in response to a survey questionnaire, as they are in the current study, the classification is developed by matching markers, derived from the literature on head injury, to participants' responses.

In this study, we relied on detailed retrospective self-report of head injuries that resulted in unconsciousness. Based on the literature and various scales developed and employed by those using self-report head injury data, the information provided in the health survey was coded on the basis of altered consciousness (i.e., a state of no memories even if awake and seemingly alert), into three categories: (a) mild (period of unconsciousness less than one hour); (b) moderate (period of unconsciousness between 1-24 hours) or severe (period of unconsciousness greater than 24 hours).<sup>41</sup> Young offenders were also asked if they had any behavioural or cognitive difficulties as a result of the injury such as mild dysphasia, memory loss or poor concentration, dizziness or changes in behavioural and emotional regulation. Young offenders were asked to provide information about any investigations that may have taken place.

The subsequent analysis of the relationship between head injury and violent offending used a dichotomous coding of head injury as other more complex or composite measures yielded essentially the same outcomes as the dichotomous classification.<sup>42</sup>

### 1.7.2.13 Section 13: SF-12 Health Survey (SF-12)

The SF-12 Health Survey was used in its original form (ie *Short-Form 12 Item Health Survey*<sup>43</sup>). SF-12 scores are normed as T-scores (mean=50,

SD=10) for the general population. It contains 12 questions from the SF-36 Health Survey (Version 1): 2 questions on physical functioning; 2 questions on role limitations because of physical health difficulties; 1 question on physical pain; 1 question on perception of general health; 1 question on vitality; 1 question on social functioning; 2 questions on role limitations as the result of emotional problems; and 2 questions on general mental health (e.g., psychological distress and psychological well-being). The SF-12 was developed using normative data from the United States;<sup>43</sup> however, SF-12 is suitable for use in Australia.<sup>44</sup> The SF-12 contains two subscales – one assessing physical health (Physical Component Summary: PCS) and the other mental health (Mental Component Summary: MCS). Mental and physical scale scores for the SF-12 items are rated on a Likert scale response format. Scores range from 0 to 100 with higher scores denoting better functioning. The test-retest reliability of the SF-12 is adequate (PCS = 0.89; MCS = 0.76)<sup>45,46</sup> and construct and criterion validity are high (r = 0.96 with SF-36).<sup>45</sup>

### 1.7.2.14 Section 14: Smoking

Questions for the section on tobacco use were taken from *2001 Inmate Health Survey*,<sup>29</sup> the *National Drug Strategy Household Survey*,<sup>30</sup> and the *Western Australian Child Health Survey*.<sup>25</sup> For the YPoCOHS, a shortened version was constructed omitting type of tobacco smoked and specific smoking behaviour questions. Information was collected on smoking status, including any tobacco related experiences, age of first smoking, current smoking status, and the frequency and number of cigarettes smoked. Intention to change smoking behaviour was assessed by asking young offenders whether they ever felt the need to quit smoking, and if they did, what assistance they required to quit. Information on parental smoking status was also collected.

### 1.7.2.15 Section 15: Alcohol

The alcohol section of the YPoCOHS was based on the *National Drug Strategy Household Survey*<sup>30</sup> and the *Young Offender Risk and Protective Factor Survey*.<sup>27</sup> Questions asked included frequency of alcohol consumption,

quantities (in standard drinks), what young offenders typically drank and how often they got drunk. There are no recommended safe drinking levels for people under 18 years of age. For this survey, hazardous/harmful levels were based on the *Australian Alcohol Guidelines* for adults.<sup>47</sup> Weekly and daily measures of alcohol use were coded. For males, the consumption of up to 28 standard drinks (1 SD=12gm alcohol) per week was coded 'Low risk', 29 to 42 per week was coded 'Risky', and 43 or more per week was coded as 'High risk'. For females the consumption of up to 14 standard drinks per week was coded 'Low risk', 15 to 28 per week was 'Risky', and 29 or more standard drinks per week was coded as 'High risk' drinking. Using daily measures of alcohol use, for men, drinking more than 4 standard drinks a day on average, and/or more than 6 standard drinks on any one day, and/or drinking every day, was classified as "Unsafe". For women, drinking more than 2 standard drinks a day on average, and/or more than 4 standard drinks on any one day, and/or drinking every day was classified as "Unsafe".

#### **Alcohol coding**

Coding of questions related to the amount of alcohol consumed was problematic. Young offenders were asked to indicate the number of drinks in standard drinks they consumed on a regular basis. To ensure the accuracy of answers, the concept of standard drinks was explained by using visual aids [cards issued by the National Health and Medical Research Council (NHMRC)<sup>48</sup>]. Despite attempts to standardise responses, there was great variation in the quality and detail of responses. If interviewers were in doubt about answers and when standard drink estimation was unclear, they were instructed to take down verbatim responses. These included statements such as "Til I get drunk", 'til it's all gone' and '2 beers' or '20 Bourbons'. Prompts to be more specific were often unsuccessful and elicited responses such as 'dunno', 'whatever's in the bottle', 'varies', 'I lose track of how much I have drunk' or 'I keep drinking 'til I pass out', 'depends on how much we got', 'depends on who's payin'.

Where responses permitted, total alcohol consumption was converted to average daily consumption. To calculate the consumption of standard drinks on each occasion, the

formula: standard drinks = units (of nominated drink) x volume (of unit) x alcohol volume (of nominated drink)/12, e.g., 3 cans "Woodstock" = 3 x 440mL x 5%v/v = 66mL/12 = 5.5sd was used. Standard drink values were then used to calculate average daily alcohol consumption, based on the number of days young offenders indicated drinking, e.g., 'almost every day or every day (5-7x)' and '3-4 times per week'. This procedure identified problem drinkers based on average daily number of standard drinks, recommended by the NHMRC to identify adult problem drinkers,<sup>50</sup> but ignored those respondents who drank infrequently and binged at least occasionally.

An alternative coding method was used to include binge drinkers, based on average number of weekly standard drinks. For males, 28 or more standard drinks per week, and for females, 15 or more standard drinks per week were identified as unsafe drinking.<sup>50</sup> Although this method was more inclusive of binge drinkers, it may still have failed to identify some problem drinkers. Respondents who indicated 'safe' weekly drinking levels, but were uncertain about the number of drinking days per week, e.g., 'whenever I go out', may have consumed a large quantity of alcohol on at least one occasion and may have qualified as binge drinkers but could not be counted as such.

#### **1.7.2.16 Section 16: Drug use**

The drug section was adapted from the *Young Offender Risk and Protective Factor Survey*<sup>27</sup> and the *National Drug Strategy Household Survey*.<sup>30</sup> The drug section asked questions about age of onset of drug use, type of drug use, usual pattern of drug use and route of administration. Scales of alcohol and drug use were developed based on these questions, where higher scores represented greater alcohol and drug use.

#### **1.7.2.17 Section 17: Drug treatment**

The drug treatment section of the YPoCOHS was modelled on the *2001 Inmate Health Survey*.<sup>29</sup> The questions combined alcohol and illicit drug related information. Treatment seeking was assessed by questions asking whether young offenders had ever received treatment, what type of treatment, how referred, how often

they attended treatment, whether they had attended in the past 12 months and whether they had completed their treatment.

#### **1.7.2.18 Section 18: Sexual health**

Questions in the sexual health section were adopted from the *2001 Inmate Health Survey*<sup>29</sup> and the *Young Offender Risk and Protective Factor Survey*.<sup>27</sup> Questions about sexual activities included oral, vaginal, and anal sexual experiences. For each category, young offenders were asked to indicate age of first sexual experience, number of times engaged in the sexual activity, number of lifetime partners, number of sexual partners in the past 12 months and sex of partners. Reports of 6 or more lifetime sexual partners were coded as "Risky sexual behaviour." Condom use was assessed separately for sexual experiences with casual and regular partners. When a young person indicated limited or no condom use with either casual or regular partners, qualitative responses were collected to assess the reasons for limited or no use. Other contraceptive use was also assessed. Multiple responses were permitted from a list of common contraceptive methods. Young offenders were also asked to indicate whether they ever engaged in sexual activities in order to obtain drugs or money, and whether they had been a sex worker, length of time as a sex worker, places worked, and condom use during the time the young person worked as sex worker. Additionally, information was collected about diagnosed and suspected sexually transmitted diseases (STDs), STD symptoms and unwanted sexual experiences.

#### **1.7.2.19 Section 19: Women's health**

The women's health section was modelled on the *2001 Inmate Health Survey*<sup>29</sup> and asked young women about specific health behaviours associated with gynaecological awareness. Information was collected about the onset of menstrual cycle, regularity of menstrual periods, pain and discomfort associated with menstrual periods, and history of pregnancy. Young women were also asked whether they ever had a PAP smear, the frequency of tests, the time of the last test and results, and whether the test was completed in custody or in the community. Information was also collected about pregnancies, live children born,

termination of unwanted pregnancies, age at first termination and number of terminations and miscarriages.

#### **1.7.2.20 Section 20: Gambling**

The gambling section of the YPoCOHS was based on the *Young People in Custody Health Survey* (YPiCHS).<sup>12</sup> That questionnaire was derived from the DSM-IV-J-R which is outlined therein. The DSM-IV-J-R is Fisher's revised version of the DSM-IV-J, later appearing as the more commonly referenced DSM-IV-MR-J.<sup>49,50</sup> For the YPoCOHS, the 12-item adolescent version of the DSM-IV (i.e. DSM-IV-J) was used. The scale includes such behaviours as: being preoccupied with gambling, being restless and irritable if unable to gamble, 'chasing' behaviour, spending lunch money, stealing money and social conflict. Questions had four response options: 'never', 'once or twice', 'sometimes' or 'often'. Psychometric tests suggest that this method of scoring improves reliability and validity.<sup>51</sup> In the community orders sample, the internal reliability was found to be high, [Cronbach's alpha = 0.91]. Some questions from the DSM-IV-J with several components were asked as separate questions, e.g. *In the past year has your gambling ever led to lies/arguments with family/friends or others* was re-written as two questions, one about family and one about friends/others. In all cases, scoring was unaffected. A participant who had endorsed both questions was scored as a 'yes'; participants answering 'never' to both questions were scored as a 'no'. The items on the scale were then scored as follows. A 'yes' answer to DSM-IV-J-R items 1 and 7 was represented by the response 'often'. A 'yes' answer to items 2, 3, 4 and 5 was represented by 'sometimes' or 'often'. A 'yes' answer to items 6, 8 and 9 was represented by 'once or twice' 'sometimes' or 'often'. A respondent who scored four 'yes' answers was classified as a 'problem' gambler.

#### **1.7.2.21 Section 21: Tattooing and body piercing**

The tattooing and body piercing section was based on the *2001 Inmate Health Survey*<sup>29</sup> and on sections of the *Hepatitis Prevalence Study*.<sup>32</sup> Separate questions asked young offenders about professionally and non-professionally made tattoos and piercings, including ear, nose, tongue and other body locations, the number

of tattoos or piercings, whether the equipment used was cleaned and the reasons for not using clean equipment.

#### **1.7.2.22 Section 22: Health education**

The health education section was adopted from the *Young People in Custody Health Survey (YPiCHS)*<sup>12</sup> and asked young offenders to indicate ways in which they believed HIV, hepatitis B and hepatitis C were transmitted. The first three responses were recorded for each condition.

#### **1.7.2.23 Section 23: Physical activity**

The physical activity section was based on the *Health Behaviours of Secondary School Students in NSW*<sup>27</sup> survey and the *Young Offender Risk and Protective Factor Survey*.<sup>27</sup> Questions asked young offenders about the general frequency of engaging in sporting or physical activities, the length of time young offenders spent in these activities, and the frequency of physical activities for the 2 weeks prior to the survey. Further questions asked about participation in organised sports for the 12 months prior to the survey and about beliefs of the availability of recreational activities in young offenders' local area. Qualitative information was also collected about preferred recreational activities.

#### **1.7.2.24 Section 24: Sun protection**

The sun protection section was modelled on the *Health Behaviours of Secondary School Students in NSW*<sup>27</sup> survey. Young offenders were asked about their usual behaviour on sunny days in summer, including how often they wore a hat, clothes covering most of their body, deliberately wearing less clothing to obtain a tan, sunscreen use, wearing sunglasses, staying mainly in the shade and spending time indoors. Young offenders were also asked about sunscreen use, the sun protection factor (SPF) of the usually used sunscreen and sunburn experience including severe sunburn.

#### **1.7.2.25 Section 25: Nutrition**

The nutrition section was modelled on the *Western Australian Child Health Survey*<sup>25</sup> and the *National Longitudinal Survey of Children and Youth*.<sup>34</sup> Questions examined the number

of times young offenders ate breakfast, fruit and vegetable intake (including fresh salad and juice), take away food, sweets, milk intake and other preferred beverages.

#### **1.7.2.26 Section 26: Lifestyle**

Parts of the lifestyle section were based on the *Young Offender Risk and Protective Factor Survey*<sup>27</sup> and on the *National Longitudinal Survey of Children and Youth*.<sup>34</sup> Questions examined various aspects of young offenders' lives, including peer relations, emotional support, physical fights and bullying. Peer relations included questions on substance use by close and trusted friends and their school related behaviour (e.g., suspension from school, drop out from school). Substance use by friends and school behaviour were scored by indicating whether 'none', 'few', 'most', or 'all' engaged in the behaviour; young offenders rated how influential peers were on four point scale ('true', 'mostly true', 'mostly false', 'false') (e.g., '*my friends sometimes push me to do foolish or stupid things*'). Emotional support was assessed by the frequency of talking to others about personal problems. Young offenders were asked to nominate individuals to whom they talked about personal difficulties and their relationship with that person. Young offenders also provided information on prevalence of physical fights for the 6 months prior to the survey, the person involved in the fight, and whether medical treatment was required. Young offenders were also asked to indicate whether they had been bullies or victims of bullies, or both, at school. For victims of bullying, additional questions examined the frequency, recency, timing (e.g., before school, in recess, after school), gender and age of the bully, and their emotional reaction to being bullied. For perpetrators of bullying, questions examined the frequency of bullying others, the gender and age of their victim(s), and their emotional reaction associated with bullying others.

#### **1.7.2.27 Section 27: Body image**

The body image section was modelled on components of the *Youth Risk Behaviour Questionnaire (YRBQ)*.<sup>22,23</sup> Questions asked young offenders to describe their current weight at the time of the survey as either

'slightly' or 'very' underweight, 'slightly' or 'very' overweight, or 'about the right weight'. Questions about weight control examined whether, in the period of 4 weeks prior to the survey, young offenders engaged in dieting, fasting, or purging behaviour (e.g., use of laxatives, self induced vomiting).

#### **1.7.2.28 Section 28: Mental health**

The mental health section was modelled on the YPiCHS HealthSurvey, which was in part derived from the *2001 Inmate Health Survey*.<sup>29</sup> The section examined young offenders' previously diagnosed psychological and behavioural problems, including anxiety disorders, attention deficit hyperactivity disorder (ADHD), conduct disorder, depression, other mood disorders, intellectual or learning disability, schizophrenia or other forms of psychotic disorders and stress related disorders (e.g., acute stress disorder). If mentioned by the young person, additional disorders were also recorded. For each condition, young offenders were asked to indicate who provided the diagnosis, the treatment received, the last time help was received, and whether treatment was in custody or in the community. If young offenders did not seek assistance they were asked to provide reasons why services were not accessed. A detailed discussion of the concept of mental health and the preferred terminology for use with adolescents is presented in Chapter 7.

#### **1.7.2.29 Section 29: Kessler Psychological Distress Scale (K-10 LM)**

The *Kessler Psychological Distress Scale (K-10 LM)*<sup>24</sup> is a 10-item questionnaire yielding a global measure of psychosocial distress that was used to assess general psychological distress in both the YPiCHS and YPoCOHS. It examines level of anxiety and depressive symptoms in the previous four weeks and scores on the K-10 range from 10 (no distress) to 50 (severe distress). Scores are divided into four groups as follows:

10-15: The client or patient may currently not be experiencing significant feelings of distress

16-21: The client or patient may currently experience mild levels of distress consistent with a diagnosis of a mild depression and/or anxiety disorder.

22-29: The client or patient may currently experience moderate levels of distress consistent with a diagnosis of a moderate depression and/or anxiety disorder.

30-50: The client or patient may currently experience severe levels of distress consistent with a diagnosis of a severe depression and/or anxiety disorder.

Scores in the very high range are associated with a high probability of having an anxiety or depressive disorder.<sup>52</sup> Population norms suggest that between 11% and 12% of the general population have high to very high scores on the K-10.<sup>52</sup> Because this is the first time that the K-10 has been used in an adolescent sample, reliability was assessed using Cronbach's alpha=.835.

#### **1.7.2.30 Section 30: Suicide and self harm**

The Physical Health Questionnaire was modelled on a number of adolescent health surveys addressing health care needs, risk behaviours and service utilisation. These included the *Youth Risk Behaviour Questionnaire (YRBQ)*,<sup>22,23</sup> *Western Australian Child Health Survey*,<sup>25</sup> *National Longitudinal Survey of Children and Youth*,<sup>34</sup> *Young Offender Risk and Protective Factor Survey*,<sup>27</sup> *NSW Corrections Health's Inmate Health Surveys*,<sup>28,29</sup> *National Drug Strategy Household Survey*,<sup>30</sup> *Adolescent Health and Wellbeing Survey*,<sup>31</sup> and *The National Longitudinal Study of Adolescent Health*.<sup>34</sup> Some items were adapted for the community orders sample. The questions differentiated between self-harm and suicide and asked young offenders about ideation, thoughts and past attempts. Additionally, questions assessed family history of suicide and exposure to suicide through school incidents.

#### **1.7.2.31 Section 31: Community health services**

Questions were modelled on the *National Longitudinal Study of Adolescent Health*.<sup>34</sup> Information was obtained on health services accessed by the young person, the frequency and reasons for medical visits, problems experienced at the time of accessing medical care and reasons for not seeking health care or for not accessing health services. Additionally, questions were asked regarding young offenders' knowledge of available health

services and the use of these services (e.g., 1800 mental health line, Life Line).

**1.7.2.32 Section 32: Health services**

The health services section was adapted from the *Experience of Care and Health Outcomes Survey*.<sup>33</sup> The questions asked about experiences with various health professionals and for a self assessment of health status.

**1.7.3 Tests of cognitive function, educational achievement and psychological adjustment**

Formal training in test administration and scoring was a mandatory requirement for students wishing to undertake their placement with the survey team. Students were supervised by the team’s clinical and forensic psychologist (Dr Chris Lennings). To ensure consistency in scoring procedures, regular supervision sessions were held and inter-rater reliability checks were carried out.

**1.7.3.1 Wechsler Abbreviated Scale of Intelligence (WASI)**

The *Wechsler Abbreviated Scale of Intelligence (WASI)*<sup>57</sup> is a 15-30 minute test that reliably assesses cognitive functioning, and yields verbal, performance and full scale IQ scores for those aged 6 – 89 years. Four subtests in the *Wechsler Abbreviated Scale of Intelligence (WASI)* combine to provide the Full Scale IQ Score (FSIQ-4). The subtests are: Vocabulary; Block Design; Similarities and Matrix Reasoning. The Vocabulary and Similarities subtests combine to

provide the Verbal IQ score (VIQ); the subtests of Block Design and Matrix Reasoning combine to give a Performance IQ score (PIQ). The FSIQ-4 provides an estimate of an individual’s general level of intellectual functioning. The VIQ provides a measure of acquired knowledge, verbal reasoning and attention to verbal information. The PIQ provides a measure of fluid reasoning, spatial processing, attentiveness to detail, and visual-motor integration. Differences between VIQ and PIQ scores can be diagnostic. Hence, a *difference score* can be calculated and compared against critical value tables within the WASI manual, to determine whether this difference is statistically or clinically significant.

Items on each subtest are scored and summed to provide a subtest Raw Score total which is converted to a *T-score*, a standardised score with a mean of 50 and a standard deviation of 10, based on standardised norms developed specifically for the WASI. The WASI has a normal distribution and has excellent psychometric properties.<sup>58</sup> The distribution of IQ scores for each of the WASI scales has a mean of 100 and a standard deviation of 15. The WASI standardisation sample included 2,245 children and adults from a wide spectrum of intellectual ability. The test-retest reliability for the children’s sample ranged between 0.88 to 0.93 for the IQ scales; for adults the range was 0.87 to 0.92. Below is a table (Table 1.2) reproduced from the WASI Manual<sup>53</sup> indicating the qualitative interpretation of IQ scores for the WASI and the expected proportions of test-takers to score within each category.

Formal training in test administration and scoring was a mandatory requirement for students wishing to undertake their placement with the survey team

The Wechsler Abbreviated Scale of Intelligence (WASI) was used to assess cognitive ability (IQ)

**Table 1.2 Qualitative descriptions of WASI IQ scores (The Psychological Corporation, 1999, p. 156).**

IQ Score	Classification	Percent included	
		Theoretical normal curve	Actual sample <sup>a</sup>
130 and above	Very superior	2.2	2
120-129	Superior	6.7	7.3
110-119	High average	16.1	15.6
90-109	Average	50.0	50.0
80-89	Low average	16.1	15.8
70-79	Borderline	6.7	6.8
69 and below	Extremely low	2.2	2.5

<sup>a</sup>The percentages shown are for the FSIQ-4 and are based on the total standardisation sample (N=2245). The percentages obtained for the VIQ and PIQ are very similar.

### 1.7.3.1.1 Assessment of Intellectual Disability (ID) using the WASI

For this study, ID was defined as a Full-scale IQ score below 70 on the WASI. Although two adaptive functioning deficits are required to formally diagnose ID<sup>54,55</sup> no specific adaptive functioning measure was administered in the study. However, contact with the criminal justice system could be construed as evidence of social maladaptation and was therefore considered to be an adaptive functioning deficit in line with the American Association for Mental Retardation definition of social adaptive functioning deficit.<sup>55</sup> This, combined with an IQ below 70, was deemed a valid way to classify the community orders sample into ID and non-ID categories. It also closely reflected criteria for eligibility into disability services in NSW.<sup>56</sup> To assess the presence of intellectual disability in this population in a manner that provided a culturally fair assessment of the different cultural sub groups, the following criteria were used: for CALD and Aboriginal, a WASI PIQ<70 and for ESB WASI FIQ<70 identified those with an intellectual disability. Further discussion can be found in Chapter 6 (Section 6.4).

### 1.7.3.2 Wechsler Individual Achievement Test II-Abbreviated (WIAT-II-A)

The *Wechsler Individual Achievement Test – Second Edition – Abbreviated (WIAT-II-A)*<sup>57</sup> is a 15 to 25 minute test designed to briefly screen targeted skills in basic reading, mathematical calculation and spelling. The WIAT II-A has three subtests - Word Reading; Numerical Operations and Spelling - which combined yield a Composite Standard Score. It is a revision of the full Wechsler Individual Achievement Test. The WIAT-II-A includes an Australian adaptation of language and metrics.

The component skills assessed by each subtest are as follows:

	<i>Component skills</i>
• Word reading	Letter identification and phonological awareness; Word reading accuracy and automaticity
• Numerical operations	Identification and writing of numbers; counting; Solving calculation problems and simple equations involving the basic operations
• Spelling	Spelling dictated letters; letter blends and words.

Each item is scored and summed for each subtest to provide a subtest Raw Score total, which are converted to Subtest Standard Scores. These scores, in the WIAT manual, are based on standardised norms developed specifically for this test. The three Subtest Standard Scores are added to obtain the Composite Standard Score. Subtest Standard Scores and the Composite Standard Score all have a mean of 100 and a standard deviation of 15. Each subtest score may be converted from Total Raw Scores to Age Equivalent and Grade Equivalent Scores. Conversion to age equivalent scores provides an indication of the age, in years and months, at which a given raw score is average or typical.

### 1.7.3.3 Test Reliability

Inter-rater reliability for the WASI and WIAT-II-A was assessed on two occasions 12 months apart during the study by randomly selecting 20 test protocols on each occasion (a total of 40 protocols). Protocols were examined by two experienced clinical psychologists. No protocol differed by the standard error of measurement and a high reliability was observed. The reliability review was undertaken by Dr Chris Lennings and Mark Allerton. There was high agreement between the two reviewers. The reviewers disagreed about scoring on only two protocols. The vocabulary scale on the WASI had the greatest number of discrepancies.

### 1.7.3.4 Guide to the Assessment of Test Session Behaviour (GATSB)

The *Guide to the Assessment of Test Session Behaviour (GATSB)*<sup>58</sup> is a 29-item three point

*Culture fair IQ testing identified intellectual disability*

*The Wechsler Individual Achievement Test – Second Edition – Abbreviated (WIAT-II-A) assessed educational achievement*

behavioral rating scale: 'usually applies', 'sometimes applies', and 'doesn't apply' that provides a framework for recording a child's behaviour during testing. The GATSB yields three individual scores and an overall Total Score. High scores indicate inappropriate behaviour (e.g., 2='usually applies') and low scores indicate the absence of inappropriate behaviour (e.g., 0='doesn't apply'). For appropriate test behaviour, the scoring is reversed (0='usually applies').

Item ratings of the GATSB (0-1-2) are summed to obtain scores for each scale and the Total Score. Scores are in T scores (mean=50; SD=10) and percentiles for each scale within three age groups: 6-8, 9-12, and 13-16. The GATSB has good test-retest reliability, with average *r*s from .71 to .77 for the three scales and .87 for the Total Score. Internal consistencies ranged from .84 to .88 for the three GATSB scales and .92 for the Total Score, averaged across the age groups.<sup>58</sup> Scores on the GATSB provided guidance to both field and research staff regarding whether a test protocol was valid.

Young offenders' behaviour during test administration of the WASI was recorded using the *Guide to the Assessment of Test Session Behaviour (GATSB)*.<sup>58</sup> The completion of the psychological test battery took 90 - 120 minutes.

### 1.7.4 Psychological assessment

Current psychological functioning, using the *Adolescent Psychopathology Scale (APS)*<sup>59</sup> (custody) and *Adolescent Psychopathology Scale - Short Form*<sup>60</sup> (community) and past risk for psychopathology [Childhood Trauma Questionnaire (CTQ)<sup>61</sup>] were undertaken. The *Kessler 10*, used to assess current psychological distress, was included in the PHQ and discussed in section 1.6.2.29.

#### 1.7.4.1 Adolescent Psychopathology Scale (APS)

The APS was used for YPiCHS. It assesses a range of psychological and psychiatric symptoms warranting possible referral or intervention. Whilst not a diagnostic tool the scales are based on DSM-IV criteria.<sup>62</sup> The APS generates 40 scales, which are organised according to clinical

disorders (20 scales), personality disorders (5 scales), psychosocial problems (11 scales) and response style indicators (4 scales). In addition, three broad indicator scores (internalising, externalising and personality) can be obtained by combining various scales. The APS has mean T score=50 (Standard deviation=10). Scores are categorised into five symptom classifications; no symptoms (below 50T), sub clinical (60T–64T), mild (65T–69T), moderate (70T–79T) and severe (80T and above). Scores above sixty-four are considered an indication of possible disorder, but not a formal diagnosis. The APS has been extensively standardised on a US population.<sup>59</sup> The APS Response Style indicators (lie response scale, a consistency response scale and an infrequency response scale) serve as an internal check on the validity of responses.

#### 1.7.4.2 Adolescent Psychopathology Scale (APS-SF)

The *Adolescent Psychopathology Scale – Short Form (APS-SF)*<sup>59</sup> was used for YPoCOHS. It is a multidimensional measure, derived from the APS, which generates 12 clinical scales to assess a range of psychological and psychiatric symptoms and two validity scales to assess the consistency of responding and the degree of defensiveness in responding to the items on the test. It is derived from the *Adolescent Psychopathology Scale (APS)*,<sup>59</sup> has been extensively standardised on a USA population, and demonstrates significant correlations with scales from the MMPI and other psychosocial measures.<sup>59</sup> Six clinical scales focus on DSM-IV symptomatology associated with Conduct Disorder, Oppositional Defiant Disorder, Post-Traumatic Stress Disorder, Generalised Anxiety Disorder, Major Depressive Disorder and Substance Abuse Disorder.<sup>59</sup> Conduct Disorder and Oppositional Defiant Disorder are the most commonly reported externalising disorders in conjunction with adolescent substance abuse in the literature; depression and anxiety are the most commonly reported internalising disorders. The other six clinical scales assess domains of adolescent psychosocial problems and competencies.<sup>59</sup>

Cronbach's alpha demonstrated high internal consistency of the APS-SF clinical scales (range: =.80 to .91; CND=.80, SUB=.85). High test-retest

Psychological functioning was assessed using the:

- *Adolescent Psychopathology Scale (APS)* (custody)
- *Adolescent Psychopathology Scale - Short Form* (community)
- *Childhood Trauma Questionnaire (CTQ)*
- *Kessler-10*



reliability is not typically expected of measures of adolescent psychopathology over extended time frames due, for example, to routine fluctuations in mood-based symptoms.<sup>59</sup> Reasonable short-term reliability is desirable, however, to demonstrate that scores are not purely related to external factors. Test-retest reliability measures were conducted on 64 adolescents, at a 2-week interval.  $R_{tt}$  for the APS-SF was moderately high to high, ranging from .76 to .91 (CND=.76; SUB=.86).

The APS-SF mean T score is 50 [Standard Deviation (SD) =10]; T scores are divided into four symptom ranges as follows:

- Subclinical Symptom Range (60T to 64T)
- Mild Clinical Symptom Range (65T to 69T)
- Moderate Clinical Symptom Range (70T to 79T)
- Severe Clinical Symptom Range (80T and above)

Elevated scores (T=65 and above) are not diagnostic of DSM-IV disorders but provide an indication of possible disorders that may require referral or intervention.<sup>59</sup>

Prior to interpretation of the scores on the APS-SF, an assessment of consistency and defensiveness of responding was conducted for the key subgroups of the sample (gender, region, ethnicity, IQ, age). Ninety-six percent (96%) of APS-SF protocols were responded to consistently according to the APS-SF consistency scale. Inconsistency was not related to any of the grouping variables. The most inconsistent protocols were removed prior to analysis of the APS-SF results. An analysis of the defensiveness

scale of the APS-SF by key subgroups indicated that CALD were more likely to score in the moderate or severe range for Defensiveness on the APS-SF than either of the other ethnic subgroups. No other subgroup differences in defensiveness were found. Given the higher CALD defensiveness pattern, CALD results on the APS-SF may represent an under-reporting of psychopathology for this group.

**1.7.4.3 Childhood Trauma Questionnaire (CTQ)**

The *Childhood Trauma Questionnaire* (CTQ)<sup>61</sup> is a 28-item retrospective self-report measure of childhood abuse and neglect experiences. The CTQ generates classification scales for five areas of maltreatment: emotional, physical and sexual abuse, and emotional and physical neglect. Each scale contains five items that are summed to produce the Scale Total Score, which ranges from 5 to 25; the higher the score, the greater the severity of maltreatment. There are four levels of maltreatment for each type of trauma: None (minimal); Low (to Moderate); Moderate (to Severe); and Severe (to Extreme). The CTQ also generates a minimisation/denial scale, scored either none (0) or possible (1 to 3), for the detection of false-negative reports regarding trauma. Internal consistency is in the satisfactory to excellent range (.66 to .92), with the total scale achieving a Cronbach’s alpha of 0.95. Test-retest reliabilities were high (.79 to .86); and construct validity is generally robust, with psychiatrically referred groups reporting higher levels of abuse and neglect than non clinical samples.<sup>63,64</sup> Table 1.3 presents the cut-off scores for each of the CTQ’s scales.

*The YLS/CMI: AA was used to provide a measure of risk of recidivism, criminogenic needs, and responsivity and protective factors related to offending behaviour in juveniles*

**Table 1.3 CTQ Cut off scores**

Level of abuse	Emotional Abuse	Physical Abuse	Sexual Abuse	Emotional Neglect	Physical Neglect
No	8	7	5	9	7
Low	12	9	7	14	9
Medium	15	12	12	17	12
High	16+	13+	13+	18+	13+

**1.7.4.4 Youth Level of Service/Case Management Inventory: Australian Adaptation (YLS/CMI: AA)**

The YLS/CMI: AA<sup>65</sup> is a 47 item instrument used to assess risk in eight domains. Three additional items address individual strengths

(see Table 1.4). The tool is based on the LS/CMI<sup>66</sup> and provides a broad measure of risk of recidivism, criminogenic needs, responsivity and protective factors related to offending behaviour in juveniles. The YLS/CMI: AA has been adapted for the Australian socio-legal

environment<sup>67</sup> and has been normed on 250 Australian juveniles.<sup>67</sup> As for the LS/CMI<sup>68</sup> it was found to be sufficiently reliable (Cronbach alpha of .91) and valid. However, Thompson and Pope (2003)<sup>69</sup> found a low correlation of .28 and area under the operating characteristic curve of 0.67 for the total score for a sample of juvenile males ( $n = 174$ ) who were followed for recidivism between 6 and 32 months, indicating that it may not accurately predict risk of recidivism.

The YLS/CMI: AA was administered by JJO. Due to DJJ policy, a number of participants was administered the tool more than once over the course of the study. The YLS/CMI: AA administered closest in time to the completion of the *Mental and Physical Health Questionnaire* (MPHQ) was used. Mean administration time of the YLS/CMI: AA was 31 days before the MPHQ. Court and offence data were obtained from participants' official criminal record.

**Table 1.4 Domain Content of the YLS/CMI: AA**

Domain	Strength
Prior and current offences (8 items)	Individual level (1 item)
Education / Employment (7 items)	Family level (1 item)
Family and living circumstances (7 items)	Social level (1 item)
Peer relations (4 items)	
Substance abuse (6 items)	
Leisure / Recreation (3 items)	
Personality / Behaviour (7 items)	
Attitudes and beliefs (5 items)	

*Findings are presented in text, tabular and graphical form*

*Data for YPiCHS are presented with results for community based participants. Percentages in tables are given to the nearest whole number. Due to rounding artefacts, columns and rows in some tables may not sum exactly to 100. Percentage calculations in the tables are based on complete data sets for the factor reported, which vary for different factors. These numbers are indicated below each table and along the x-axis in graphs*

### 1.8 Reporting results

Findings are presented in text, tabular and graphical form. Where appropriate, statistical tests of significance were conducted to identify whether subgroups within the sample of young offenders differed significantly from each other on some measures used in the survey. Chi square is a non-parametric test of statistical significance for bivariate tabular analysis. Chi square tests the hypothesis that samples differ sufficiently in some characteristic such that one can generalise from the sample to the population from which the sample was drawn and conclude that the population is also likely to produce the same pattern of results as those obtained within the sample. For each cell in the table, the chi square calculates both the observed and the expected frequencies for the characteristic. An examination of the adjusted standardised residuals for the table matrix indicates the degree of difference between observed and expected frequencies. In this report, because multiple Chi square tests are reported, a stringent p value (.001), which represents a probability of error threshold of 1 in 1000 was adopted to avoid the identification of spuriously significant results. Although the numerical calculations for the Chi square tests are not presented, text that identifies differences between sub groups met the probability

threshold for reporting sub group differences. Theoretically significant findings that did not reach this threshold were, in some cases, identified and discussed in the text. Data were not weighted according to baseline population proportions (which in some breakdowns was not available), so interpretation of the chi square analyses needs to be undertaken with this in mind. Other statistical tests were carried out on some aspects of the data. These are explained in the relevant chapters.

Data for the young offenders in custody (YPiCHS) are presented, where appropriate, alongside the results for community based participants. Some questions in the YPiCHS related to young offenders' experiences before entering custody and others while in custody and are indicated in the text as: [YPiCHS: before custody] and [YPiCHS: in custody]. While the females in custody sample represented almost all young women in detention at the time of the custody health survey, the total number was only 19. Comparisons between in custody and community based females must therefore be made with caution. Percentages in tables are given to the nearest whole number. Due to rounding artefacts, columns and rows in some tables may not sum exactly to 100. Percentage calculations in the tables are based on complete data sets for the factor reported and therefore

vary for different factors. These numbers are indicated below each table and along the x-axis in graphs.

Reliable comparisons between custody and community orders samples could not be made for some factors (e.g. substance use) because of the controlled environment in custody (as indicated by the text [YPiCHS: controlled environment]), insufficient numbers (indicated by [YPiCHS: low N]), or because data were not recorded (n/r). Where appropriate, comparisons with population-based surveys conducted in the community are included for comparison with custody and community samples of young offenders. These are indicated by their acronym in the table title but identified in full in text before each table and in footnotes to tables where appropriate.

### 1.8.1 Information dissemination

Dissemination of the results of this research included a media launch of the Key Findings Report (July, 2006), media releases of information arising from the report, public statements to the media, placement of the reports onto the Justice Health and Department of Juvenile Justice Intranets, presentation of findings to strategic planning groups of the partner organisations, regional, national and international conferences, and publication in scholarly journals. A list of publications arising from the two surveys at the time of printing of this book are contained in Appendix 2. Copies of the full papers are available from the first author and the partner organisations.

## 1.9 Young offenders' view of the health survey

Although no formal evaluation of the survey experience from the participants' perspective was undertaken, anecdotal accounts from field staff indicated a high level of satisfaction. All participants were offered individual sessions to discuss their serology and psychological test results. There was a high uptake of this offer of post test feedback interviews. Nursing staff noted that young offenders, particularly

females, asked additional questions about their health and were keen to discuss and understand their test results. On occasion, survey staff reported that young offenders attended the survey intending to pay. Although there was no charge for any of the procedures, the preparedness to pay for them indicated the importance that young offenders placed on the opportunity to receive this service. While incentives to participate were clearly important in the recruitment phase of the study, involvement with the survey provided these young offenders with a valued opportunity to discuss issues regarding their physical and mental health that they stated they did not feel comfortable discussing with their JJOs or other community based health workers.

## 1.10 Follow up assessment (Time 2)

About one quarter (n=212) of the participants were followed up 12 months after the initial assessment. All young offenders who completed the Health Survey at Time 1 were eligible to participate at Time 2. Contact was established based on previously collected information on location of participants, including contact details of significant others and peers. Phase 2 consisted of a shortened version of the health questionnaire and repeat serology testing. Due to the high mobility of the sample, establishing contact with young offenders after 12 months was difficult. The main barriers to re-contacting young offenders included: A significant proportion of young offenders who were on community orders at the time of the initial assessment had completed their orders and were no longer in contact with DJJ. Hence DJJ could not provide contact details and could not help survey staff to locate their ex-clients; some relatives or peers could not provide current contact details; employment or study commitments; currently serving a custodial sentence, either in a juvenile or adult correctional facility. A separate report of the findings of the follow up survey will be presented at a later date.

*Comparisons with population-based surveys conducted in the community are included for comparison with custody and community samples of young offenders*

*Young offenders were very satisfied with the service provided as part of the study*

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# CHAPTER 2

## DEMOGRAPHICS

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## 2. DEMOGRAPHICS

The sample comprised young offenders serving community orders with the New South Wales Department of Juvenile Justice (DJJ) between October 2003 and December 2005. Eligibility was limited to those on a supervised, community-based order during the study period, provided that they were seen during or within 2 months of order completion.

The Young Offenders Act 1997 provides Police with the option of giving young offenders a Warning, Caution, or referral to a Youth Justice Conference to divert these young people from formal court processes. Police or Authorised Officers (STA Officers, Rangers, etc) can issue Infringement Notices to young people observed committing minor offences or violations of regulations. Figures derived from the NSW Bureau of Crime Statistics and Research (BOCSAR) show that in 2005-06 young people aged 10-17 years in NSW were issued with 68,009 Infringement Notices, 19,349 Warnings, 9,449 Cautions and police referred 978 matters to Youth Justice Conferencing. These are largely diversionary measures that may place conditions on the young person's behaviour, but do not require that they attend for supervision. Supervised orders issued by the courts are either custodial or community-based. Custodial orders confine a young person to detention for a specified period of time. The large majority of supervised orders, however, are served in the community, and the Department supervises young offenders who receive supervised good behaviour bonds and probation orders, community service work orders, parole orders and suspended sentences. The Department also supervises young offenders on conditional bail and those remanded in custody pending finalisation of their court matters.<sup>1</sup>

### 2.1 Sample characteristics: Gender, ethnicity, region, IQ and age

DJJ records show that in 2005-2006, for every 1,000 people aged 10-17 years resident in NSW:

- 10.6 had a criminal matter finalised in the Children's Court;
- 6.8 were convicted and/or sentenced in these finalised matters;
- 1.9 were given sentences requiring the Department to supervise them in their community;

- 0.6 were sentenced to detention.

Approximately 4036 young offenders were serving a community based supervision order with DJJ during the study period. They were supervised in one of the JJCS offices located throughout the state of New South Wales. NSW covers an area of 800,642 km<sup>2</sup> and is Australia's most populous state, with approximately 6.75 million residents. Participants were interviewed in locations across NSW that were stratified into three main areas: Sydney, Other metropolitan and Regional. 'Sydney' includes the Greater Sydney metropolitan area (excluding Gosford, to be consistent with DJJ's regional boundaries). 'Other metropolitan' includes Wollongong, Newcastle and Gosford (the other major cities in NSW, each with populations of more than 100,000). 'Regional' includes other smaller cities and towns (e.g. Albury, Dubbo, and Lismore). Young offenders were classified according to the DJJ office responsible for supervision of their community order; hence, some of those interviewed in regional DJJ offices may have been from remote areas supervised by that office. This method applies adapted classification rules from the RRMA (Rural, Remote and Metropolitan Areas),<sup>2</sup> and ASGC (Australian Standard Geographical Classification)<sup>3</sup> systems. Remoteness, according to these classifications, describes areas in terms of relative distance from, and population size of Australia's major cities and regional areas.

Clients from 22 Juvenile Justice offices were seen at 39 sites during the study period. Some sites were visited on multiple occasions and some were visited only once due to geographical distance and cost. Sixteen offices were not visited. There were 745 young offenders in sites not visited. Clients on custody and/or bail orders only or who were dealt with under Section 32 or 33 of the *Mental Health (Criminal Procedure) Act 1990* (amended via the *Crimes Legislation Amendment Act 2002*) were not included in the sampling frame. Approximately 50% (469) of the clients in sites visited once only were either not eligible to participate because they were not on orders at the time of assessment or were not available on the day the assessment team arrived. The sample frame therefore comprised 2,822 young offenders, of whom 800 were included as participants in the study. Of the 2,022 who did not participate, approximately 1,000 either did not respond to several attempts

*Sample comprised 800 young offenders from 22 Juvenile Justice Community Services throughout NSW*

*Further detail on sampling is presented in chapter 1*

to contact them or failed to attend after several bookings were made; approximately 500 were approached but refused to participate; 400 had no current contact details; 100 (90 males and 10 females) were excluded because of serious mental health problems, substance withdrawal or excessively disruptive behaviour on the day of testing. (These exclusions may have resulted in an underestimation of some conditions, particularly mental health indicators, substance abuse, offence and violence characteristics).

Precise numbers for each category were difficult to ascertain; it was not unusual for clients to initially refuse, then later consent, fail to attend for interview, and ultimately not respond to contact efforts. Other details on sampling were presented in chapter 1.

Table 2.1 shows the sample (YPoCOHS), DJJ population on community orders during the study period (CO), custody sample (YPiCHS) and young offenders aged 12-21 in NSW (NSW) by gender, ethnicity, region, IQ and age.

**Table 2.1 Sample and comparative population characteristics**

	YPoCOHS		CO population <sup>i</sup>		YPiCHS		NSW	
	N	%	N	%	N	%	N	%
Male	682	85.3	3429	85.0	221	92.1	430,000	51 <sup>ii</sup>
Female	118	14.8	607	15.0	19	7.9	414,000	49 <sup>ii</sup>
ESB	527	65.9	2154*	55.8	102	42.5	n/a	78 <sup>iii</sup>
Indigenous	155	19.4	1275**	33.0	102	42.5		2 <sup>iii</sup>
CALD	118	14.8	253*	6.5	36	15.0		20 <sup>iii</sup>
Sydney	603	75.4	1809	44.8	84	35.0	-	68 <sup>iv</sup>
Other metro	95	11.9	572	14.2	96	40.0	-	32 <sup>iv</sup>
Regional	102	12.8	1413	41.0 <sup>^</sup>	60	25.0	-	
IQ <70	119	15.2	n/a		40	17.5	n/a	2 <sup>v</sup>
IQ 70-84	307	39.3			91	39.9		13 <sup>v</sup>
IQ 85+	355	45.5			97	42.5		85 <sup>v</sup>
<16 years	176	22.0	606	15	44	18.3	-	-
16+ years	624	78.0	3430	85	196	81.7	-	-

<sup>i</sup> Data extracted from NSW Department of Juvenile Justice Client Information Management System; <sup>ii</sup> & <sup>iii</sup> Australian Bureau of Statistics Cdata01. <sup>ii</sup>: young people aged 15-24; <sup>iii</sup>: all ages; <sup>iv</sup> Australian Bureau of Statistics: Australian Social Trends 2006 Table 2.1: NSW; <sup>v</sup> Wechsler Abbreviated Scale of Intelligence Full Scale IQ tables; \* 181 (4.5%) non-Aboriginal young offenders had no recorded ethnicity data; \*\* 173 (4.3%) young offenders had no recorded Aboriginal status or ethnicity data; <sup>^</sup> Includes 242 (6%) from rural and remote areas not visited by YPoCOHS

Sample characteristics included:  
 85% Male  
 66% ESB  
 19% Aboriginal  
 15% CALD  
 75% Sydney  
 12% Other metropolitan  
 13% Regional  
 15% IQ<70

Mean age 17 years  
 22% < 16 years

## 2.2 Gender and age

Table 2.2 shows gender distributions for the YPoCOHS sample by ethnicity, region, IQ and age.

**Table 2.2 Ethnicity, region, IQ & age by gender**

	Males		Females	
	n	%	n	%
ESB	450	66	77	65
Indigenous	118	17	37	31
CALD	114	17	4	3
Sydney	510	75	93	79
Other metro	86	13	9	8
Regional	86	13	16	14
IQ <70	100	15	19	17
IQ 70-84	266	40	41	36
IQ >84	302	45	53	47
<16 years	139	20	37	31
16+ years	543	80	81	69

The gender distribution, 682 (85%) males and 118 (15%) females matched the population gender distribution during the study period. ESB, region, IQ and age had the expected distributions by gender. However, there were more males in the CALD group and more females in the Aboriginal group. This was due to purposeful sampling of young Aboriginal females.

The mean age of the sample was 17 years 0 months (SD 1.3; range 12-21), 17 years 1 month (SD 1.3; range: 12-21) for males and 16 years 8 months (SD 1.3; range: 13-20) for females. Data extracted from NSW DJJ's Client Information Management System (CIMS) indicated that the average age of community based young offenders was 17 years, 11 months (SD 1.8; range 11-25), 17 years 11 months (SD 1.8; range: 11-25) for males and 17 years 6 months (SD 1.7; range: 11-22) for females. The younger mean age of our sample reflects the lower availability of DJJ's older clients.

Figure 2.1 shows the age distribution of the community orders sample by gender.

**Figure 2.1 Age of community orders sample (%)**

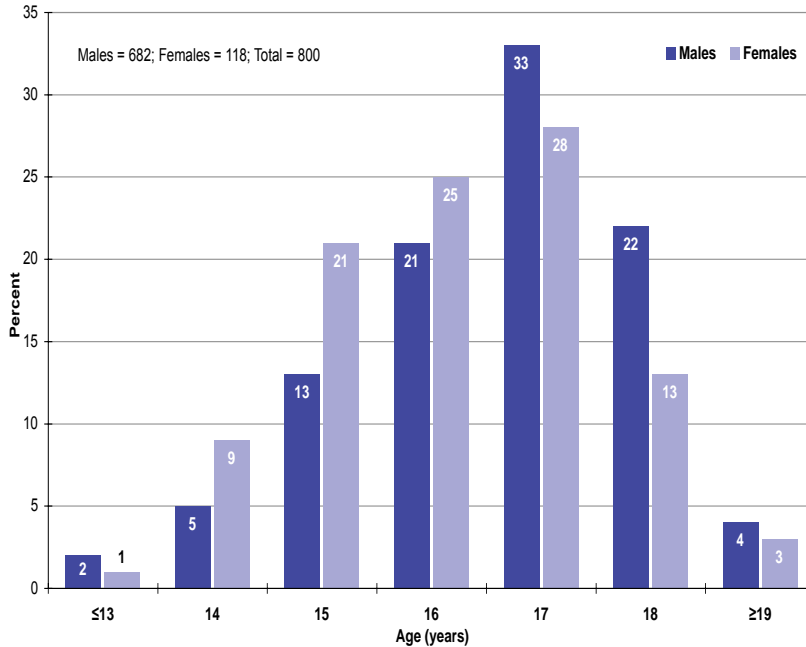


Table 2.3 shows distributions by gender, ethnicity, region and IQ for those younger than 16 years and those 16 years and older.

**Table 2.3 Gender, ethnicity, region and IQ by age category**

	<16 years		16+ years	
	n	%	n	%
Male	139	79	543	87
Female	37	21	81	13
ESB	109	62	418	67
Indigenous	46	26	109	18
CALD	21	12	97	16
Sydney	113	64	490	79
Other metro	28	16	67	11
Regional	35	20	67	11
IQ <70	36	21	83	14
IQ 70-84	65	39	242	39
IQ >84	68	40	287	47

Young offenders under 16 years of age were more likely to live in regional areas; young offenders 16 years and older were more likely to live in Sydney. This distribution reflects the same, but stronger, trend in the eligible population.

### 2.3 Ethnicity

Young Aboriginal offenders comprised 33% of the total population of young offenders on community orders [males (32%), females (40%)] during the study period, and 19% (155; 18% males, 30% females) in the study sample [YPiCHS 40%]. Aboriginal under-representation was due to limited sampling of regional (and remote) areas, a higher refusal rate in urban areas and greater difficulty making contact.

While the proportions of male and female offenders reflected population proportions for the ESB group, there were more females in the Aboriginal group and fewer females in the CALD group. CALD offenders were also more likely to be from Sydney and less likely to be from other metropolitan or regional areas. Aboriginal were less likely to be from Sydney and more likely to be from regional areas. ESB offenders were more likely to be from other metropolitan areas. ESB offenders were more likely to have IQ>84 and less likely to be in the other IQ categories. Aboriginal offenders were more likely to be IQ<70 and less likely to have IQ>84. CALD offenders were more likely to have IQ 70-84.

*Young offenders under 16 years of age were more likely to live in regional areas*

*Young offenders 16 years and older were more likely to live in Sydney*

*Aboriginal young offenders were under-represented (33% in community orders population, 19% in sample)*

*Aboriginal young offenders were more likely to have IQ<70 than ESB or CALD young offenders*

Table 2.4 shows ethnicity distributions for ESB, Aboriginal and CALD young offenders. Table 2.5 presents regions of birth by gender.

**Table 2.4 Gender, region, IQ and age by ethnicity**

	ESB		Indigenous		CALD	
	n	%	n	%	n	%
Male	450	85	118	76	114	97
Female	77	15	37	24	4	3
Sydney	391	74	95	61	117	99
Other metropolitan	75	14	19	12	1	1
Regional	61	12	41	27	0	0
IQ <70	64	12	42	28	13	11
IQ 70-84	184	36	66	45	57	50
IQ >84	271	52	40	27	44	39
<16 years	109	21	46	30	21	18
16+ years	418	79	109	70	97	82

**Table 2.5 Region of birth by gender (%)**

Region of birth	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Australia	83	84	85	95	83 [75] <sup>1</sup>	85
Other Oceania	8	7	13	0	8 [2]	6
Asia	4	5	3	5	4 [7]	5
Middle East	2	2	0	0	2 [2]	2
Europe	<1	1	0	0	<1 [10]	1
Americas	<1	1	0	0	<1 [1]	1
Africa	<1	<1	0	0	<1 [1]	<1

a Males = 672, Females = 118, Total = 800; b Males = 223, Females = 19, Total = 242  
<sup>1</sup>Comparison: 2001 Census, Population and housing NSW B07A & B07B (ages 15-19)

Table 2.6 shows the countries of birth for young offenders and their biological parents.

**Table 2.6 Country of birth for young offenders and their parents (%) [2001 Census]**

Country	Participant		Mother		Father	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Australia	83 [75]	85	62 [58]	70	59 [56]	62
ALL OTHER	17 [25]	15	38 [42]	30	41 [44]	38
New Zealand	7 [2]	5	6	2	7	4
Samoa	.7	0	3	3	4	3
Tonga	.1	1	4	3	4	4
Lebanon	.5 [.5]	<1	3	5	3	5
Vietnam	.5 [1]	1	2	2	3	2
England	.4 [1]	<1	3	0	2	3
Philippines	1 [1]	<1	2	0	2	<1
Thailand	.6	<1	1	<1	1	<1
Iraq	.5	<1	1	<1	1	<1
Fiji	.6 [.6]	<1	1	1	1	1
Cook Islands	.4	0	1	0	1	0

a Participant = 799, Mother = 770, Father = 721; b Participant = 240, Mother = 240, Father = 235  
 Comparison: 2001 Census, Population and housing NSW, B05A & B05B  
 Other countries of birth not included in table include Cambodia, Russia, Myanmar (formerly Burma)

The majority of young offenders were born in Australia (83%)

Other regions of birth were Oceania (8%) and Asia (4%)

38% mothers and 41% fathers of young offenders were born overseas

Table 2.7 shows the primary language spoken; 29 young offenders spoke two or more languages at home, including 12 who did not speak English at home.

**Table 2.7 Language spoken by gender (%) [2001 Census]**

Language	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
English	83 [74]	84	97 [75]	90	85 [75]	84
ALL OTHER	17 [26]	16	3 [25]	10	15 [25]	16
<b>MIDDLE EASTERN</b>						
Arabic	2 [2]	3	2 [2]	5	2 [2]	3
Lebanese	1	<1	0	0	0	<1
Turkish	<1	1	0	0	<1	1
Persian	<1	1	0	0	<1	1
<b>ASIAN</b>						
Vietnamese	2 [1]	1	1 [1]	0	1 [1]	1
Filipino/Tagalog	1	1	1	5	1	1
Cambodian	<1	1	0	0	1	1
Burmese	<1	0	0	0	1	0
Thai	<1	0	0	0	1	0
Chinese dialect	<1	1	0	0	<1	<1
Cantonese	1	1	0	0	0	<1
Korean	1	1	0	0	0	<1
<b>EUROPEAN</b>						
Spanish	1	1	0	0	0	1
Russian	<1	0	0	0	<1	0
Greek	1	0	0	0	<1	0
<b>OCEANIC</b>						
Tongan	2	2	0	0	0	2
Samoan	2 [<1]	1	0 [<1]	0	0 [<1]	1
Maori	1	1	0	0	0	<1

a Males = 680, Females = 118, Total = 798; b Males = 221, Females = 19, Total = 240  
Comparison: 2001 Census, Population and housing, NSW (all ages)

85% of young offenders spoke English as their first language

Young offenders from Regional areas were more likely to have IQ<70

## 2.4 Geographic region and socioeconomic status

Table 2.8 presents the young offender on community orders sample by region. Young offenders from Sydney were more likely to be IQ>84 and less likely to be IQ<70. By contrast, young offenders from Regional areas were more likely to be IQ<70 and less likely to be IQ>84 (see Table 2.4).

**Table 2.8 Gender, ethnicity, IQ and age by region**

	Sydney		Other metropolitan		Regional	
	n	%	n	%	n	%
Male	510	85	86	91	86	84
Female	93	15	9	10	16	16
ESB	391	65	75	79	61	60
Indigenous	95	16	19	20	41	40
CALD	117	19	1	1	0	0
IQ <70	75	13	17	18	27	27
IQ 70-84	225	38	38	40	44	44
IQ >84	288	49	39	42	28	28
<16 years	113	19	28	30	35	34
16+ years	490	81	67	71	67	66

Table 2.9 presents the sample by socioeconomic (SES) tertiles. SES tertiles were determined by dividing the scores on the SEIFA (Socio-Economic Indexes for Areas) disadvantage index.<sup>4</sup> This index was derived from 2001 Census data by the Australian Bureau of Statistics and measures disadvantage in a local area using factors including income, education and occupation.

Young offenders' placement on the index was determined by the postcode in which they reported spending most of their time. Selected postcodes were given an index score. The Australia-wide average has been fixed at around 1,000, so that generally speaking, an

area with a score below 1,000 can be considered relatively disadvantaged and an area with a score above 1,000 can be considered relatively advantaged. The further away from 1,000 the scores are, the more or less disadvantaged the given area is.

Young offenders from high SES were: more likely to be ESB, Sydney, IQ>84; less likely to be Aboriginal, Regional, IQ 70-84. Young offenders from mid SES were: more likely to be Regional, IQ 70-84; less likely to be Sydney, CALD, IQ>84. Young offenders from low SES were: more likely to be Sydney, CALD; less likely to be ESB, Regional.

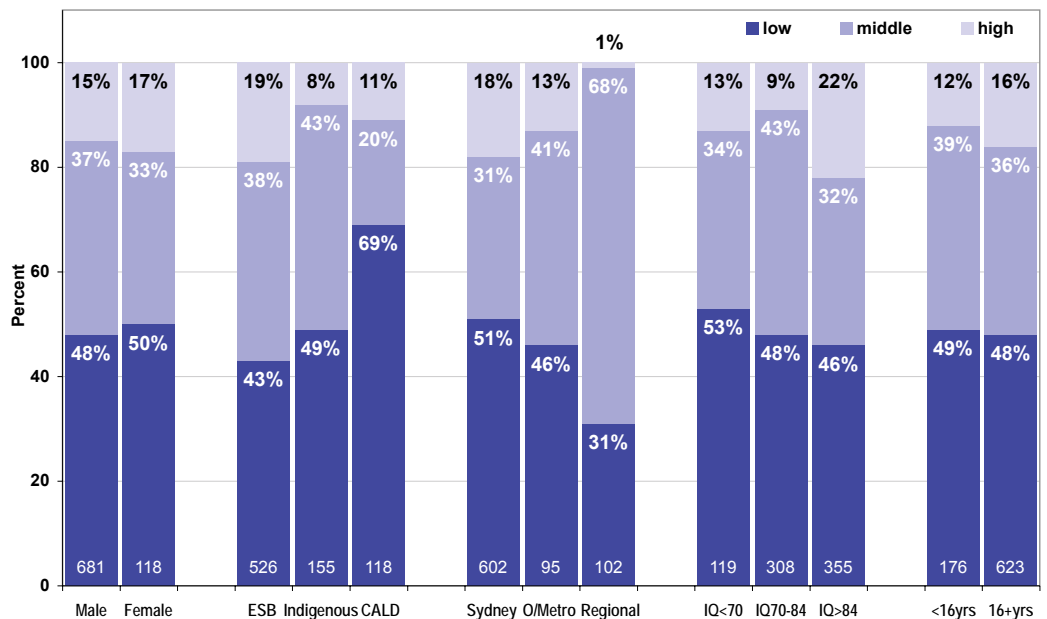
Young offenders from high SES were more likely to be ESB, from Sydney region and have IQ>84

Young offenders from low SES were more likely to be from Sydney region and CALD

**Table 2.9 Gender, ethnicity, region, IQ and age by SES tertiles**

	Low		Middle		High	
	n	%	n	%	n	%
Male	325	85	253	87	103	84
Female	59	15	39	13	20	16
ESB	227	59	201	69	98	80
Indigenous	76	20	67	23	12	10
CALD	81	21	24	8	13	11
Sydney	308	80	184	63	110	89
Outer metropolitan	44	12	39	13	12	10
Regional	32	8	69	24	1	1
IQ <70	63	17	41	14	15	12
IQ 70-84	149	40	130	46	28	23
IQ >84	164	44	113	40	77	65
<16 years	86	22	69	24	21	17
16+ years	298	78	223	76	102	123

**Figure 2.2 Proportions of sample in each of the three socio-economic tertiles by gender, ethnicity, region, IQ and age (%)**



## 2.5 Criminal history

Studies in the United Kingdom<sup>5</sup> and the United States<sup>6</sup> are instructive for comparative purposes. In the UK, in 2005, of approximately 1.6 million convicted offenders aged 10 to 17 years old, 48% had committed violent offences, 20% were convicted for selling drugs and 29% for theft and related crimes. In the US, of 1.6 million cases (for a total of 2.4 million arrests), 41% were convicted for property offences, 23% for person offences (mainly involving violence) and 22.5% for public order offences, including some acts of minor violence. Thirteen percent (13.5%) were liquor law and drug violations. Unfortunately, data collections from each country do not follow similar reporting conventions, making direct comparisons of individual offence types difficult. This is especially so since there are 51 separate juvenile justice jurisdictions in the United States and there are no uniform reporting rules. In addition, not all States contributed offence data after 2003.

In the current sample of community based offenders, those with recorded offence data

(n=692, 86.5%) had on average 5.1 (SD=6.0) offences. Violent offences were the most common form of recorded offence (63.8%). Those participants who committed violent offences were charged on average 2.4 times (SD=2.1) for such offences. Property offences were recorded for 18.5% of the sample and those who committed such offences were charged on average 3.7 times (SD=3.2). Those who committed traffic offences (8.6%) committed 2.4 (SD=1.8) such offences; 11% of participants committed 'other' offences. The most common court outcomes were bonds or suspended sentences (84.9%) followed by supervision orders (80.3%) and control orders (10.6%). Courts may issue young offenders with more than one type of order at sentencing.

The current offence, incarceration history and duration of custody and community orders of both the community and custody samples and the incarceration history of parents and other relatives are presented in Tables 2.10 – 2.15.

The most serious current offence for which young offenders had been charged at the time of interview is presented in Table 2.10.

*The three most serious current offences for which young offenders had been charged were 'Other assault', robbery and aggravated assault*

**Table 2.10 Offence type by gender (%)**

Most serious offence <sup>i</sup>	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Other assault	25	17	49	16	28	17
Robbery	23	27	14	32	22	28
Aggravated assault	15	7	13	0	15	6
Other	14	6	7	16	13	7
Car and other theft	10	9	15	26	11	10
Break and enter	10	22	3	5	9	21
Sexual assault	2	7	0	0	1	7
Homicide	<1	5	0	5	<1	5

a Males=595, Females=102, Total=697; b Males=223, Females=19, Total=242

Figure 2.3 displays the percentages charged with crimes against persons (assaults, robbery, homicide) and property offences (theft and break and enter) by gender, ethnicity, region, IQ and age.

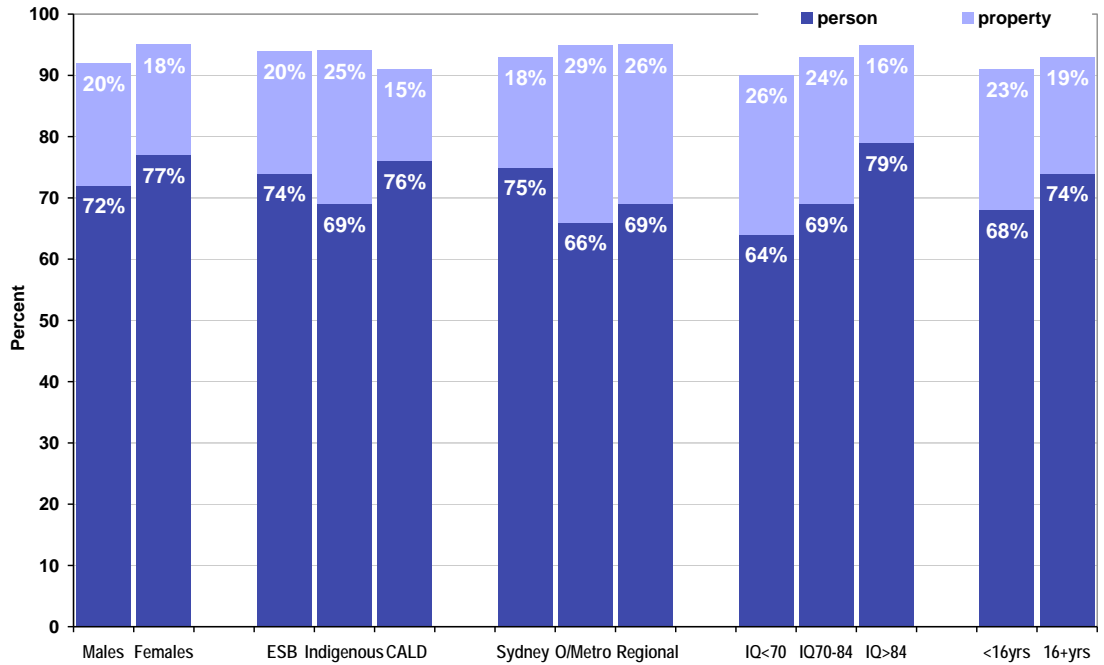
The pattern of offending i.e. the distribution of crimes against persons and property offences was not related to gender, ethnicity, region, IQ or age category.

Eighty-two percent (82%, n=655) of young offenders on community orders reported histories of incarceration (including juvenile detention and remand in police stations).

Fourteen percent (14%, n=102) [YPiCHS 65%] estimated that they had spent six months or more in custody during their lifetime. Table 2.11 (overleaf), presents the numbers of incarcerations and community orders for both samples.

*82% young offenders on community orders reported histories of incarceration (including juvenile detention and remand in police stations)*

**Figure 2.3 Most serious current offence against persons and property by gender, ethnicity, region, IQ and age (%)**



The pattern and distribution of crimes against persons and property offences were not significantly related to gender, ethnicity, region, IQ or age

56% young offenders on community orders had been in custody more than three times

**Table 2.11 History of custody and community orders by gender (%)**

Times in custody (if been in custody) <sup>i</sup>	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
1-3	44	55	41	42	44	54
>3	56	45	59	58	56	46
Number of community orders <sup>ii</sup>						
None	3	43	5	32	4	42
1	47	27	39	37	46	28
2	20	12	21	10	20	12
3	9	4	16	5	10	4
4-6	13	7	9	0	12	7
7-9	3	1	2	5	3	1
>10	5	6	8	11	5	6

a (i) Males=565, Females=90, Total=655; (ii) Males=656, Females=116, Total=772

b (i)&(ii) Males=221, Females=19, Total=240. \*'Times in custody' Includes detention, remand, lock-up.

<sup>1</sup> DJJ records

Self-reported time spent in custody for both samples is presented in Table 2.12.

**Table 2.12 Self-reported total time spent in custody in lifetime by gender (%)**

Times in custody <sup>i</sup>	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
No time	10	0	10	0	10	0
Less than 6 months	76	35	80	37	77	35
6 months to 1 year	8	29	4	32	8	29
1 to 2 years	3	19	3	32	3	20
2 to 5 years	3	16	3	0	3	15
5 to 10 years	0	1	0	0	0	1

a Males = 660, Females = 116, Total = 776; b Males = 223, Females = 19, Total = 242



Sixty-two percent (62%, n=475) young offenders estimated that they had spent six months or more on community orders during their lifetime (Table 2.13).

**Table 2.13 Self-reported total time spent on community orders in lifetime by gender (%)**

Time	Male	Female	Total
Order not yet commenced	4	5	4
Less than 6 months	35	31	35
6 months to 1 year	20	33	22
1 to 2 years	22	18	22
2 to 5 years	18	10	16
5 to 10 years	2	3	2

Males = 655, Females = 116, Total = 771

In the United Kingdom, 52% of a sample of 1.6 million offenders reported at least one parent having been in trouble with the police. No data were reported specifically on incarceration.<sup>5</sup> In the United States, a study of a sub-sample of the CASA dataset<sup>7</sup> showed that 39% of offenders reported at least one parent with a criminal conviction.

“Being in trouble with police,” having a criminal conviction and having been incarcerated represent different levels of contact with the criminal justice system. Available frequencies from other studies are presented here as indicative of comparable figures in other samples of offenders and are not intended for

direct comparison with the figures obtained for the current study.

In this sample, 27% had parents with a history of incarceration [YPiCHS 43%] and 61% had either parents or other relatives with a history of incarceration [YPiCHS n/a]. Table 2.14 shows the percentages of young offenders by ethnicity, region and IQ whose parents and other relatives (including step-parents, grandparents, siblings and step-siblings, aunts, uncles and cousins) had a history of incarceration.

Aboriginal young offenders were more likely to have relatives with a history of incarceration compared with non-Aboriginal young offenders.

*27% young offenders on community orders had parents with a history of incarceration [YPiCHS 43%]*

*61% had either parents or other relatives with a history of incarceration*

*Aboriginal young offenders were more likely to have relatives with a history of incarceration compared with non-Aboriginal young offenders*

**Table 2.14 History of incarceration: mothers, fathers and other relatives (%)<sup>1</sup>**

Ethnicity <sup>i</sup>	Mother		Father		Other relatives*
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>
Indigenous	13	17	36	64	81
Non-Indigenous	5	13	21	24	44
<b>Region<sup>ii*</sup></b>					
Urban	6	-	21	-	50
Non-urban	10	-	32	-	55
<b>IQ<sup>iii</sup></b>					
IQ <85	6	16	25	43	55
IQ >84	7	11	22	33	46

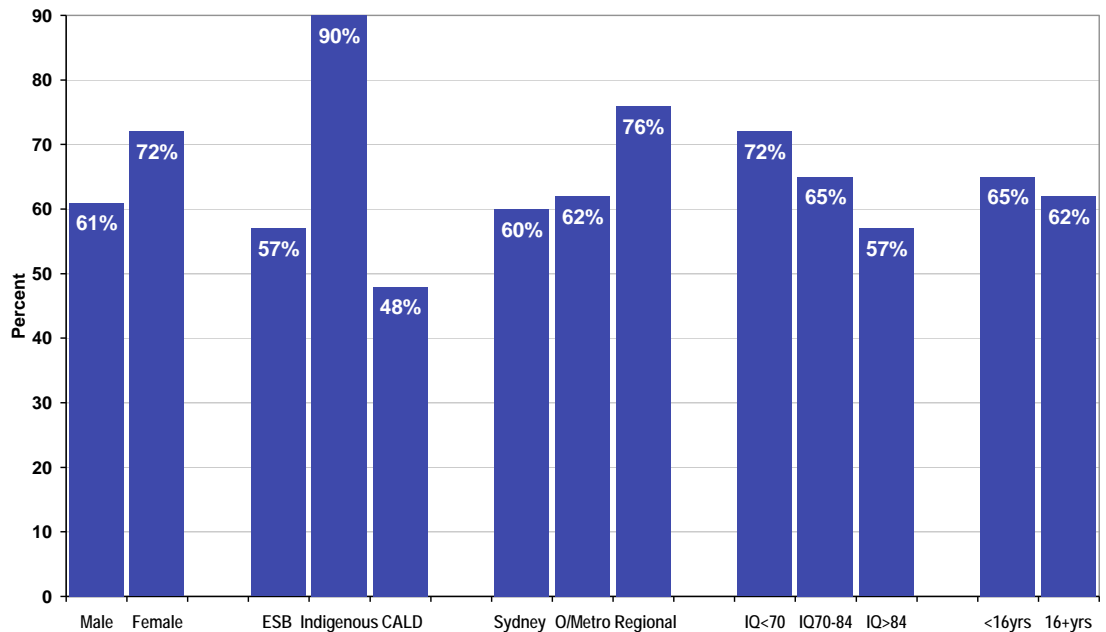
a (i)&(ii) Mother=777, Father=777, Other=761; (iii) Mother=761, Father=761, Other relatives=746

b (i)&(ii) Mother=225, Father=225; (iii) Mother=214, Father=214; \*Data not collected for custody sample

\* Comparison by region of custody and community samples could not be undertaken because location of detention centre does not reflect residential location of young people in custody.

Figure 2.4 (overleaf) shows the distribution of relatives with a history of incarceration by gender, ethnicity, region, IQ and age.

**Figure 2.4 Relatives' history of incarceration by gender, ethnicity, region, IQ and age (%)**



The sample as a whole scored in the 'Medium Risk' category of the YLS/CMI: AA

More Aboriginal young offenders (36%) had high risk scores than either ESB (24%) or CALD (19%)

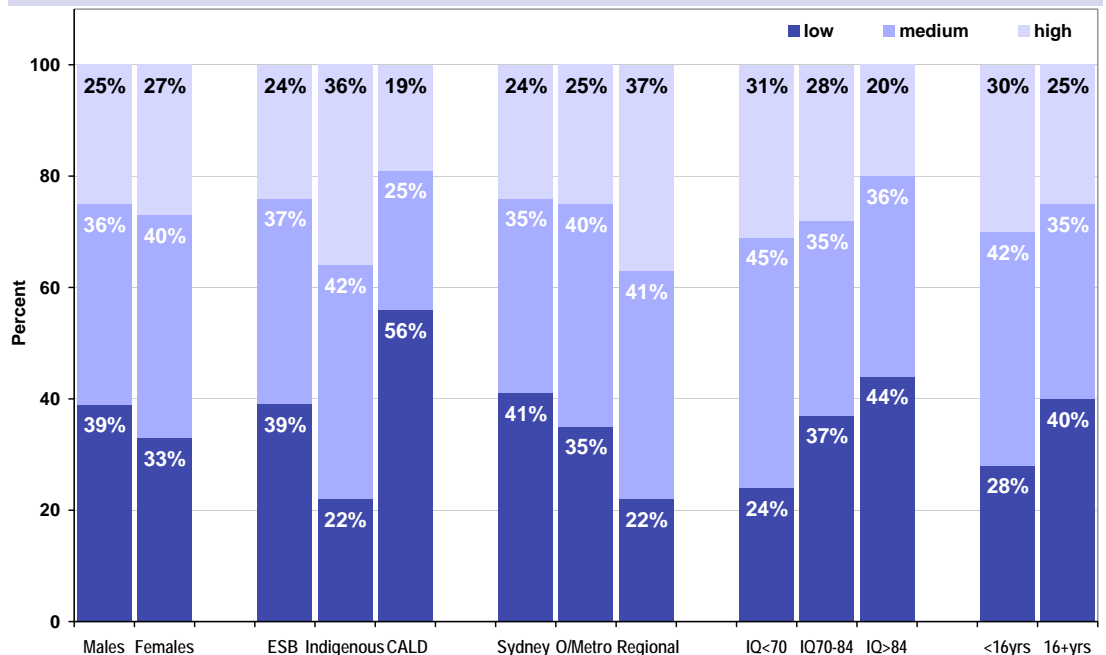
Regional young offenders (37%) were more likely to have high risk scores compared with Sydney (24%) and Other metropolitan (25%). IQ<84 (30%) were more likely to be high risk than IQ>84 (20%)

**2.6 Youth Level of Service / Case Management Inventory: Australian Adaptation (YLS/CMI: AA)**

The YLS/CMI: AA is a 47 item instrument used to assess risk factors in eight domains. Three items address individual strengths. The YLS/CMI: AA is based on the LS/CMI<sup>8</sup> and provides a broad measure of risk of recidivism, criminogenic

need, responsivity and protective factors related to offending behaviour in juveniles. The YLS/CMI: AA has been adapted for the Australian socio-legal environment<sup>9</sup> and has been normed on 290 Australian juveniles.<sup>10</sup> Like the LS/CMI<sup>11</sup> the YLS/CMI: AA is reliable (Cronbach alpha of .91 for this sample). Figure 2.5 shows the breakdown of the three risk categories (low, medium and high) by sub groups.

**Figure 2.5 YLSI severity by tertiles by gender, ethnicity, region, IQ and age (%)**



Mean YLS/CMI: AA total score was 17.18 (SD=9.35) for the total sample, placing participants, on average, in the 'Medium Risk' category of the YLS/CMI: AA. More Aboriginal young offenders (38%) had high risk scores than either ESB (24%) or CALD (19%).

Regional young offenders (37%) were more likely to have high risk scores compared with Sydney (24%) and Other metropolitan (25%). IQ<84 (30%) were more likely to be high risk than IQ>84 (20%).

## 2.7 Social Background

Many young offenders on community orders had characteristics indicating highly unstable backgrounds (Table 2.15).

Of particular concern was the proportion of young women not living in the family home and those with a history of out of home care (OOHC). A higher proportion of those in custody had a parental history of imprisonment and reported that they had no close friends with whom they could talk compared with those in the community.

**Table 2.15 Social indicators by gender (%)**

Indicators <sup>i</sup>	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Not living in family home*	34	35	46	17	36	33
History of parental/step-parental imprisonment	25	42	38	50	27	43
History of OOHC	21	28	36	39	24	28
Deceased parent	10	10	6	4	10	9
Lives with person with a physical or mental health problem affecting their daily life	20	19	30	17	21	19
No close friends to talk to	7	30	9	18	7	29
Parent of child/children	5	11	10	6	6	10
Parent currently in prison	4	10	7	22	5	11

\* [YPiCHS: before custody]

a Males (range) = 659-673, Females (range) = 114-118, Total (range) = 774-791

b Males (range) = 198-209, Females (range) = 17-18, Total (range) = 215-227

Table 2.16 (overleaf) summarises the patterns of care giving received by young offenders, relationship status of their biological parents, and gender of their primary care giver(s).

## 2.8 Out of Home Care (OOHC) history

People who have been in the care of the State as children comprise between 0.135% and 0.2% of the general population. In contrast, in the adult prison system they make up one in five non-Indigenous prisoners and one in three Indigenous prisoners, constituting approximately 38% of all prisoners in NSW. Children currently in care now comprise 0.6% of the general NSW population.<sup>12</sup>

Twenty-four percent (24%) [28% YPiCHS] young offenders had a history of having been placed in care (i.e. they had spent part of their childhood living away from their natural parents).

A comparison of those young offenders who had been placed in OOHC with those who had not showed that OOHC young offenders were significantly more likely to: have received special education (49% vs 36%); have relative(s) who had been in prison (69% vs 60%); have experienced a physical injury requiring medical treatment (37% vs 28%); report having no close friends (11% vs 6%); be living in unsettled accommodation at the time of the survey (23% vs 8%); report having treatment for substance abuse (25% vs 17%); and to have experienced unwanted sex (14% vs 6%). OOHC young offenders were less likely to be working at the time of the survey (19% vs 27%) and more likely to be receiving some form of government allowance or benefit (62% vs 42%) compared with non OOHC young offenders.

36% young offenders were not living in the family home during the study period

21% were living with a person with a physical or mental health problem

24% [28% YPiCHS] young offenders had a history of having been placed in care, compared with 0.6% of the general NSW population

**Table 2.16 Primary and other caregiver(s) and associated factors by gender (%)**

Biological parents <sup>i</sup>	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Mother AND father	37	36	26	33	36	36
Mother only	47	43	50	44	48	44
Father only	7	5	6	6	7	5
Neither mother NOR father	8	16	18	17	10	16
<b>Status of biological parents<sup>ii</sup></b>						
Separated or divorced	52	56	57	56	53	56
Living together	30	30	23	33	29	30
Father deceased	8	7	4	0	7	7
Never lived together	6	5	14	0	7	4
Mother deceased	3	2	2	0	3	2
Don't know who parents are	1	0	0	6	1	<1
<b>Other primary caregivers<sup>iii*</sup></b>						
Grandmother	12	22	19	22	13	22
Grandfather	5	12	10	17	6	12
Aunt	5	11	3	6	5	11
Sister(s)	3	4	6	0	4	4
Uncle	3	8	4	0	3	8
Brother(s)	3	7	5	0	3	7
Stepfather	2	4	5	11	3	5
Stepmother	<1	1	1	6	1	2
Foster family	1	2	3	0	1	2
Self	1	0	3	0	1	0
Step brother(s)/Sister(s)	0	0	1	0	1	0
Friends	<1	1	2	0	<1	1
Cousin	<1	1	0	0	<1	1
DOCS	<1	1	0	0	<1	<1
Refuges	0	1	0	0	0	<1
<b>Gender of primary caregiver(s)<sup>iv</sup></b>						
No male caregiver	49		50		49	
No female caregiver	8		16		9	

a (i) Males=673 Females=117 Total=790; (ii) Males=671 Females=116 Total=787; \*Multiple responses permitted  
 b (ii) Males=208 Females=18 Total=226 (iii) Males=207 Females=18 Total=225; \*Multiple responses permitted

Five males (2 ESB, 2 Aboriginal, and 1 CALD) and no females indicated that both of their parents were deceased.

Figure 2.6 (overleaf) shows the proportions of young offenders with at least one biological parent deceased.

Parental deceased status was not related to gender, ethnicity, region, IQ or age category.

Figure 2.7 (overleaf) shows the proportions of young offenders who were living with a person with physical, mental, or emotional limitations.

Limitations of people living in the same accommodation as the young person was not related to gender, ethnicity, region, IQ or age category.

There are no comparable figures internationally indicating accommodation needs of young offenders. The UK study did not find accommodation stress to be a risk factor after controlling for other factors but did not report any specific data. The CASA study comments on the importance of stable accommodation but presents no data on the subject in its report.

36% young offenders in both community and custody samples reported having both their mother and father as primary caregivers

48% [44% YPiCHS] had mother only

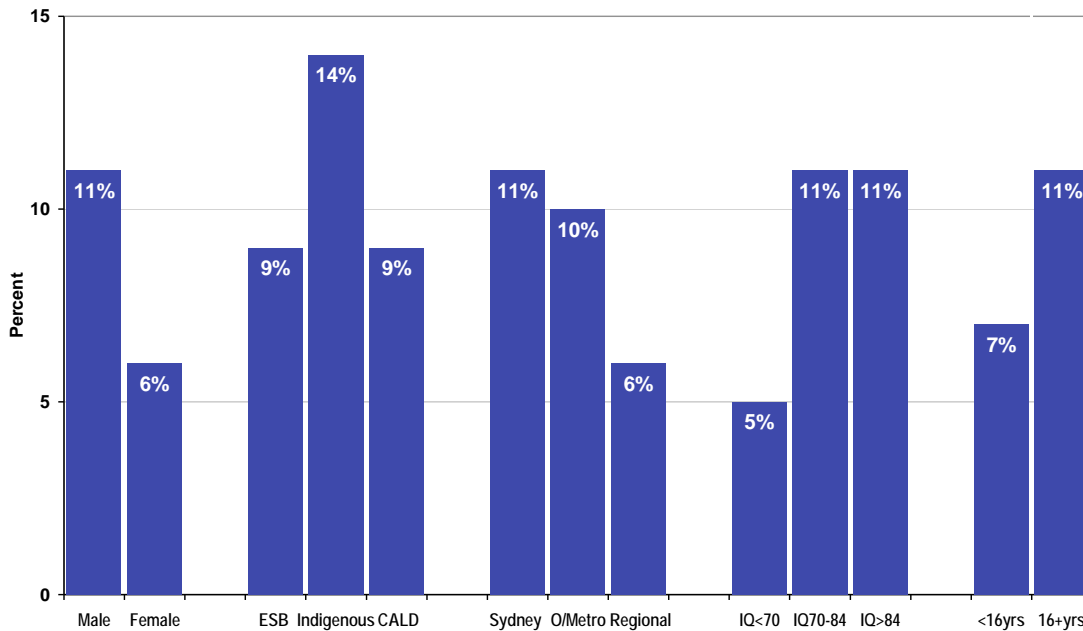
7% [5% YPiCHS] had father only

10% [16% YPiCHS] had neither parent (as their primary caregivers)

Parents of 53% young offenders [56% YPiCHS] were separated or divorced

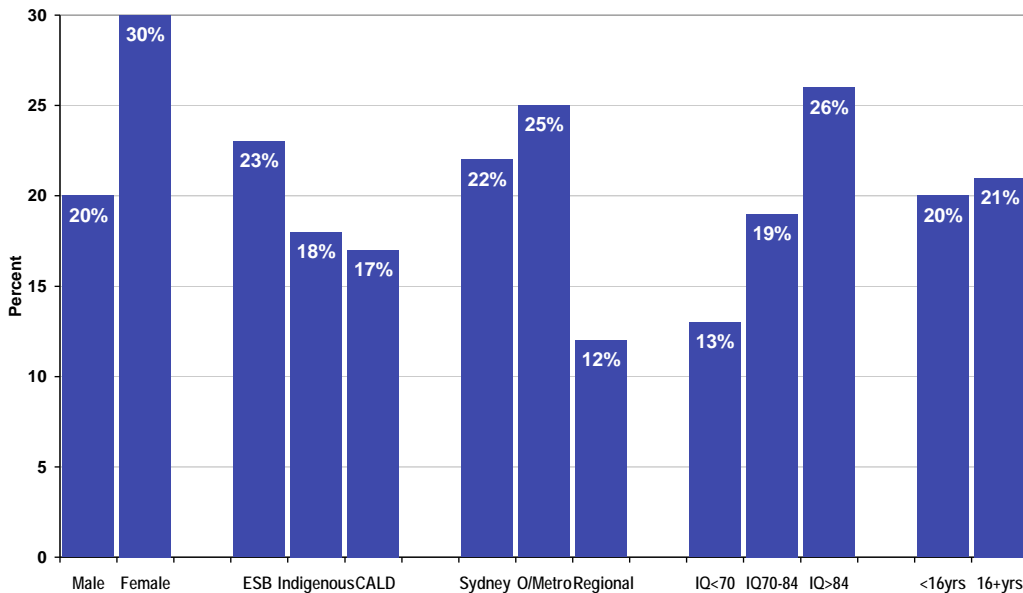
49% had no male caregiver

**Figure 2.6 One or more biological parents deceased by gender, ethnicity, region, IQ & age (%)**



*Between 5% (IQ<70) and 14% (Aboriginal) young offenders on community orders had at least one of their biological parents deceased*

**Figure 2.7 Physical, mental and emotional limitations of people in same accommodation by gender, ethnicity, region, IQ and age (%)**



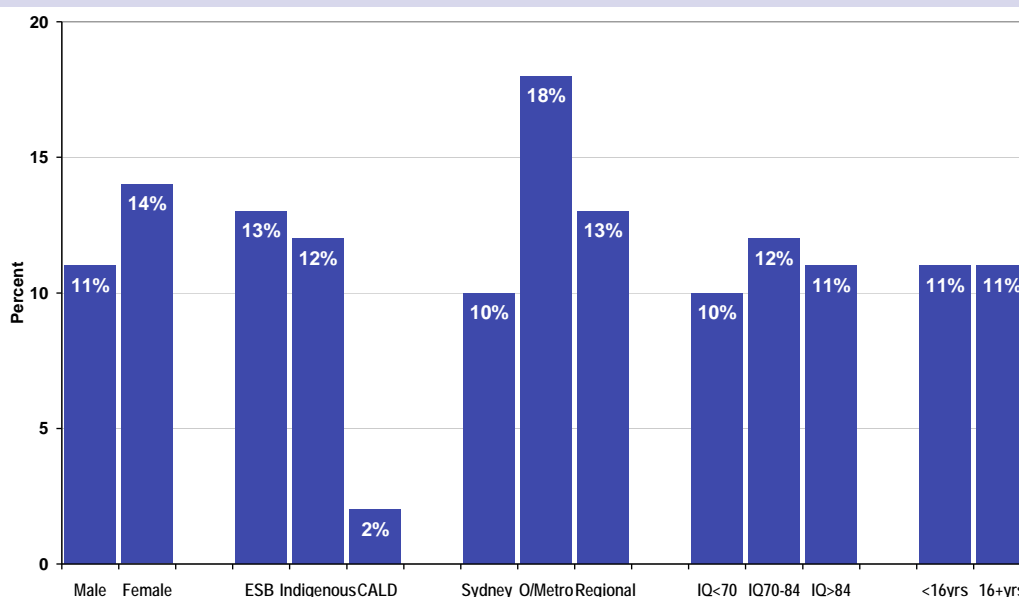
*11% young offenders were living in unsettled accommodation at time of survey*

*Unsettled accommodation was not related to gender, ethnicity, region, IQ or age, although CALD were less likely to be in unsettled accommodation*

Figure 2.8 (overleaf) shows the proportions of young offenders who were living in unsettled accommodation (homeless, in a refuge, or in a hostel) at the time of the survey (total: 11%, n=86).

Unsettled accommodation was not related to gender, ethnicity, region, IQ or age category, although CALD were less likely to be in unsettled accommodation.

**Figure 2.8 Living in unsettled accommodation at time of survey (homeless, refuge, hostel) by gender, ethnicity, region, IQ and age (%)**



5% young offenders [10% YPiCHS] were parents of one or more children

There were 46 children born to 42 parents (four young offenders had two children)

Young mothers were aged 13-17 years when their first child was born

Young fathers were aged 14-20 years when their first child was born

76% children were born to parents aged 14-16 years

### 2.9 Adolescent parenthood

Family circumstances at the time of birth are strong predictors of later developmental outcomes. Adolescent parenthood is a risk factor that is associated with social disadvantage, such as lower socioeconomic status for both the parent and child, low occupational status and job instability. These in turn affect the physical, social and neuro-cognitive development of the child born to an adolescent parent.<sup>13</sup> Having an adolescent mother has been associated with poorer educational, financial, mental and physical health outcomes and criminality in both male and female offspring and with persistent

antisocial behaviours in the sons of adolescent mothers.<sup>14</sup> Five percent (5%) young offenders [10% YPiCHS] were parents to one or more children. There were 46 children born to 42 parents (4 young offenders had two children). Of the 40 young parents with available data, 50% (18 males and 2 females) stated that their child(ren) had never lived with them; 16 of the children born to males were living with their partners (i.e. child's mother); three were living with the young person's parent(s); and one had been placed in foster care. There were no reported adoptions. Table 2.17 summarises the parenting status of these young offenders.

**Table 2.17 Number of children and age at which child was born by gender (%)**

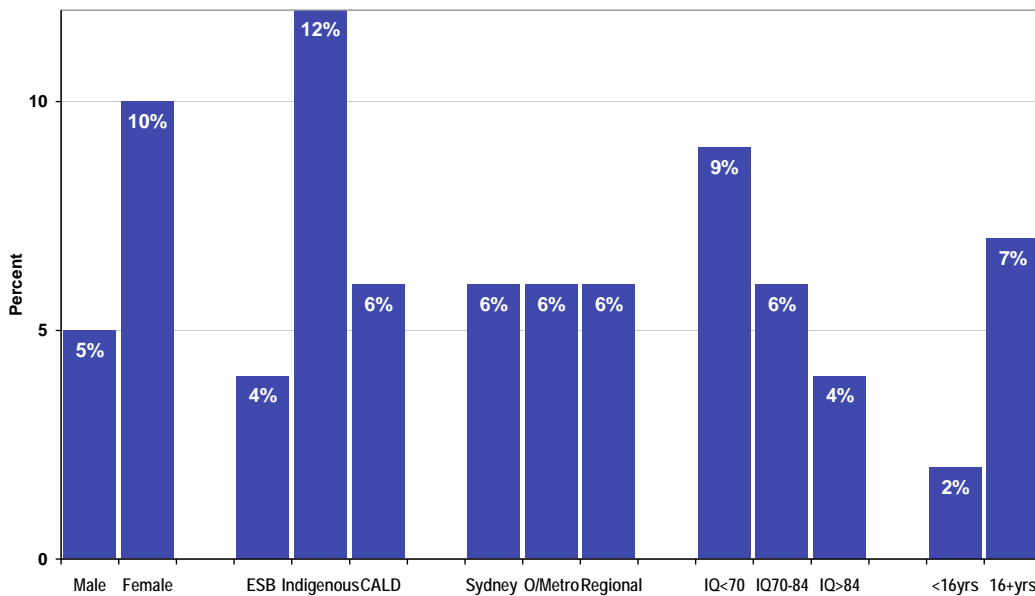
Have children <sup>i</sup>	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
None	95	89	90	94	95	89
1 child	5	10	9	0	5	10
2 or more children	<1	1	1	6	<1	1
Age first child born <sup>ii</sup>						
13	0	9	0	100	11	14
14	12	5	9	0	22	4
15	12	29	50	0	39	27
16	44	28	25	0	15	27
17	15	24	17	0	11	24
18	15	0	0	0	2	0
19	0	5	0	0	0	4
20	3	0	0	0	2	0

a (i) Males=671, Females=117, Total=788; (ii) Males=34, Females=12, Total=46 [low n]

b (i) Males=208, Females=18, Total=226; (ii) Males=21, Females=1, Total=22 [low n]

Figure 2.9 shows the proportions of young offenders with children. Young offenders' parental status was not related to gender, ethnicity, region, IQ or age category, although trends indicate higher proportions for females, Aboriginal, IQ<70 and age >16 years.

**Figure 2.9 Young parents by gender, ethnicity, region, IQ and age (%)**



Young offenders' parental status was not significantly related to gender, ethnicity, region, IQ or age category, although trends indicate higher proportions for females, Aboriginal, IQ<70 and age >16 years

## 2.10 Employment history

This report is the first to present detailed data on employment history of young offenders. Both the UK and the CASA studies indicate its importance, but neither reports any specific data. Table 2.18 summarises the employment and benefit status of young offenders at the time of the survey.

**Table 2.18 Employment status and benefits by gender (%) [ABS 2001]**

Currently working <sup>i</sup>	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Yes<sup>i</sup></b>	<b>27 [92]</b>	<b>40</b>	<b>16 [93]</b>	<b>17</b>	<b>25 [92]</b>	<b>38</b>
Full time <sup>ii</sup>	36 [41]	41	22 [24]	0	35 [32]	40
Part time <sup>ii</sup>	24 [53]	24	22 [71]	33	23 [62]	24
Casual <sup>iii</sup>	37	27	50	67	38	28
CDEP <sup>iii</sup>	3	6	0	0	3	6
Volunteer work <sup>iii</sup>	<1	2	6	0	1	2
<b>Receiving any benefit<sup>i</sup></b>						
<b>Yes<sup>i</sup></b>	<b>45</b>	<b>45</b>	<b>53</b>	<b>61</b>	<b>46</b>	<b>46</b>
Youth allowance <sup>iii</sup>	75	70	71	73	74	70
Newstart <sup>iii</sup>	6	9	0	0	4	8
Centrelink (unspecified) <sup>iii</sup>	3	1	6	0	4	1
Disability support pension <sup>iii</sup>	4	4	0	0	4	4
Live away from home <sup>iii</sup>	3	3	3	0	3	3
Jobseeker <sup>iii</sup>	3	0	3	0	3	0
Parenting allowance <sup>iii</sup>	1	0	13	0	3	0
Austudy <sup>iii</sup>	2	3	2	0	2	2
Abstudy <sup>iii</sup>	2	10	2	27	2	12
Carer allowance (adult) <sup>iii</sup>	1	0	0	0	1	0

a (i) Males=667-672, Females=117, Total=784-789; (ii) M=175, F=18, T=193, (iii) M=298, F=62, T=360.  
 b (i) Males=206, Females=18, Total=224; (ii) Males=82, Females=3, Total=85; (iii) M=92, F=11, T=103  
 Source: ABS (2001). 2001 Census Population and housing, NSW, Table B25, Age group: 15-19 years

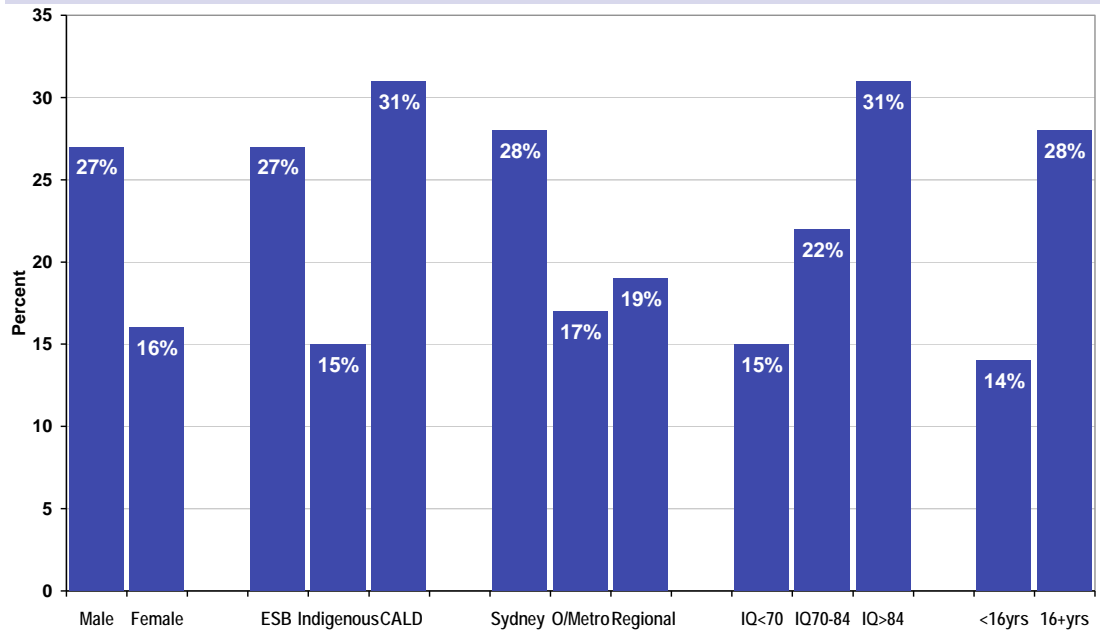
25% young offenders [38% YPiCHS] were working full or part time or casual at the time of the survey

Sixty-eight percent (68%; n=42) young offenders who were both working and receiving benefits were receiving Youth Allowance. One percent (1%; n=10) young offenders were receiving more than one benefit. Of the 42 young

parents, 20 were receiving youth allowance, 10 parenting benefits, and 5 other benefits.

Figure 2.10 shows the proportions of young offenders working at the time of the survey.

**Figure 2.10 Employment by gender, ethnicity, region, IQ and age (%)**



*Young offenders in Sydney, those with IQ>84 and 16+ years were more likely to be employed, while young offenders in regional areas and those with IQ<70 were less likely to be employed*

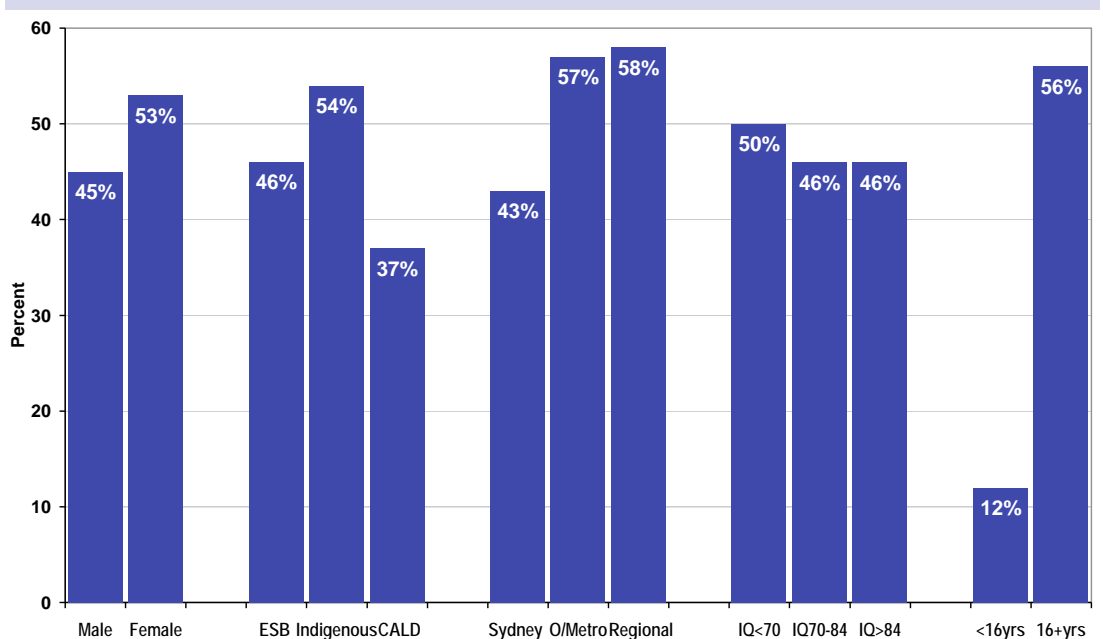
*Young offenders 16+ years were more likely to be receiving benefits than young offenders <16 years*

More young offenders aged 16+ years were employed at the time of the study. Young offenders in Sydney and those with IQ>84 were more likely to be employed, while young offenders in Regional areas and those with IQ<70 were less likely to be employed.

Males and young offenders from Sydney and those who were 16+ years were less likely to be in receipt of benefits than Other metropolitan and Regional young offenders.

Figure 2.11 shows the proportions of young offenders who were receiving benefits.

**Figure 2.11 Benefit receipt by gender, ethnicity, region, IQ and age (%)**





## 2.11 Life plans

Of the 85% (n=668) young offenders who provided detail on their plans for the future, 84% (n=626) planned to work and/or study at school or TAFE; 20% indicated plans to reform or settle down (stop crime, complete drug rehabilitation, help others, work on relationships, buy a house or move to a better area). A small number had other plans including travel and 'getting rich'.

## 2.12 Summary and conclusions

Eight hundred young offenders on community orders from 22 Juvenile Justice Offices across the state of New South Wales, Australia were assessed. The mean age of the sample was 17 years (22% were younger than 16 years); 85% were male, 66% ESB, 19% Aboriginal and 15% CALD; 75% lived in Sydney, 15% had IQ<70 with regional offenders more likely to have IQs in this range.

The majority of young offenders (83%) were born in Australia and spoke English as their first language (85%). However, 38% of offenders' mothers and 41% of offenders' fathers were born overseas. The majority were from Oceania (New Zealand, Samoa, Tonga) and Asia (Vietnam, Philippines).

The most frequent offences for which this sample were charged were assault, robbery, car

and other theft, and break and enter. Young offenders had been charged with an average of five offences; 64% were charged with a violent offence. The most common court outcomes were bonds or suspended sentences (85%) and supervision orders (80%). Ninety percent (90%) had histories of incarceration. Sixty-one percent (61%) had parents or other relatives with a history of incarceration; 90% Aboriginal young offenders had relatives with a history of incarceration.

Many young offenders had unstable backgrounds: only 36% were living with both their parents at the time of the survey; parents of 53% had separated or divorced; 36% were not living in the family home; 24% had a history of OOHC; 21% lived with a person with a physical or mental health problem; 11% were living in unsettled accommodation. Five percent (5%) young offenders were parents of one or more children. Mothers were aged between 13-17 years at the time of the birth of their first child.

Twenty-five percent (25%) young offenders were working in some capacity at the time of the survey; 46% were receiving some form of benefit, the most common of which was youth allowance (74%). Young offenders living in Sydney and those with IQ>84 were more likely to be employed.

*Most young offenders showed evidence of the capacity for future planning and most expressed prosocial goals and aspirations*

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# CHAPTER 3

## PHYSICAL HEALTH

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# 3. PHYSICAL HEALTH

Studies on the physical health of young offenders indicate an early engagement in health risk behaviours affecting physical health.<sup>1,2,3,4,5,6</sup> One UK study of 590 16-20 year old detainees found that 25% of the young men and 30% of the young women reported a long standing physical health problem.<sup>7</sup> Respiratory illness was the most frequently reported chronic health condition in both males and females, followed by musculoskeletal problems for men and nervous system complaints for women.

Fasheretal(1997)examinedthehealthreception records of juvenile offenders in NSW and found high levels of respiratory conditions, injuries, illicit drug use, suicidal ideation, and tobacco smoking.<sup>8</sup> Another recent study conducted in Victoria found that the standardised mortality rate was 9.4 for young male offenders and 41 for young female offenders, indicating that similar poor health exists among Australian juvenile offenders as that reported overseas.<sup>9</sup>

The survey questionnaire comprised a comprehensive physical health assessment that included self-report questionnaires, blood and urine tests, tests of visual acuity and assessment of treatment utilisation patterns.

## 3.1 Self-reported health status

The *Young People in Custody Health Survey*<sup>10</sup> assessed self-reported health of 242 young offenders in custody in NSW using the 12-item Short-Form Health Survey (SF-12). Overall

ratings of physical and mental health of young offenders revealed that most young offenders rated their health positively on the SF-12.

The SF-12 was again used to examine general physical and mental health and role limitations due to physical and mental health problems in the four weeks prior to assessment of young people on community orders.<sup>11</sup> Two summary scales, the physical health summary scale (PCS-12) and the mental health summary scale (MCS-12) are derived from the SF-12; low scores indicate poor functioning.

The mean PCS and MCS scores were 53 and 51 [YPICHS: 54 and 47]. The median scores at the 50th percentile on the US standardisation sample of 18-24 year olds were 55.16 and 46.39 respectively. Females and males had equivalent scores on the PCS: males, 53 and females, 52 [YPICHS both males and females 54], and MCS: males, 48 and females, 48 [YPICHS males 48 and females 43].

Question one of the SF-12 asks for a self-rating of health on a scale ranging from 'poor' to 'excellent'. According to the *National Health Survey (2004-05)*,<sup>12</sup> 82% young Australians aged 15-17 years rated their health as excellent or very good, 13% rated their health as good, and 4% rated their health as either fair or poor. Young offenders' ratings were much lower.

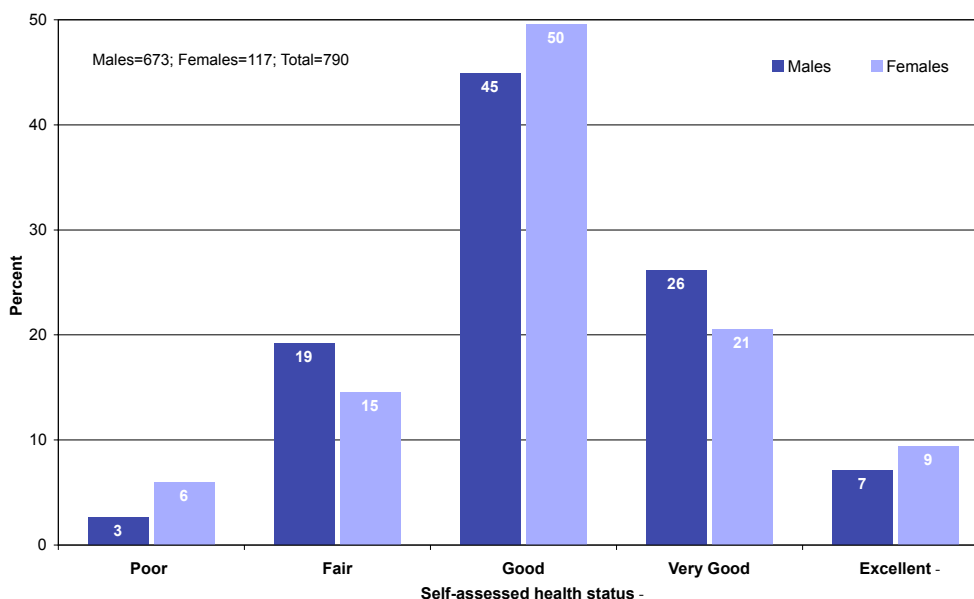
Figure 3.1 presents these ratings by gender.

*There were no gender differences in self-ratings of physical and mental health*

*Young offenders' self-ratings were lower than the National Health Survey of Young Australians<sup>12</sup>*

*33% males and 30% females rated their health as very good or excellent compared with 82% young Australians aged 15-17 years*

**Figure 3.1 Self-assessed health status from SF-12 (%)**



Self-rated health status has been found to agree with objective measures of health.<sup>13</sup> Most males (78%) [YPiCHS 91%] and females (79%) rated their health as 'good', 'very good' or 'excellent'. Given the poor health detected using other objective and self-reported health measures (e.g. smoking status, illicit drug use, alcohol use, poor diet), it appears that young people in this survey have an unrealistic view of their health, or that the adverse effects of these risk behaviours are not yet evident. The former is perhaps the more likely explanation given that 70% of adult offenders also rate their health as 'good', 'very good' or 'excellent' but have a high level of physical health morbidity.

### 3.2 Health conditions

The most common reasons for medical visits to health professionals by Australian young

people in 2003 were respiratory conditions, including colds, asthma and bronchitis.<sup>14</sup> Other frequent causes were prescriptions for contraception, sporting injuries, tonsillitis and acne. Participants were asked to self-report whether they had been diagnosed by a health professional with a range of physical health problems (Table 3.1). The most commonly reported medical conditions in both samples were chicken pox, asthma, ear infections and tonsillitis. Arthritis, meningitis, appendicitis and sinusitis had all been diagnosed in less than 1% of both samples, and there were no reported diagnoses of HIV.

### 3.3 Recent symptoms and health complaints

Recent health complaints (occurring in the past four weeks) were assessed using a modified

78% young offenders rated their health as 'good' or better

The most frequently diagnosed medical conditions were chicken pox, asthma, ear and chest infections and tonsillitis

**Table 3.1 Medical conditions reported to be diagnosed by a health professional (%)**

Medical conditions	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Chicken pox	60	55	32	44	61	54
Asthma	33	28	34	56	33	30
Ear infection	26	28	39	39	28	29
Tonsillitis	23	27	35	39	25	28
Chest infections	20	15	29	17	22	15
Back problems	17	20	20	33	17	21
Allergy	15	11	15	11	15	11
Skin condition	12	11	18	17	13	11
Measles	10	12	8	17	10	13
Parasitic infections	8	6	16	0	9	6
Gastroenteritis	9	10	8	11	8	10
Whooping cough	8	4	9	6	8	4
Glandular fever	7	4	9	6	7	4
Mumps	2	3	3	6	3	3
Epilepsy	1	2	4	6	2	2
Heart problems	2	5	3	6	2	5
German measles	2	2	5	6	2	3
Hepatitis C	1	2	6	22	1	4
Cancer	1	1	1	0	1	1
Pneumonia	1	n/a	3	n/a	1	n/a
Diabetes	<1	0	<1	11	<1	1
Hepatitis A	<1	<1	0	0	<1	<1
Hepatitis B	<1	1	0	11	<1	2

a Males=673, Females=117, Total=790; b M=208, F=18, T=226; Multiple responses permitted

version of an instrument developed for drug users.<sup>15</sup> Although developed for opioid users, this instrument provides insight into recent ailments and symptoms covering cardio-

respiratory, genito-urinary, psychological and neurological, gastrointestinal, injection related, general, and women's health issues. Symptoms relating to possible hepatitis C seroconversion

and self-harm were added. Table 3.2 shows the most common symptoms and health complaints occurring in the four weeks prior to the survey. Tiredness/energy loss and trouble sleeping

were the most common recent complaints in both males and females followed by memory problems and headaches.

**Table 3.2 Most common recent symptoms and health complaints in last 4 weeks (%)**

Symptom/health complaint	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Tiredness / energy loss	36	34	51	33	39	34
Trouble sleeping	38	40	46	67	39	42
Forgetting things	31	25	37	33	32	26
Headaches	26	23	39	39	28	24
Poor appetite	25	17	26	17	25	17
Sore throat	18	18	26	17	19	18
Teeth problems	14	21	30	28	18	21
Shortness of breath	16	11	25	22	18	12
Weight loss / underweight	17	10	20	11	17	10
Night sweat	17	22	20	28	17	22
Dizziness	15	11	25	17	17	12
Persistent cough	15	7	24	0	16	6
Muscle pain	14	20	18	17	15	20
Chest pain	12	11	18	11	13	11
Stomach / abdominal pains	10	8	26	6	12	8
Swollen glands	8	7	20	11	10	7
Wheezing	9	7	18	6	10	7
Joint pains / stiffness	10	7	10	6	10	7
Vision troubles	8	11	13	17	9	11
Heart racing	9	5	11	6	9	5
Fever	7	7	15	6	8	7
Nose bleeds	8	10	8	0	8	9
Vomiting	7	4	18	6	8	4
Bruising easily	4	3	25	17	7	4
Hearing troubles	6	9	11	6	7	9
Eye problems	6	7	8	11	7	7
Blackouts	6	3	12	0	7	3
Tremors / shakes	6	2	11	0	7	2
Itchiness	6	3	10	6	7	4
Prominent bruising / scarring	5	5	11	17	6	6
Abscesses/skin infections	4	6	7	17	5	7
Numbness/tingling	4	6	8	6	5	6
Nausea	4	3	11	11	5	4
Ear problems	4	11	5	17	4	11
Hearing voices	3	4	6	6	4	4
Wanting to harm self	3	7	8	6	3	7
Bleeding easily	1	2	4	0	2	2
Diarrhoea	5	6	6	6	2	6
Dark urine	2	5	3	6	2	5
Jaundice / yellowish skin	1	1	2	0	1	1
Painful urination	<1	1	3	0	1	1
Discharge from genitals	0	1	7	0	1	1
Rash on / around genitals	1	2	1	0	1	2
Constipation	1	1	3	11	1	2

a Males=673, Females=117, Total=790; b M=208, F=16, T=226

Health complaints and symptoms of young offenders in the community were associated with drug use and drug of choice. Those abusing

amphetamines and multiple substances were more likely to report tiredness/energy loss and trouble sleeping than those not using any drugs.

The most frequently reported health complaints in the four weeks prior to the survey were

- tiredness/energy loss
- trouble sleeping
- memory problems
- headaches
- poor appetite

Health complaints were associated with substance use

Polydrug users were also more likely to report pain symptoms. Of the 32% who reported memory problems, 73% were cannabis users.

Table 3.3 displays symptoms according to type and amount of substances used.

**Table 3.3 Most common recent symptoms and health complaints by drug use in last 4 weeks (%)**

Symptoms and complaints	No drugs	Cannabis	Amphetamine	Polydrug
Trouble sleeping	32	44	51	56
Tiredness / energy loss	33	41	50	52
Pain (chest/stomach/joint/muscle)	29	33	37	44
Poor appetite	15	31	42	43
Headaches	27	28	37	37
Forgetting things	25	73	37	33

Total=104-445; Multiple responses permitted

### 3.4 Health complaints in past 6 months

The Australian Bureau of Statistics (ABS) defines a disability as a limitation, restriction, or impairment, which has lasted or is likely to last, for at least six months and restricts everyday activities. Examples of everyday or 'core' activities may include: self-care, mobility and communication. The degree of impairment ranges in severity from profound to mild. Table 3.4 presents young offenders'

self-reported health problems and disabilities lasting six months or more, and detail on the type of problem or disability for the sub-group reporting difficulties in the last six months.

While most young offenders reported that their disability did not limit their daily activities, 57% custody and 26% community-based offenders reported that it caused them to cut down on activities.

*Amphetamine and polydrug use were associated with trouble sleeping, tiredness/energy loss*

*Cannabis use was strongly associated with memory problems*

*19% young offenders reported health problems in the past 6 months; the most frequently reported were musculoskeletal, psychological and respiratory*

*1% experienced limitations to daily activities associated with their health problems and 26% reduced their activities*

**Table 3.4 Health problems lasting 6 months or more (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Health-related difficulties in last six months<sup>i</sup></b>						
Yes	19	21	19	11	19	20
<b>Health problem/disability<sup>ii</sup></b>						
Musculoskeletal	38	37	18	50	35	38
Psychological	18	9	18	50	18	11
Respiratory	12	16	18	0	13	16
General and unspecified	5	7	5	0	6	7
Neurological	6	9	5	0	5	9
Skin	6	2	0	0	5	2
Endocrine/metabolic/nutrition	4	0	5	0	4	0
Digestive	2	5	9	0	3	4
Eye	3	0	0	0	3	0
Ear	2	2	9	0	3	2
Cardiovascular	2	5	0	0	2	4
Blood, blood forming	2	0	0	0	1	0
Urological	0	0	9	0	1	0
genital	0	5	4	0	1	4
<b>Daily activities limited</b>	<b>1</b>	<b>13</b>	<b>1</b>	<b>10</b>	<b>1</b>	<b>14</b>
<b>Reduced activities</b>	<b>27</b>	<b>58</b>	<b>19</b>	<b>50</b>	<b>26</b>	<b>57</b>

a (i) Males=669, Females=117, Total=786 (ii) M=125, F=22, T=147; b (i) M=207, F=18, T=225 (ii) M=43, F=2 T=45

The most frequently reported activities reduced due to disability or health problems in the community sample were sports/exercise

(50%, n=18) and school/work/juvenile justice supervision (19%, n=7).



### 3.5 Medications

Information about prescription medicine in the community is provided by Medicare Australia. Use of non-subsidised prescription medicines is estimated from surveys of community based pharmacies. However, data are not available for prescription medicine used in private and public hospitals or for non-prescription

medicine. The most frequently (recorded) prescribed medications for all adults in 2004-05 were blood cholesterol lowering medications and antibiotics. Table 3.5 shows the proportion of the sample of young offenders who reported taking medication at the time of the survey and the type of medication taken for the sub-sample who were currently on medication.

**Table 3.5 Current medication use (%) [YPiCHS]**

	Males	Females	Total
<b>Currently taking any medications<sup>i</sup></b>			
Yes	14 [39]	23 [56]	16 [40]
<b>Respiratory system (preventive inhalations and relaxants)<sup>ii</sup></b>			
Ventolin	18	17	17 [24]
Flixotide / Seretide	2	0	2
Pulmicort	1	0	1
<b>Central nervous system (sedatives, antipsychotics, antidepressants)<sup>ii</sup></b>			
Dexamphetamine	9	0	7
Ritalin	9	0	7
Zoloft	5	4	5 [6]
Temazepam	3	0	3
Respiradone	4	0	3
Mirtazapine	2	0	2
Valium	0	8	2
Tegretol	2	0	2
Epilim	0	8	2
Zyprexa	0	4	1
Luvox, Aropax, Zolpidem	1	0	1
<b>Infections and infestations (Penicillin, tetracyclines)<sup>ii</sup></b>			
Antibiotics – unspecified	5	4	5 [19]
Amoxicillin	3	4	3
Keflex / Ibilex	2	4	3
Flucloxacillin	0	4	1
Akamin, Doxycycline (each)	1	0	1
<b>Non-steroidal anti-inflammatory (musculoskeletal system)<sup>ii</sup></b>			
Brufen	1	0	1 [6]
Naprosyn	0	4	1
Voltaren, Feldene, Celebrex (each)	1	0	1
<b>Narcotic analgesics (painkillers)</b>			
Panadeine Forte (and Panadeine)	7	4	6 [7]
Morphine	1	0	1
<b>Agents used in drug dependence<sup>ii</sup></b>			
Buprenorphine	3	4	3
Methadone	1	4	2
Naltrexone	1	0	1
<b>Skin (including acne, corticosteroids, antifungals)<sup>ii</sup></b>			
Roaccutane	3	4	3
Diprosone	1	0	1
Clonea	0	4	1
<b>Endocrine and metabolic disorders (including hormonal agents)<sup>ii</sup></b>			
Cyproterone	0	13	3
Somatropin	1	1	1
<b>Other (incl. migraines, ulcers, allergies)<sup>ii</sup></b>			
Catapres	3	0	3
Losec	0	4	1
Phenergan	1	0	1

Multiple response data

a (i) Males=668, Females=114, Total=782; (ii) M=91, F=24, T=115; b M=206, F=18, T=224 (top 5 reported)

16% young offenders were currently taking medication

Ventolin (asthma) was the most frequently reported medication, followed by ritalin and dexamphetamine (ADHD), Zoloft (depression), panadeine forte (pain) and antibiotics (infection)

Young people in custody reported higher levels of medication consumption than those in the community, possibly due to greater access to health services

### 3.6 Allergies and asthma

#### 3.6.1 Allergies

Allergies are common in the general population. A survey conducted by the Australian Institute of Health and Welfare in 2003 revealed that 5 per 100 medical consultations by 12-24 year olds concerned skin problems, allergies and immune system problems.<sup>14</sup> In the current sample, 15% (n=118) young offenders reported that they had been diagnosed with an allergy by a health professional.

Table 3.6 presents the types of allergens diagnosed by a health professional for the subgroup of 90 (out of 118) young offenders who provided detail. Allergies to stings and bites and food were the most common allergies reported by this group.

**Table 3.6 Allergens diagnosed by a health professional (%)**

Allergen	Males	Females	Total
Stings / bites	27	23	27
Food	18	23	19
Dust mites	13	23	14
Drugs / medications	14	15	14
Pollen / other flora	12	0	10
Animals / animal hair	5	8	6
Harsh chemicals/metal	2	0	2
Other	8	8	8

Males=77, Females=13, T=90; YPiCHS not recorded  
Thirteen percent (13%, n=103) young offenders had been diagnosed with a skin condition by a health professional.

Table 3.7 presents the types of skin conditions diagnosed by a health professional for the subgroup of 78 (out of 103) young offenders who provided detail.

**Table 3.7 Skin conditions diagnosed by a health professional (%)**

Skin conditions	Males	Females	Total
Boils / abscesses	62	30	54
Eczema / Dermatitis	21	50	28
Rash	5	5	5
Scabies	0	10	3
Sensitivity / irritation	3	0	3
Ringworm	3	0	3
Fungal infection	0	5	1
Psoriasis	2	0	1
Acne	2	0	1

Males=58, Females=20, T=78

#### 3.6.2 Asthma

Asthma is a common disease in Australia and is characterised by recurrent episodes of wheeze, shortness of breath, and sometimes a cough. Asthma is of unknown cause, tends to run in families, and is closely linked to allergies. In the majority of people, asthma can be effectively controlled by a combination of the regular use of medications that reduce the symptoms and avoidance of, or controlling trigger factors.

Thirty-three percent (33%, n=222) males and 34% (n=40) females reported having been diagnosed with asthma at some time. The 2001 National Health Survey (NHS)<sup>12</sup> (also based on self-report) indicated that 34% of young men aged 12-17 years and 29% of young women had been diagnosed with asthma. The NHS<sup>12</sup> reported that 12% of young people aged 15-24 years had been diagnosed with asthma.

Sixty-one percent (61%, n=159) had their last attack over one year ago; 17% (n=45) had an attack in the one month prior to the survey.

Table 3.8 (overleaf) summarises the asthma history and recency of last asthma attack.

Thirteen percent (13%, n=103) of those with asthma had been hospitalised for the condition. Thirty-one percent (31%, n=32) of those who had attended hospital for asthma had done so only once; 16% (n=16) [YPiCHS 54%] had over five hospital visits for asthma. Shortness of breath (16% males, 25% females), persistent cough (15% males, 24% females), and wheezing (9% males, 8% females) were reported in the four weeks prior to the survey.

In 2004-05, hospitalisation rates for asthma were higher for young females (131 per 100,000) than for young males (88 per 100,000). This represents a decrease of 54% since 1996-97 which may be due to reduced severity and improved management.<sup>16</sup> The hospitalisation rate for young people aged 12-24 years was 0.17% for males and 0.23% for females.<sup>16</sup>

Table 3.9 (overleaf) shows the number of young offenders who had ever been hospitalised for asthma and the frequency of hospitalisation. No difference was reported between males and females for overall hospitalisation for asthma and only females in the very frequent category spent more time in hospital.

15% young offenders had been diagnosed with an allergy

13% had been diagnosed with a skin condition

Boils and abscesses constituted 54% of reported skin conditions

**Table 3.8 Asthma history and recency of last asthma attack (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>History of asthma<sup>i</sup></b>						
Yes	33	28	34	56	33	31
<b>Last asthma attack or difficulty breathing<sup>ii</sup></b>						
Less than 4 weeks ago	14	28	37	29	17	28
1 to 3 months ago	10	8	6	14	9	9
3 to 6 months ago	7	8	4	14	7	9
6 to 12 months ago	5	5	9	0	6	4
More than 1 year ago	64	53	44	43	61	51

a (i) Males=673, Females=117, T=790; (ii) M=197, F=32, T=229; b (i) M=208, F=18, T=226; (ii) M=40, F=7, T=47

**Table 3.9 Hospitalisation for asthma and number of times in hospital for asthma (%)**

Hospitalisation	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Been to hospital for asthma<sup>i</sup></b>						
Yes	13	12	13	22	13	13
<b>Number of times in hospital for asthma<sup>ii</sup></b>						
Once	31	52	33	67	31	54
Twice	32	13	27	0	31	12
3 to 10 times	29	30	27	33	29	31
11 to 30 times	7	4	7	0	7	4
More than 30 times	1	0	6	0	2	0

a (i) Males=672, Females=117, Total=789; (ii) M=82, F=15, T=97; b (i) M=202, F=18, T=222; (ii) M=23, F=3, T=36

Self reports in the 2001 *National Health Survey*<sup>12</sup> showed that 36% young people aged 15-24 years used prevention and relief medication for asthma. Table 3.10 presents data on asthma medication use by young offenders for the whole sample, and type of medications for asthma and medication frequency for the sub-sample reporting asthma medication use. Other medications reported were Salmeterol

/ Serevent (1%), Bricanyl (1%) and Pulmicort (1%). A very small proportion of young offenders erroneously nominated Celebrex and Ritalin (2% and 1%) as medications for treatment of their asthma.

Five percent (5%, n=12) young offenders who had an asthma diagnosis reported having an asthma plan at the time of the survey.

**Table 3.10 Asthma medication use, type of medications, and medication frequency (%)**

Asthma medication	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever been prescribed medication for asthma<sup>i</sup></b>						
Yes	28	23	29	39	28	24
<b>Currently taking medication</b>						
Yes	11	13	16	29	12	14
<b>Type of medication<sup>ii</sup></b>						
Ventolin	82	92	83	100	82	93
Flixotide / Seretide	10	4	11	0	10	3
Becotide / Becloforte	3	4	0	0	3	3
<b>Asthma medication frequency<sup>iii</sup></b>						
Daily or more often	52	-	50	-	52	-
Weekly or more often	13	-	25	-	15	-
Monthly	13	-	0	-	11	-
Less than monthly	22	-	25	-	22	-

a (i) Males=671, Females=117, Total=789 (ii) M=73, F=18, T=91; (iii) a M=23, F=4, T=27

b (i) M=205, F=18, T=223 (ii) M=25, F=5, T=20

33% young offenders had been diagnosed with asthma, consistent with the 2001 *National Health Survey*, but three times higher than the *NHS report (2006)*

Of those with asthma, 39% had had an asthma attack in the previous year

13% had been hospitalised for asthma, rates far in excess of the *AIHW 2003 sample*

28% young offenders had been prescribed medication for asthma, of whom 12% were currently using medication

5% of those with asthma reported having an asthma plan

### 3.7 Immunisation

Since the introduction of mass immunisation the impact of infectious diseases has been reduced across Australia. Despite various incentives for immunisation and widespread education programs, young people still report diseases such as pertussis, measles, rubella and mumps.<sup>14,15</sup> Young offenders in both the community orders

and custody samples reported an overall high rate of immunisations. Table 3.11 presents immunisation histories for both samples (hepatitis A data not available for custody sample). There was almost complete reported coverage among this group for mandated childhood immunisations, although many did not recall/report which specific immunisations they had received.

**Table 3.11 Self-reported immunisations (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Have had childhood immunisations<sup>i</sup></b>						
Yes	98	97	98	100	98	97
<b>Type of immunisation<sup>ii</sup></b>						
Tetanus booster	56	77	50	56	55	75
Meningococcal	41	n/a	45	n/a	42	n/a
Hepatitis B	31	67	40	47	32	66
Rubella (MMR)	17	56	35	43	20	54
Chicken Pox	8	17	19	7	10	16
Hepatitis A	9	n/a	17	n/a	10	n/a
Polio	5	27	13	0	6	24
Meningitis	5	4	9	0	5	3
Whooping cough	5	18	8	7	5	17

a (i) Males=502, Females=78, Total=580; (ii) T=443-580; b (i) M=169, F=15, T=184; (ii) T=121-196

### 3.8 Oral health

Oral health refers to the health of tissues in the mouth, including mucous membranes, connective tissue, jaw muscles, bone, teeth and gums. It can also include immunological, physiological, sensory and digestive system functioning, but most often refers to the health of teeth and gums. Oral health is fundamental to overall health, wellbeing and quality of life. A healthy

mouth enables people to eat, speak and socialise without pain, discomfort or embarrassment. Good oral health can have positive benefits for young people. However, oral diseases and disorders during childhood can negatively affect quality of life. Most young offenders had brushed their teeth at least once in the previous day; this was more common in custody than in the community (Table 3.12). Almost all of those who brushed their teeth used toothpaste.

**Table 3.12 Dental health: Frequency of teeth brushing and toothpaste use (%)**

Dental health	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Brushed teeth on previous day<sup>i</sup></b>						
Yes	76	87	85	94	77	88
<b>Number of times brushed teeth<sup>i</sup></b>						
Once	39	27	39	12	39	26
Twice	34	41	38	59	34	42
Three or four times	3	14	8	24	4	14
Five or more times	<1	1	0	0	<1	1
<b>Used toothpaste<sup>ii</sup></b>	99	98	99	100	99	99

a (i) Males=671, F=117, T=788; (ii) M=508, F=98, T=606; b (i) M=207, F=18, T=225 (ii) M=181, F=17, T=198

The oral health of young people is usually measured in terms of dental health decay.<sup>17</sup> Dental caries are the single most prevalent health problem in Australia. Dental caries is the second most costly diet-related disease in Australia, with an economic impact comparable

with that of heart disease and diabetes.<sup>16</sup> Poor oral health in Australia is most evident among Indigenous peoples, those on low incomes, rural and remote populations, prisoners, and some immigrants from CALD backgrounds, particularly refugees.<sup>17</sup>

Almost all young offenders reported having received childhood immunisations

77% young offenders brushed their teeth on the day before the survey and all used toothpaste

Self reports of young Australians in 1999 show that around 88% of 12-17 year olds rated their oral health as excellent, very good or good, and a similar proportion (85%) of young people aged 18-24 years also rated their oral health as excellent, very good or good. The prevalence of toothaches is a good indicator of problems with teeth or gums. In an Australian sample of young

people, 10% of those aged 12-17 years and 18% of 18-24 year olds reported experiencing toothache in the last 12 months. A further 12% of those aged 12-24 years reported avoiding eating some foods because of problems with teeth or gums.<sup>16</sup> Table 3.13 shows the frequency of toothache for the offender samples in the last 12 months.

**Table 3.13 Frequency of toothache in the last 12 months.**

Frequency of toothache	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Very often	2	4	11	17	3	5
Often	3	4	11	6	4	5
Sometimes	13	15	16	22	14	15
Hardly ever	23	26	16	11	22	25
Never	59	51	46	44	57	50

a Males=661, Females=117, Total=778; b M=199, F=18, T=217

Table 3.14 presents detail on problems other than toothache with teeth or gums (whole sample) and the type of problems experienced (sub-sample who reported such problems).

**Table 3.14 Problems other than toothache with teeth or gums in last 12 months (%)**

Dental problems	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Any problem other than toothache<sup>i</sup></b>						
Yes	17	31	28	28	18	30
<b>Type of problem (if any problem)<sup>ii</sup></b>						
Bleeding gums	27	0	23	0	27	0
Broken teeth	20	11	20	20	20	11
Decay	16	19	30	0	19	18
Wisdom teeth/gums	6	0	20	0	9	0
Mouth ulcers	6	0	0	0	5	0
Orthodontic maintenance	5	0	0	0	5	0
Infection	4	5	0	0	3	5
Loose tooth	4	0	0	0	3	0
Teeth knocked out	3	0	3	0	3	0
Discoloured teeth	1	0	4	0	2	0
Extraction	2	5	0	20	1	7
Poor alignment	2	9	0	0	1	8
Periodontal disease	2	49	0	60	1	50
Nerve problem/crown	2	0	0	0	1	0
Sore jaw	0	2	0	0	0	2
<b>Seen dental professional about problem<sup>iii</sup></b>						
Yes	41	68	41	60	41	67

a (i) Males=658, Females=115, Total=773; (ii) M=109, F=30, T=139; (iii) M=111, F=32, T=143

b (i) Males=206, Females=18, Total=224; (ii) M=57, F=5, T=62; (iii) M=59, F=5, T=64

A 2003 health survey of Australian young people reported that 79% young Australians aged 12-17 years and 52% young people aged 18-24 years had visited a dentist in the previous 12 months.<sup>14</sup> In terms of locations of dental visits, one-third of 12-17 year olds had used the school dental service on their last dental

visit and 59% had consulted a private dentist. Among 18-24 year olds, 81% used private dental services and 15% visited a public clinic.

Table 3.15 (overleaf) displays the frequency and location of visits to dental professionals for young offenders in both samples.

7% experienced toothache very often or often

79% experienced toothache rarely or never

18% reported some problem with teeth or gums in the past 12 months

The most frequently reported problems were bleeding gums (27%), broken teeth (20%) and tooth decay (19%)

Only 41% had seen a dental professional about their dental problem

**Table 3.15 Time of last visit and location of visits to dental professionals (%)**

Time of last visit <sup>i</sup>	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
2 weeks or less	2	13	6	6	2	13
>2 weeks <3 mths	11	17	6	17	10	17
>3 mths <6 mths	12	15	12	11	13	14
>6 mths <12 mths	13	14	15	11	13	14
>12 mths <2 years	16	6	16	6	16	6
>2 years	46	31	45	44	46	32
Never	0	5	0	6	0	5
<b>Place of last visit (for those who had visited a dentist)<sup>ii</sup></b>						
Private dentist	34	18	23	7	32	17
School dental clinic	22	11	22	40	22	13
Dental hospital/service	15	5	22	13	16	6
Dentist in custody	13	50	7	27	12	48
Area health service	11	7	10	0	11	7
Aboriginal Medical Service	3	7	13	13	4	8
Orthodontist	2	2	3	0	2	2

a (i) Males=592, Females=101, T=693; (ii) M=563, F=99, T=662; b (i) M=206, F=18, T=224; (ii) M=186 F=15 T=201

Table 3.16 displays frequency of dental visits in the last 12 months and reasons for not visiting a dental practice given by young offenders in custody and the community.

**Table 3.16 Frequency of dental visits in last 12 mths and reasons preventing visits (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Number of times visited a dental professional in last 12 months<sup>i</sup></b>						
None	62	42	64	56	62	43
Once	25	29	22	28	25	29
Twice	6	14	6	11	6	14
Three times	3	7	4	0	3	6
Four or more times	4	8	4	6	4	8
<b>Reasons for not visiting a dental professional (multiple responses permitted)</b>						
Believed no treatment needed	64	72	38	70	60	72
Cost	11	10	17	13	12	10
Thought it wasn't important	13	19	7	0	12	18
Too busy	8	15	13	0	9	13
Didn't care/think about it	11	11	11	25	11	12
Nervous	7	2	8	0	7	1
Difficulty getting appointment	3	2	10	0	4	1
Problems with transport	3	2	3	0	3	1
Given up going to dentist	3	3	0	0	2	3
Did not know where to go	3	2	1	0	2	1

a (i) Males=604, F=106, T=710; (ii) M=114 F=76 T=490; b (i) M=206 F=18 T=224; (ii) M=66-78 F=8-10 T=74-88

### 3.9 Visual acuity

Participants were tested for distance visual acuity using the Snellen eyesight chart. Three percent (3%) young offenders (17/623) had visual acuity below the normal limits suggesting they required referral for further examination.

This proportion is lower than the 18% of young people aged 15-24 years reported to be short-sighted by the Australian Bureau of Statistics (2006).<sup>12</sup>

For a more detailed discussion of the methods of assessment for visual acuity, refer to chapter 1 (section 1.7.1.1).

46% young offenders had not visited a dentist for more than two years prior to the survey

62% had not visited a dentist within the last 12 months

The most frequent reason for not visiting a dentist was that no treatment was needed (60%)

### 3.10 Health service utilisation

Twenty percent (20%) [YPiCHS 38%] young offenders (22% males and 11% females) had not seen a doctor in the community in the past 12 months. The greater rate of health service utilisation in young offenders in custody may be attributed to the presence of health

professional staff in juvenile detention centres. A small proportion of young offenders had never visited a doctor in the community (1% males; 0% females). Table 3.17 presents information regarding contact of young offenders with health professionals in the community in the past 12 months.

**Table 3.17 Health service utilisation (past 12 months) (%)**

Health professionals	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Doctor	99	80	99	81	99	80
Nurse	48	98	52	100	49	98
Alcohol/drug counsellor	37	47	32	63	37	48
Psychiatrist	34	22	29	19	33	22
Psychologist	27	61	28	50	27	60
Sexual health worker	9	21	17	6	10	20
Dentist/dental therapist*	-	40	-	25	-	39
<b>Any service (above)</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>100</b>	<b>99</b>	<b>99</b>

a Males=626-666, Females=108-117, Total=725-783; b M=202, F=16, T=218; \*YPoCOHS not available

Twenty-one percent (21%, n=141) males and 20% (n=24) females believed they had a medical problem in the past 12 months but did not seek treatment. These young offenders reported a number of perceived barriers to accessing medical treatment in the community (Table 3.18). Of this group, 40% (n=66) [YPiCHS

55%] believed that their health problem had worsened due to lack of medical treatment.

Most of those who accessed health providers were satisfied with the service received (Table 3.19, overleaf).

**Table 3.18 Barriers to seeking medical treatment in the community (%)**

Barriers	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Thought problem would go away	33	27	29	20	32	26
Didn't want to / didn't care	30	12	21	0	28	10
Didn't have time	13	15	8	20	12	15
Afraid of what Dr would say/do	9	12	17	40	10	15
Couldn't pay	5	6	25	0	8	5
Didn't think Dr could help	7	12	13	0	7	10
Transportation problems	4	6	8	20	5	8
Difficulty making appointment	4	3	13	20	5	5
Too embarrassed	3	3	8	20	4	5
Didn't know who to see	4	6	0	0	3	5
Didn't want parents to know	2	0	4	0	3	0
No one available to go along	1	3	4	20	2	8
Parent would not go with them	2	9	0	0	2	8
Thought Dr would tell authorities	1	9	4	0	1	8

a Males=138; Females=24; Total=162; b Males=34; Females=5; Total=39; Multiple responses permitted

### 3.11 Health information awareness

Young offenders reported awareness of telephone-based help lines; however only

a small percentage of young offenders on community orders reported using these (Table 3.20, overleaf).

*All young offenders had used at least one health service*

*Most were satisfied with the service*

*37% young offenders had ever seen an alcohol or drug counsellor*

*Only 10% young offenders had ever consulted a sexual health worker*

**Table 3.19 Satisfaction with service provided at last visit (visit rated 'good' or 'OK') (%)**

Health professionals	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Nurse <sup>i</sup>	97	93	96	94	97	93
Sexual health worker <sup>ii</sup>	98	95	94	100	97	95
Doctor <sup>iii</sup>	95	93	93	100	95	94
Alcohol/drug counsellor <sup>iv</sup>	93	95	94	100	93	95
Psychologist <sup>v</sup>	87	93	66	100	84	94
Psychiatrist <sup>vi</sup>	81	84	64	100	79	85
Dentist/dental therapist*	-	94	-	100	-	94

a (i) M=294 F=56 T=350; (ii) M=56 F=18; (iii) M=638 F=114; (iv) M=231 F=34; (v) M=161 F=29; (vi) M=205 F=31  
 b (i) M=196 F=16 T=212; (ii) M=40 F=1; (iii) M=160 F=13; (iv) M=94 F=10; (v) M=121 F=8; (vi) M=44 F=3 \*M78 F7

**Table 3.20 Young offenders' awareness [utilisation] of available help lines (%)**

Multiple responses permitted	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Kids Help line	90 [9]	84 [9]	98 [21]	84 [9]	91 [10]	84 [9]
Alcohol & Drug Info. Service	70 [2]	56 [2]	77 [5]	56 [2]	71 [3]	56 [2]
Family Support line	54 [1]	61 [2]	72 [3]	61 [2]	56 [1]	61 [2]
LifeLine	52 [2]	51 [2]	59 [3]	51 [2]	53 [2]	51 [2]
G Line	30 [1]	31 [3]	44 [3]	31 [3]	32 [1]	31 [3]
Salvo's Line	20 [<1]	16 [<1]	29 [0]	16 [<1]	21 [<1]	16 [<1]
Quit Line	20 [<1]	15 [<1]	20 [0]	15 [<1]	20 [<1]	15 [<1]
1800 Mental Health**	13 [<1]	18 [<1]	21 [0]	18 [<1]	15 [<1]	18 [<1]
Internet help lines	15 [1]	23 [<1]	18 [2]	23 [<1]	15 [1]	23 [<1]
Hep C Help line	13 [<1]	18 [2]	20 [0]	18 [2]	14 [<1]	18 [2]

a Males=647-665, Females=114-117, Total=763-782; b M=200; F=16, T=216; \*Available to custody clients only

Health helpline information awareness was high but utilisation of these services was very low

Kids Help Line was most frequently used (10%)

All other services had an uptake of 3% or less

### 3.12 Summary and conclusions

Chicken pox (61%), asthma (33%), ear infections (28%), tonsillitis (25%), chest infections (22%) and back problems (17%) were the most commonly reported health conditions by young offenders for which medical attention was sought. The most frequently reported health concerns four weeks prior to the survey were tiredness/energy loss (39%), trouble sleeping (39%), memory problems (32%), headaches (28%) and poor appetite (25%). Health complaints were associated with substance use. Polydrug users reported more health complaints than single and non drug users.

Sixteen percent (16%) young offenders were taking prescribed medication at the time of the survey. The most frequently reported were medications acting on the central nervous system (35%), of which 14% were medications for ADHD, asthma (20%), antibiotics (13%), and agents used to combat drug dependence (6%).

Most (98%) young offenders reported having received at least some of the major childhood immunisations.

Seventy-seven percent (77%) young offenders reported brushing their teeth with toothpaste on the day before the survey; 79% reported hardly ever or never having a toothache in the past 12 months. Eighteen percent (18%) had experienced an oral health problem other than toothache (eg bleeding gums, broken teeth, decay without toothache) in the past 12 months. Sixty-two percent (62%) had not visited a dentist in the past 12 months.

All young offenders had used at least one health service at some time; only 10% young offenders had ever consulted a sexual health worker; 37% reported having seen an alcohol and drug counsellor. Young offenders had high awareness but low utilisation of helpline services.



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# CHAPTER 4

## SEXUAL HEALTH

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# 4. SEXUAL HEALTH

## 4.1 Sexual behaviour

The legal age for consent to sexual intercourse – 16 years for both males and females – coincides with the age during which adolescents show an acceleration of sexual risk behaviours.<sup>1</sup> There have been two recent surveys on the sexual behaviour and health of adolescent Australians.<sup>2,3</sup> The 1997 survey of Australian secondary students found that 25% of year 10 (15 -16 years) and almost 50% year 12 students (17-18 years) reported having had sexual intercourse. According to this survey, most sexually active students in year 10 and year 12 had only one sexual partner in the previous year.<sup>2</sup> The *National Survey of Australian Secondary Students* (2003) reported that 26% of Year 10 students and 47% of Year 12 students stated that they had experienced sexual intercourse. Both in Years 10 and 12, slightly more males than females reported having had sexual intercourse. Between 1992 and 2002, the proportion of young people in Years 10 and 12 (in government schools) who had had sexual intercourse increased from 35% to 42% (an increase from 23% to 32% among Year 10 students and an increase from 48% to 55% among Year 12 students).

Half of sexually active male students in Years 10 and 12 reported having sexual intercourse with one sexual partner in the previous year, as did 62% of female students. Around 38% of young people in Years 10 and 12 had more than one sexual partner in the previous year. A higher proportion of males in Years 10 and 12 reported having more than one sexual partner during the previous year (41%) compared with females (35%).<sup>3</sup>

The pattern of sexual activity was very different for young offenders. In both survey samples (custody and community), most young offenders reported having had sexual intercourse (vaginal, anal, or oral) at least once in their lifetime [YPoCOHS: (88%; n=692), YPiCHS: 93%; n=192]. Eighty-three percent (83%) of the community orders sample and 83% of the custody sample had experienced sexual intercourse by the age of 15.

Ten percent (10%, n=79) of the community orders sample reported having had only one sexual partner; 78% (n=532) [YPiCHS: 75%, n=165] indicated that they had had three or more sexual partners (Figure 4.1 and Table 4.2).

**Figure 4.1 Lifetime number of sexual partners (including same sex partners) by gender (%)**

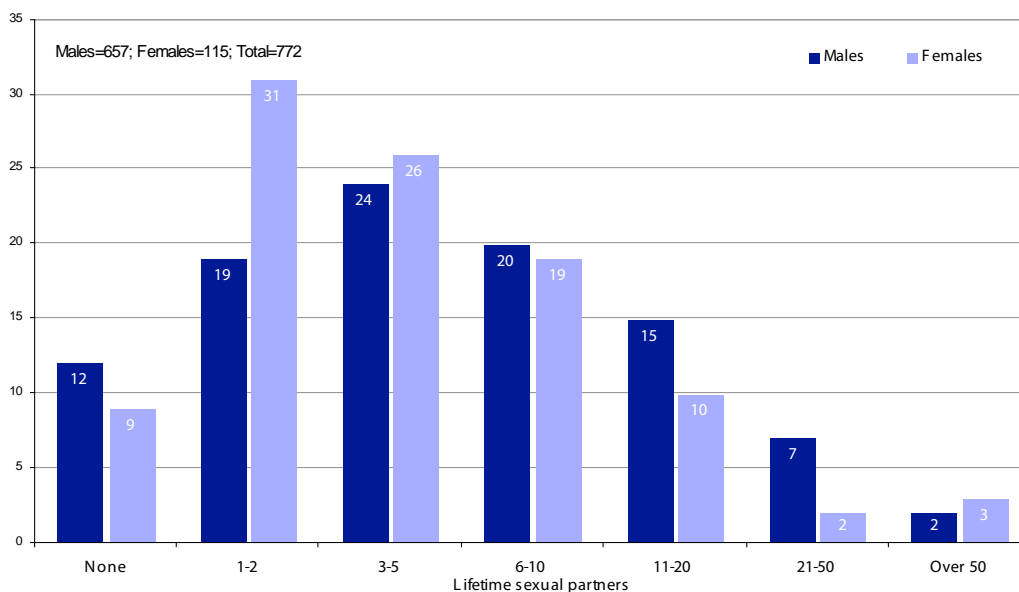


Table 4.1 displays sexual experience history with a partner (including vaginal, oral, anal

sex), age at first sexual experience and lifetime sexual partners.

12% young offenders had never experienced sexual intercourse

34% had experienced sexual intercourse by age 13

74% had experienced sexual intercourse by age 15

67% young offenders who had experienced sexual intercourse reported that they had had three or more sexual partners

**Table 4.1 Sexual experience history (vaginal, oral, anal sex), age at first sexual experience, and number of sex partners (%)**

Sexual experience	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Have you ever had sex<sup>i</sup></b>						
Yes	88	93	91	94	88	93
<b>Age first had sex<sup>ii</sup></b>						
<12	5	10	5	0	5	10
12-13	33	40	35	44	33	38
14-15	45	39	42	37	45	35
>15	17	11	18	19	17	10
<b>Number of sex partners<sup>ii</sup></b>						
1	10	8	19	24	11	9
2	11	10	15	13	11	10
3-5	27	20	29	44	27	22
6-10	24	25	20	13	24	24
11-20	17	19	11	0	17	18
21-50	8	10	2	0	7	9
51-100	2	4	1	6	3	4
>100	<1	4	3	0	<1	4

a (i) Males=670, Females=116, Total=786; (ii) M=579, F=104, T=683; b (i) M=206, F=17, T=223 (i) M=190, F=16, T=206

Of the 88% who had experienced sex

- 38% had experienced sex by age 13, 83% by age 15
- 11% reported having had only one sex partner

Parents can be influential in supporting safe sex practices in their children

Although parents believe that they have little influence over their adolescents' sexual behaviour, a recent study has shown otherwise.<sup>4</sup> It examined the role of parental communication and instruction concerning sexual behaviour in a community-based sample of 1083 youth aged 13–17 years. It found that youth were much less likely to have initiated sexual intercourse if their parents taught them to be assertive in sexual negotiations with partners, set clear rules, talked about responsible sexual behaviour and about delaying sexual activity. If youth were sexually active, they were more likely to use birth control if taught at home about delaying sexual activity and about birth control. Having only one sexual partner was associated with having an adult role model who supported abstinence, being taught at home about birth control, and being taught at home to be assertive in sexual negotiations with partners. If parents reported talking with youth about birth control and sexually transmissible infections (STI) prevention, youth were significantly more likely to use birth control. The authors concluded that parents have the capacity to influence their children's sexual behaviour and sexual decision making.

**4.1.1 Vaginal, oral and anal sex**

Ompad et al. (2006)<sup>5</sup> surveyed 1,679 adolescents about sexual practices, including vaginal, oral and anal sex. Responses indicated a tendency to engage in oral and anal sex as a means of reducing the risk of STIs and pregnancy.

Adolescents experience a range of social and emotional consequences after having sex. These may be different for males and females. For example, Brady and Halpern-Felsher (2007)<sup>6</sup> examined whether adolescents' initial consequences of sexual activity differed according to type of sexual activity and gender in a sample of 618 school-attending 14 year old adolescents (56% female). Adolescents who engaged in oral sex were less likely to report STIs but females were more likely to feel guilty, bad about themselves and used. Males having oral sex were more likely than females to report feeling good about themselves. These findings have implications for clinical practice and public sexual health campaigns targeted at youth.

Table 4.2 displays age, frequency and number of sexual partners for vaginal sex. The median age of first vaginal sex was 14 years for both males (range: 6 to 18) and females (range: 7 to 17).

**Table 4.2 Vaginal sex: Age of first experience, number of times and number of partners (%)**

Vaginal sex	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Have you ever had vaginal sex<sup>i</sup></b>						
Yes	87	91	91	94	88	91
<b>Age first had vaginal sex<sup>ii</sup></b>						
11 years or less	4	9	4	0	4	9
12 to 13 years	30	39	34	44	31	39
14 years	24	23	22	25	24	23
15 years	23	19	22	12	23	18
16 years or more	19	10	18	19	18	11
<b>Number of times had vaginal sex<sup>ii</sup></b>						
1	4	1	4	0	4	1
2	4	4	5	7	4	4
3 to 5	12	11	14	20	12	12
6 to 10	14	12	15	13	14	12
11 to 20	16	18	15	33	16	19
21 to 50	16	26	18	13	16	26
51 to 100	13	6	16	7	14	6
Over 100	21	22	13	7	20	20
<b>Number of vaginal sex partners<sup>ii</sup></b>						
1	12	8	20	25	13	9
2	12	11	16	13	13	11
3 to 5	28	21	28	44	28	23
6 to 10	22	24	21	12	22	23
11 to 20	15	18	9	0	14	17
21 to 50	9	11	2	0	8	10
51 to 100	2	4	1	6	1	5
Over 100	0	3	3	0	1	2

a (i) Males=651, Females=113, Total=764 (ii) M=569-579, F=103-104, T=672-683; b (i) M=206, F=17, T=223 (ii) M=190, F=16, T=206

Table 4.3 (overleaf) displays history, age at first experience, frequency and number of sexual partners for oral sex. The median age of first

oral sex was 14 years for both males (range: 6 to 18) and females (range: 7 to 17).

12% young offenders had not experienced vaginal sex

Of the 88% who had experienced vaginal sex

- 82% had experienced vaginal sex by age 15

- 74% had three or more vaginal sex partners

**Table 4.3 Oral sex: Age of first experience, number of times and number of partners (%)**

Oral sex	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Have you ever had oral sex<sup>i</sup></b>						
Yes	54	53	47	41	53	52
<b>Age first had oral sex<sup>ii</sup></b>						
11 years or less	5	8	6	0	5	8
12 to 13 years	30	35	45	0	32	33
14 years	18	21	11	43	17	22
15 years	24	21	20	29	24	22
16 years or more	23	15	18	28	22	15
<b>Number of times had oral sex<sup>ii</sup></b>						
1	3	3	9	14	4	4
2	6	5	11	0	6	5
3 to 5	17	12	31	15	19	12
6 to 10	15	14	17	43	15	15
11 to 20	19	21	13	0	18	20
21 to 50	15	19	13	14	15	19
51 to 100	12	6	6	14	12	6
Over 100	13	20	0	0	11	19
<b>Number of oral sex partners<sup>ii</sup></b>						
1	13	13	28	57	15	16
2	17	9	24	14	18	9
3 to 5	29	24	31	15	29	23
6 to 10	22	17	6	0	20	16
11 to 20	13	23	9	0	13	22
21 to 50	4	8	2	0	4	8
51 to 100	2	2	0	14	1	3
Over 100	0	4	0	0	0	3

a (i) Males=659, Females=114, Total=773 (ii) M=355-359, F=54-55, T=409-414; b (i) M=194, F=17, T=211 (ii) M=109, F=7, T=116

Table 4.4 (overleaf) displays history, age at first experience, frequency and number of sexual partners for anal sex. The median age of first

anal sex was 14 years for both males (range: 6 to 18) and females (range: 7 to 17).

47% young offenders had never had oral sex

Of the 53% who had experienced oral sex,

- 78% had oral sex by age 15

- 67% had three or more oral sex partners



**Table 4.4 Anal sex: Age of first experience, number of times and number of partners (%)**

Anal sex	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Have you ever had anal sex<sup>i</sup></b>						
Yes	12	10	11	6	12	10
<b>Age first had anal sex<sup>ii</sup></b>						
11 years or less	1	5	0	0	1	5
12 to 13 years	11	20	17	0	12	19
14 years	9	5	8	0	8	5
15 years	13	20	33	0	16	19
16 years or more	66	50	42	100	63	52
<b>Number of times had anal sex<sup>ii</sup></b>						
1	36	29	66	100	40	32
2	16	33	17	0	16	32
3 to 5	24	4	17	0	23	4
6 to 10	10	19	0	0	9	18
11 to 20	7	10	0	0	6	9
21 to 50	4	0	0	0	3	0
51 to 100	1	0	0	0	1	0
Over 100	2	5	0	0	2	5
<b>Number of anal sex partners<sup>ii</sup></b>						
1	55	48	83	100	59	50
2	22	33	17	0	22	32
3 to 5	14	14	0	0	12	14
6 to 10	5	5	0	0	4	4
11 to 20	4	0	0	0	3	0
Over 20	0	0	0	0	0	0

a (i) Males=669, Females=116, Total=785; (ii) M=81-83, F=12, T=93-95; b (i) M=205, F=17, T=222; (ii) M=20, F=1, T=21-22

#### 4.1.2 Sexual orientation

In the 2002 National Survey of Secondary Students and Sexual Health, 93% reported exclusive heterosexuality; less than 1% reported exclusive homosexuality; and 5% reported bisexual attraction. These latter two groups may be at risk of marginalisation, and young gay men may be at increased risk of

contracting a sexually transmitted infection like HIV/AIDS.<sup>3</sup>

Table 4.5 presents data on young offenders' sexual orientation and history of same-sex sexual experience. Females were more likely to report non-heterosexual sexual orientation and to engage in sex with a same-sex partner.

**Table 4.5 Sexual orientation and history of sex with same-sex partners**

Sexual orientation*	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Heterosexual	99	-	87	-	97	-
Bisexual	1	-	11	-	2	-
Homosexual	<1	-	2	-	1	-
<b>Any sex with same sex partner<sup>ii</sup></b>						
Yes	1	1	13	19	3	2

a (i) Males=570, Females=105, Total=675; (ii) M=669, F=116, T=785; b (ii) M=203, F=17, T=220. \*YPiCHS not available

88% young offenders had never had anal sex

Of the 12% who had:

- 37% had experienced anal sex by 15 years of age

- 19% had three or more anal sex partners

1% males and 13% females indicated that they had had sexual partners of the same sex

**4.1.3 History of sex work, sex for money or drugs and unwanted sexual experiences**

Most of the recent literature on sex work has been conducted in developing countries. However, the studies conducted in developed countries such as the UK and USA show that, for female sex workers, sex work is associated with higher rates of mortality and morbidity including the consequences of STIs, such as pelvic inflammatory disease and infertility, mental health problems, and substance misuse. Once inducted into sex work, female sex workers remained in this work over extended periods of time.<sup>7</sup>

One percent (1%, n=4 males and n=2 females) young offenders reported having worked as sex workers. Most (n=4) reported always using condoms while working as a sex worker.

Non-consensual sexual experiences are associated with a greater prevalence of psychological problems, alcohol misuse, and self harm.<sup>8</sup>

Table 4.6 displays the reported number of times the young person had sex to obtain drugs or money and the reported frequency for the sub-sample who had sex for drugs or money.

**Table 4.6 Engagement in sex to get drugs or money and frequency of engagement (%)**

Sex for payment	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Had sex to get drugs or money<sup>i</sup></b>						
Yes	3	2	3	6	3	2
<b>Number of times had sex to get drugs or money<sup>ii</sup> [low n]</b>						
1	12	34	0	100	9	50
2-5	59	33	50	0	57	25
More than 5	29	33	50	0	34	25
<b>Unwanted sexual experiences<sup>iii</sup></b>						
Yes	4	-	29	-	8	-
<b>Nature of unwanted experiences<sup>iv</sup> [low n]</b>						
Raped when drunk/stoned	43	-	17	-	31	-
Date/partner/ex partner	15	-	34	-	23	-
Family member	14	-	25	-	19	-
Gang/group rape	14	-	8	-	11	-
Acquaintance	7	-	8	-	8	-
Under pressure	7	-	8	-	8	-
<b>Age at unwanted experiences<sup>v</sup> [low n]</b>						
Less than 10 years	19	-	19	-	19	-
10 to 16 years	76	-	71	-	74	-
Over 16 years	5	-	10	-	7	-

a (i) Males=669 Females=116 Total=785; (ii) M=17 F=4 T=21; (iii) M=657 F=114 T=771; (iv) M=14 F=12 T=26; (v) M=21 F=21 T=32; b (i) M=198 F=17 T=215; (ii) M=3 F=1 T=4; (iii, iv, v) data not available. \*YPiCHS many times

Four percent (4%, n=26) males and 29% (n=33 females) reported having had sex against their will (a forced or unwanted sexual experience, including sexual abuse, rape, and partner/peer pressure for sex).

Of the 72% (n=42) who provided their age at the time of their unwanted sexual experiences, 19% (n=8) were less than 10 years old at the time of the experience. Of the 45% (n=26) young offenders who provided detail about the circumstance of their unwanted sexual

experiences, rape (gang rape, date rape, and rape when intoxicated) was the most commonly reported (62%, n=16).

**4.1.4 Condom use**

According to the *National Survey of Australian Secondary School Students*,<sup>9</sup> condom use increased between 1992 and 1997, but not to acceptable levels. In 1997, 37% of sexually active males in Year 12 used condoms 'sometimes' and 9% 'never' used condoms. More young men

3% young offenders reported having sex to get drugs or money

8% (4% males and 29% females) reported having unwanted sexual experiences

19% were <10 years old when these occurred

reported using condoms than young women; 63% young men in Year 12, compared with 52% young women.<sup>10</sup>

In 2002, 68% and 53% Year 10 males and females respectively reported using a condom during their last sexual encounter with someone they had just met. Over three-quarters of Year 12 students (75% males and 80% females) said they used a condom at their recent sexual encounter with someone they had just met. The majority of male students in Years 10 and 12 reported using a condom at their most recent sexual encounter with their current girlfriend (84% and 73% respectively). Female condom use at most recent sexual encounter with their boyfriend was lower (65% and 48% for female students in Years 10 and 12 respectively). Over three-quarters of male students in Years 10 and 12 and female students in Year 10 reported using a condom at their most recent sexual encounter with someone they had known for a while; however, a somewhat lower proportion of female Year 12 students did so (59%).

Using data from the *National Longitudinal Study of Adolescent Health*, which followed a sample of 4018 sexually active adolescents between 1994 and 2002, Shafii, Stovel & Holmes (2007)<sup>10</sup> found that adolescents who reported condom use during their first sexual intercourse were more likely than those who

did not use condoms to report condom use at their most recent sexual intercourse (on average 6.8 years after sexual debut). They were also half as likely to test positive for chlamydia or gonorrhoea (adjusted odds ratio=0.50; 95% confidence interval=0.26, 0.95). Reported lifetime numbers of sexual partners did not differ between condom users and non-users. This study demonstrated the importance and long term benefits of developing adaptive health behaviours and attitudes through sex education programs prior to engagement in sexual activity.

In the present survey, condom use during sexual intercourse was evaluated for both casual and regular partners (Tables 4.7 and 4.8). A casual sexual partner was defined as a once only sexual partner or a "one night-stand"; a regular sexual partner was defined as someone with whom one had sex on a regular basis.

A notable proportion of young offenders did not use condoms in situations that placed them at an increased risk of contracting HIV/AIDS, an STI or hepatitis. Of the 556 males and 92 females who had had a casual partner, 23% (n=128) males [YPICHS 33%] and 25% (n=23) females either never used condoms or used them less than half the time when they had penetrative sex with casual partners. Of the 561 males and 98 females who had a regular

*Of those young offenders who had casual sex partners, 12% never used condoms*

*Of the young offenders who had had a casual partner, 23% males and 25% females either never used condoms or used them less than half the time when they had penetrative sex with casual partners.*

*The two most frequently cited reasons for not using condoms were that they did not like the feeling (40%) or they did not have any at the time they were needed (27%)*

**Table 4.7 Condom use with casual partners and reasons for low frequency use (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Condom use with casual partner<sup>i</sup></b>						
Never	12	16	14	31	12	17
Less than half the time	11	17	11	13	11	17
More than half the time	17	28	29	25	19	28
Always	60	39	46	31	58	39
<b>Reasons for using less than half the time<sup>ii</sup></b>						
Do not like the feeling	39	32	44	25	40	32
Did not have any	29	0	19	0	27	0
Too drunk / on drugs	7	6	12	0	8	5
Prefers natural	7	11	0	0	6	11
Knew partner was safe	4	2	13	0	5	2
Could not be bothered	5	13	0	0	4	12
Did not think about it	2	6	6	0	3	5
Impulsive	3	21	0	25	2	21
Did not know how to use	2	0	0	0	2	0
In a stable relationship	1	0	0	25	1	2
Bad previous experience with condom breakage	1	0	0	0	1	0
Female used other contraceptive methods	0	0	6	0	1	0
Do not feel like it	0	9	0	25	0	11

a (i) Males=556, Females=92, Total=648 (ii) M=97, F=16, T=113; b (i) M=183, F=16, T=199 (ii) M=53, F=4, T=57

partner, 42% (n=236) males and 59% (n=59) females either never used condoms or used them less than half the time when they engaged in penetrative sex with regular partners. These findings are consistent with community data suggesting that young women are less likely

to use condoms regardless of whether their partner was casual or steady.<sup>9</sup>

Tables 4.7 (previous page) and 4.8 display condom use frequency and reasons for low condom use with casual and regular partners.

**Table 4.8 Condom use with regular partner and reasons for low frequency use (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Condom use with regular partner<sup>i</sup></b>						
Never	24	31	39	36	27	31
Less than half the time	18	18	20	21	18	18
More than half the time	16	20	13	21	15	20
Always	42	31	28	24	40	31
<b>Reasons for using less than half the time<sup>ii</sup></b>						
Do not like the feeling	26	21	17	14	25	21
Female used other contraceptive methods	21	0	10	0	19	0
In a stable relationship	11	31	28	57	14	33
Did not have any	13	0	17	0	14	0
Knew partner was safe	9	7	12	0	10	6
Prefers natural	8	9	3	0	7	8
Could not be bothered	5	9	5	0	5	8
Trying to conceive	2	1	5	0	2	1
Impulsive	2	7	0	14	1	8
Did not know how to use	1	1	0	0	1	1
Bad previous experience with condom breakage	1	0	3	0	1	0
Did not think about it	<1	4	0	0	<1	4
Too drunk / on drugs	<1	0	0	0	<1	0
Do not feel like it	0	10	0	14	0	10

a (i) Males=561, Females=98, Total=659 (ii) M=182, F=40, T=222; b (i) M=182 F=14 T=196 (ii) M=71, F=7, T=78

Australian secondary students preferred condoms (64%), oral contraceptives (37%) and the withdrawal method (12%) as forms of contraception.<sup>9</sup> The current young offender samples showed similar preferences with the majority indicating that condoms were their preferred form of contraception (YPoCOHS:

67%, YPiCHS: 55%). Clearly, strategies are needed to improve condom use among this high risk population in view of the high prevalence of STIs, especially chlamydia.

Table 4.9 displays preferred forms of contraception to prevent pregnancy.

**Table 4.9 Preferred type of contraceptive to prevent pregnancy (%)**

Contraceptive type	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Condom	69	57	56	31	67	55
Pill/oral contraceptive	23	24	13	13	21	23
None	16	25	28	56	18	28
Depo-Provera	2	2	5	6	3	3
Withdrawal method	3	0	2	0	3	0
Implanon	1	1	5	6	2	2
Diaphragm	<1	0	0	0	<1	0

a Males=575, Females=103, Total=678; b M=185, F=16, T=201; Multiple responses permitted

Of those young offenders who had regular sex partners, 27% never used condoms

Of the young offenders who had a regular partner, 42% males and 59% females either never used condoms or used them less than half the time when they engaged in penetrative sex with regular partners

Condoms (67%) were the preferred form of contraception followed by oral contraceptives (21%)

18% had no preference for methods of contraception

## 4.2 Sexually transmissible infections (STI) and blood borne viruses (BBV)

Sexually transmitted infections (STIs) are communicable diseases that may be contracted through sexual activity (oral, anal or vaginal sex). Young people may be at risk of contracting blood borne viruses and sexually transmissible infections if they do not have the information, skills, support or access to health services to manage issues with sexual development and behaviour that they may encounter during adolescence.

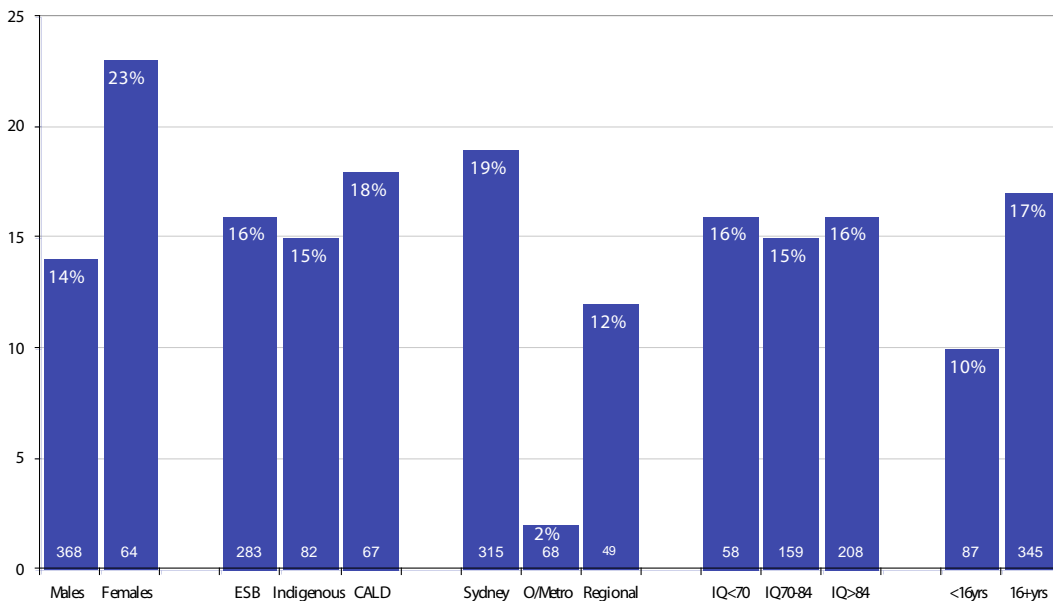
Risk behaviours such as injecting drug use, sharing contaminated injecting equipment, unsafe tattooing and body piercing and unprotected sex have been linked to increased exposure to blood borne viruses and sexually

transmitted infections. Adult offender populations have a high prevalence of blood borne viruses such as hepatitis C and HIV and sexually transmitted infections such as syphilis, chlamydia and genital herpes.

Figure 4.2 displays the frequency of sexually transmitted infections and blood borne viruses within the subgroup of young offenders completing full pathology testing (both serology and PCR/urine screen; n=432). Further detail on pathology tests and response rates can be found in Chapter 1.

Females had a higher frequency of STIs and BBVs than males and urban and regional young offenders had higher rates than other metropolitan. There were no differences in infection rates between ethnic or IQ groups.

**Figure 4.2 Frequency of STIs and BBVs in young offenders with complete pathology results (%)**



*Females (23%) had higher rates of STIs and BBVs than males (14%)*

*Urban and regional young offenders had higher rates than 'other metropolitan'*

### 4.2.1 Chlamydia, gonorrhoea and other STIs

Chlamydia, gonococcal infection and syphilis are transmitted mainly through sexual contact.

Chlamydia is one of the most prevalent of all STIs. It is a curable STI that is acquired through oral, vaginal or anal sexual contact with an infected sexual partner.<sup>11</sup>

In Australia in 2005, there were 21,692 notifications of chlamydia among young people

aged 12-24 years (up from 11,859 in 2001), a rate of 572 per 100,000.<sup>12</sup> This represented over fifty percent of all notifications for chlamydia.<sup>11</sup> Of these, 69% were females. Males are more likely than females to have symptoms of chlamydia. However, up to 75% of people with chlamydia have no symptoms.

The rate of chlamydia notification was more than four times as high in females as males (961 per 100,000 for females compared with 221 per 100,000 young people for males).<sup>12</sup> The rates of

chlamydia notifications for young women have been steadily increasing over time, particularly between 2001 and 2005, when the rate almost doubled. This increase may be related to greater awareness and better diagnosis, although it is possible that young people are increasingly engaging in unprotected sex and frequently changing their sexual partners.<sup>12</sup>

In 2005, 3,564 notifications of gonorrhoea for young people aged 12-24 years were made (up from 2,213 in 2001).<sup>12</sup> This accounts for 43% of the total gonorrhoea notifications in Australia for that year. Rates of notifications were similar for males and females.<sup>12</sup>

Table 4.10 presents sexually transmissible infections for the custody and community orders samples, derived from pathology testing.

**Table 4.10 Sexually transmissible infections diagnosed from pathology testing (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Herpes simplex virus-2	7	6	9	18	7	7
Chlamydia	5	6	11	7	6	6
Gonorrhoea	<1	2	1	0	<1	2
<b>Any sexually transmitted infection<sup>i</sup></b>	13	13	22	19	14	13

a Males=431-49 Females=72-80 Total=507-29; (i) M=373 F=67 T=440; b M=162-81 F=14-17 T=178-97; (i) M=158 F=16 T=174

\* Any of the following: HSV-2, chlamydia, and gonorrhoea. Three cases of syphilis were detected within this group.

Table 4.11 displays the self-reported frequency of sexually transmitted infections for both samples and self-reported treatment for the community orders sample.

**Table 4.11 Self-report of sexually transmitted infections (%) [self-report of treatment]**

Type of STI	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Chlamydia	2	3	6	24	2 [0.4]	4.6
Pubic lice/crabs	1	4	1	6	0.8 [0.5]	3.7
Genital warts	1	<1	4	0	1 [0.8]	0.5
Gonorrhoea	<1	<1	3	0	0.6 [0.5]	0.5
Urinary tract infection	<1	2	1	6	0.3 [0.3]	2.3
Genital herpes (HSV-2)	<1	0	2	0	0.4 [0.3]	0
Syphilis	<1	0.6	1	6	0.3[0.1]	0.9
HIV	0	0.5	0	0	0	0.5

a Males=669, Females=116, Total=785; b M=198, F=17, T=215

The majority of young offenders in the community with STIs other than chlamydia had received treatment; all those with chlamydia in the custody sample had received treatment, as had the majority of those with other STIs.

**4.2.2 Herpes Simplex Virus**

No data are available to provide estimates of population prevalence of HSV-2 for young people in Australia; however, studies in high risk individuals and selected populations

around the world have shown infection is uncommon in people below the age of 15 but seroprevalence increases rapidly from the mid-teens to the mid-twenties.<sup>13</sup> The commonly observed rise in HSV-1 seroprevalence in adolescence is probably due to their expanded social network and the associated increased exposure to HSV-1-infected oral secretions (e.g. kissing of sexual partners). During adolescence, many individuals begin engaging in sexual behaviours that expose them to HSV-2-infected secretions, resulting in genital herpes.<sup>14</sup>

14% young offenders had at least one STI

Most young offenders with STIs had received treatment

Herpes Simplex Virus Type 1 (HSV-1) was not assessed in the community orders sample; however, self-reported prevalence of a history of cold sores (HSV-1) was 25% (n=167) for males [YPiCHS: 40%, (180)] and 30% (35) for females [YPiCHS: 29%, n=5].

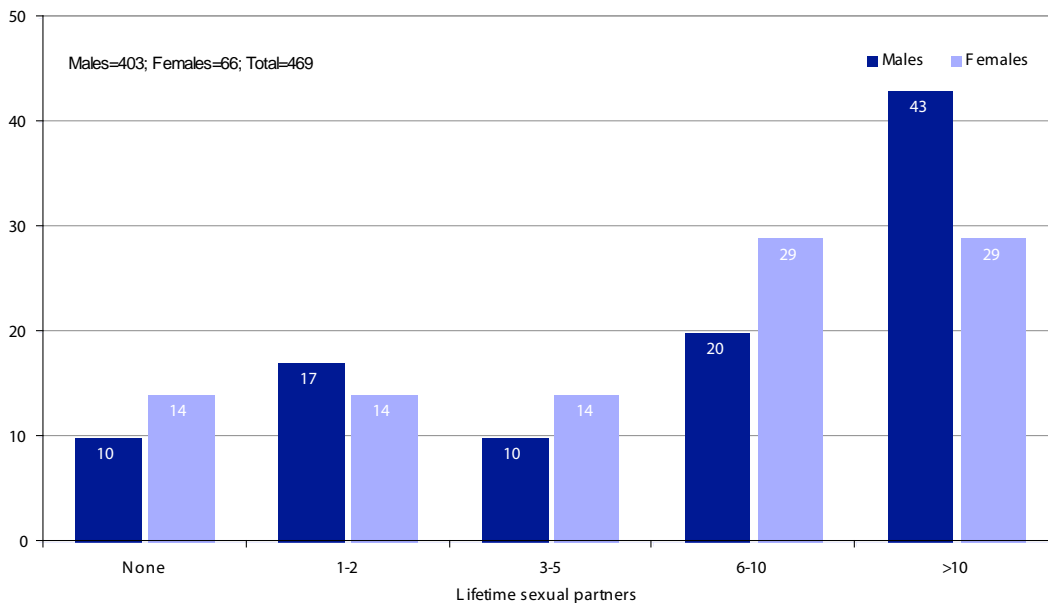
Herpes simplex 1 and 2 viruses are transmitted by direct contact. HSV can be present in semen, vaginal fluids and saliva. The primary difference between the two infections is the site of infection--mucous membranes of the lips and oro-facial skin for HSV-1 and the genitalia for HSV-2.

HSV-2 is a sexually transmitted disease (STD). It causes herpes sores in the genital area and is transmitted through vaginal, oral, or anal

sex, especially from unprotected sex. Those who have a prior infection with HSV-1 have an acquired immune response that lowers the risk of acquiring HSV-2. Previous oral HSV-1 infection reduces the acquisition of subsequent HSV-2 infection by 40%.<sup>15</sup> Although genital HSV-1 offers little protection against acquiring genital HSV-2 infection, it usually prevents the severe clinical manifestations observed with many primary HSV-2 infections.<sup>16</sup> A fall in the prevalence of HSV-1 antibodies in adolescence therefore results in a greater number of adults at risk of disease.<sup>17</sup>

Figure 4.3 presents the rate of HSV-2 (genital herpes) by lifetime number of sexual partners. The prevalence of HSV-2 increases sharply with six or more sexual partners.

**Figure 4.3 Herpes simplex virus type 2 by lifetime number of sexual partners by gender (%)**



Ten percent (10%) males and 14% females who had HSV-2 reported that they had not had a sexual partner. This suggests that there was some under-reporting of sexual activity including contraction through undisclosed consensual sex, incest or other sexual assault.

#### 4.2.3 Blood-borne viruses: hepatitis B and C

Hepatitis B is an infrequent occurrence in Australians, except for those born overseas. The most usual route of transmission is vertical

(from mother to child) and through the use of non-sterile medical practices in the countries of origin.

Prevalence of hepatitis C in the general adult community is 0.5%. Table 4.12 (overleaf) presents percentages of custody and community offenders with hepatitis B and C. It shows that, for hepatitis C, prevalence in young offenders on community orders was 10 times higher, and for the young offenders in custody 18 times higher than rates in the general community. No cases of HIV were detected in either sample.

*The prevalence of HSV-2 increased sharply with six or more sexual partners*

*The rate of infection for:*

- males doubled from 20% (6-10 sexual partners) to 43% (>10 sexual partners)
- females doubled from 14% (3-5 sexual partners) to 29% (6+ sexual partners)

*Prevalence of hepatitis C in young offenders on community orders (5%) was 10 times higher and for young offenders in custody (9%) 18 times higher than rates in the general community (0.5%)*

**Table 4.12 Blood-borne viruses: hepatitis B and C (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Hep B core antibody	4	11	4	18	4	11
Hep B surface antigen	<1	3	1	12	<1	4
Hep B surface antibody	23	n/a	33	n/a	24	n/a
Hepatitis C antibody	3	8	12	18	5	9
<b>Any blood borne virus</b>	4	12	14	29	5	13

a Males=431-49, Females=72-80, T=507-29; (i) M=430 F=73 T= 503; b M=180 F=17 T=187; (i) M=162-81 F=14-17 T=178-97

Table 4.13 provides additional interpretation of the hepatitis B results.<sup>18</sup> Criteria for susceptibility to hepatitis B infection are that one does not have a current or previous infection. Immunity due to vaccination occurs when surface antibody (sAb) is positive and core antibody (cAb) is negative. Immunity or natural infection occurs when both sAb and cAb are positive. Acute or chronic infection is indicated by a positive surface antigen (sAg).

Blood test results from the majority of both male and female young offenders on community orders indicated they were likely to be susceptible to hepatitis B infection with only about one third of males and females having evidence of immunity from hepatitis B vaccination. Among both sexes, a small proportion showed evidence of immunity to hepatitis B infection acquired from a previous hepatitis B infection. Active hepatitis B infection was detected amongst a very small proportion of males (<1%).

*There were low levels of hepatitis B vaccination in males and females*

*Only one third of males and females had evidence of immunity from hepatitis B vaccination*

*Active hepatitis B infection was detected in <1% males and no females*

*There were no cases of hepatitis A*

**Table 4.13 Interpretation of hepatitis B results (%)**

Interpretation	Males	Females	Total
Susceptible to infection	70	62	69
Immune (vaccination)	26	34	27
Immune (natural infection)	3	1	3
Acute or chronic infection	<1	0	<1
Indeterminate	1	3	1

Males=431; Females=73; Total=504

Only 30% of our study population had protective antibody levels. The majority (70%) remained susceptible to hepatitis B, despite the availability of a vaccine. In view of the high prevalence of risky sexual and drug related behaviours, a three-dose course of the HBV vaccine can be given on an accelerated schedule at days 0, 7 and 21 with comparable seroprotection to the traditional 0, 1 and 6 month course.<sup>19,20</sup> A number of publications have shown this strategy to be highly successful and more acceptable than traditional regimens in similar at risk populations.<sup>21,22</sup> (Note: The accelerated dosing schedule applies to a specific brand of HBV vax (Engerix B). HBV vax, which is funded and supplied through NSW Health to support the HBV program is cheaper than Engerix B but is not suited to the accelerated

vaccination schedule. While the accelerated schedule would benefit young offender populations, it has cost implications).

**4.2.3.1 Hepatitis A**

Hepatitis A, although not a blood borne virus, was also tested. None of those screened were positive for hepatitis A antibody. This finding is consistent with community standards where hepatitis A is almost zero for young people.

**4.2.4 Hepatic and metabolic profiles**

A hepatic profile is assessed using blood tests for markers of liver function, liver inflammation and specific tests for viruses that cause hepatitis. A metabolic profile includes blood tests for cholesterol, fats and glucose,



along with physical examination findings for weight, body mass index, waist circumference and blood pressure.

The specific tests undertaken in the following analyses are as follows:

- i Low-density lipoproteins (LDL) transport cholesterol to the arteries starting the formation of plaques. LDL is commonly referred to as bad cholesterol. Increased levels are associated with atherosclerosis, and heart attack, stroke and peripheral vascular disease.
- ii High-density lipoproteins (HDL) or 'good cholesterol' remove cholesterol from arteries and transports it to the liver for excretion or re-utilization. A high level of HDL protects against cardiovascular diseases, and low HDL cholesterol levels [less than 40 mg/dL] increase the risk for heart disease.
- iii Alanine transaminase (ALT) is an enzyme present in liver cells. When a cell is damaged, it leaks this enzyme into the blood, where it is measured. ALT rises dramatically in acute liver damage, such as viral hepatitis or paracetamol overdose. Elevations are often measured in multiples of the upper limit of normal (ULN). The reference range is 0- 50 U/L in most laboratories.
- iv Gamma glutamyl transpeptidase (GGT) is raised in alcohol toxicity (acute and chronic). It is often elevated above normal in hepatitis

and other conditions that cause chemical liver damage.

- v Triglycerides, as major components of very low density lipoprotein (VLDL) play an important role in metabolism as energy sources and transporters of dietary fat. High levels of triglycerides in the bloodstream have been linked to risk of heart disease and stroke. However, the negative impact of raised levels of triglycerides is lower than that of LDL:HDL ratios.

For these analyses, normal ranges for adolescent lipids were taken from *The Cholesterol in Childhood Guidelines*.<sup>23</sup> This suggested that there was an increased risk of cardiovascular disease with total cholesterol  $\geq 5.18$  mmol/L, low density lipoprotein (LDL) cholesterol  $\geq 3.4$  mmol/L, triglycerides  $\geq 2.25$  mmol/L and HDL cholesterol  $\leq 1.03$  mmol/L.

#### 4.2.4.1 Subgroup analysis of young male offenders

More detailed analysis was conducted on the 439 male adolescents with full survey and blood results in this sample. The mean age of this subset was 16.6 years (range 12 -19 years). The majority of males were born in Australia (82.9%), New Zealand (7.2%), Asia (2.7%) or the Middle East (2.3%). Sample characteristics and baseline metabolic and hepatic profile can be seen in Table 4.14 and 4.15.

**Table 4.14 Sample characteristics of males in subgroup analysis**

Males (n=439)	n	%
ESB	292	66.6
Indigenous	72	16.4
CALD	75	17.0
Sydney	312	71
Other metropolitan	68	15.5
Regional	59	13.5
<16 years	91	20.7
16+ years	348	79.3

33% males were either overweight or obese

41% had low HDL cholesterol

Abnormal liver biochemistry:

- 17% young offenders had raised ALT
- 14% had raised GGT

4.4% had been exposed to hepatitis B

3.2% had been exposed to hepatitis C

**Table 4.15 Baseline characteristics of males with blood results: n (%)\***

Males (n=439)	n	%
Age (years) <i>mean (SD)</i>	16.6 (1.3)	
Body Mass Index (BMI) <i>mean (SD)</i>	23.69 (4.9)	
Underweight	15	3.5
Normal weight	266	62.1
Overweight	90	21.0
Obese	57	13.3
Blood sugar levels (mmol/L) <i>mean (SD)</i>	5.8 (1.1)	
Diabetic	5	1.2
Lipid analysis abnormal <sup>i</sup>	-	
LDL cholesterol $\geq$ 3.4 mmol/L	44	10.4
HDL cholesterol $\leq$ 1.03 mmol/L	176	41.4
Triglycerides $\geq$ 2.25 mmol/L	34	8.0
Hep B sAg positive	3	0.7
Hep B sAb not immune	301	70.0
Hep B sAb immune: vaccinated	110	25.6
Hep B cAb positive	19	4.4
Hep C antibody positive	14	3.2
HIV positive	0	0
Liver biochemistry raised: ALT	76	17.5
Liver biochemistry raised: GGT	62	14.3
Liver biochemistry raised: AST	30	6.9

Note: Levels taken from American Academy of Pediatrics (1992).<sup>23</sup> Cholesterol in childhood guidelines: levels conveying excess cardiovascular risk.

BMI, overweight and obesity, Hep C antibody positive, GGT, AST, total cholesterol, LDL cholesterol and triglycerides were significantly associated with raised ALT

Of note, 33% were either overweight or obese, 10% had raised LDL<sup>i</sup> cholesterol and 41% had low levels of HDL<sup>ii</sup> cholesterol. Abnormal liver biochemistry was present in a large number of adolescents with 17% having a raised ALT<sup>iii</sup> and 14% a raised GGT.<sup>iv</sup> Exposure to hepatitis B and C were both more prevalent in this group than the general community with levels of 4.4% and 3.2% respectively.

The cohort with raised ALT was compared with those with normal ALT (Table 4.16, overleaf).

Overweight (33% vs 18%; p=0.004) and obesity (38.7% vs 6.9%; p<0.001) predicted raised ALT. When combined in multivariate analysis these conveyed a risk (OR) of 6.9 (CI 3.7 – 12.8; p < 0.001; Table 4.17). LDL cholesterol, triglyceride<sup>v</sup> and total cholesterol levels were all higher in those with raised ALT (p<0.001), with LDL and triglycerides remaining significant when controlled for BMI (Table 4.17). There were no significant differences in the HDL cholesterol levels for the two groups. Blood sugar levels, the number of diabetics, exercise levels and alcohol consumption were also not important markers for raised ALT.

Hepatitis C antibody positivity conveyed a very high risk 14.6 (CI: 3.7 – 57.6), although the wide confidence interval is a reflection of the small numbers involved. Young offenders with hepatitis B were too few to have any statistical impact. When adolescents with viral hepatitis were excluded, 76% of those remaining were either overweight or obese and 92.2% had one or more features of the metabolic syndrome. Current smokers had lower ALTs, but this was not found to be significant on multivariate analysis (Table 4.17, overleaf).

Table 4.18 (see page 4.18) presents data on the risk factors associated with hepatitis C antibody in the sub group of young male and female offenders who provided blood samples. Fourteen (3.2%) males and nine (17.2%) females were hepatitis C antibody positive (hep C pos). The comparison of this group with those who were hepatitis C antibody negative (hep C neg) is also presented in Table 4.18. Only males had sufficient numbers for multivariate analyses. Available results for females are discussed below.

**Table 4.16 Characteristics of males with and without raised ALT: n (%)\***

Characteristics of males	Raised ALT (≥28 IU/L) n=76	Normal ALT (<28 IU/L) n=359	P value
Age(years) <i>mean (SD)</i>	16.8 (1.4)	16.5 (1.3)	0.173
Body Mass Index (BMI) <i>mean (SD)</i>	28.1 (6.3)	22.6 (3.8)	<0.001
Overweight	25 (33.3%)	63 (18.1%)	0.004
Obese	29 (38.7%)	24 (6.9%)	<0.001
Systolic BP > 140mmHg	8 (10.5%)	22 (6.1%)	-
Blood sugar levels (mmol/L) <i>mean (SD)</i>	5.8 (1.8)	5.8 (0.9)	0.790
Diabetic	1 (1.3%)	4 (1.1%)	0.657
Never exercise or play sport	13 (17.3%)	36 (10.1%)	0.093
Frequent exercise (>2 times/week)	52 (69.3%)	253 (70.9%)	0.828
Current smoker	54 (72%)	301 (84.3%)	0.014
No alcohol use in last 12 months	7 (9.5%)	22 (6.2%)	0.468
Unsafe alcohol use in last 12 months	61 (82.5%)	309 (87.5%)	0.266
Hep B sAg positive	1 (1.3%)	2 (0.6%)	0.96
Hep B sAb not immune	51 (68.9%)	248 (70.7%)	0.815
Hep B sAb immune: vaccinated	20 (27%)	88 (25.1%)	0.757
Hep B cAb positive	3 (4.0%)	14 (4.3%)	0.756
Hep C antibody positive	8 (10.5%)	6 (1.7%)	< 0.001
HIV positive	0 (0%)	0 (0%)	-
GGT (IU/ L) <i>mean (SD)</i>	33.9 (17.4)	17.8 (6.1)	<0.001
Number raised (≥ 28.7)	40 (52.6%)	22 (6.1%)	<0.001
AST (IU/L) <i>mean (SD)</i>	31.7 (26)	16.9 (6.1)	<0.001
Number raised (≥ 32.3)	23 (30.3%)	7 (1.9%)	<0.001
<b>Lipid analysis abnormal</b>			
Cholesterol	4.56 (1)	4.1 (0.8)	<0.001
LDL cholesterol	2.8 (0.77)	2.4 (0.7)	<0.001
HDL cholesterol	1.1 (0.3)	1.1 (0.4)	0.759
Triglycerides	1.68 (0.95)	1.2 (0.57)	<0.001

\*Unless otherwise indicated, cells display n (percent)

Raised ALT in males was strongly associated with anti-HCV and overweight and obesity

Fourteen males and nine females were hepatitis C antibody positive

**Table 4.17 Multivariate analysis factors associated with raised ALT (males only)**

Males	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	P value
Anti-HCV	6.9 (2.3 – 20.4)	14.6 (3.7 – 57.6)	< 0.001
BMI: Overweight or obese	7.7 (4.4 – 13.5)	6.9 (3.7 – 13.1)	< 0.001
Current smoker	0.48 (0.27 – 0.85)	0.49 (0.24 – 0.99)	0.05
Total cholesterol	5.3 (2.8 – 9.9)	3.6 (1.7 – 7.7)	0.01
LDL-cholesterol raised	2.5 (1.5 – 4.2)	-	-
Triglycerides raised	5.0 (2.4 – 10.5)	2.1 (0.9 – 5.0)	0.08

**Table 4.18 Risk factors associated with hepatitis C antibody: n (%)\***

Risk factors	Males			Females		
	Hep C pos (n=14)	Hep C neg (n=425)	P value	Hep C pos (n=9)	Hep C neg (n=66)	P value
Age (years) mean (SD)	17 (0.7)	16.6 (1.3)	0.06	17.2 (1.9)	16.1 (1.1)	0.016
Body Mass Index mean (SD)	24.2 (6.2)	23.7 (4.9)	0.72	22.2 (4)	24.5 (6)	0.27
Overweight	2 (15.4%)	88 (21.2%)	0.77	0 (0%)	17 (25.8%)	0.14
Obese	2 (15.4%)	55 (13.3%)	0.77	1 (11.1%)	9 (13.6%)	0.75
Blood sugar levels (mmol/L) mean (SD)	5.8 (0.7)	5.8 (1.1)	0.42	5.3 (0.4)	5.8 (0.8)	0.12
Never exercise or play sport	6 (42.9%)	43 (10.2%)	< 0.001	2 (22.2%)	17 (25.8%)	0.86
Frequent exercise (>2 times/wk)	7 (50%)	301 (71.3%)	0.115	5 (55.5%)	28 (42.4%)	0.7
Current smoker	12 (85.7%)	344 (81.5%)	0.69	8 (88.9%)	56 (84.8%)	0.86
Alcohol use in past 12 months	12 (85.7%)	388 (93.2%)	0.464	9 (100%)	60 (90.9%)	0.78
None	2 (14.3%)	29 (6.8%)	0.613	0 (0%)	6 (9.1%)	0.8
Unsafe but not too often	12 (85.7%)	339 (79.8%)	0.989	7 (77.8%)	48 (72.7%)	0.94
Illicit drug use in past 12 months	14 (100%)	380 (90.3%)	0.554	-	-	-
Heroin	9 (64.3%)	45 (10.7%)	< 0.001	7 (77.8%)	8 (12.5%)	< 0.001
Marijuana	14 (100%)	379 (90%)	0.21	9 (100%)	56 (87.5%)	0.329
Benzodiazepines	5 (35.7%)	42 (10%)	0.009	6 (66.7%)	15 (23.4%)	0.014
Amphetamines	12 (85.7%)	196 (46.6%)	0.004	8 (88.9%)	35 (54.7%)	0.05
Cocaine	4 (28.6%)	71 (16.9%)	0.28	5 (55.6%)	12 (18.8%)	0.03
Injected drugs in past 12 months	7 (50%)	23 (5.5%)	< 0.001	6 (66.7%)	9 (14.1%)	< 0.001
Unsafe injection in past 12 mths	5 (71.4%)	6 (26.1%)	0.068	5 (55.5%)	2 (3%)	< 0.001
Lifetime sexual partners >11	6 (42.8%)	102 (24.7)	0.221	2 (22.2%)	10 (15.1%)	0.95
Sexually transmitted diseases	7 (50.0%)	110 (25.9%)	0.078	5 (55.6%)	20 (30.8%)	0.32
Sex workers	1 (7.1%)	2 (0.5%)	0.191	1 (11.1%)	0 (0%)	0.12
Condom use with casual sex: never / not always	8 (57.1%)	145 (40.3%)	0.141	3 (33.3%)	34 (51.5%)	0.5
Body Piercing or Tattoos	9 (69.1%)	218 (51.9%)	0.51	8 (88.9%)	56 (87.5%)	0.86
Hep B sAg positive	1 (7.1%)	2 (0.5%)	0.09	0 (0%)	1 (1.6%)	0.89
Hep B sAb not immune	6 (42.9%)	295 (70.9%)	0.050	5 (55.5%)	40 (60.6%)	0.94
Hep B sAb immune: vaccinated	5 (35.7%)	105 (25.2%)	0.354	2 (22.2%)	23 (34.8%)	0.7
Hep B cAb positive	3 (21.4%)	16 (3.8%)	0.02	2 (22.2%)	1 (1.6%)	0.038
HIV positive	0 (0%)	0 (0%)	-	0 (0%)	0 (0%)	-
ALT mean (SD)	73.3 (130.5)	20.9 (15)	0.03	74.4 (61)	17.1 (14.5)	0.02
Number raised (>28)	8 (57.1%)	68 (16.3%)	< 0.001	6 (66.6%)	5 (7.6%)	< 0.001
LDL cholesterol (mmol/L) mean (SD)	2.3 (0.5)	2.5 (0.8)	0.82	2.6 (0.7)	2.6 (0.7)	0.93
Number raised (>3.3)	0	44 (10.7%)	0.20	0	7 (11.1%)	-
Triglycerides (mmol/L) mean (SD)	1.36 (0.6)	1.26 (0.7)	0.98	1 (0.5)	1.2 (0.8)	0.34
Number raised (>2.3)	2 (15.4%)	32 (7.8%)	0.32	0	4 (6.3)	-

\*Unless otherwise indicated, cells display n (percent)

**4.2.4.2 Hepatitis C: Young female offenders**

A separate (univariate) analysis of risk factors associated with hepatitis C antibody positive in females was also conducted (see Table 4.18 above). There were insufficient cases for multivariate analyses. Interpretation of significance results for the female sub group needs to be treated cautiously because of the

small number of young women who were hepatitis C antibody positive. However, the results of univariate analyses show that the risk factors for females are essentially the same as those for young male offenders - heroin use, injected drugs in the past 12 months (young women showed a stronger tendency to inject unsafely) and more likely to be poly substance users (benzodiazepines, amphetamines and cocaine).

Risk factors for hepatitis C antibody were the same for males and females:

- heroin use
- injected drugs in the past 12 months
- poly-substance users (benzodiazepines, amphetamines and cocaine)

Females with hepatitis C were more likely to engage in unsafe injecting practices

The rate of infection was much higher in females than for males. Seventy-five (75) young women had usable blood samples. Of these, nine (12%) tested positive for hepatitis C antibody. The prevalence of hepatitis C (12%, 9 of 75) is four times the rate of infection compared with males in the sample and given that general community prevalence is estimated at 0.1-0.4%

for this age group of females, these young female offenders have a rate that is almost 100 times community rates.

#### 4.2.4.3 Multivariate analyses for male sub group only

Table 4.19 summarises the multivariate analyses for males.

**Table 4.19 Unadjusted and adjusted Odds Ratios (OR) and Confidence Intervals (CI) for factors associated with hepatitis C antibody for males**

Males	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	P value
Raised ALT (liver biochemistry)	6.9 (2.3 - 20.4)	7.4 (2.2 - 25.3)	0.001
Hepatitis B cAb positive	6.8 (1.7 - 26.9)	7.1 (1.3 - 39.9)	0.02
Injected drugs in past 12 months	17.3 (5.6 - 53.6)	7.8 (1.9 - 31.4)	0.004
Amphetamine use in past 12 months	6.8 (1.5 - 31.2)	3.4 (0.6 - 18.5)	0.16
Benzodiazepine use in past 12 months	5.0 (1.6 - 15.8)	1.6 (0.4 - 6.6)	0.55
Heroin use in past 12 months	15.0 (4.8 - 46.8)	-	-
Never play sport or exercise	6.0 (1.9 - 18.6)	-	-

Those young male offenders with hepatitis C antibody were significantly more likely to have injected drugs in the past 12 months (OR 7.8; CI 1.9 - 31.4), have been exposed to hepatitis B (OR 7.1; CI 1.3 - 39.9) and have a raised ALT (OR 7.4; CI 2.2 - 25.3). Use of heroin was highly significant on univariate analysis ( $p < 0.001$ ), but clearly followed injecting drug use and lost significance on multivariate testing (Table 4.19). Amphetamine (OR 3.4) and benzodiazepine use (OR 1.6) appeared more common in the group with hepatitis C, but were not significant in the multivariate analysis, possibly due to the small numbers involved. Young hepatitis C positive offenders did not have any increased incidence of risk taking sexual activity when compared to their peers as indicated by similar levels of condom use with casual sex, number of previous sexual partners and incidence of sexually transmitted infections (Table 4.18). While metabolic parameters such as BMI and blood sugar levels were not statistically different between the two groups it did appear that the hepatitis C positive cohort were more likely to never exercise or play sport (42.9% vs 10.2%;  $p < 0.01$ ). However, it was their drug use rather than their hepatitis C status that limited their activity.

The most significant risk factor for hepatitis C in males was intravenous drug use. In the 30 current injectors, 7 (23%) were hepatitis C positive. Seventy-one percent (71%) of those with hepatitis C had injected drugs in the past, 54% within the past 12 months, consistent with epidemiological reports that suggest most hepatitis C is acquired in this manner.<sup>24,25</sup> Sexual behaviour was not an important risk factor for hepatitis C as has been shown by a number of other studies.<sup>26,27,28</sup> In view of the relatively high sexual promiscuity in this group, the lack of an association with hepatitis C antibody transmission is significant, although in contrast to a CDC report that suggested 25% of transmission occurred sexually.<sup>25</sup>

Seventeen (17%) males testing positive for hepatitis C antibody had a history of injecting drug use only, 26% tattooing/body piercing only, and 52% a history of both injecting and tattooing/body piercing (5% had missing data on one or more items).

Hepatitis C prevalence was 3.2%, consistent with a report of juvenile offenders from the United States,<sup>29</sup> but lower than a previous Australian report<sup>30</sup> where 21% were hepatitis C positive; although this figure was likely due to extraordinarily high rates of intravenous drug

*Of the 75 females with blood samples, nine (12%) tested positive for hepatitis C antibody, a rate four times the rate of infection compared with males in the sample, and 100 times greater than the rate in the general community (0.1-0.4%) of same-age females*

*In males, hepatitis C antibody positive was associated with:*

- Prior hepatitis B exposure (HepB c Ab)
- Higher ALT
- Heroin use in past 12 months
- Injecting drug use in past 12 months

*Hepatitis C was not associated with:*

- More promiscuous sexual practices (number sexual partners, use of condoms)
- Metabolic syndrome

use in the small sample studied. Hepatitis C antibody was detected at a rate 10 to 40 times that of similar aged adolescents in the United States and Italy.<sup>31,32,33</sup>

The rate of viraemia in the hepatitis C positive adolescents was lower than expected at 42% (5/12, 2 missing). In general, rates of persistent infection of 50-70% are expected in this age group.<sup>31</sup> It is possible this is an underestimation. The blood was not spun down straight after collection and in many cases did not reach the laboratory for 24 hours. Further, the PCR analysis took place a year after collection which may have affected the integrity of the samples.<sup>34</sup>

A follow up blood sample was taken at 12 months post survey to assess the seroconversion rate of this cohort for hepatitis B, C and HIV. Table 4.20 shows the new infection rate at the 12 month follow up of the sub group (n=81)

with blood samples at time 2.

In the following 12 months three new cases were detected (3.7%). Of the positive hepatitis cases, none developed chronic disease (sAg). It is known from a number of studies that hepatitis C positivity is extremely high in incarcerated adults, with rates of between 8%<sup>33</sup> and 37%.<sup>35</sup> Given that recidivism rates of up to 69% are common in these adolescents<sup>36,37</sup> there is a clear window of opportunity while they are under supervision to try to reduce future hepatitis C transmissions and infection.

**Table 4.20 12 month follow up of subgroup (n=81) with blood samples at time 2**

Serology	New cases	Cumulative
Hep B sAg	0 (0%)	3
Hep B cAb	3 (3.7%)	22
Hep C antibody	3 (3.7%)	26
HIV	0 (0%)	0

**4.2.4.4 Hepatitis C and liver biochemistry: Comparison of Aboriginal and non-Aboriginal young offenders**

The analysis reported for males and females above was repeated for Aboriginal and non-Aboriginal young offenders. Table 4.21 shows the baseline characteristics. There were no significant differences found between these two groups on any of the baseline characteristics assessed.

Table 4.22 presents factors associated with raised ALT for Aboriginal and non-Aboriginal young offenders. Once again, the profiles for the two groups were similar; the main difference was a higher rate of dyslipidemia in the non-Aboriginal group. Dyslipidemia is a disruption in the amount of lipids in the blood. In western societies, most dyslipidemias are hyperlipidemias; that is, an elevation of lipids in the blood, often due to poor diet and lifestyle.

**Table 4.21 Baseline characteristics of Indigenous vs non-Indigenous young offenders**

Risk factors	Indigenous (n=95)	Indigenous (n=419)
Age (years) mean	16.2	16.6
Male gender	73 (76.8%)	366 (87.4%)
Body Mass Index (BMI) mean	23.3	23.9
Underweight	4 (4.4%)	15 (3.7%)
Normal weight	60 (65.9%)	248 (60.5%)
Overweight	12 (13.2%)	95 (23.2%)
Obese	15 (16.5%)	52 (12.7%)
Blood sugar levels mmol/L mean	5.7	5.8
Diabetic	1 (1.1%)	5 (1.2%)
Lipid analysis abnormal <sup>23</sup>		
LDL cholesterol ≥ 3.4 mmol/L	47 (49.5%)	194 (46.5%)
Triglycerides ≥ 2.25 mmol/L	21 (22.1%)	99 (23.7%)
Hep B sAg positive	1 (1.1%)	3 (0.7%)
Hep B sAb not immune	58 (62.4%)	288 (70.2%)
Hep B sAb immune: vaccinated	32 (34.4%)	103 (25.1%)
Hep B cAb positive	4 (4.3%)	18 (4.4%)
Hep C antibody positive	5 (5.3%)	18 (4.3%)
HIV positive	0 (0%)	0 (0%)
Liver biochemistry raised: ALT <sup>1</sup>	17 (17.9%)	70 (17.1%)
Liver biochemistry raised: GGT <sup>1</sup>	13 (13.7%)	66 (15.9%)
Liver biochemistry raised: AST <sup>1</sup>	5 (5.3%)	38 (9.1%)

\*Unless otherwise indicated, cells display n (percent); <sup>1</sup>According to analysis in this subsample

Those positive for hepatitis C were more likely to be:

- Older
- Users of heroin and other drugs
- Drug injectors (and unsafe)
- Have been exposed to Hep B (cAb)
- Have a raised ALT (liver inflammation)
- Not more sexually promiscuous or risk taking

Recommendations for all females:

- Vaccinate for hepatitis B
  - Educate about hepatitis C and clean needles
- Recommendations for hepatitis C positive:
- Antiviral treatment
  - Detoxification (methadone/ naltrexone)

In the 12 month follow up three new cases (3.7%) of hepatitis C were detected

**Table 4.22 Factors associated with raised ALT: Indigenous vs non-Indigenous**

Factors associated with ALT	Indigenous (n=95)			Non-Indigenous (n=410)		
	Raised ALT n=17	Normal ALT n=78	P value	Normal ALT n=69	Raised ALT n=341	P value
Age (years) mean	16.4	16.1	NS	16.9	16.6	NS
Body Mass Index (BMI) mean	29.7	22.1	< 0.001	27.9	22.9	< 0.001
Overweight	1 (6.3%)	11 (14.7%)	NS	24 (34.3%)	68 (20.5%)	0.001
Obese	9 (56.3%)	6 (8%)	< 0.001	24 (34.3%)	24 (7.3%)	< 0.001
Systolic BP > 140mmHg	1 (5.9%)	7 (9%)	NS	7 (10%)	17 (5%)	NS
Blood sugar levels (mmol/L) mean	5.4	5.8	NS	5.7	5.8	NS
Diabetic	0 (0%)	0 (0%)	-	1 (1.4%)	4 (1.2%)	NS
Never exercise or play sport	4 (23.5%)	6 (7.9%)	NS	11 (15.9%)	47 (13.9%)	NS
Frequent exercise	12 (70.5%)	57 (75%)	NS	48 (69.6%)	218 (63.5%)	NS
Current smoker	10 (58.8%)	64 (84.2%)	NS	53 (76.8%)	287 (84.9%)	NS
No alcohol in past 12 months	1 (5.9%)	10 (13.3%)	NS	8 (11.8%)	16 (4.8%)	NS
Unsafe alcohol use in past 12 mths	13 (82.4%)	58 (77.4%)	NS	55 (80.9%)	300 (89.3%)	NS
Hep B sAg positive	0 (0%)	1 (1.3%)	NS	1 (1.4%)	2 (0.6%)	NS
Hep B sAb not immune	6 (37.5%)	52 (67.5%)	0.03	50 (72.5%)	233 (70%)	NS
Hep B sAb immune: vaccinated	9 (56.3%)	23 (29.9%)	NS	15 (21.7%)	86 (25.8%)	NS
Hep B cAb	2 (11.8%)	2 (2.6%)	NS	3 (4.3%)	14 (4.2%)	NS
Hep C antibody	4 (23.5%)	1 (1.3%)	< 0.001	10 (14.3%)	8 (2.4%)	< 0.001
HIV positive	0 (0%)	0 (0%)	-	0 (0%)	0 (0%)	-
GGT raised ( $\geq 28.7$ )	9 (52.9%)	4 (5.1%)	< 0.001	38 (54.3%)	22 (6.5%)	< 0.001
AST raised ( $\geq 32.3$ )	4 (23.5%)	1 (1.3%)	0.003	27 (38.6%)	5 (1.5%)	< 0.001
Cholesterol level mmol/L mean	4.2	4.1	NS	4.7	4.0	< 0.001
LDL cholesterol mmol/L mean	2.6	2.6	NS	2.9	2.4	< 0.001
HDL cholesterol mmol/L mean	1.1	1.1	NS	1.1	1.1	NS
Triglycerides mmol/L mean	1.7	1.1	0.03	1.6	1.1	< 0.001

Table 4.23 shows that the two groups are largely the same. Lack of statistical significance (NS) for some factors in the Aboriginal sample may be due to small numbers rather than lack of a true difference compared with non-Aboriginal young offenders.

**Table 4.23 Factors associated with hepatitis C antibody positive: Indigenous vs non-Indigenous**

Factors associated with Hep C	Indigenous (n=95)			Non-indigenous (n=419)		
	Hep C pos n=5	Hep C neg n=90	P value	Hep C neg n=18	Hep C neg n=398	P value
Age (years) mean	16	16.2	NS	17.4	16.6	NS
Male gender	4 (80%)	69 (76.7%)	NS	10 (55.6%)	356 (88.8%)	NS
Body Mass Index (BMI) mean	27.8	22.9	NS	22	23.9	NS
Overweight	0 (0%)	12 (13.3%)	NS	2 (11.8%)	93 (23.7%)	NS
Obese	2 (40%)	13 (15.1)	NS	1 (5.9%)	51 (13%)	NS
Blood sugar levels (mmol/L) mean	5.1	5.7	NS	5.7	5.8	NS
Never exercise or play sport	3 (60%)	7 (9.3%)	NS	5 (33.3%)	53 (16.8%)	NS
Current smoker	3 (60%)	71 (80.7%)	NS	17 (94.4%)	329 (82.7%)	NS
Substance use in past 12 months						
Alcohol: none	0 (0%)	11 (12.6%)	NS	2 (11.1%)	18 (6.1%)	NS
Alcohol: unsafe	5 (100%)	67 (77%)	NS	16 (88.9%)	345 (87.4%)	NS
Heroin	3 (60%)	8 (9.1%)	0.007	13 (72.2%)	45 (11.3%)	< 0.001
Marijuana	5 (100%)	80 (90.9%)	NS	18 (100%)	355 (89.4%)	NS

There were no differences between Aboriginal and non Aboriginal young offenders on BMI, blood sugar, lipid analysis, hepatitis or liver biochemistry

Both Aboriginal and non-Aboriginal young offenders who were Hep C positive were more likely to have used heroin, to have injected drugs and to have injected unsafely in the past 12 months

**Table 4.23 Factors associated with hepatitis C antibody positive: Indigenous vs non-Indigenous (cont)**

Factors associated with Hep C	Indigenous (n=95)			Non-indigenous (n=419)		
	Hep C pos n=5	Hep C neg n=90	P value	Hep C neg n=18	Hep C neg n=398	P value
Benzodiazepines	2 (40%)	12 (13.6%)	NS	9 (50%)	45 (11.3%)	< 0.001
Amphetamines	4 (80%)	35 (39.8%)	NS	16 (88.9%)	196 (49.4%)	0.002
Cocaine	2 (40%)	8 (9.1%)	NS	7 (38.9%)	75 (18.9%)	NS
Injected drugs	2 (40%)	5 (5.7%)	0.05	10 (55.6%)	27 (6.7%)	< 0.001
Unsafe injection of drugs	2 (40%)	1 (1.1%)	<0.001	8 (44.5%)	7 (1.6%)	< 0.001
Lifetime sexual partners >11	3 (60%)	22 (24.7%)	NS	6 (33.3%)	101 (25.4%)	NS
Sexually transmitted infections	2 (40%)	27 (30.3%)	NS	10 (55.6%)	103 (25.9%)	0.02
Sex workers	0 (0%)	0 (0%)	NS	2 (11.1%)	2 (0.5%)	0.001
Condom use with casual sex: never / not always	3 (60%)	41 (53.2%)	NS	8 (51.1%)	138 (41.2%)	NS
Body piercing or tattoos	3 (60%)	50 (57.5%)	NS	15 (82.4%)	224 (56.6%)	0.05
Hep B sAg positive	0 (0%)	1 (1.1%)	NS	1 (5.6%)	2 (0.5%)	NS
Hep B sAb not immune	2 (40%)	56 (63.6%)	NS	9 (50%)	279 (71.2%)	NS
Hep B sAb immune: vaccinated	2 (40%)	30 (34.1%)	NS	5 (27.8%)	98 (25%)	NS
Hep B cAb	1 (20%)	3 (3.4%)	NS	4 (22.2%)	14 (3.6%)	< 0.001
HIV positive	0 (0%)	0 (0%)	-	0 (0%)	0 (0%)	-
ALT number raised (>28)	4 (80%)	13 (14.4%)	0.002	10 (55.6%)	60 (15.3%)	< 0.001
LDL cholesterol mmol/L mean	2.6	2.5	NS	2.3	2.5	NS
Triglycerides mmol/L mean	1.8	1.2	NS	1.1	1.3	NS

Very few young offenders had accurate knowledge of how HIV (14%), hepatitis B (3%) and C (4%) are transmitted

**4.3 Health education**

Murray et al. (2003)<sup>29</sup> have shown that the majority of juvenile offenders have a very poor understanding about the transmission of hepatitis C and other blood borne viruses. Only 17% of their cohort could correctly identify

risk behaviours for hepatitis C and only 5% knew it was a disease affecting the liver. Our sample showed a similar level of ignorance and misinformation as those in Murray et al. Table 4.24 shows the proportion of young offenders who could correctly identify how HIV, hepatitis B and hepatitis C are contracted.

**Table 4.24 Young offenders' knowledge of how HIV, hepatitis B & C are contracted (%)**

Knowledge area	Males	Females	Total
<b>Knowledge of how to contract HIV</b>			
None / inaccurate	20	24	21
Mixed	66	62	65
Accurate	14	14	14
<b>Knowledge of how to contract hepatitis B</b>			
None / inaccurate	67	62	66
Mixed	31	35	32
Accurate	3	3	3
<b>Knowledge of how to contract hepatitis C</b>			
None / inaccurate	68	60	67
Mixed	28	34	28
Accurate	4	6	4
<b>Overall knowledge (of all of the above)</b>			
None / inaccurate	19	22	19
Mixed	65	59	64
Accurate	16	19	16

Males=671, Females=116, Total=787



A number of strategies need to be employed to reduce the burden of hepatitis C amongst this population.

One cost effective strategy would be to give each young person coming into contact with the juvenile system prompt cards with simple health messages such as:

To avoid contracting hepatitis C:

1. Cover open wounds
2. Never share IV drug needles, other drug equipment, razors, toothbrushes, manicure

tools or other items that could contain contaminated blood

3. Always use sterile equipment when having piercings or tattoos
4. Limit alcohol intake.

#### 4.4 Women's health

Tables 4.25 to 4.27 display data on young female offenders' menstruation, Pap smear and reproductive history.

**Table 4.25 Menstruation history (%)**

Menstruation	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Age of first menstrual period<sup>†</sup></b>		
<9	1	0
9 to 10	8	6
11 to 12	52	35
13 to 14	33	41
> 14	6	18
<b>Regular periods</b>	<b>74</b>	<b>82</b>
<b>Last period</b>		
<1 month	71	0
1 to 2 months ago	16	92
>3 but <4 months ago	3	0
>4 but < 6 months ago	2	0
>6 but <12 months ago	8	8
>12 months ago	1	0
<b>Period pain, discomfort and other problems</b>		
Heavy	4	18
Painful	27	47
Heavy and painful	13	6

a 112-113; b 17

Human papillomavirus (HPV) infection is one of the most common sexually transmitted infections (STIs) in young women. It is also strongly implicated in the development of cervical cancer. First infection most commonly occurs between 15 and 25 years.<sup>38</sup> Early detection and treatment of pre-cancerous lesions through Pap smear as part of the National Cervical Screening Program has resulted in a decline in cervical cancer incidence and mortality over the past two decades.<sup>39</sup> However, in 2003–2004, less than 50% of young women aged 20–24 years participated in the National Cervical Screening Program.

International data show that only 12-45% of sexually active adolescent girls have obtained Pap smear screening. A recent study of 234 Italian young women aged 11-21 years who had cytology and/or physical examination suspicious for HPV infection reported that only

85 (36.3%) used condoms, the only barrier form of contraceptive effectively protecting against virus, indicating a low awareness of the high risk for contracting HPV infection among young sexually active women.<sup>40</sup>

In a prospective cohort of pregnant adolescents aged 17 years or younger in Western Australia, high prevalences of both chlamydia (27%) and Pap-smear abnormalities (38%) were detected in the screened cohort. The majority of Pap-smear abnormalities were inflammatory atypia, but high-grade Bethesda lesions were also diagnosed.<sup>41</sup>

Table 4.26 (overleaf) shows that only 33% of young female offenders had ever had a Pap smear. This is of concern, given their early initiation into sexual activity, risky sexual practices and the prevalence of abnormal results from the sub sample who reported having a Pap smear. In Australia, in 2007, a

85% young women commenced menstruation between 11-14 years

44% reported heavy bleeding, painful periods, or both

Despite their early age of onset of sexual intercourse, only 33% of the young female offenders had ever had a Pap smear

**Table 4.26 Pap smear history (%)**

Pap smear	Community <sup>a</sup>	Custody <sup>b</sup>
Had pap smear <sup>i</sup>	33	59
<b>Frequency of pap smears<sup>ii</sup></b>		
Once only	54	60
Twice a year	11	10
Yearly	14	10
Once every two years	22	20
<b>Site of last pap smear<sup>ii</sup></b>		
Custody	22	70
Community	78	30
<b>Time of last pap smear<sup>ii</sup></b>		
Past 6 months	39	70
>6 and <12 months	25	20
>12 months and >2 years	28	0
>2 years and <4 years	3	10
>4 years	6	0
<b>Abnormal results<sup>iii</sup></b>	<b>6</b>	<b>14</b>

a (i) 113; (ii) 36-37; (iii) 31; b (i) 17; (ii) 10; (iii) 7

Of the 33% who reported having had a Pap smear, 22% had it while in custody

6% reported abnormal Pap smear results

Of the 119 young female offenders in the community sample:

- 29% (35) had been pregnant
- 10% (12) were mothers of one or more children
  - 11% (15) reported at least one miscarriage
  - 10% (12) reported at least one termination of pregnancy

cervical cancer vaccine was made available to all young women aged 16 to 26 years. The vaccine targets HPV-16, which is found in 50 percent of cervical cancers. Pap smears are, however, still advisable because the vaccine only targets one of the many HPVs.<sup>41</sup>

A sexually active female adolescent who does not use contraception has a 90% chance of becoming pregnant within a year. Teens are more likely to become pregnant if they:

- Begin dating early (dating at age 12 is associated with a 91% chance of being sexually involved before age 19, and dating at age 13 is associated with a 56% probability of sexual involvement during adolescence)
- Use alcohol and/or other drugs, including tobacco products
- Drop out of school
- Have no support system or few friends
- Lack involvement in school, family, or community activities

- Think they have little or no opportunity for success
- Live in a community or attend a school where early childbearing is common and viewed as normal rather than as a cause for concern
- Grow up in poverty
- Have been a victim of sexual abuse or assault
- Have a mother who was 19 or younger when she first gave birth.<sup>43</sup>

Table 4.27 presents the reproductive history of young females offenders including pregnancies, termination and miscarriages.

Of the 118 young female offenders in the community orders sample, 29% (34) had been pregnant 10%; n=12 were mothers of one or more children, 11%; n=15 reported having had at least one miscarriage, and 10%; n=12 reported terminations of pregnancy.

**Table 4.27 Reproductive history: Pregnancy, terminations, miscarriages (%)**

Pregnancy	Community <sup>a</sup>	Custody <sup>b</sup>
Pregnant at some time	29	29
Currently pregnant	2	0
Had terminated pregnancy	14	12
Had miscarriage	11	12

a 111-117; b 16-17

## 4.5 Summary and conclusions

The sexual histories of this group of young offenders are cause for serious concern. Most young offenders (88%) reported having had sexual intercourse, including oral and anal sex, commencing at a median age of 14 years. Most had three or more sexual partners. With casual partners, 23% reported never using condoms or using them less than half the time; with regular partners 45% reported never using condoms or using them less than half the time.

Three percent (3%) reported either homosexual or bisexual orientation. Three percent (3%) had sex in order to obtain drugs or money and 8% had experienced unwanted sex including gang, date and acquaintance rape and incest.

Twenty-three percent (23%) females and 14% males had a STI or BBV, including Herpes simplex virus-2, chlamydia and gonorrhoea, and hepatitis B and C. Rates of infection far exceeded rates in same aged community samples. Despite this, very few young people

had accurate knowledge of how HIV, hepatitis B and C are transmitted. Hepatitis C antibody positive was associated with prior hepatitis B exposure (HepB c Ab), higher ALT, heroin use in past 12 months and injecting drug use in past 12 months. There were very few differences between male and female or Aboriginal and non-Aboriginal young offenders. There were low levels of hepatitis B vaccination in both males and females.

Of the 118 young female offenders in the community sample, 29% (n=35) had been pregnant, 10% (n=12) were mothers of one or more children, 11% (n=15) reported at least one miscarriage, 10% (n=12) reported at least one termination of pregnancy.

Although public agencies and health and education departments can play a vital role in improving the sexual behaviour and health of young offenders, parents can also be educated with respect to the positive influence they can potentially have on developing positive sexual attitudes and behaviour in their children.

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# CHAPTER 5

## LIFESTYLE

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# 5. LIFESTYLE

## 5.1 Diet and nutrition

Prevention of overweight and obesity at an early age is essential. One third of obese preschool children become obese adults, as do half of obese school-aged children. Remission rates are low (<1% per year) and decline with age.<sup>1</sup>

In a longitudinal study of more than 10,000

9-14 year olds, increase in body mass index (BMI) was found to be higher in those who reported more time playing TV/videos/games and in those who increased their caloric intakes. Cumulative effects during the adolescent years produced substantial gains in body weight.<sup>1</sup> Table 5.1 displays young offenders' eating habits and frequency of consumption of certain food types.

**Table 5.1 Reported dietary/nutritional intake (%)**

Food/drink type	Never		1-2 per week		3-4 per week		Every day	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Males</b>								
Milk	9	-	19	-	14	-	58	-
Fruit juice	10	-	34	-	21	-	35	-
Breakfast	22	35	24	12	21	13	33	40
Eat fresh vegetables	15	15	27	27	27	22	32	36
Meat pie / burger*	4	8	32	38	33	26	30	28
Fresh fruit	15	20	39	33	20	19	26	29
Take away food	6	9	41	42	32	26	20	22
Potato chips	11	10	39	45	30	23	20	22
Sweet foods**	13	10	43	41	25	20	18	29
Garden salad	25	-	39	-	19	-	18	-
<b>Females</b>								
Milk	22	-	17	-	14	-	47	-
Fruit juice	14	-	28	-	17	-	41	-
Breakfast	34	41	25	24	21	6	21	29
Eat fresh vegetables	16	18	24	18	19	18	41	47
Meat pie / burger*	10	12	49	41	24	12	16	35
Fresh fruit	16	24	39	59	20	0	26	18
Take away food	11	6	54	53	19	6	16	35
Potato chips	10	18	44	29	31	18	15	35
Sweet foods**	12	12	42	53	24	0	22	35
Garden salad	30	-	36	-	16	-	19	-

a Males=668-669, Females=114-116; b M=205, F=17; \*Meat pie/burger/hot dog; \*\*Biscuit/doughnut/chocolate/ice-cream /cake

Table 5.2 presents preferred drinks when thirsty. Energy drinks, coffee and tea were preferred by fewer than 1% of both samples.

**Table 5.2 Preferred drink when thirsty (%)**

Preferred drink	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Water	58	45	67	59	59	46
Soft Drink	22	34	17	29	22	33
Fruit Juice	7	11	9	6	8	10
Milk	7	7	3	0	6	6
Cordial	5	3	3	6	5	3
Alcohol	0	2	0	0	0	1

a Males=665, Females=116, Total=781; b Males=197, Females=17, Total=214

22% males and 34% females never ate breakfast

15% never ate fresh fruit or vegetables

9% males and 22% females never drank milk

20% males, 16% females ate take away food every day

Water was the preferred drink for 59% young offenders, followed by soft drink (22%)

No young offender nominated alcohol as their preferred drink

## 5.2 Weight, weight management and weight perceptions

Overweight and obesity are among the most common health problems facing young people throughout the world.<sup>2</sup> The prevalence of overweight and obesity in young people has been increasing over several decades, with the most recent figures from Australia suggesting that 30% of boys and 25% of girls are either overweight or obese.<sup>3</sup> A number of studies have suggested that young people from low socioeconomic backgrounds have a higher prevalence of overweight and obesity than those from higher socioeconomic groups<sup>3,4,5,6</sup> and that some cultural groups may be at increased risk.<sup>7</sup>

Body Mass Index (BMI) is calculated by the algorithm [weight in kilograms divided by (height in metres<sup>2</sup>)] for all ages. For people under 18 years of age, BMI cut-off curves for overweight and obesity are defined to pass through the standard adult cut-offs of 25 kg/

m<sup>2</sup> for overweight and 30 kg/m<sup>2</sup> for obesity. Substantial data link these cut-off points with disease risk in children and adults.<sup>8,9</sup>

For people 18 years of age or more, a BMI of less than 18.5 kg/m<sup>2</sup> may be used to classify underweight. For this survey, cut-offs on a curve passing through this value were used to identify underweight people under 18 years of age.<sup>10</sup> Four percent (4%) young offenders (3% males and 4% females) were underweight.

Comparison data were taken from the *Schools Physical Activity and Nutrition Survey (SPANS)*,<sup>3</sup> a study of overweight and obesity in school-attending adolescents. Data for 14-16 year olds are included in the table for comparison with young offender data. Rates of obesity were higher in the community offender sample for 16 year old males and females compared with the SPANS sample.

Table 5.3 reports BMI results for young offenders on community orders, 34% of whom were either overweight or obese.

34% young offenders were either overweight or obese

4% were underweight

23% 16 year old males were obese compared with 3% from the SPANS sample

13% of 16 year old females were obese compared with none from the SPANS sample

**Table 5.3 Body mass index for young offender samples and SPANS sample (%)**

	Males			Females			Total	
	Comm. <sup>a</sup>	Custody <sup>b</sup>	SPANS	Comm. <sup>a</sup>	Custody <sup>b</sup>	SPANS	Comm. <sup>a</sup>	Custody <sup>b</sup>
<b>Obese</b>								
14 years and under <sup>i</sup>	10	6	10	9	0	4	10	6
15 years <sup>ii</sup>	11	5	7	4	50	4	10	8
16 years <sup>iii</sup>	23	11	3	13	0	0	21	11
17 years <sup>iv</sup>	12	13	-	19	0	-	13	12
18 years <sup>v</sup>	12	10	-	21	0	-	12	9
19 years and over <sup>vi</sup>	14	30	-	0	0	-	12	30
<b>Total<sup>vii</sup></b>	<b>14</b>	<b>11</b>	<b>-</b>	<b>13</b>	<b>11</b>	<b>-</b>	<b>14</b>	<b>11</b>
<b>Overweight</b>								
14 years and under <sup>i</sup>	26	18	22	9	0	19	23	18
15 years <sup>ii</sup>	15	14	18	25	0	13	17	13
16 years <sup>iii</sup>	13	28	24	37	0	12	18	28
17 years <sup>iv</sup>	19	19	-	16	0	-	19	18
18 years <sup>v</sup>	26	23	-	7	0	-	24	21
19 years and over <sup>vi</sup>	37	15	-	50	0	-	38	15
<b>Total<sup>vii</sup></b>	<b>20</b>	<b>21</b>	<b>-</b>	<b>22</b>	<b>0</b>	<b>-</b>	<b>20</b>	<b>20</b>

a (i) Males=48; Females=12; T=60; (ii) M=91; F=25; T=116; (iii) M=143 F=30 T=173; (iv) M=224 F=33 T=257; (v) M=139 F=14 T=153; (vi) M=22 F=4 T=26; (vii) M=667 F=118 T=785; b (i) M=17 F=0 T=17; (ii) M=22 F=2 T=24; (iii) M=46 F=1 T=47; (iv) M=70 F=3 T=73; (v) M=31 F=3 T=34; (vi) M=13 F=0 T=13; (vii) M=199 F=9 T= 20

Table 5.4 (overleaf) reports on self-description of weight, weight change efforts and weight loss in past four weeks (prior to survey).

**Table 5.4 Body image and weight change effort and weight loss in last four weeks (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Self-description of weight<sup>i</sup></b>						
Very underweight	6	4	4	0	5	4
Slightly underweight	27	19	12	18	25	19
About the right weight	49	55	42	53	48	55
Slightly overweight	17	18	29	18	18	18
Very overweight	2	4	12	12	3	4
<b>Weight change efforts<sup>ii</sup></b>						
Not trying to do anything	45	21	41	29	45	22
Gain weight	33	45	10	14	30	43
Lose weight	10	7	38	14	14	8
Stay the same weight	11	27	11	43	11	28
Put on muscle	<1	0	0	0	<1	0
<b>Weight loss behaviours in last 4 weeks<sup>i</sup></b>						
Eat less food/fat/calories	5	8	18	29	7	9
Not eat for 24hrs/more	2	2	8	0	3	2
Vomit/take laxatives	<1	0	3	0	1	0

a (i) Males=661-6, Females=115-6, Total=777-82; b (i) M=184-201, F=14-17, T=198-218

Females were more likely to describe themselves as overweight, and to have made efforts to lose weight (using all three methods listed in table 5.4) during the last four weeks; in contrast, males were more likely to describe themselves as underweight and to have made efforts to gain weight during the last four weeks. Of the young offenders in the community who had tried to lose weight through caloric restriction (eating less food, fat or calories), 59% (n=27) did so on at least 14 days in the past four weeks. By contrast, 91% (n=20) of those who used fasting (not eating for 24 hours or more) or purging (vomiting or taking laxatives) to lose weight did so on 7 or fewer days in the past four weeks. A similar pattern was evident in the custody sample.

### 5.3 Risk factors for cardiovascular disease and fatty liver

Cardiovascular disease and fatty liver are among the most commonly associated co-morbidities reported in obese adults and contribute greatly to the overall burden of disease.<sup>8,10</sup> Although the consequences of obesity may not be fully realised until adulthood, risk factors for cardiovascular disease and evidence of fatty liver may be present among adolescents.<sup>9,11</sup> Several studies have found that both weight

status and risk factors track into adulthood, suggesting that overt disease may be present at younger ages.<sup>9,12</sup>

The prevalence of overweight and obesity, cardiovascular and liver disease risk factors among young offenders in this study is shown in Table 5.5 (overleaf) with the prevalence from a population based sample of adolescents (mean age 15.4 years) from the *NSW Schools Physical Activity and Nutrition Survey (SPANS)* conducted in 2004.<sup>3</sup> All of the risk factors were substantially more prevalent among young offenders than among the population sample.

33% males were trying to gain weight and 10% were trying to lose weight

10% females were trying to gain weight and 38% were trying to lose weight

**Table 5.5 Prevalence of overweight, obesity and abnormal biomarkers in young offenders compared with a representative sample of adolescents from SPANS**

	Young offenders		School survey sample	
	Males <sup>i</sup>	Females <sup>ii</sup>	Males <sup>iii</sup>	Females <sup>iv</sup>
Overweight	20.0	22.4	21.5	14.6
Obese	13.7	12.9	6.6	4.4
<b>Serology*</b>				
High ALT	14.9	29.7	9.0	5.3
High LDL	10.2	8.2	4.5	6.3
High Triglycerides	8.3	6.8	1.0	0.0
Low HDL	40.9	21.9	10.7	3.9

\*Young offenders with required serology results

<sup>i</sup>Males=446; <sup>ii</sup>Females =75; <sup>iii</sup>Males =290; <sup>iv</sup>Females=204

10% males had high LDL compared with fewer than 5% same aged school sample

41% males and 22% females had low HDL compared with 11% males and 4% females in the school sample

All examined cardiovascular risk factors were significantly associated with overweight and obesity among males but not females after adjusting for other risk factors

People from Aboriginal backgrounds may be at greater risk of cardiovascular and other risk factors than the population as a whole,<sup>13</sup> and for this reason risk factors for young Aboriginal offenders were examined separately. None of the risk factors was more prevalent; however, Aboriginal males (but not females) were significantly less likely to be overweight or obese than the other participants.

Although the prevalence of overweight was similar to males from SPANS, the prevalence of obesity in young male offenders was twice as high as that found in the SPANS sample. Among

young female offenders, the prevalence of overweight was over 50% higher, and the rate of obesity was three times as high as the SPANS sample.

The prevalence of cardiovascular disease risk factors is of great concern. Forty-one percent (41%) young male offenders and 22% young female offenders also had low levels of HDL (or good) cholesterol.

The associations of biological risk factors with overweight and obesity in males and females are shown in Table 5.6.

**Table 5.6 Associations of biological risk factors with overweight and obesity in young offenders with required serology results**

Risk factor	N	%	Odds Ratio (95% CI)	P-value
<b>Males</b>				
High ALT	65	32.9	7.6 (3.9, 14.6)	<0.0001
High LDL	45	51.1	2.5 (1.3, 4.6)	0.003
High Triglycerides	37	73.0	6.8 (3.2, 14.5)	<0.0001
Low HDL	182	42.9	2.3 (1.5, 3.4)	<0.0001
<b>Females</b>				
High ALT	22	39.3	2.1 (0.7, 5.7)	0.2
High LDL	6	16.7	0.3 (0.04, 3.0)	0.3
High Triglycerides	5	80.0	8.3 (0.9, 79.3)	0.03
Low HDL	16	43.8	1.6 (0.5, 4.8)	0.4

\* Young offenders with required serology results

Overweight and obese males were 7.6 times more likely to have raised ALT and 6.8 times more likely to have high triglycerides than males with normal weight. They were also

more than twice as likely to have high LDL and low HDL cholesterol. These relationships were not observed for females, probably due to the smaller sample size.

All of the examined cardiovascular risk factors were significantly associated with overweight and obesity among males but not females after adjusting for other risk factors. In addition, overweight and obese males were more likely to have elevated ALT (see page 4.15 for definition) after adjusting for cardiovascular risk factors. The small numbers of individuals (6 males, 0 females) with other causes of elevated liver enzymes such as hepatitis were excluded from these analyses.

## 5.4 Physical and recreational activity

Table 5.7 presents frequency and time spent on sport and exercise and participation in organised sport.

Females were more likely to report never exercising, more likely to exercise for less than 40 minutes and less likely to take part in an organised sport. Males were more likely to report exercising two or more times per week and to exercise for more than one hour.

**Table 5.7 Frequency and time spent on sport or exercise, participation in organised sport (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Frequency of sport or exercise<sup>i</sup></b>						
Never	11	2	30	12	14	3
Once or less per week	19	6	22	18	20	7
Two or more times/week	33	18	22	24	32	18
Everyday	36	74	26	47	35	72
<b>Time spent on exercise<sup>ii</sup></b>						
Less than 21 minutes	14	9	27	20	16	10
21-39 minutes	11	16	19	33	12	17
40-60 minutes	17	30	15	27	17	30
More than 1 hour	57	45	40	20	55	43
<b>Exercise during the last two weeks<sup>i</sup></b>						
Daily	20	65	11	35	19	63
Three or more times/week	31	21	12	18	29	21
Once or twice a week	24	6	27	29	25	8
Not at all	24	7	50	18	28	8
<b>Participated in organised sport<sup>i</sup></b>						
Yes	43	51	22	47	40	51

a (i) Males=667-670, Females=114-6, Total=781-5; (ii) M=649, F=101, T=750; b Males=202-4, Females=15-17, Total=217-21

Table 5.8 shows perception of recreational activities in local areas and type of activities pursued.

**Table 5.8 Recreational activity (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Enough recreational activities in local area?<sup>*</sup></b>						
Yes	78	69	73	65	78	69
<b>Type spent on recreational activities<sup>ii</sup></b>						
Sport / physical activity	40	43	23	20	37	41
Social / entertainment / partners	18	25	27	40	19	26
Indoor recreation	14	6	18	0	14	6
Hang around/ relax	9	5	18	13	11	6
Constructive hobby	11	8	4	13	10	8
Use drugs/alcohol/ smoke	5	9	6	7	5	9
Sleeping	2	1	2	7	2	1
Nothing	1	1	3	0	1	1
(Re-)offend	0	2	0	0	0	2
Work	0	2	0	0	0	2

a (i) Males=651, Females=113, Total=764; (ii) M=643, F=108, T=751; b (i) M=201, F=17, T=218; (ii) M=184, F=15, T=199

66% exercised twice a week or more

40% participated in organised sports (43% males, 22% females)

Females were less likely to exercise or to take part in an organised sport than males

78% community sample thought there were enough recreational activities in their local area

### 5.5 Sun protection

Table 5.9 presents data on the type and frequency of sun protection used by males and females in custody and serving community orders.

**Table 5.9 Sun protection behaviours and frequency of use (%)**

Behaviour	Never		Rarely		Sometimes		Usually		Always	
	Comm. <sup>a</sup>	Cust. <sup>b</sup>	Comm. <sup>a</sup>	Cust. <sup>b</sup>	Comm. <sup>a</sup>	Cust. <sup>b</sup>	Comm. <sup>a</sup>	Cust. <sup>b</sup>	Comm. <sup>a</sup>	Cust. <sup>b</sup>
<b>Males</b>										
Wear sunglasses	62	53	9	10	17	21	6	9	6	7
Wear clothes covering most of the body (arms & legs)	25	14	21	17	24	32	16	20	14	17
Wear a hat or a cap	16	16	6	5	12	12	13	11	52	56
Wear less clothes so as to get more sun on the skin	33	41	13	15	31	27	14	12	9	5
Spend most time indoors	17	12	21	25	36	36	20	23	6	4
Wear max protection sunscreen (SPF30+)	63	63	13	13	15	15	5	5	5	4
Stay mainly in the shade	19	21	16	16	34	32	22	22	10	10
<b>Females</b>										
Wear sunglasses	40	47	8	6	25	18	7	12	20	18
Wear clothes covering most of the body (arms & legs)	30	18	12	18	22	29	20	12	16	24
Wear a hat or a cap	50	41	14	6	16	24	6	18	14	12
Wear less clothes so as to get more sun on the skin	26	24	8	18	34	41	19	12	13	6
Spend most time indoors	16	12	26	29	27	24	19	12	13	24
Wear max protection sunscreen (SPF30+)	50	53	14	24	16	12	10	6	11	6
Stay mainly in the shade	24	18	10	18	31	35	24	6	11	24

a Males=667- 668, Females=115 -116, Total=782-784; b M=202-204, F=17, T=219-221

Table 5.10 displays sun screen use behaviour and reasons for rarely or never using sunscreen.

**Table 5.10 Sunscreen use and reasons for not using sunscreen (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Sun protection factor<sup>i</sup></b>						
Don't use sunscreen	61	64	49	53	59	63
SPF 30+	24	17	33	24	26	18
SPF 15	8	8	13	18	9	9
SPF 12 or lower	1	1	0	0	1	1
Don't remember/know	6	11	5	6	6	10
<b>Reason for rarely or never using sunscreen<sup>ii</sup></b>						
Takes too long / inconvenient	20	9	100	0	29	8
Not available/hard to get	27	14	0	10	24	14
Don't need it	20	45	0	40	18	45
Don't want to/ don't like it	20	19	0	20	18	19
Not in the sun much	13	0	0	0	12	0
Adverse medical concern	0	3	0	0	0	3
Don't remember	0	5	0	0	0	4
To get a tan	0	6	0	30	0	7

a (i) Males=654, Females=113, Total=767; (ii) M=15, F=2, T=17; b (i) M=204, F=17, T=221; (ii) M=152, F=10, T=162

63% males and 50% females never used maximum protection sunscreen when in the sun

50% females did not wear a hat or cap when in the sun compared with 16% males

The two main reasons for not wearing sunscreen were that it took too long to apply and that it was hard to obtain

Table 5.11 displays sun protection behaviour and sunburn history of young offenders during the summer preceding the survey. Forty-six percent (46%; n=359) young offenders were

sunburnt at least once during the previous summer; 18% (n=141) were sunburnt 2-3 times; and 11% (n=86) were sunburnt four or more times.

**Table 5.11 Time spent outdoors and sunburn history for past summer (%)**

	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Time spent outdoors</b>		
None	0	1
< 1 hour	1	2
1-2 hours	7	24
> 2 hours < 4 hours	14	24
> 4 hours < 6 hours	25	25
> 6 hours	52	24
<b>Sore and tender sunburn over past summer</b>		
Not at all	53	64
Once	17	11
Two or more times	18	15
Four or more times	11	10

a 781-782; b 220-221

## 5.6 Tattooing and body piercing

Tattooing in custody has been linked with hepatitis C transmission.<sup>14</sup> Twenty-seven percent (27%) males and females (total n=211) had at least one tattoo. Of those with a tattoo, 51% males [YPiCHS 66%] and 71% females (total n=111) had been tattooed by a non-professional. Thirty-seven percent (37%) males and 82% females (total n=341) had one or

more body piercings. Non-professionals had performed the procedure on 39% males and 17% females (total n=111) who had a piercing. Females were more likely to have had at least one body piercing. Males were more likely to have had a non-professional body piercing, and not to have used new equipment.

Table 5.12 summarises the prevalence of tattoos and body piercings in both samples.

**Table 5.12 Tattoos and body piercing (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
None	50	48	16	18	45	45
Tattoos only	13	22	2	0	11	20
Piercings only	23	16	57	29	28	17
Both	14	14	25	53	16	17

a Males=667, Females=115, Total=782; b Males=204, Females=17, Total=221

Tables 5.13 and 5.14 (overleaf) present the number of tattoos, setting of tattooing and tattooist qualification.

46% young offenders were sunburnt at least once over the previous summer

11% were sunburnt four or more times

39% young offenders had either a tattoo or a body piercing

55% young offenders had a tattoo, a body piercing, or both

Males were more likely to have tattoos; females were more likely to have piercings

**Table 5.13 Number of tattoos, setting and tattooist qualification (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Number of tattoos</b>						
1	40	42	57	43	42	42
2	32	27	20	14	30	25
3 to 5	21	20	16	29	21	21
6 to 10	6	21	7	0	6	11
11 and over	1	0	0	14	1	2
<b>Setting of tattooing<sup>i</sup></b>						
Custody	2	14	0	0	1	12
Community	93	78	93	89	93	79
Both	5	8	7	11	6	9
<b>Made by non-professional<sup>i</sup></b>	51	66	71	78	54	68

a Males=176-8, Females=29-31, Total=206-211; b (i) M=41, F=7, T=48; (ii) M=73-4, F=9, T=82-3

**Table 5.14 Tattooing: Safety for non-professional tattoos (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Cleanliness of equipment used<sup>i</sup></b>						
New equipment	47	40	46	43	47	41
Cleaned	44	55	54	43	46	54
Not cleaned	4	0	0	14	3	2
Don't know if cleaned	5	4	0	0	4	4
<b>Cleaning method (if any)<sup>ii</sup></b>						
Heat sterilisation	27	46	33	0	29	41
Boiling water	23	21	17	33	21	22
Soaked in bleach	17	4	17	33	17	7
Cleaning solution/detergent	16	4	8	0	14	4
Wiped	7	4	17	0	10	4
Alcohol/methylated spirits	10	13	8	33	9	15

a (i) Males=92, Females=22, Total=114; (ii) M=30, F=12, T=42; b (i) M=47, F=7, T=54; (ii) M=24, F=3, T=27

Tables 5.15 and 5.16 present the number of piercings, the setting of piercing, and conditions under which piercing was conducted.

**Table 5.15 Number of body piercings and setting (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Number of body piercings<sup>i</sup></b>						
1	54	33	12	0	42	23
2	24	27	42	29	29	27
3 to 5	21	27	32	57	24	36
6 to 10	1	13	13	14	5	14
11 and over	0	0	1	0	<1	0
<b>Setting of piercing<sup>ii</sup></b>						
Custody	<1	7	0	0	<1	6
Community	98	90	100	93	99	90
Both	2	3	0	7	1	4
<b>Made by non-professional<sup>ii</sup></b>	39	40	17	29	33	38

a Males=232-45, Females=92-4, Total=324-39; b (i) M=15, F=7, T=22; (ii) M=59-62, F=14, T=73-6

54% (51% males, 71% females) of those with a tattoo used non-professionals

28% young offenders had three or more tattoos

3% young offenders had tattoos with unclean equipment

30% young offenders had three or more body piercings

33% of those with a piercing used non-professionals

11% young offenders had piercings using unclean equipment



**Table 5.16 Safety for non-professional piercing (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Cleanliness of equipment used<sup>i</sup></b>						
Cleaned	60	62	39	25	57	57
New equipment	28	31	56	75	33	37
Not cleaned / unsure	11	8	6	0	11	7
<b>Cleaning method (if any)<sup>ii</sup></b>						
Heat sterilisation	38	14	25	NA	36	14
Boiling water	25	7	38	NA	26	7
Cleaning solution/detergent	17	21	13	NA	16	21
Soaked in bleach	8	14	13	NA	8	14
Alcohol/methylated spirits	8	29	13	NA	8	29
Wiped	6	7	0	NA	5	7
Hot water	0	7	0	NA	0	7

a (i) Males=96, Females=18, Total=114; (ii) M=53, F=8, T=61; b (i) M=26, F=4, T=30; (ii) M=14, F=0, T=14

## 5.7 Fighting and injury

Mortality rates among young people are closely related to injury. More young people in Australia die due to injury than from all other causes of death combined; injury is also the main cause of hospitalisation and emergency medical intervention for young people.<sup>15</sup>

The Australian Bureau of Statistics (ABS) reported differences in injury related hospitalisation rates for male and female teenagers in 1999-2000. The hospitalisation rate for males due to transport accidents was 0.78%, more than double the rate for females (0.32%) (i.e. 779 per 100,000 compared with 323 per 100,000). Injuries resulting from assaults were also more common among males (0.28%), with hospitalisation rate over three times that for females (0.08%) (i.e. 281 per 100,000 compared with 80 per 100,000).<sup>16</sup>

Conversely, the hospitalisation rate for females resulting from intentional self-harm (0.29%) was approximately three times that for males (0.11%) (i.e. 293 per 100,000 compared with 107 per 100,000).<sup>16</sup> These trends in injuries reflect young males' tendency to be more involved in risk-taking behaviours that lead to injury, such as alcohol consumption,<sup>17</sup> unlicensed or driving while intoxicated<sup>18</sup> and physical fights.<sup>17</sup>

The risk of injury differs between other subgroups of adolescents. Socioeconomically disadvantaged youth, young people in remote and rural areas and Indigenous youth are at an increased risk of sustaining physical injuries.<sup>19</sup> For example, lower socioeconomic status is

associated with increased risk of suicide and self-harm,<sup>20</sup> increased drug use and increased risk of being injured or killed.<sup>15,17,19</sup> In rural and remote areas, risk taking behaviour is strongly associated with drug and alcohol use, driving incidents and celebrations.<sup>19</sup> Indigenous youth suffer from a number of additional risk factors that can lead to risk taking and suicidal behaviour, including illiteracy, which may result in exclusion and alienation, lack of support networks, drug and alcohol abuse and a persistent cycle of grief in many communities.<sup>21</sup>

In 2004-05 the most frequently reported injuries for Australian young people aged 12-24 years resulting in health action being taken was being cut with a knife, tool or other implement (27%), followed by hitting something or being hit by something (17%) and a low fall (16%). There were no gender differences in the reporting of each of these events. For externally caused injuries between 2004-05, the most common type among young people resulting in hospitalisation was transport accidents (21%, of which 71% were males) followed by falls and exposure to inanimate mechanical forces (each 15%).<sup>22,23</sup>

The following tables display results for up to three injuries described by young offenders. Physical injuries and head injuries are reported separately; however, some head injuries may also be detailed in the physical injury tables. Note that unless specified, in-text references refer to the first injury (of up to three injuries) described by young offenders.

*Socioeconomically disadvantaged youth, young people in remote and rural areas and Aboriginal youth are at an increased risk of physical injury*

**5.7.1 Physical fights**

young offenders were involved in and whether they received medical treatment.

Table 5.17 displays the number of physical fights

**Table 5.17 Number of physical fights during the past six months and subsequent treatment (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Number of fights<sup>i</sup></b>						
Never	29	28	39	0	31	26
Once	18	15	21	24	18	16
2 or 3 times	23	28	22	47	23	30
4 or 5 times	14	10	14	12	14	10
6 or more times	16	19	5	18	14	19
<b>Medical treatment required as result of the fight<sup>ii</sup></b>						
Yes	12	18	11	0	12	16

a (i) Males=667, Females=116, Total=783; (ii) M=474, F=71, T=545; b (i) M=200, F=17, T=217; (ii) M=144, F=17, T=161

Figure 5.1 present physical fights in the last six months broken down by key subgroups.

**Figure 5.1 Physical fights during the last 6 months by gender, ethnicity, region, IQ and age (%)**

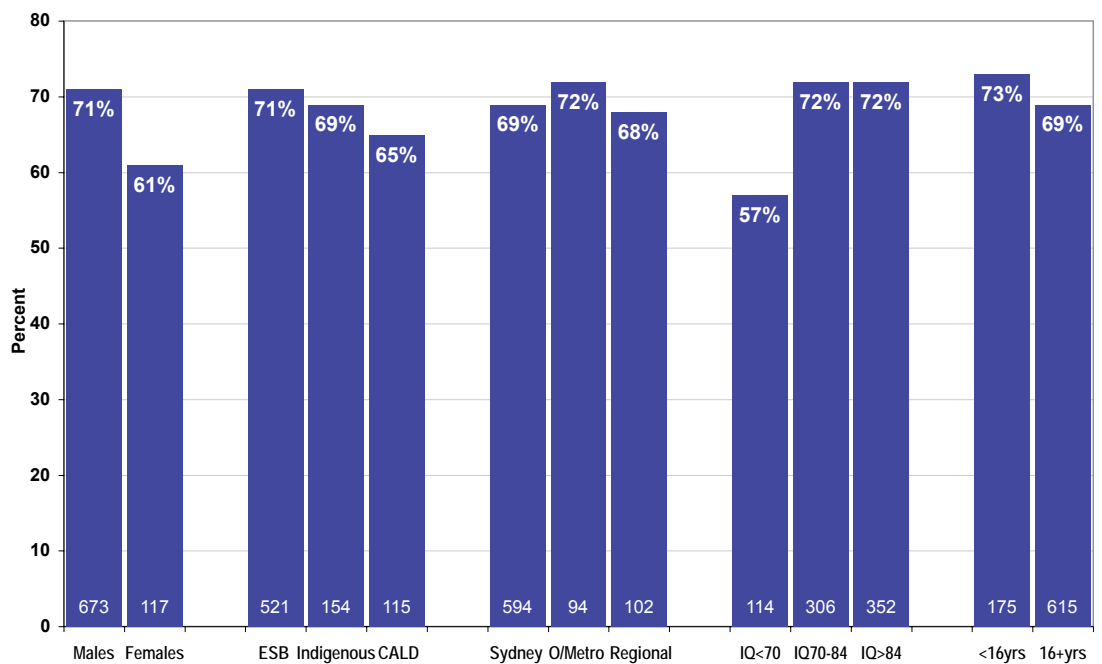


Table 5.18 (overleaf) shows the person(s) with whom young offenders were most recently involved in a physical fight. In both samples most young offenders reported being involved in fight with a stranger (YPoCOHS: 50%, YPiCHS: 54%). The majority of young offenders in both samples were involved in at least two

physical fights in the six months before the survey (YPoCOHS: 51%, YPiCHS: 59%). Males showed higher rates of fights with strangers than with friends/acquaintances, while girls showed the reverse pattern, being more likely to become involved in physical fights with friends/acquaintances. These findings have

69% young offenders had been involved in at least one physical fight in the past 6 months

14% had been in 6 or more fights

12% had required treatment as a result of the fight

There were no subgroup differences in the proportions of young offenders involved in physical fights in the past 6 months

implications for anger/aggression management training programs with young offenders, in particular in the identification of triggers

in interpersonal relationships that result in physically violent reactions.

**Table 5.18 Person involved in most recent physical fight(s) (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Stranger	52	55	26	47	49	54
Friend/acquaintance	34	25	47	53	35	28
Parent/sibling/relative	7	2	10	0	7	2
Other unspecified	7	18	9	0	7	16
Boyfriend or girlfriend	0	0	8	0	1	0

a Males=474, Females=71, Total=545; b M=145, F=17, T=162

### 5.7.2 Physical injury

Seventy-eight percent (78%, n=532) males and 59% (n=68) females had sustained an injury at some time in their lives requiring them to see a doctor or nurse or to attend hospital. The three leading causes of injuries for males were: being struck by an object or person (21%), low falls (less than one metre) (20%), and cutting, piercing, stabbing (17%). The leading causes of injuries for females were low falls (23%), being struck by object or person (22%), and cutting, piercing, stabbing (20%). Twenty percent (20%) males [YPICHS 34%] and 30%

females (combined n=158) reported at least one injury resulting in a lasting disability; 28% also reported persisting pain as a result of their injury.

Table 5.19 displays general information regarding physical injuries. Most (75%) of the community orders sample and 84% of the custody sample reported some form of physical injury. The most common injury for both the community and custody samples were open or closed wounds (40% and 39%, respectively) followed by fractures (37% and 27%, respectively).

**Table 5.19 History of physical injuries (%)**

History of injuries	Male		Female		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever had accident/injury requiring medical attention<sup>i</sup></b>						
Yes	78	86	59	56	75	84
<b>Accident/injury within the last 12 months<sup>ii</sup></b>						
Yes	31	n/a	24	n/a	30	n/a
<b>Type of injury<sup>iii</sup></b>						
Fracture (excl. tooth)	37	27	43	20	37	27
Wound (laceration or cut)	40	40	40	30	40	39
Sprain or strain	0	5	0	30	0	6
Concussion/intracranial	0	6	0	0	0	6
Dislocation	0	7	0	10	0	6
Unspecified nature	5	0	6	0	5	0
Other	18	15	11	10	18	16

a (i) Males=670, Females=116, Total=786; a (ii) M=644, F=115, T=759; a (iii) M=520, F=68, T=588

b (i) M=207, F=18, T=225; b (iii) M=175, F=10, T=85

Table 5.20 (overleaf) shows the types of injuries reported by young offenders by injury incident. Forty percent (40%) young offenders reported open wounds and cuts as their first injury and

46% reported wounds and cuts for their second and third injuries. Other injuries were fracture (37%), unspecified injuries (5%), and contusion (3%).

49% of all physical fights involved strangers

Young male offenders were most frequently involved in fights with strangers (52%)

Young female offenders were most frequently involved in fights with friends (47%)

75% young offenders had sustained a physical injury requiring medical attention, 77% of which were fractures or lacerations

**Table 5.20 Type of physical injuries (by injury incident) (%)**

Type of injury	Injury 1		Injury 2		Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Wound (laceration/cut)	40	39	46	43	46	34
Fracture (excl. tooth)	37	27	32	25	28	37
Unspecified nature	5	0	4	0	6	0
Contusion	3	3	1	2	4	5
Dislocation	3	4	2	2	3	0
Sprain or strain	3	6	4	6	3	7
Concussion/intracranial	2	7	1	18	2	17
Bite - non venomous	1	<1	3	1	1	0
Burn	2	6	1	1	1	0
Asphyxia	1	0	0	0	1	0
Nerve/spinal cord	<1	1	1	0	1	0
Superficial (excl. eye)	<1	0	1	0	1	0
Eye (excl. foreign body)	<1	1	0	0	1	0
Dental injury	<1	0	0	0	1	0
Poison/toxin (non-bite)	<1	2	<1	0	1	0
Crushing injury	1	<1	1	1	0	0
Injury to blood vessels	<1	0	<1	0	0	0
Traumatic amputation	1	2	1	0	0	0
Bite venomous	<1	1	0	1	0	0
Drowning	<1	0	1	0	0	0

a Injury 1=588, b Injury 1=185; a Injury 2=336, b Injury 2=96; a Injury 3=158; b injury 3=41

Table 5.21 (overleaf) shows the activities being undertaken and the physical location during injuries incurred by male offenders by injury incident.

For young males on community orders injuries were most common during leisure and recreational activities, representing 25% of all activities for the first injury. Other activities were sports and exercise (15%), fighting or involvement in riots (15%), misadventure (13%), and bicycle accidents (7%). For young males in custody the most common activity leading to injury was sport and exercise (23%), followed

by fighting (15%) and leisure or recreational activities (11%). For both the community orders (20%) and custody (23%) samples, physical injuries occurred most commonly at home.

Information about the location where injuries occur is not always specified or collected and therefore the available data may not reliably reflect injury locations. Based on limited hospital records of 12-24 year olds in Australia in 2000-01, most young people who were hospitalised for physical injury received their injury in the home (25%), followed by the street or highway (21%).<sup>15</sup>

**Table 5.21 Activity and physical location at time of injury (by injury incident)  
- Males (%)**

	Injury 1		Injury 2		Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Activity during injury</b>						
Leisure or recreation	25	11	24	15	24	12
Sports/exercise	15	23	18	23	15	27
Fight riot quarrel	15	15	12	21	16	20
Personal misadventure	13	28	13	23	9	22
Pushbike rider	7	0	5	0	8	0
Vehicle driver/passenger	6	7	3	2	3	5
Battery	4	0	7	0	9	0
Pedestrian	3	1	3	3	2	0
Motor cyclist	3	5	4	4	4	5
Crime / being arrested	3	5	3	3	2	7
Household activities	2	1	6	0	1	0
Occupational	2	1	2	1	3	0
Maintenance	1	1	0	1	1	0
Intended self harm	1	1	1	2	2	2
Other transport related	1	0	1	0	0	0
<b>Location at time of injury</b>						
Home	20	23	24	29	20	23
Street or highway	19	21	18	21	18	26
Other specified place	12	4	11	3	12	3
Recreational area	11	16	10	10	9	19
School/day-care/public administration area	9	8	7	5	4	6
Athletics/sports field	8	6	11	12	9	10
Unspecified place	8	0	7	0	12	0
Trade/service area	5	3	6	3	6	3
Friend/relative's house	4	0	4	0	6	0
In custody	2	11	1	12	1	6
Industrial/ construction area	1	1	1	3	2	0
Farm (excl. farmhouse)	0	3	1	1	0	3
Residential institution	0	2	0	1	0	0
Medical hospital	0	2	0	1	0	0

Activity: a Injury 1=496, Injury 2=297, Injury 3=135 [low n]; b Injury 1=177, Injury 2=91, Injury 3=41 [low n]  
Location: a Injury 1=514, Injury 2=294, Injury 3=139 [low n]; b Injury 1=149, Injury 2=77, Injury 3=31 [low n]

Table 5.22 shows activities being undertaken and physical location during injuries reported by female respondents by injury incident. For Injury 1, leisure and recreation was the most common activity for female respondents on community orders (23%), followed by personal

activities or misadventure (17%), sports and exercise (15%), fighting (12%), and battery (11%). Young females in custody reported personal activities and misadventure as the most common activity during injuries (30%).

Males were more frequently injured during leisure or recreation (25%), during sport or exercise (18%) or in a fight (15%)

Males were more frequently injured at home (20%), on the street (19%) or in recreational areas (11%), a pattern similar to comparison population samples

**Table 5.22 Activity and physical location at time of injury (by injury incident) - Females (%)**

	Injury 1		Injury 2		Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Activity during injury</b>						
Leisure or recreation	23	10	24	20	15	0
Personal misadventure	17	30	13	0	0	0
Sports/exercise	15	10	17	20	8	0
Fight riot quarrel	12	10	13	40	38	0
Battery	11	0	7	0	8	0
Pushbike rider	11	0	5	0	0	0
Vehicle driver/passenger	5	0	3	20	0	0
Household activities	3	10	5	0	15	0
Pedestrian	2	0	2	0	0	0
Other transport related	2	0	1	0	0	50
Crime / being arrested	2	10	3	0	8	50
Motor cyclist	0	10	4	0	8	0
Occupational	0	0	2	0	0	0
Maintenance	0	0	0	0	0	0
Intended self harm	0	10	1	0	0	0
<b>Location at time of injury</b>						
Home	19	50	33	25	27	0
Street or highway	17	13	17	25	20	0
Recreational area	13	13	10	50	20	0
Athletics/ sports field	11	0	3	0	0	0
Other specified place	11	0	10	0	7	0
School/day-care/public administration area	8	0	7	0	13	0
Friend/relative's house	8	0	3	0	7	0
Unspecified place	6	0	13	0	7	0
In custody	5	13	0	0	0	0
Trade or service area	3	13	3	0	0	0
Residential institution	0	0	0	0	0	0
Medical hospital	0	0	0	0	0	0
Industrial/construction area	0	0	0	0	0	0
Farm (excl farmhouse)	0	0	0	0	0	100

For Injury 1, leisure and recreation were the most common activities for females, followed by personal misadventure, sports and exercise, fighting, and battery

Activity a Injury 1=66, Injury 2=30, Injury 3=13 [low n]; b Injury 1=10, Injury 2=5, Injury 3=2 [low n]  
 Location a Injury 1=64, Injury 2=30, Injury 3=15 [low n]; b Injury 1=8, Injury 2=4, Injury 3=1 [low n]

Table 5.23 (overleaf) displays the causes of physical injury by injury incident. For Injury 1, being struck by an object or a person was the primary cause of physical injury for both the community orders (23%) and custody (34%) samples, followed by law falls (23% and 25%, respectively).

**Table 5.23 Causes of physical injuries (by injury incident) (%)**

Causes	Injury 1		Injury 2		Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Struck by object/person	33	23	29	40	38	34
Fall – low	20	21	22	20	23	25
Cutting/ piercing/stabbing	15	17	21	15	17	14
Fall - high (>1 metre)	11	5	9	3	10	5
Other specified causes	4	<1	3	0	2	0
Other unspecified	3	0	4	1	2	2
Motor vehicle driver	2	3	1	2	1	2
Motor vehicle passenger	2	4	1	2	1	0
Motorcycle driver	1	5	1	4	1	5
Pedal cyclist	0	9	<1	3	1	11
Hit by car	4	3	2	5	1	2
Fire/flames/smoke	<1	3	<1	1	1	0
Poisoning - other	<1	1	<1	0	1	0
Dog related	1	<1	3	1	1	0
Other transport	1	0	1	0	0	0
Drowning/swimming pool	<1	0	<1	0	0	0
Other threat to breathing	<1	0	<1	0	0	0
Scalds	1	0	<1	0	0	0
Contact burn	<1	2	1	0	0	0
Other animal related	1	2	0	2	0	0
Electricity	<1	<1	0	0	0	0
Firearm	0	1	0	1	0	0

a Injury 1=578, Injury 2=330, Injury 3=152 [low n]; b Injury 1=187, Injury 2=97, Injury 3=44 [low n]

More than half of young offenders reported that physical injuries occurred more than two years before completion of the survey. There was no significant difference between young

offenders living in the community and those in custody.

Table 5.24 shows the time categories for all physical injuries by injury incident.

**Table 5.24 Recency of physical injuries (by injury incident) (%)**

Time of injury	Injury 1		Injury 2		Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
1-4 weeks ago	5	5	5	6	1	2
1-6 months ago	12	11	10	14	15	7
>6 months <2 years ago	30	30	29	23	33	33
>2 years <5 yrs	26	27	25	31	33	25
>5 years ago	27	27	31	26	18	33

a Injury 1=588, injury 2=333, injury 3=155; b Injury 1=187, Injury 2=95, Injury 3=43

Twenty-one percent (21%) of the community sample and 33% of the custody sample reported some form of lasting injury or disability resulting from their physical Injury 1. Young offenders in the community orders sample indicated musculoskeletal difficulties were sustained from more than half of all injuries, whereas

the majority of young offenders in the custody sample (37%) reported general, unspecified difficulties.

Table 5.25 (overleaf) shows all lasting injuries and disabilities for both the community orders and custody samples by injury incident.

*The most frequent causes of physical injuries were falls, being struck by objects/persons and cuts*

*21% reported lasting disability from their physical injury*

**Table 5.25 Frequency and type of lasting injuries or disabilities from physical injury (by injury incident) (%)**

	Injury 1		Injury 2		Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever had a lasting injury or disability<sup>i</sup></b>						
Yes	21	33	17	24	16	26
<b>Type of injury or disability<sup>ii</sup></b>						
Musculoskeletal	65	39	56	15	59	27
Skin	12	16	15	15	14	0
General/unspecified	8	31	19	35	9	37
Neurological	6	7	6	20	18	27
Eye	5	3	0	0	0	0
Psychological	3	0	4	5	0	0
Ear	1	2	0	0	0	0
Respiratory	1	2	0	10	0	0
Male genital	0	0	0	0	0	9

a (i) Injury 1=561, Injury 2=299, Injury 3=142; (ii) Injury 1=111, Injury 2=48, Injury 3=22 [low n]  
 b (i) Injury 1=186, Injury 2=96, Injury 3=42; (ii) Injury 1=61, Injury 2=20, Injury 3=11 [low n]

*Musculoskeletal difficulties were the most frequent form of disability from physical injury*

*For injury 1, 21% reported lasting injury or disability as a result of an injury incident*

*There were no subgroup differences in physical injury characteristics*

Table 5.26 shows the type of treatment young offenders reported receiving for their injuries by injury incident.

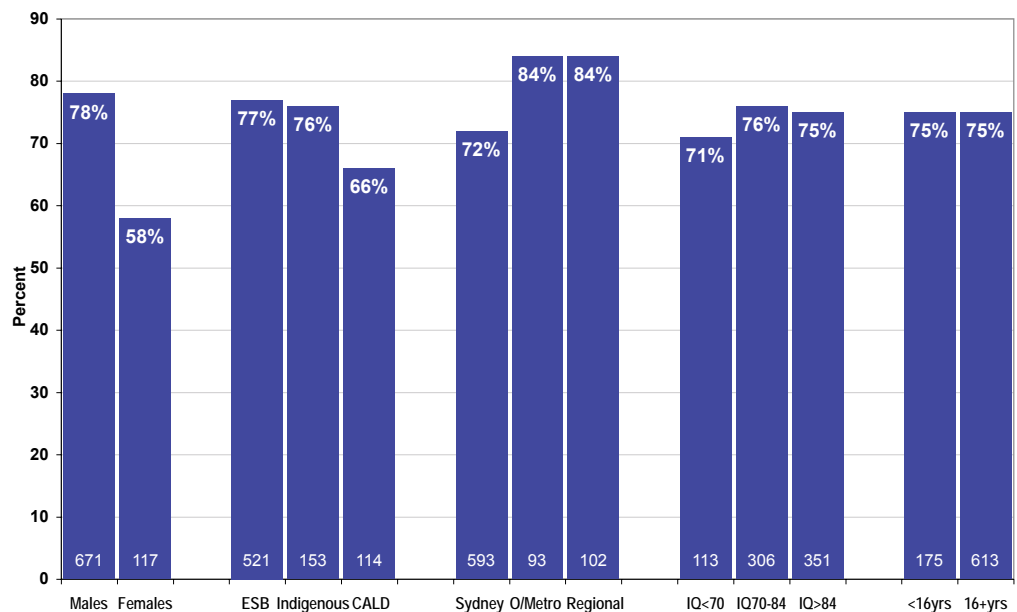
**Table 5.26 Treatment of physical injuries (by injury incident) (%)**

Treatment received	Injury 1		Injury 2		Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Medical treatment	96	91	95	90	93	86
Self treatment/none	4	9	4	10	6	15

a Injury 1=568, injury 2=321, injury 3=145 [low n]; b Injury 1=186, Injury 2=92, Injury 3=39 [low n]

Figure 5.2 presents data on injuries sustained for each of the key subgroups.

**Figure 5.2 Physical injuries by gender, ethnicity, region, IQ and age (%)**





For the community orders sample, injuries were divided between accidental or intentional causes. Table 5.27 shows the nature of physical injuries, based on the nature of incidents.

**Table 5.27 Accidental or intentional physical injuries (%)**

	Males	Females	Total
Accidental	67	75	68
Intentional	33	25	32

Males=510, Females=67, Total=577

Persons most commonly responsible for causing injury to young offenders living in the community were strangers (36%, n=87), followed by acquaintances (18%, n=43) and friends (12%, n=29). For young offenders in custody, injury was most commonly inflicted

by other detainees (62%, n=130), followed by partners (15%, n=31), then fathers (9%, n=19).

One third of males and one quarter of females reported injuries that had been intentionally caused. Table 5.28 shows the different persons causing deliberate physical injuries.

**Table 5.28 Persons causing deliberate physical injury in past 12 months (%)**

Persons causing harm	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Stranger	39	3	24	0	37	3
Acquaintance	18	1	8	0	18	1
Friend	12	2	16	0	12	2
Police	9	1	0	0	9	1
Detainee	6	62	0	70	6	62
Partner (boy/girlfriend)	3	15	32	12	6	15
Other relative	6	5	16	12	6	5
Father	3	10	4	0	3	9
Mother	3	1	0	6	3	2

a Males=213, Females=29, Total=242; b M=195, F=16, T=211

### 5.7.3 Head injury

Studies of adults have shown that damage to the frontal area of the brain, which is responsible for executive functioning,<sup>24</sup> results in recurrent impulsive, aggressive and antisocial behaviour, immature moral reasoning, and a poor appreciation for the subjective experience of others.<sup>25,26,27</sup> The higher frequency of abnormalities in the brain function of offenders<sup>28,29</sup> suggests possible interactions between biological, neurological and social factors that may be associated with violent offending.<sup>30,31,32,33</sup> Neuro-imaging techniques have revealed pre-frontal dysfunction in people who have committed homicide and left temporal dysfunction and hypofrontality (an inability to control violent impulses) in aggressive adults and violent patients. Some support for the relationship between head injury and violent crime, especially murder, has been found in studies of adolescents.<sup>34,35,36</sup>

However, results are necessarily based on small sample sizes and identify multiple potential mediating factors such as deficits in social problem solving, language deficits and impulse control.

The most common of many causal explanations for the relationship between head injury and violence assumes a direct effect of a biological or social factor on violent behaviour. Other theories posit interacting effects between biological and social factors. For example, the "threshold effect"<sup>37</sup> proposes that head injuries precipitate violent behaviour in those individuals who are already predisposed to violent behaviour due to the presence of other biological or social risk factors; that is, head injuries lower the "threshold" for violent behavior in the presence of other activating conditions such as alcohol use and specific crime determinants such as victim resistance.<sup>31</sup>

*Young offenders reported that 68% of their physical injuries were caused accidentally*

*Strangers were the most frequently reported to cause deliberate physical injury*

Not every head injury predicts violent behaviour. Most individuals who suffer head injuries do not become violent,<sup>33</sup> suggesting that there are mechanisms that mediate or moderate this association. Substance abuse, poor coping skills, reduced inhibition or restraint, past physical abuse and social and cultural factors are candidate factors. Head injury increases sensitivity to the effects of alcohol, so a head injury may exacerbate the criminogenic effects of alcohol abuse.<sup>33</sup> A direct effect between alcohol abuse and involvement in violent offending among young people has been frequently observed.<sup>38</sup> Both substance abuse and head injury are known to diminish coping skills, judgment and restraint or inhibition.<sup>39</sup> Sustained head injuries may precipitate violence in individuals who already have deficits in those areas.<sup>33</sup> Physical abuse has been implicated as a cause of 95% of serious head injuries in children.<sup>39</sup>

Head injury rates in the custody and community orders samples were comparable. Forty-one percent (41%, n=275) [YPiCHS 40%, n=83] males

and 30% (n=34) [YPiCHS 6%, n=1] females had sustained a head injury in which they had become unconscious or 'blacked out'. Of these 24% (n=74) reported only one injury; 38% (n=117) reported two or more injuries. Most were the result of being struck by an object or person (including fights) (50%), striking an object or person (12%), or low falls (19%).

Proportions with sequelae from head injury were higher for young offenders in custody, indicating that they may have suffered from more serious head injuries than the community orders sample. Headaches (5%) [YPiCHS 25%], memory loss (4%) [YPiCHS 19%] and poor concentration (4%) [YPiCHS 18%] were the most common unresolved side effects from reported head injury [YPiCHS: low n].

Figure 5.3 presents head injuries where young offenders became unconscious or 'blacked out'. Young ESB offenders were more likely to report two or more head injuries than Aboriginal and CALD offenders, and IQ<70 were more likely to report no history of head injuries compared with IQ 70-84 and IQ >84 subgroups.

*ESB were more likely to report two or more head injuries; IQ<70 were more likely to report no head injuries*

**Figure 5.3 Number of head injuries resulting in unconsciousness by gender, ethnicity, region, IQ and age (%)**

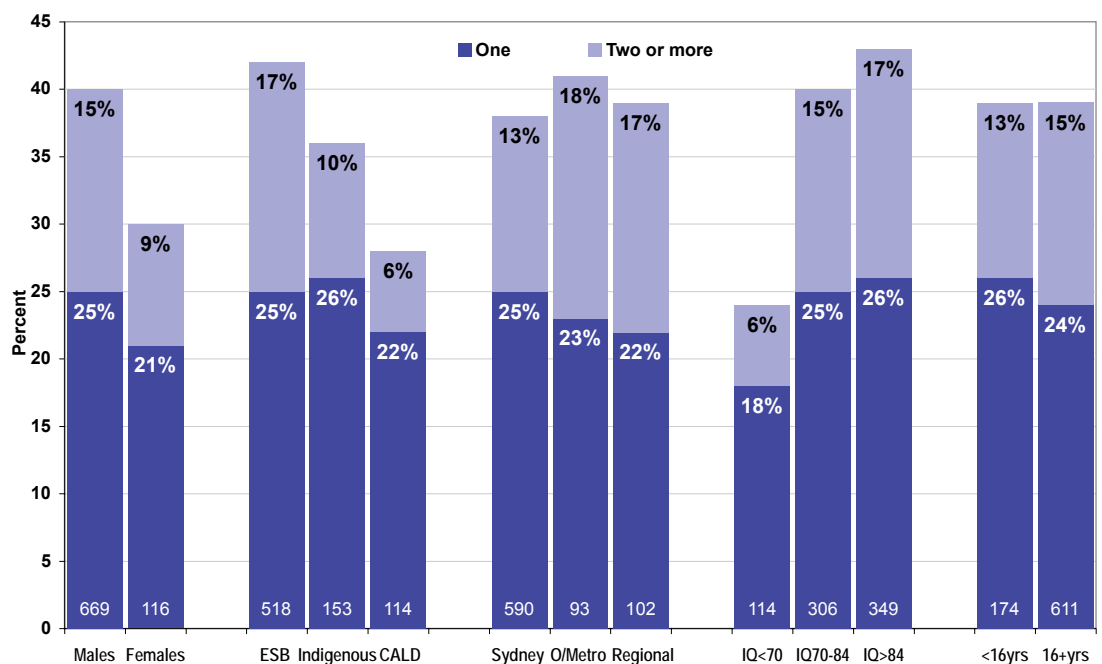


Table 5.29 presents data on prevalence and frequency of head injuries with a community comparison for hospital separations for traumatic brain injury (age 15-19) based on

estimated incident cases.<sup>40</sup>The data show similar rates for males but higher rates for females compared with the hospitalisation sample.

**Table 5.29 Ever had a head injury and frequency of head injuries (%)**  
**[Hospitalisation sample]**

Head injury: general	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever had head injury</b>						
Yes	41 [40]	40	30 [15]	6	39 [28]	37
<b>Frequency of head injuries</b>						
0	59	61	71	94	61	64
1	25	28	21	6	24	26
2	8	5	5	0	8	4
3 to 4	4	3	2	0	4	3
5 to 6	1	3	2	0	1	3
> 6	2	0	0	0	1	0

a Males=672, Females=116, Total=788; b Males=203-7, Females=18, Total=221-5

Source: O'Connor P (2002). Table 4, Hospitalisation for head injury, 1997-98, age group 15-19 years.<sup>38</sup>

Table 5.30 presents data on the causes of head injuries.

**Table 5.30 Causes of head injuries (%)**

Cause of head injuries	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Struck by object/person	49	60	47	100	49	60
Fall - low (<1 metre)	19	13	25	0	19	13
Struck object or person	12	0	16	0	12	0
Fall – high (>1 metre)	11	6	9	0	11	6
Hit by motor vehicle	4	2	3	0	4	2
Motor vehicle driver	2	10	0	0	2	10
Bicycle rider/passenger	<1	4	0	0	1	4
Other threat to breathing	<1	0	0	0	1	0
Fitting	<1	0	0	0	1	0
Cutting/piercing/stabbing	<1	1	0	1	<1	1
Motor vehicle passenger	2	1	0	0	<1	1
Motorcycle driver	1	1	0	0	<1	1
Poisoning	0	1	0	0	0	1
Firearm	0	1	0	0	0	1

a Males=252, Females=32, Total=284 [low n]; b Males=83, Females=1, Total=84 [low n]

Table 5.31 (overleaf) presents data on activities being engaged in at the time of head injury 1. Data for head injury incidents 2 and 3 are not reported due to low sample sizes.

40% males and 30% females had sustained a head injury in which they had become unconscious or 'blacked out'

38% reported two or more head injuries

The most frequent cause of head injury was being struck by an object or person (49%)

**Table 5.31 Activities during head injury 1 (%)**

Activity	Males	Females	Total
Sports/exercise	28	10	26
Battery	14	34	16
Leisure/recreation	12	7	11
Personal misadventure	9	17	10
Fight riot	11	4	11
Pushbike rider	9	17	9
Vehicle driver/passenger	8	0	7
Pedestrian	3	3	4
Motor cyclist	5	0	4
Household activities	0	8	1
Intended self-harm	1	0	1

Males=233, Females=29, Total=262 [low n]

Table 5.32 presents data on the causes of head injuries by injury incident with comparison data.<sup>38</sup>

**Table 5.32 Causes of head injuries (by injury incident) (%) [Hospitalisation sample]**

Cause	Head Injury 1		Head Injury 2		Head Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Struck by object/person	49 [13]	61	56	69	58	64
High and low falls	30 [18]	19	24	8	22	22
Striking object/person	12 [0]	0	13	0	14	0
Motor vehicle accident	8 [29]	12	5	8	4	7
Other	1 [12]	0	3	0	2	0
Unprotected road user	0 [11]	6	0	11	0	0
Homicide	0 [17]	0	0	4	0	7

a Injury 1=284, Injury 2=106, Injury 3=50 [low n]; b Injury 1=84, Injury 2=26, Injury 3=14 [low n]

Source: O'Connor P (2002). Table 4, Hospitalisation for head injury, 1997-98, age group 15-19 years.<sup>38</sup>

Table 5.33 presents data on the duration of unconsciousness due to head injury by injury incident.

**Table 5.33 Duration of unconsciousness following head injury (by injury incident) (%)**

Duration of unconsciousness	Head Injury 1		Head Injury 2		Head Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Brief moment	52	70	17	70	11	72
< 10 mins	24	0	48	0	61	0
> 10 mins	7	11	10	17	11	7
> 30 mins	12	13	23	13	18	21
More than 24 hours	4	6	2	0	0	0

a Injury 1=272, Injury 2=48, Injury 3=18 [low n]; b Injury 1=70, Injury 2=23, Injury 3=14 [low n]

Table 5.34 (overleaf) presents data on the time since head injury by injury incident.

For head injury 1, 37% occurred during sport/leisure; 16% were caused by battery

For head injury 1, 76% were unconscious for <10 mins; 16% were unconscious >30 mins

**Table 5.34 Time since head injuries (by injury incident) (%)**

Time since injuries	Head Injury 1		Head Injury 2		Head Injury 3	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Within last week	3	1	3	5	4	0
1-4 weeks ago	4	5	9	0	6	7
1-6 months ago	13	8	16	14	21	7
>6 months <2 years ago	32	68	35	64	38	62
>2yrs ago	48	18	37	17	31	24

a Injury 1=301, Injury 2=109, Injury 3=52 [low n]; b Injury 1=84, Injury 2=26, Injury 3=13 [low n]

Table 5.35 presents data on the problems resulting from head injury.

**Table 5.35 Problems resulting from head injuries (%)**

Problem	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Headache/dizziness	8	31	9	100	8	31
Poor concentration	4	18	12	0	5	18
Memory loss	5	23	6	0	5	22
Personality/behavioural	3	13	3	0	3	13
Weakness	2	3	3	0	2	3
Slurring/speech	2	10	3	0	2	10
Coordination/balance	1	5	6	0	2	5
Anxiety/depression	1	6	3	0	2	6
Blackouts	1	2	0	0	1	2
Vision problems	1	0	6	0	1	0
Scarring/skin	1	0	3	0	1	0

a Males=261, Females=34, Total=295; b Males=61, Females=1, Total=62 [low n]

Table 5.36 presents data on unresolved side effects of head injury.

**Table 5.36 Unresolved side effects resulting from head injuries (%)**

Side effects	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Headache/dizziness	5	31	6	100	5	32
Poor concentration	3	18	9	0	4	18
Memory loss	4	23	3	0	4	22
Personality/behavioural	2	13	3	0	2	13
Weakness	1	3	0	0	1	3
Slurring/speech	1	10	3	0	1	10
Coordination/balance	<1	5	3	0	1	5
Anxiety/depression	1	7	3	0	1	6
Blackouts	1	2	0	0	1	2
Vision problems	<1	0	3	0	1	0
Scarring/skin	<1	0	3	0	1	0

a Males=262, Females=34, Total=296; b Males=61, Females=1, Total=62 [low n]

Table 5.37 (overleaf) presents scans and tests for head injuries.

48% reported that their first head injury occurred more than 2 years ago

Headaches, memory loss and poor concentration were the most frequently reported unresolved side effects

Young offenders in custody were more likely to have unresolved side effects from head injuries than young offenders on community orders

**Table 5.37 Scans and tests for head injuries (%)**

Scans and tests	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Received any scans or tests<sup>i</sup></b>						
Yes	30	29	24	0	29	30
<b>Type of scans or tests<sup>ii</sup></b>						
CT	61	72	80	0	62	72
X-ray	31	28	20	0	31	28
Other	4	0	0	0	4	0
MRI	3	0	0	0	3	0

a (i) Males=269, Females=33, Total=302; (ii) M=67, F=5, T=72 [low n]; b (i) M=75, F=1, T=76; (ii) M=18, F=0, T=18 [low n]

**5.7.4 Relationship between head injury and violent offending**

A detailed study of the relationship between head injury and violent offending was conducted for the custody sample only because there was necessarily a better distribution of levels of violence in their offending profile than that in the community orders sample in which there were very few cases with histories of severe violent offending. The sub group who had committed a severe violent offence was compared with the group who had committed less violent offences (no, mild, moderate). Findings showed that there was a significantly higher percentage of offenders who had committed violent offences if a head injury were present than if a head injury were absent (20.0% vs 9.6%, P=0.04) (OR=2.37). The period of time unconscious as a result of the head injury (ie the severity of the head injury) was significantly related to serious violent crime (OR=2.82). This association supports hypotheses that head injury may have an effect on violent

offending by increasing the vulnerability of a young person through impairing cortical control and lowering the threshold for violence,<sup>41</sup> or through adding to the burden of multiple stressors, thus weakening restraints that prevent violence.<sup>37</sup> The observation that head injuries are associated with violent crime in both young people and adults indicates the important aetiological role such trauma may play in serious violent offending. The significant relationship between the number of unconscious episodes and the persistence of symptoms of head injury suggests a “dose-response” effect; the accumulation of stressors specific to head injury (i.e. the number of post-head-injury symptoms) that accompany each period of unconsciousness may increase the risk of severely violent behaviour.

Table 5.38 shows the results of the logistic regression analysis and the factors that predicted moderate/severe violence and severe violence.

**Table 5.38 Logistic regression model of predictors of moderate/severe violent offending and severe violent offending (%)**

	Odds ratio	95% CI (lower)	95% CI (upper)	Significance
<b>Predicting moderate/severe violence</b>				
CALD v. ESB	2.41	1.04	5.63	0.041
Indigenous v. ESB	0.66	0.38	1.15	0.144
<b>Predicting severe violence</b>				
CALD v. ESB	3.15	1.19	8.33	0.021
Indigenous v. ESB	0.33	0.11	0.97	0.043
Head injury v. no head injury	2.52	1.11	5.72	0.027
Harmful drinking v. non-harmful or no drinking	2.72	1.00	7.36	0.049
Severe conduct disorder v. no, mild or moderate conduct disorder	0.38	0.16	0.92	0.031

*In the custody sample, a significantly higher percentage of offenders had committed severely violent offences if a head injury were present than if a head injury were absent*

*Head injuries and hazardous levels of drinking were strong predictors of severe violent offending*

*Alcohol augments the impact of head injury by reducing behavioural inhibition*

No single factor can explain why young people commit a violent crime, and it is probably the comorbid presentation of head injuries, alcohol use and possibly ethnic status that best explain such involvement. The link between head injury, substance use, developmental vicissitudes and impaired executive function as a feature of violent crime is well known, without direct causal pathways yet established.<sup>24</sup> Our results support the hypothesis that severe violence reflects disinhibition of control processes. It is probable that risk of disinhibition is greater when other factors as well as a history of head injury are present, such as cultural factors predisposing a person to the use of violence, substance abuse, or victim resistance.

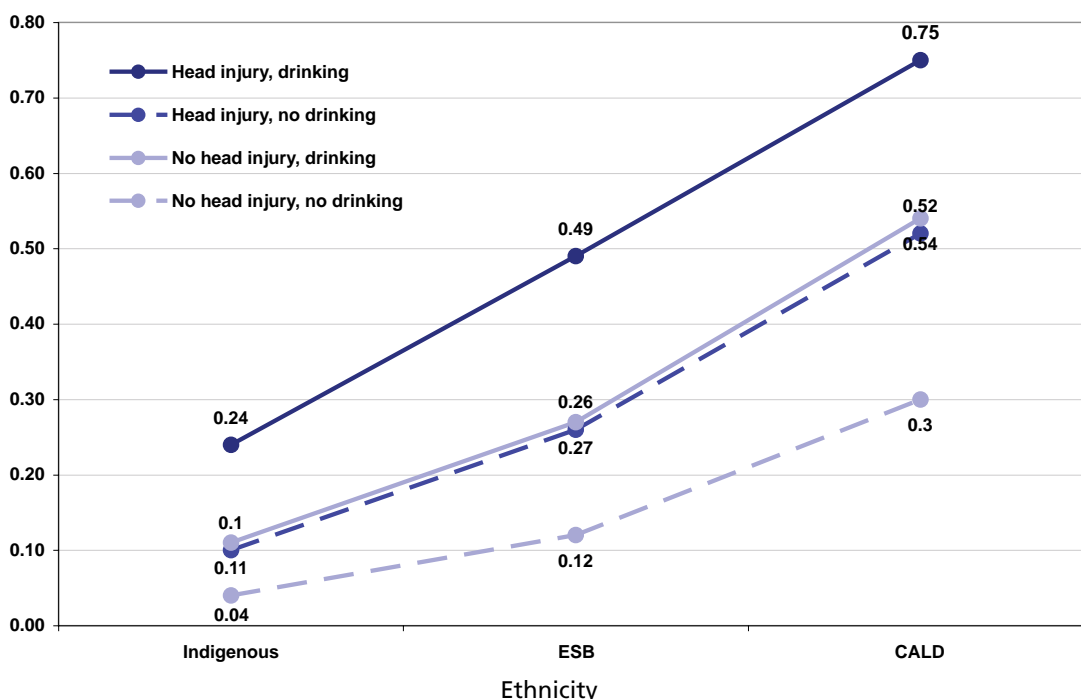
Alcohol has an important role to play in augmenting the impact of head injuries on violent crime. Alcohol acts as a central nervous system depressant and reduces the inhibition of behaviour. If head injuries increase the risk of disinhibition, and alcohol increases the risk of disinhibition, the two together should show synergistic effects, and this was clearly evident in our results. A disinhibition hypothesis would posit that alcohol use and head injury together would have a stronger relationship with violent crime than either alone; that is, they would act as cumulative stressors.

We have insufficient information to understand precisely what characteristics of our aggregated ethnic group (CALD) contributed to serious violent offending. One possible explanation is the higher prevalence of aggravated sexual assault in particular ethnic groups; another is the tendency for some ethnic groups to operate in gangs; yet another is that in some cultures, physical abuse of children is endemic and this practice both increases the risk of head injury and socialises children to act violently. Some research suggests that specific stressors such as refugee status and being unaccompanied to a new country as a minor increase the likelihood of involvement in the criminal justice system.<sup>42</sup> Not only did the CALD group have the lowest relative rate of head injury, but their general overrepresentation in violent crime suggests other as yet unknown causal factors are operating. Further research on the contribution of these factors to serious violent crime is needed. It is of note that both Aboriginal status and absence of severe conduct disorder (as assessed by the APS-SF) were protective factors against severe violent offending in this sample.<sup>43</sup>

Figure 5.4 shows the relationship between the predictive factors for the subgroup without severe conduct disorder.

*CALD young offenders with head injury and hazardous drinking were at highest risk of severe violent offending*

**Figure 5.4 Probability of committing a severely violent offence: Relationship between the predictive factors for the subgroup without severe conduct disorder**



## 5.8 Summary and conclusions

Cardiovascular disease and fatty liver are among the most commonly associated co-morbidities in obese adults and risk factors for these conditions may begin in childhood and adolescence. In this sample, 34% young offenders were either overweight (20%) or obese (14%). All examined cardiovascular risk factors were significantly associated with overweight and obesity among males but not females. There were no differences between Aboriginal and non-Aboriginal young offenders, although Aboriginal males were significantly less likely to be overweight than all other participants. Eating habits were not significantly associated with overweight or obesity, perhaps due to selective reporting. However, 20% males and 16% females reported eating take-away food every day. Forty percent (40%) of young offenders reported participating in organised sport; 67% reported exercising at least twice a week. Females were less likely to exercise or participate in sport than males.

Some health messages had not penetrated this group. For example, 63% males and 50% females reported never using sun protection when in the sun; 46% were sunburnt at least once in the previous summer. Fifty-five percent (55%) of young offenders had either a tattoo or a body piercing or both. Between 33% (piercing) and 54% (tattoo) used non-professionals to do their piercing or tattoo.

The majority (75%) of young offenders had sustained an injury at some time that required

medical treatment. Sixty-nine percent (69%) had been involved in at least one physical fight in the previous six months, of whom 12% had required medical treatment as a result of the fight. Lacerations and fractures were the most commonly reported physical injuries. Young male offenders were most frequently involved in fights with strangers (52%); young female offenders were most frequently involved in fights with friends/acquaintances. Thirty-three percent (33%) males and 25% females reported that their injuries had been intentionally caused.

The proportion of both custody and community based young offenders with head injury far exceeded available adolescent population estimates, perhaps by as much as ten times. Forty-one percent (41%) males and 30% females had sustained a head injury in which they had become unconscious. The most frequent cause of the head injury was being struck by an object or person (49%). Headaches (5%), memory loss (4%) and poor concentration (4%) were the most commonly reported unresolved side effects of the head injury. Young offenders in custody reported significantly higher proportions of unresolved side effects.

Head injuries and hazardous levels of alcohol consumption were strong predictors of severe violent offending. CALD young offenders were more likely to commit a severe violent offence than either ESB or Aboriginal young offenders.

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# CHAPTER 6

## COGNITIVE ABILITY

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# 6. COGNITIVE ABILITY

Assessment of cognitive ability is an important component in understanding youth crime and in programming for young offenders. A number of studies using different methods have concluded that low IQ is a risk factor for offending.<sup>1,2</sup> Individuals with lower IQ scores self-report more delinquent acts than individuals with higher IQ scores,<sup>1</sup> and the self-reported IQ-delinquency relationship is still evident when ethnicity, socioeconomic status (SES), and IQ test motivation are controlled.<sup>3</sup> Therefore, the IQ-crime relationship is not simply a matter of greater police detection of less intelligent offenders, but an opportunity to identify criminogenic risk factors that present independently and within the context of individual and environmental factors.<sup>2,4</sup>

Moffitt (1993)<sup>5</sup> proposed that lower cognitive ability may characterise life-course-persistent criminals who are more likely to have a 'neuropsychological deficit' identified by poor

performance on tests of cognitive ability. He further proposed that adolescent limited offenders (i.e. those who engage in transient antisocial behaviour during their adolescence) would show cognitive profiles that more closely resemble age matched adolescents. Their better cognitive functioning allows this sub group of adolescent offender to desist from criminal behaviour once they reach adulthood. Limited support for this hypothesis has been found.<sup>4</sup>

Accordingly, intelligence tests were administered to estimate reasoning ability and academic potential. The *Wechsler Abbreviated Scale of Intelligence* (WASI) scores [average score = 100; standard deviation (SD) = 15] were compared with the normative sample for the test and show the normal distribution taken from the standardisation sample<sup>6</sup> (Figure 6.1 overleaf).

Table 6.1 presents WASI subscale results for both community orders and custody samples.

**Table 6.1 WASI subscale scores for community orders and custody samples (%)**

Subscales	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>WASI Full Scale IQ</b>						
Intellectually disabled (IQ<70)	15	17	17	21	15	18
Borderline (IQ 70-79)	28	27	22	26	27	27
Low average (IQ 80-89)	28	30	35	37	29	31
Average (IQ 90-109)	27	24	26	16	26	23
High average (IQ 110-119)	2	<1	1	0	2	<1
Superior (IQ 120-129)	<1	1	0	0	<1	1
Very superior (IQ>129)	0	0	0	0	0	0
<b>WASI Verbal IQ</b>						
Intellectually disabled (IQ<70)	23	32	19	21	23	31
Borderline (IQ 70-79)	34	33	30	21	33	32
Low average (IQ 80-89)	23	22	29	37	24	23
Average (IQ 90-109)	18	11	21	21	18	12
High average (IQ 110-119)	2	0	1	0	2	0
Superior (IQ 120-129)	<1	2	0	0	<1	1
Very superior (IQ>129)	<1	0	0	0	<1	0
<b>WASI Performance IQ</b>						
Intellectually disabled (IQ<70)	8	7	8	21	8	8
Borderline (IQ 70-79)	13	15	17	11	14	15
Low average (IQ 80-89)	22	19	19	37	22	21
Average (IQ 90-109)	49	53	56	26	50	51
High average (IQ 110-119)	6	4	1	5	6	4
Superior (IQ 120-129)	1	1	0	0	1	1
Very superior (IQ>129)	0	0	0	0	0	0
<b>WASI culture fair Full Scale IQ</b>						
Intellectually disabled (IQ<70)	12	16	12	21	12	16
Borderline (IQ 70-79)	23	26	19	26	22	26
Low average (IQ 80-89)	27	29	31	37	28	30
Average (IQ 90-109)	34	27	37	16	35	26
High average (IQ 110-119)	3	<1	0	0	3	<1
Superior (IQ 120-129)	<1	1	0	0	<1	1
Very superior (IQ>129)	0	0	0	0	0	0

a Males=671-673, Females=113-115, Total=784-788; b Males=209-210, Females=19, Total=228-229

*Compared with other adolescents, many more young offenders on community orders may have difficulty comprehending, communicating and problem solving using language or numbers*

*In the community orders sample*

- 15% had Full Scale IQ<70

- 23% had Verbal IQ<70

- 8% had Performance IQ<70

- 12% had culture fair Full Scale IQ<70

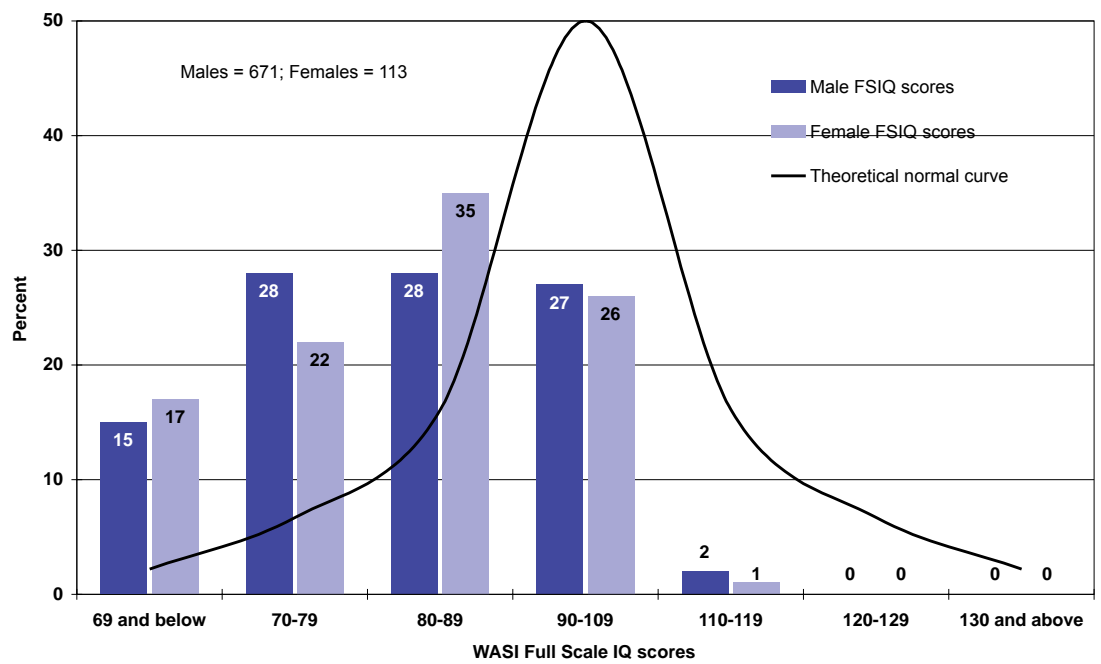
- less than 1% young offenders scored in the superior/very superior IQ range

Many young offenders scored in the borderline or low average ranges on both the cognitive and academic tests. The pattern of results suggests that, compared with other adolescents (represented in Figures 6.1-6.5 by the theoretical normal curve), many more young offenders on community orders may have difficulty comprehending, communicating and problem solving using language or numbers.

### 6.1 Full Scale IQ

The average WASI Full Scale IQ (FSIQ) score for young offenders on community orders was 83 (SD: 13, range: 52 to 128). Seventy-two percent (72%) scored below the average range for the test, compared with 25% from the standardisation sample (see Figure 6.1).

**Figure 6.1 WASI Full Scale IQ scores by gender (%)**



72% young offenders scored below the average range for the WASI compared with 25% from the WASI standardisation sample

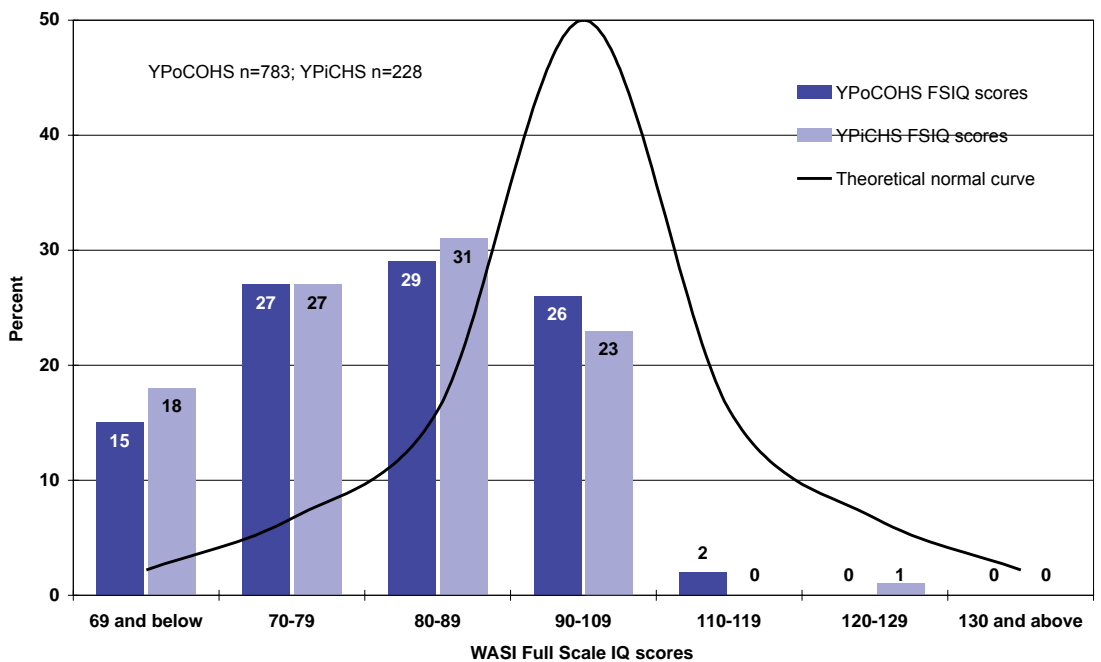
25% scored in the average range for the WASI

3% scored in the above average range or better

The pattern of IQ scores was similar for custody and community orders samples and for males and females

Figure 6.2 presents WASI full scale IQ scores for both samples.

**Figure 6.2 WASI Full Scale IQ scores for community orders and custody samples (%)**

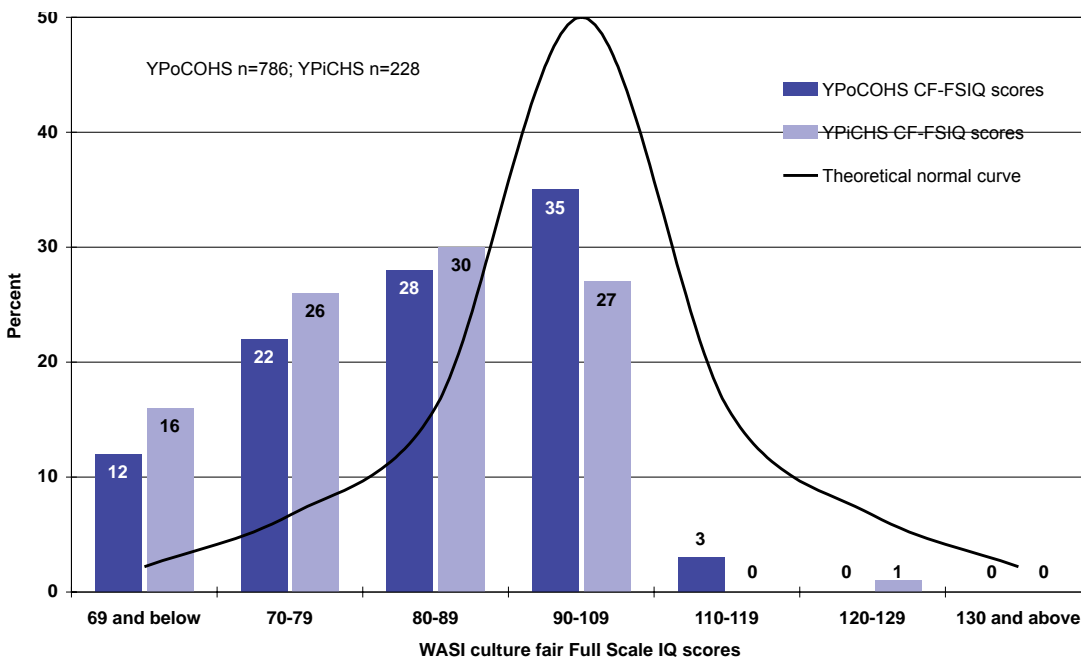


**6.1.1 Culture fair IQ assessment**

'Culture fair' IQs were calculated using the Full Scale IQs for young offenders from an English-speaking background, and the Performance IQs for Aboriginal and culturally and linguistically diverse (CALD) young offenders (Figure 6.3). The overall pattern of results for culture fair testing was similar to the WASI Full Scale IQ

scores, except that there was an increase in those scoring in the average range for the test: 26% (FSIQ for all young offenders used) compared with 35% (PIQ used for CALD and Aboriginal groups) using culture fair testing. A detailed discussion of the use of culture fair IQ testing to determine intellectual disability is presented in section 6.4.

**Figure 6.3 WASI culture fair Full Scale IQ scores for community orders and custody samples (%)**



**6.1.2 Comparison of Verbal IQ (VIQ), Performance IQ (PIQ) and Full Scale IQ (FSIQ) scores**

Scores for subtests assessing practical reasoning (fluid intelligence skills or ability to solve non-verbal problems) were closer to the normative group for the tests used compared with scores on the verbal IQ subscales. The mean FSIQ score

of 83 fell within the low average range. The mean VIQ score of 79 fell in the borderline range. The mean PIQ score of 91 fell in the average range. Means for the custody sample fell in the same ranges [YPiCHS: FSIQ=82, VIQ=76, PIQ=91].

Figures 6.4 and 6.5 (overleaf) present verbal and performance IQ scores by gender.

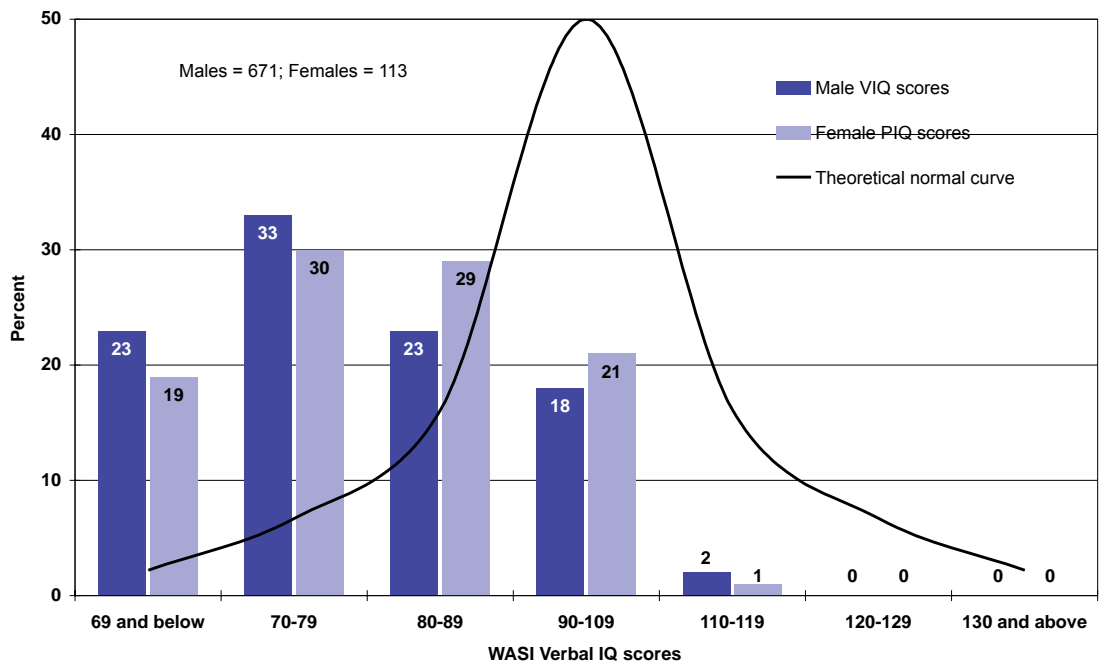
*Using a culture fair IQ assessment protocol, 34% young offenders scored in the average range on the WASI*

*The mean FSIQ score of 83 fell within the low average range*

*The mean VIQ score of 79 fell in the borderline range*

*The mean PIQ score of 91 fell in the average range*

**Figure 6.4 WASI Verbal IQ scale scores by gender (%)**

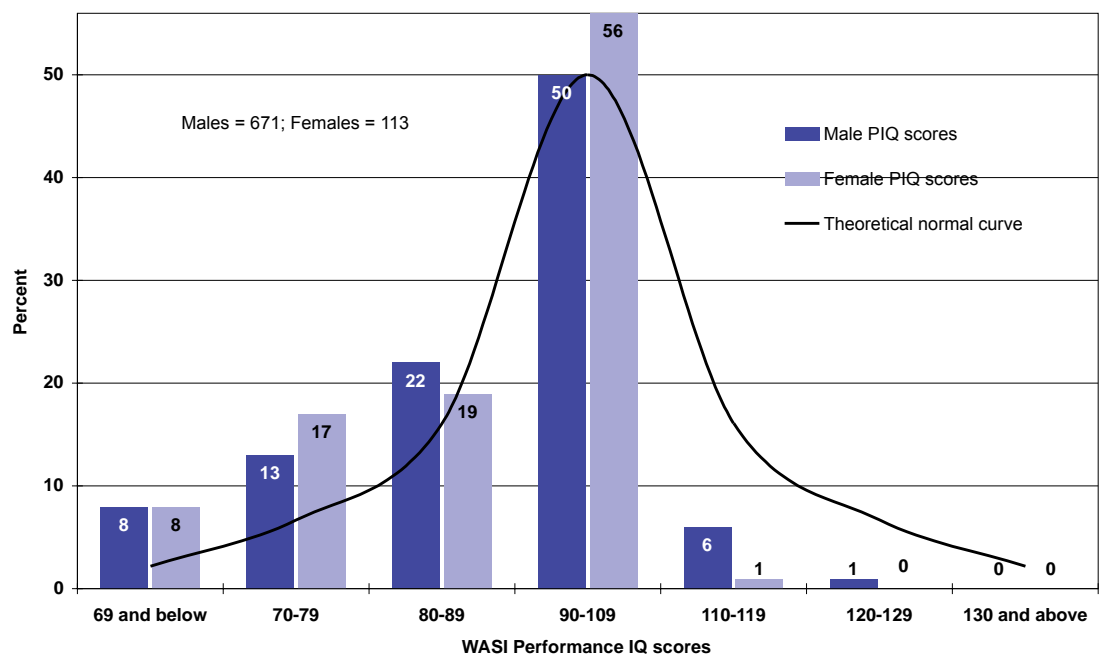


18% males and 21% females scored in the average range on WASI verbal IQ scale

50% males and 56% females scored in the average range on WASI Performance IQ scale

Young offenders indicated a high level of disengagement with the educational environment from an early age

**Figure 6.5 WASI Performance IQ scale scores (%)**



## 6.2 Education

### 6.2.1 Educational history

Young offenders are at very high risk of experiencing academic and social problems in school. Most available studies report significant deficits in the basic academic skills of reading,

language, and mathematics.<sup>7</sup> Other studies also report that low educational achievement contributes to the prediction of recidivism.<sup>8</sup> One study reported that 36% of their sample of 202 young offenders aged 12-18 years had been suspended from school at least five times and 64% had been expelled at least once.<sup>9</sup>



Young offenders indicated a high level of disengagement with the educational environment from an early age (Table 6.2).

The majority had left school without achieving a minimal qualification, had not regularly attended school, and had been suspended on numerous occasions.

**Table 6.2 Educational history (%)**

Educational history*	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Mean age left school (years) <sup>i</sup>	15.0	14.5	14.5	14.6	14.9	14.5
Not attending school <sup>i</sup>	82	81	84	83	82	82
- left school before Year 7 <sup>ii</sup>	2	1	1	0	2	1
- left school in Year 7 <sup>ii</sup>	7	16	6	20	7	16
- left school in Year 8 <sup>ii</sup>	15	24	16	33	15	25
- left school in Year 9 <sup>ii</sup>	31	34	43	20	32	33
- left school in Year 10 <sup>ii</sup>	30	16	27	27	30	17
- left school in Year 11 <sup>ii</sup>	11	8	4	0	10	7
- left school in Year 12 <sup>ii</sup>	5	1	3	0	5	1
Skip/skipped school regularly <sup>i</sup>	59	n/r	69	n/r	60	n/r
Suspended from school <sup>i</sup>	90	90	85	100	89	91
History of special education <sup>i</sup>	37	39	32	50	36	40

a (i) Males=673, Females=118, Total=791; (ii) M=551, F=97, T=648; b M=156-209; F=12-18; T=168-227; <sup>^</sup> Special school or class, tutorial centre, or alternative community based program; \* [YPICHS: before custody]

School mobility (Figure 6.6) refers to “changes in school enrolment at times other than those prompted by school or program design”<sup>10</sup> (eg changing schools but not graduating to high school). Research into the effects of mobility is inconclusive; however, Henderson (2002)<sup>11</sup> lists potential negative impacts including disrupted

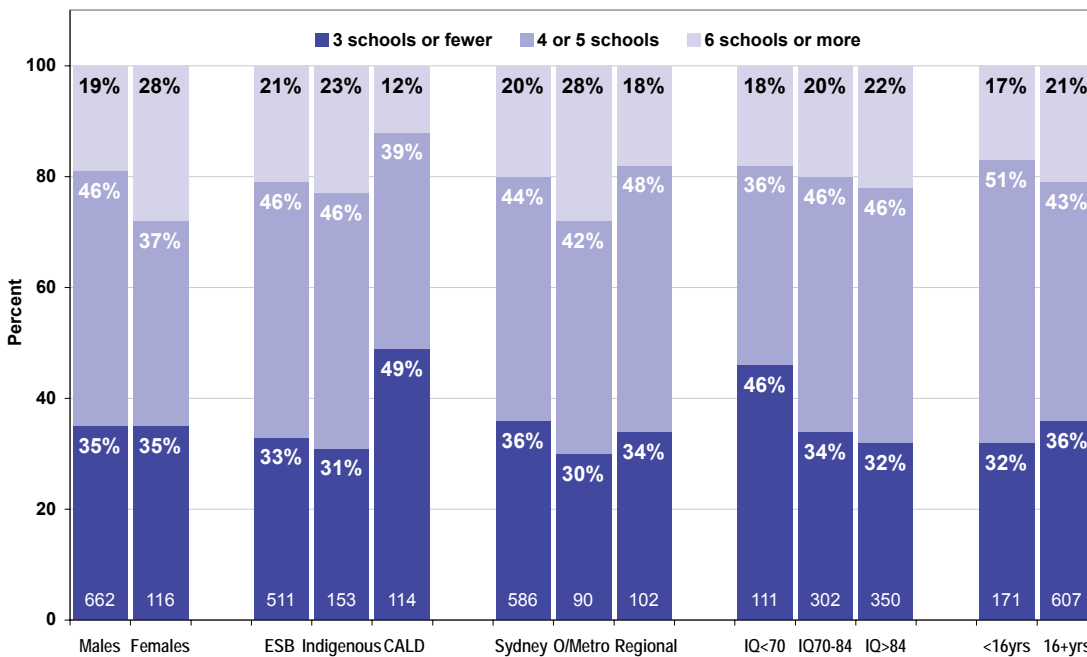
social and academic development,<sup>12,13</sup> lower achievement,<sup>14</sup> delayed grade progression,<sup>15</sup> and dropout.<sup>16</sup> Young offenders with a history of out of home care (OOHC) were more likely to have attended six or more schools; those with no OOHC were more likely to have attended three or fewer schools.

Most young offenders had left school without achieving a minimal qualification, had not regularly attended school, and had been suspended on numerous occasions

20% young offenders had attended 6 or more schools

Young offenders with a history of out of home care (OOHC) were more likely to have attended six or more schools; those with no OOHC were more likely to have attended three or fewer schools

**Figure 6.6 School mobility (categories) by gender, ethnicity, region, IQ and age (%)**



### 6.3 Academic Achievement

The Composite Standard Score on the *Wechsler Individual Achievement Test-II-Abbreviated* (WIAT-II-A) provides an estimate of overall academic achievement in reading, spelling and mathematics.<sup>17</sup> The WIAT-II-A is based on a normative sample with an average score of

100 and standard deviation of 15, the normal distribution curve for which is superimposed on Figures 6.7-6.9 for comparison with the young offender sample.

Table 6.3 presents WIAT-II-A subtest scores for both community orders and custody samples.

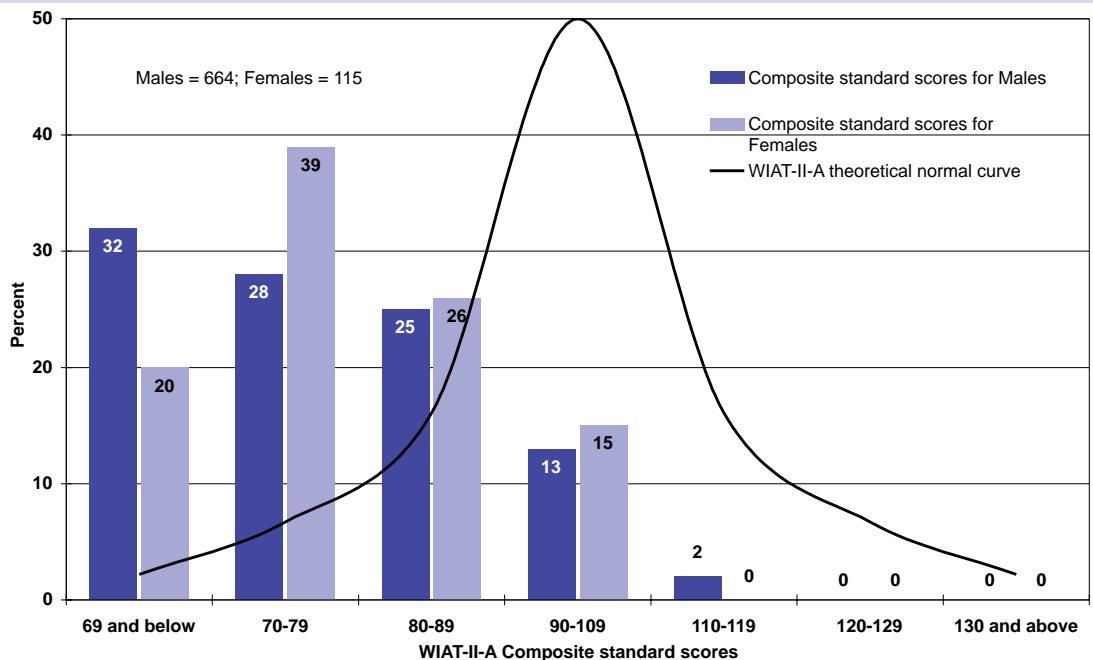
**Table 6.3 WIAT-II-A subtest scores for community orders and custody samples (%)**

Subscales	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>WIAT Numerical operations</b>						
Intellectually disabled (<70)	63	62	69	89	64	64
Borderline (70-79)	21	21	22	0	21	19
Low average (80-89)	9	9	9	5	9	9
Average (90-109)	6	7	0	5	5	7
High average (110-119)	1	1	0	0	1	1
Superior (IQ 120-129)	<1	0	0	0	0	0
Very superior (IQ>129)	0	0	0	0	0	0
<b>WIAT-II-A Spelling subtest</b>						
Intellectually disabled (I<70)	23	30	9	17	21	30
Borderline (70-79)	17	21	16	17	17	20
Low average (80-89)	20	16	20	22	20	17
Average (90-109)	35	29	52	44	37	31
High average (110-119)	5	3	3	0	4	2
Superior (IQ 120-129)	1	0	0	0	1	0
Very superior (IQ>129)	0	0	0	0	0	0
<b>WIAT-II-A Word Reading subtest</b>						
Intellectually disabled (<70)	22	31	17	11	21	28
Borderline (70-79)	17	12	17	11	17	12
Low average (80-89)	18	17	18	17	18	18
Average (90-109)	37	34	46	39	39	34
High average (110-119)	5	6	2	17	5	7
Superior (IQ 120-129)	0	1	0	6	0	1
Very superior (IQ>129)	0	0	0	0	0	0

a (i) Males= 666-8, Females= 115-7, Total= 783-4; b M= 194-7; F= 18-19; T= 212-6

Figure 6.7 displays WIAT-II-A composite standard scores for males and females.

**Figure 6.7 WIAT-II-A composite standard scores (%)**



85% young offenders scored in the borderline range or lower for numerical operations

38% young offenders scored in the borderline range or lower for spelling achievement

38% young offenders scored in the borderline range or lower for word reading

13% scored in the average range (90-109) on the Composite Standard Score of the WIAT-II-A

Average overall academic performance fell within the borderline range. The average WIAT-II-A Composite Standard Score (CSS) was 77 (range 46 to 118), indicating that young offenders on community orders fell well below (1.5 standard deviations, on average) the expected norms in terms of their overall academic achievement. Thirty percent (30%) of young offenders scored <70 on the Composite Standard Score.

ESB young offenders were less likely and Aboriginal young offenders were more likely to score in the range for intellectual disability (<70) on the WIAT-II-A CSS. Aboriginal young offenders were also less likely to score in the ranges 70-84 and >84 than expected; ESB were more likely to score in those ranges while CALD had the expected distribution across the three score ranges for CSS.

Young offenders from the metropolitan areas were less likely and regional young offenders were more likely to achieve scores <70 on CSS.

As expected, those young offenders with IQ<70 were more likely to achieve a CSS <70 and more young offenders with IQ>84 were likely to achieve a CSS>84.

**6.3.1 Numerical ability, spelling and word reading subtest scores**

Sixty-two percent (62%; n=482) [YPiCHS 60%, n=128] could read at a low average or better standard; 62% (486) [YPiCHS 50%, n=105] were able to spell at a low average or better standard, but only 15% (116) [YPiCHS 16%, n=35] could perform numerical operations at a low average standard or better. The following percentages of young offenders on community orders attained the WIAT-II-A subtest scores consistent with performance in the intellectually disabled range:

- 30% (234) composite standard scores;
- 64% (501) numerical operations subtest;
- 21% (168) word reading subtest;
- 21% (163) spelling subtest.

Figure 6.8 shows the distribution of scores on the numerical operations subtest for male and female offenders.

*30% young offenders scored <70 (i.e. in the intellectually disabled range) on the Composite Standard Score of the WIAT-II-A CSS*

*Aboriginal young offenders were more likely to score in the intellectually disabled range (<70) on the WIAT-II-A CSS*

*62% young offenders could read and spell at a low average or better standard but only 15% could perform numerical operations at low average or better standard*

**Figure 6.8 WIAT-II-A numerical operations standard scores (%)**

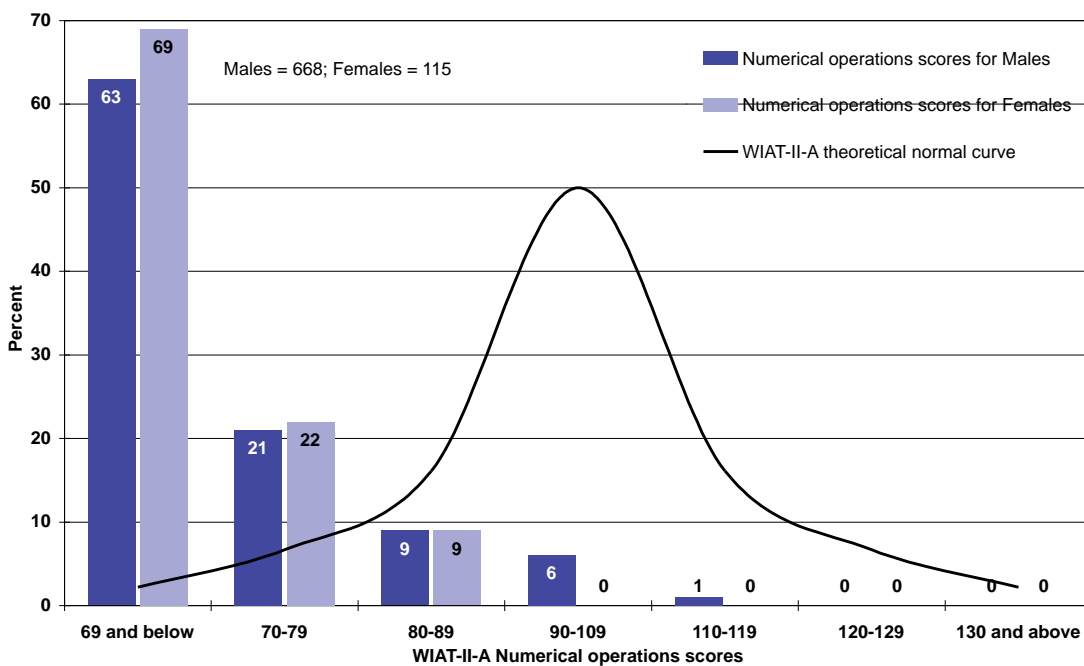


Figure 6.9 (overleaf) shows the distribution of scores on the spelling subtest for both samples.

**Figure 6.9 WIAT-II-A spelling standard scores (%)**

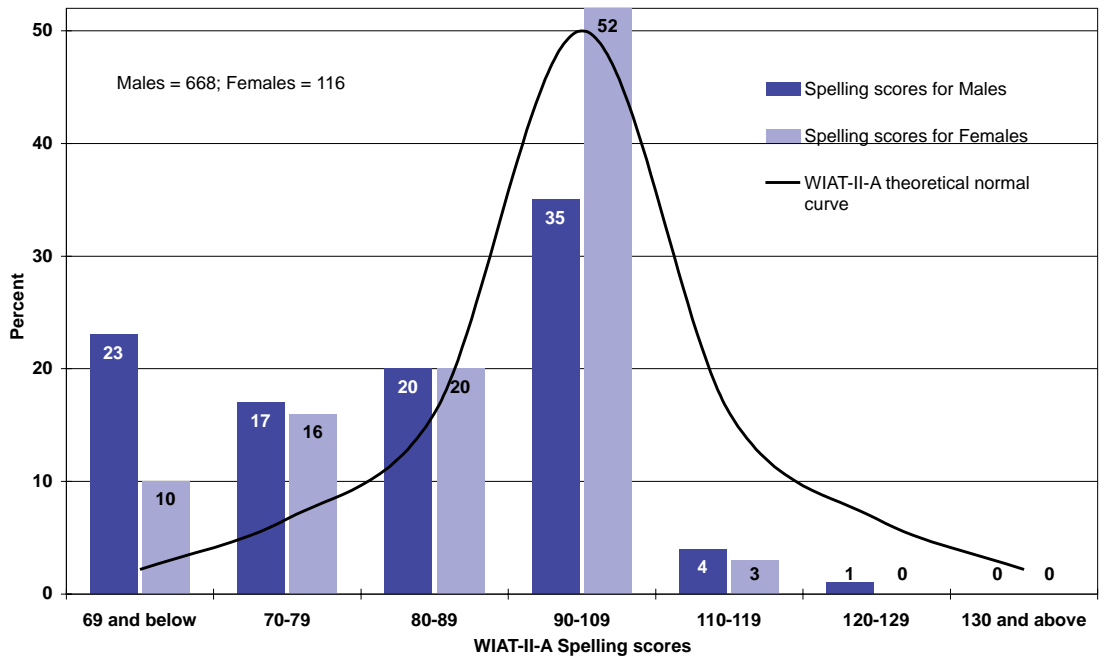
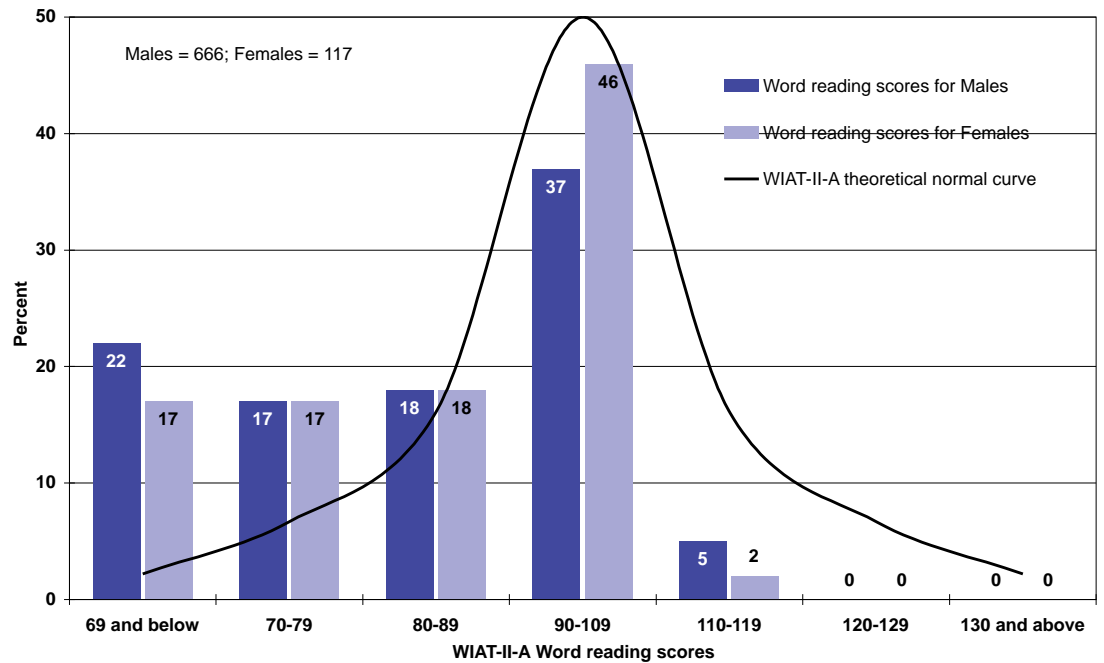


Figure 6.10 shows the distribution of scores on the word reading subtest for males and females with the normative curve from the standardisation sample.

**Figure 6.10 WIAT-II-A word reading standard scores (%)**



**6.4 Intellectual disability estimates**

Intellectual disability is defined as an individual's level of intellectual functioning and its impact on ability to perform a range of cognitive and behavioural tasks required

for independent living. An individual is usually defined as intellectually disabled if he or she has an overall intellectual quotient <70 (two standard deviations below the mean) of a reliable test of intelligence (mean=100; SD=15), such as the *Wechsler Intelligence Scale for Children*, along with functional impairments in

Young offenders attained WIAT-II-A subscale scores consistent with performance in the intellectually disabled range:

- 30% Composite Standard Scores
- 64% Numerical Operations
  - 21% Word Reading
  - 21% Spelling

two of the behavioural domains that impact on adaptive functioning.<sup>17</sup> These domains include communication, educational achievement, self-care and interpersonal skills. Intellectual disability is normally identified before the age of 18 years and is usually present from birth.<sup>18</sup>

The WASI assesses cognitive functioning, and the WIAT-II-A assesses one area of adaptive functioning, that of functional academic skills (two areas of adaptive functioning are required for a formal diagnosis – only one was available for this study).

Developmental disability and neurological dysfunction create problems in executive and adaptive function.<sup>19</sup> Young offenders with a developmental disability are usually unable to develop meta-cognitive skills, that is, the capacity for awareness and insight into their own thinking processes. Such failures in cognitive development and adaptive function (problem-solving, impulse control) are more likely to lead to behaviours that result in the commission of an offence.

As a special needs group, intellectually disabled offenders present unique challenges to Departments of Juvenile Justice, especially in relation to their identification, assessment, case management, rehabilitation needs and post release adjustment. It is more challenging for offenders with an intellectual disability to learn new adaptive behaviours and harder for them to unlearn maladaptive behaviours than other offenders. Consequently, more intensive interventions may be required than for offenders with average intellectual functioning. Having an intellectual disability can also predispose an individual to other behavioural problems and increase the probability of dual diagnosis presentations.

The *Young People in Custody Health Survey*<sup>20</sup> found that 13% of juvenile offenders surveyed met the criteria for intellectual disability where adaptive functioning was measured by academic performance. Culture fair testing estimated that 10% of Aboriginal and CALD offenders also met these criteria.

For young offenders in the community, 15% (n=119) WASI Full Scale IQ scores fell into the range consistent with intellectual disability (i.e., <70). Eleven percent (11%; n=87) scored

<70 on both the WASI Full Scale IQ and the WIAT-II-A Composite Standard Score (WIAT-CSS). This indicates that 11% young offenders on community orders may have an intellectual disability, at least in relation to their adaptation to mainstream Anglo-Australian society.

To understand a person's educational and adaptive needs, the normative standards of the dominant cultural group are important.<sup>21</sup> However, to diagnose intellectual disability in a culture-fair manner, it is important to compare IQ and adaptive behaviour with those of a person's cultural group. Since the WASI and WIAT-II-A sample comprised Aboriginal (19.5%; n=148) and CALD young offenders (15%; n=112) (Note: in YPoCOHS, CALD was coded for those with a language other than English mainly spoken in the home), these results require careful interpretation because these young offenders would be expected to have lower verbal scores than those from an English-speaking background (ESB).

#### **6.4.1 Culture fair assessment of intellectual disability**

Indigenous performance on the non-verbal (Performance) scales on IQ tests are more likely to be comparable to available Australian norms, particularly for those raised in urban areas.<sup>20</sup> One 'culture fair' estimate of IQ could be based on numbers of Aboriginal and CALD young offenders scoring <70 on the WASI Performance IQ Scale, and the number of ESB young offenders with a WASI Full Scale IQ <70. Twenty-four Aboriginal and seven CALD young offenders scored <70 on the Performance IQ Scale, and 64 young ESB offenders scored <70 on the WASI Full Scale IQ. Hence, 12% (95) young offenders have culture fair IQ scores <70.

Two thirds (64) of those young offenders with culture-fair IQ scores (i.e. WASI PIQ for CALD/Aboriginal groups) <70 also had WIAT-CSS scores <70. This combined assessment of adaptive functioning and culture fair IQ provides a valid culture fair measure of intellectual disability at 8%, n=64.

Several clients who refused to continue on the WASI may have done so to avoid the anxiety and perceived shame of being unable to

*People with an intellectual disability are usually unable to develop meta-cognitive abilities, that is, the capacity for awareness and insight into their own thinking processes*

*It is more challenging for people with an intellectual disability to learn new adaptive behaviours and harder for them to unlearn maladaptive behaviours*

*15% young offenders' WASI Full Scale IQ scores fell into the range consistent with intellectual disability*

complete the required tasks. This would suggest that 8% may be an underestimate of the true level of intellectual disability in this group. Further, although strict criteria were applied to identify caseness for ID in this report, many of the young offenders scoring in the borderline ranges for IQ and/or educational achievement would share many of the characteristics and deficits specifically identified in young people meeting criteria for ID and should therefore be offered similar interventions as those meeting the criteria for ID.

**6.4.2 Relationships between intellectual disability, Aboriginal status and offending**

Neurobiological dysfunction, lower verbal

ability,<sup>8,22,23</sup> lack of metacognitive skills, poor capacity to problem solve, high levels of impulsivity and emotional dysregulation,<sup>21,24</sup> and social skills deficits<sup>25,26</sup> have all been observed more frequently in people with an intellectual disability, and these characteristics are thought to increase the risk of offending and hence explain the relationship between ID and offending. Specifically, social skills deficits have been hypothesised to account for higher rates of person-focused offending (violent and sex offences) in young offenders with an intellectual disability.<sup>27,28</sup>

Court outcomes for offences and offence types were compared for ID and nonID young offenders and results are presented in Table 6.4.

**Table 6.4 Court outcomes for offences and offence types by ID status (%)**

Offence/court determination	ID category	N	Mean	SD	P-value
Number of court dates	<70	119	5.03	4.58	0.000
	>69	657	3.51	3.24	
	Total	776	3.74	3.52	
Recorded offences	<70	119	6.14	6.06	0.024
	>69	657	4.85	5.65	
	Total	776	5.05	5.73	
Bond, probation, CSO, suspended, z-rec	<70	109	5.32	4.61	0.054
	>69	567	4.46	4.18	
	Total	676	4.60	4.26	
Supervised orders	<70	109	4.33	4.26	0.069
	>69	567	3.61	3.66	
	Total	676	3.73	3.77	
Control orders	<70	109	0.67	2.12	0.372
	>69	567	0.49	1.93	
	Total	676	0.52	1.96	
Violent offences	<70	109	1.66	2.12	0.691
	>69	567	1.74	1.99	
	Total	676	1.73	2.01	
Property offences	<70	37	3.86	3.98	0.048
	>69	141	2.75	2.72	
	Total	178	2.98	3.05	
Traffic offences	<70	37	0.86	1.49	0.902
	>69	142	0.90	1.63	
	Total	179	0.89	1.60	

\* Sample size too small to conduct statistical analysis

There were significant differences between ID and nonID young offenders on four of the offence factors assessed. ID young offenders had significantly more court dates and recorded offences than nonID offenders. They also received more bonds, probations etc than nonID offenders but there were no differences

between the ID groups with respect to orders with supervision and control orders. ID young offenders committed more property offences but there were no differences between IQ categories with respect to violent offences or traffic offences.

11% scored <70 on both the WASI Full Scale IQ and the WIAT-II-A Composite Standard Score (WIAT-CSS)

At least 11% of young offenders on community orders have an intellectual disability

12% young offenders had culture fair IQ<70

8% had both a culture fair IQ and WIAT-II-A CSS in the range for intellectual disability

8% may be an underestimate of the true level of intellectual disability in this group

Using ANOVA with post hoc comparisons, a further breakdown of the same factors by Aboriginal and ID status showed that non-Aboriginal non-ID offenders had fewer court dates, fewer recorded offences, fewer bonds, fewer supervised orders and fewer control

orders than the other three groups. However, there were no differences between the four groups with respect to the number of violent, property or traffic offences committed (Table 6.5).

**Table 6.5 Number of court dates, court outcomes and offence types by Indigenous and ID status (%)**

Court outcomes and offences	Group	N	Mean	SD	P-value
Number of court dates	Indig_ID	77	4.90	4.40	0.000
	nIndig_ID	552	3.20	2.99	
	Indig_nID	42	5.26	4.92	
	nIndig_nID	105	5.10	3.98	
	Total	776	3.74	3.52	
Recorded offences	Indig_ID	77	6.35	6.15	0.000
	nIndig_ID	552	4.46	5.37	
	Indig_nID	42	5.76	5.93	
	nIndig_nID	105	6.92	6.59	
	Total	776	5.05	5.73	
Bond, probation, CSO, suspended, z-reco	Indig_ID	72	5.33	4.73	0.002
	nIndig_ID	472	4.20	4.10	
	Indig_nID	37	5.30	4.43	
	nIndig_nID	95	5.77	4.31	
	Total	676	4.60	4.26	
Supervised orders	Indig_ID	72	4.31	4.33	0.002
	nIndig_ID	472	3.38	3.56	
	Indig_nID	37	4.38	4.18	
	nIndig_nID	95	4.79	3.97	
	Total	676	3.73	3.77	
Control orders	Indig_ID	72	0.78	2.18	0.019
	nIndig_ID	472	0.38	1.69	
	Indig_nID	37	0.46	2.01	
	nIndig_nID	95	1.02	2.77	
	Total	676	0.52	1.96	
Violent offences	Indig_ID	72	1.85	2.37	0.087
	nIndig_ID	472	1.66	1.93	
	Indig_nID	37	1.30	1.49	
	nIndig_nID	95	2.15	2.25	
	Total	676	1.73	2.01	
Property offences	Indig_ID	24	3.92	4.28	0.129
	nIndig_ID	115	2.59	2.61	
	Indig_nID	13	3.77	3.52	
	nIndig_nID	26	3.46	3.13	
	Total	178	2.98	3.05	
Traffic offences	Indig_ID	24	1.17	1.69	0.481
	nIndig_ID	116	0.89	1.57	
	Indig_nID	13	0.31	0.85	
	nIndig_nID	26	0.96	1.93	
	Total	179	0.89	1.60	

Those with an IQ<70 had more recorded offences

There were no differences between ID and nonID offenders in court outcome

Non-Aboriginal ID young offenders had fewer court dates and fewer recorded offences than Aboriginal ID young offenders

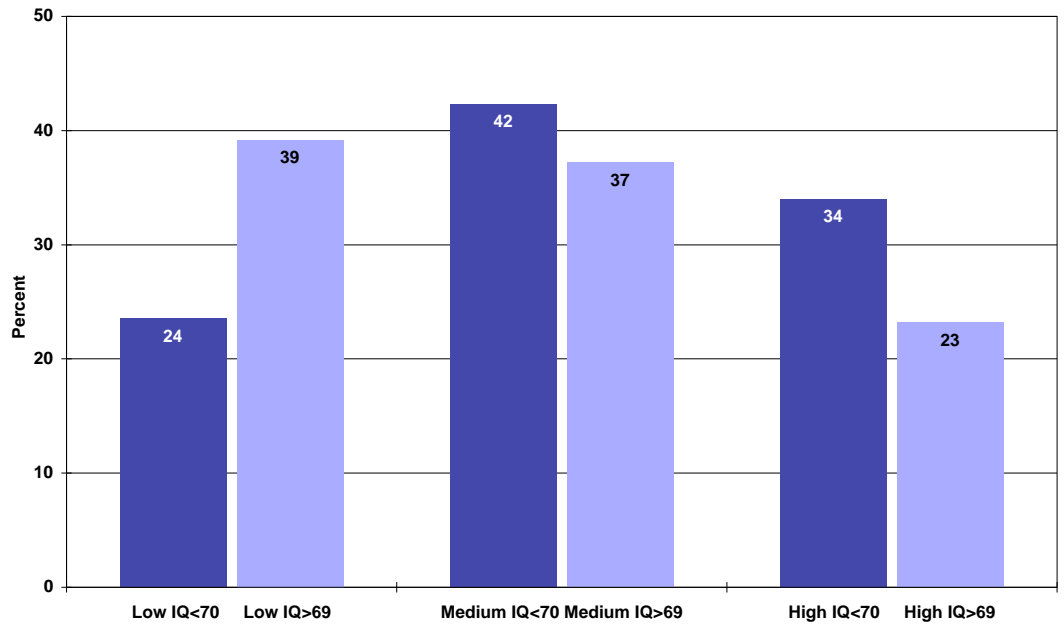
ID young offenders were rated 'medium risk' on the YLSI-AA and non ID young offenders were rated 'low risk'

#### **6.4.3 Relationship between Youth Level of Service/Case Management Inventory: Australian Adaptation, (YLS/CMI:AA) and intellectual disability**

On average, those with an IQ<70 scored in the 'Medium Risk' category and those with an

IQ>69 scored in the 'Low Risk' category on the YLS/CMI:AA. Those with an IQ <70 scored higher on: 'Prior and current offences'; 'Peer Relations'; 'Education and Employment'; 'Leisure and Recreation'; and 'Attitudes and Orientation', but lower than IQ>69 on the 'Substance Use' domain (Figure 6.11 overleaf).

**Figure 6.11 Relationship between YLSI risk level and IQ (%)**



*Aboriginal offenders may be at higher risk of recidivism*

*ID young offenders have more needs relating to peers, leisure, education, employment and attitudes*

*Social skills deficits are an important criminogenic need for ID young offenders*

A further assessment of the relationships between YLSI, age and number of court appearances by Aboriginal and ID status

was conducted. Table 6.6 shows the domain scores on the YLSI:AA for Aboriginal and non-Aboriginal young offenders.

**Table 6.6 Age, YLSI/CMI:AA and number of court dates by IQ and Indigenous status (%)**

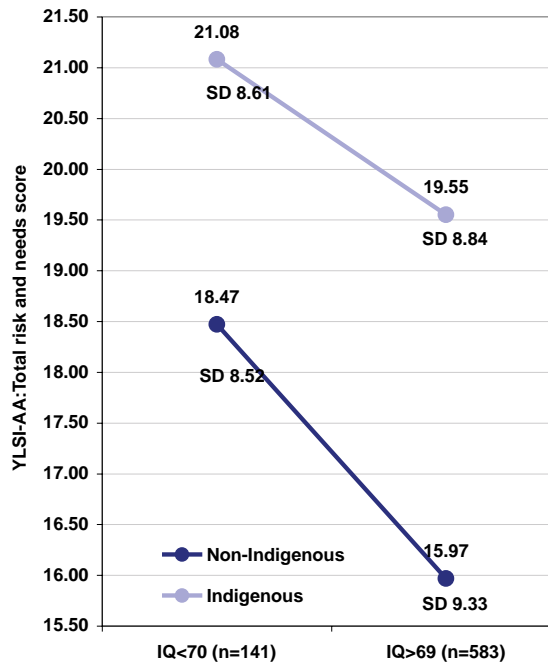
	IQ range (<70 and >69)	N	Indigenous	Mean	SD
AGE	<70	73	No	16y 11m	1.2
		39	Yes	16y 2m	1.3
		112	Total	16y 8m	1.3
	>69	510	No	17y 1m	1.2
		102	Yes	16y 9m	1.3
		612	Total	17y 1m	1.3
	Total	583	No	17y 1m	1.2
		141	Yes	16y 7m	1.3
		724	Total	17y 0m	1.3
YLS/CMI:AA: Total risk & needs score	<70	73	No	18.47	8.5
		39	Yes	21.08	8.6
		112	Total	19.38	8.6
	>69	510	No	15.97	9.3
		102	Yes	19.55	8.8
		612	Total	16.57	9.3
	Total	583	No	16.28	9.3
		141	Yes	19.97	8.8
		724	Total	17.00	9.3
Number of court dates (excluding court dates for abuse)	<70	73	No	4.77	4.1
		39	Yes	4.92	3.6
		112	Total	4.82	3.9
	>69	510	No	3.22	2.8
		102	Yes	5.20	4.0
		612	Total	3.55	3.1
	Total	583	No	3.41	3.0
		141	Yes	5.12	3.9
		724	Total	3.74	3.3



The MANOVA (multivariate analysis of variance) shows significant differences for both ID [Wilks lambda=0.981; F (3,718)=4.7, p=.003] and Aboriginal [Wilks lambda=0.961; F (3,718)=9.68, p < .001] groups but no interaction between Aboriginality and ID. Significant differences between those with an IQ>69 and IQ<70 were found for age (ID were younger) (p=.003) and YLS/CMI: AA total scores (ID had higher scores) (p=.05). Significant differences between those identified as Aboriginal and non-Aboriginal were found for age (Aboriginal were younger) (p=.000), YLS/CMI: AA total scores (Aboriginal had higher scores) (p=.003) and number of court dates (Aboriginal had more court appearances) (p=.003). Analysis of the interaction revealed only one significant effect, for number of court dates (Aboriginal non-ID had more court dates than non-Aboriginal non-ID (p=.011) but number of court dates for Aboriginal and non-Aboriginal ID were the same).

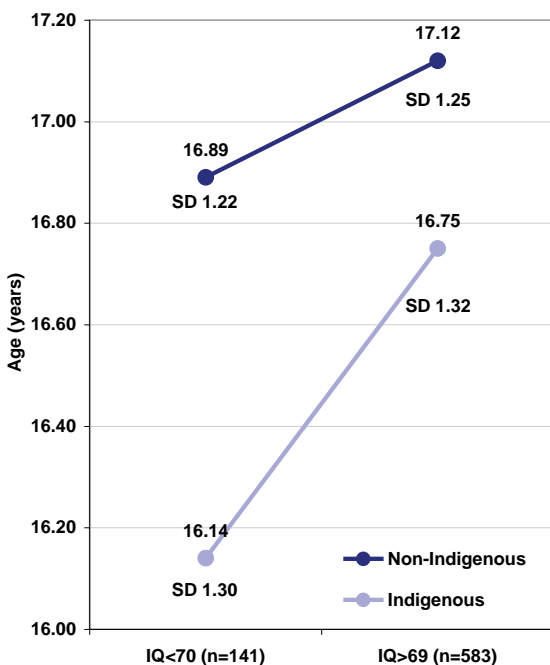
Figures 6.12 to 6.14 present these findings graphically for ease of interpretation.

**Figure 6.13 YLSI by IQ for Indigenous and non Indigenous offenders (%)**

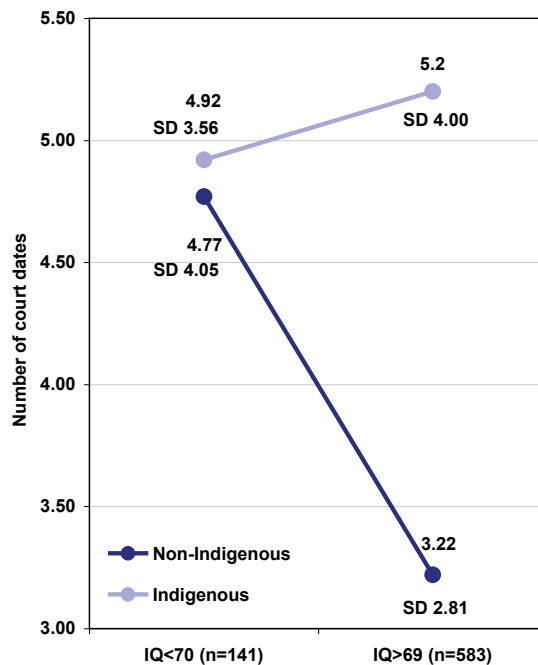


Young offenders with ID (IQ<70) had a greater risk of re-offending

**Figure 6.12 Age by IQ for Indigenous and non Indigenous offenders (%)**



**Figure 6.14 Court dates by IQ for Indigenous and non Indigenous offenders (%)**



Aboriginal offenders were younger and had more court appearances than non-Aboriginal offenders

Aboriginal non-ID offenders had more court dates than non-Aboriginal non-ID offenders

## 6.5 Summary and conclusions

The mean Full Scale IQ score of 83 fell within the low average range. The mean Verbal IQ score of 73 fell within the borderline range; the mean Performance IQ of 91 fell within the average range. Fifteen percent (15%) young offenders had Full Scale IQ (WASI) <70, placing them in the category of intellectual disability; 23% had Verbal IQ<70 compared with 8% who had Performance IQ<70. An additional 27% had Full Scale IQs in the range 70-79 (Borderline). Therefore, 42% young offenders on community orders were functioning in the borderline range of intellectual functioning or lower. The pattern of scores was similar for the custody sample, although there were more young offenders in custody who scored in the range of intellectual disability. Twelve percent (12%) had a culture fair IQ that fell in the range of intellectual disability. Eight percent (8%) had scores on both WASI and WIAT tests that fell within this range.

Young offenders indicated a very high level of disengagement with the school environment from an early age. Most had left school without achieving a minimal educational qualification (Year 10 School Certificate). Most had been suspended from school. Educational testing using the WIAT-II-A showed that the average overall academic performance fell within the borderline range (average WIAT CSS=77); 30% scored <70 on WIAT CSS. Many young offenders had not achieved a basic standard of literacy or numeracy; 64% scored in the range of intellectual disability for numerical operations and 21% for each of word reading and spelling scored in this range. Aboriginal young offenders were more likely to score in the intellectually disabled range.

Participants with an IQ <70 had higher scores (ie higher criminogenic needs) on the YLS/CMI:AA than those with an IQ >69 and were placed in a higher category of risk on the YLS/CMI:AA (Medium v Low). According to the principles of RNR (risk, needs and responsivity) these findings suggest that those with an IQ <70 have a greater risk of re-offending. Recent meta-analytic studies indicate that ID is a risk factor for recidivism in juveniles.<sup>29,30</sup> These results have implications for juvenile justice

services. The Department of Juvenile Justice in NSW determines frequency of contact of those on community orders according to risk, with high risk young offenders receiving more contact. As those with an ID are more likely to be in higher risk categories, juvenile justice officers are likely to spend a large amount of time engaging with juvenile offenders with an ID. Juvenile Justice Officers should therefore be trained to recognise possible ID in young offenders, refer for assessment and to interact appropriately with this group of young offenders to ensure maximum rehabilitative benefit of their supervision.

The finding that those with an ID had higher YLS/CMI:AA scores must be considered with caution. The percentage of those with and without an ID in categories of 'Low', 'Medium' and 'High' risk appeared different for different offences, including 'Break and Enter' and 'AVO'. This suggests a possible interaction between offence type, ID status and risk categorisation that requires further exploration. The significance of the relationship between higher YLS/CMI:AA risk category and ID was also affected by Aboriginal status. Aboriginal young offenders were more likely to be in a higher risk category on the YLS/CMI:AA than non-Aboriginal young offenders. This finding supports previous research in Australia that indicates that Aboriginal offenders are at particularly high risk of recidivism.<sup>31,32</sup> Whilst no interaction effect was found between ID and Aboriginal status for YLS/CMI:AA score, when separate analyses were conducted for Aboriginal and non-Aboriginal offenders with respect to ID status and YLS/CMI:AA risk classification, those with an ID were only found to be at higher risk of being allocated to a higher risk category when participants were not Aboriginal. This is consistent with previous research suggesting that although ID is a significant risk factor for recidivism, the relationship may be indirect due to ID's relationship with other factors that have been found to be more proximal with offending.

Those with an ID had a different profile of needs compared with those without an ID. Higher needs for the ID group included domains relating to peers, leisure, education, employment and attitudes. This domain profile

*42% young offenders' intellectual functioning fell within the borderline range or lower*

*ID young offenders need to be identified early and receive targeted interventions to ensure maximum rehabilitative benefit from their supervision*

*There may be an interaction between offence type, ID status and risk categorisation on YLSI that requires further exploration*

*Social skills deficits are an important criminogenic need for those with an ID*

strongly reflects the heightened social needs of those with an ID compared with young offenders without an ID. These findings are also consistent with the hypothesis that social skills deficits are an important criminogenic need for those with an ID.<sup>25,26</sup>

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# CHAPTER 7

## MENTAL HEALTH

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# 7. MENTAL HEALTH

Mental illness is a less clearly defined term for adolescents than for adults.<sup>1</sup> Adolescence represents a time of rapid physical, cognitive and emotional development, in which symptoms may appear and mutate, and in which the course of a problem is dynamic and may not achieve the stability usually assumed with adult manifestations of illness/disorder.<sup>2</sup> For this reason, we use the term 'mental health concerns' or 'mental health problems' rather than mental illness.

In New South Wales, Section 32 of the *Mental Health (Crime Procedures) Act (1990)* allows a magistrate in the local or Children's Court to determine whether a defendant should be viewed as suffering from a mental illness, disorder or condition. Section 32 states that if at the commencement or any time during the course of proceedings it appears to the Magistrate that "the defendant is developmentally disabled, is suffering from a mental illness or from a mental condition for which treatment is available in a hospital, but is not a mentally ill person within the meaning of Chapter 3 of the *Mental Health Act 1990* (Part 9), and that, on an outline of the facts alleged... it would be more appropriate to deal with the defendant in accordance with the provisions of this Part than otherwise in accordance with the law."

The American Academy of Child and Adolescent Psychiatry reports that 65%-75% of young people in the juvenile justice system have one or more diagnosable mental disorders<sup>3</sup> compared with 29%<sup>4</sup> of a comparable general adolescent population. Young people with emotional/mental health disorders are four times more likely to have a substance abuse disorder than young people without such disorders.<sup>5</sup> The association between mental health, substance abuse and criminal offending in young offenders<sup>6,7,8,9</sup> has been confirmed by longitudinal studies of delinquency<sup>10,11,12</sup> that highlight the important roles that mental health problems and substance abuse play in delaying the trajectory out of offending.

Alcohol and illicit drug use are widespread among Australian young people.<sup>13</sup> The criteria for Substance Abuse Disorder include recurrent substance use that results in failure to fulfil major social roles, such as obligations at work, home or school, substance use that is associated with risky behaviours (eg drink

driving), substance use related legal problems and continued substance use despite persistent social or interpersonal problems.<sup>14</sup>

The current Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV-TR)<sup>14</sup> defines Conduct Disorder as a "repetitive and persistent pattern of behaviour in which the basic rights of others or major age-appropriate societal norms or rules are violated" (APA 2000) manifested by aggression to people or animals (bullying, violence, cruelty), destruction of property, and/or deceitfulness or theft. Diagnostic criteria are provided in the methodology chapter.

Conduct Disorder is one of the most frequently diagnosed mental health concerns in adolescents, particularly in young offenders. Conduct Disorder is estimated to affect 5-10% of children aged 5-15 years in the United Kingdom and the United States.<sup>15,16</sup> For those children with early onset in preschool years, Conduct Disorder often persists into adulthood and predicts poor employment prospects, marriage breakdown, and self harming or antisocial and criminal behaviour.<sup>17,18,19</sup>

There is debate, however, as to whether Conduct Disorder is a psychopathological condition or a description of anti-social behaviour. Recent research has shown that 1- to 3-year-old children at high risk of externalising disorders showed marked reductions in problem behaviours following a home-based, attachment-based video-feedback intervention to promote positive parenting and sensitive discipline (VIPP-SD).<sup>20</sup> Improved behaviour was associated with enhanced maternal sensitivity in discipline interactions. This study highlighted the origin of Conduct Disorder in dysfunctional parent-child interactions. Similarly, a recent randomised controlled trial of the effectiveness of the Webster-Stratton Incredible Years basic group parenting program delivered to parents of 116 children aged 36-59 months at risk of developing Conduct Disorder (defined by scores over the clinical cut off on the *Eyberg Child Behaviour Inventory*) showed marked improvements in behaviour for those children at highest risk of developing Conduct Disorder.<sup>21</sup>

For this report, we adopted an operational definition of mental health that was assessed by a series of norm-referenced psychological

*Mental illness is a less clearly defined term for adolescents than for adults; hence, the use of the terms 'mental health concerns' or 'mental health problems'*

*There is a strong association between mental health, substance abuse and offending*

tests. Because we used *the Adolescent Psychopathology Scale – Short Form (APS-SF)*, which includes Conduct Disorder as a subscale, Conduct Disorder is reported as one of the psychopathologies in young offenders. Insofar as Conduct Disorder is related to dysfunctional parenting and child abuse and neglect, the presence of this diagnosis may reflect contextual elements that explain offending behaviour.

### 7.1 Adolescent Psychopathology Scale – Short Form (APS-SF)

The *Adolescent Psychopathology Scale – Short Form (APS-SF)* generates 14 scales to describe a range of psychological and psychiatric symptoms warranting possible referral or intervention.<sup>22</sup> These scales are based on DSM-IV criteria for psychiatric, personality and psychosocial problems.<sup>14</sup> The APS-SF provides an indication of possible disorders, not a formal diagnosis, and does not describe personality disorders.

Prior to interpretation of the scores on the APS-SF, an assessment of consistency and defensiveness of responding was conducted for the key subgroups of the sample (gender, region, ethnicity, IQ, age). Ninety-six percent (96%) of APS-SF protocols showed consistent response patterns according to the APS-SF consistency scale. Inconsistency was not related to any of the grouping variables. The most inconsistent protocols were removed prior to analysis of the APS-SF results.

An analysis of the defensiveness scale of the APS-SF by key subgroups indicated that CALD were more likely to score in the moderate and severe range for Defensiveness on the APS-SF than either of the other ethnic subgroups. No other subgroup differences in defensiveness were found. Given the higher CALD defensiveness pattern, CALD results on the APS-SF may represent an under-reporting of psychopathology for this group.

Sixty percent (60%; n=472) young offenders did not score in the severe clinical range on any of the subscales of the APS-SF. As predicted by defensiveness patterns, CALD (74.3%) were less likely than ESB (60.6%) or Aboriginal (56.7%) to have scores in the severe clinical range.

Forty percent (40%; n=314) (40% males, 38% females) [YPiCHS males 48%, females 61%] reported severe symptoms consistent with a clinical disorder.

Scores on the Substance Abuse and Conduct Disorder scales were the most prevalent disorders occurring in the severe range. Consistent with analysis completed for the YPiCHS, APS-SF scores in the YPoCOHS were assessed against the total APS-SF standardisation sample of adolescents aged 10-19 years, consisting of 555 males and 529 females aged 15 and over, and 344 males and 405 females aged 14 or less. Preliminary analysis of YPoCOHS data against age- and gender-specific norms provided for the APS-SF standardisation sample sub-groups suggests that fewer young offenders would score in the severe range on the subscales compared with assessing their scores against the total standardisation sample. Research is underway to assess the degree of discrepancy in prevalence rates in population studies when sub population norms are used.

Table 7.1 (overleaf) compares custody and community based young offender samples on scales that assess the same or similar clinical dimensions (note that only some scales of the APS used in the YPiCHS are included in the APS-SF).

### 7.2 Conduct Disorder and Substance Abuse Disorder

On the APS-SF scales, 49% males and 57% females scored in the normal range for Conduct Disorder and 52% males and 54% females scored in the normal range for Substance Abuse Disorder.

Proportions of young offenders with Conduct Disorder scores in the severe range were as follows: ESB (18%; n=90); Aboriginal (21%; n=32); CALD (14%; n=15). Aboriginal were more likely to have Conduct Disorder than either ESB or CALD. Proportions of young offenders with Substance Abuse Disorder scores in the severe range were as follows: ESB (30%; n=151); Aboriginal (23%; n=35); CALD (19%; n=21). ESB were more likely than CALD to have Substance Abuse Disorder.

Younger offenders (<16 years) were more likely to have scores in the severe range on the Conduct Disorder scale (29%; n=48) than older offenders (>16 years) (17%; n=99) but were less likely to have scores in the severe range on Substance Abuse Disorder (20%; n=33) than older offenders (29%; n=174). Males (11%; n=74) showed a trend to be less likely to have two or more scores in the severe range on the APS-SF than females (19%; n=22).

40% young offenders scored in the severe clinical range on at least one of the subscales of the APS-SF

Substance Abuse and Conduct Disorder scales had the highest percentage of scores in the severe range

Aboriginal offenders were more likely to have a Conduct Disorder than either ESB or CALD offenders

ESB offenders were more likely than CALD offenders to have a Substance Abuse Disorder



**Table 7.1 APS-SF scale scores in the mild, moderate and severe range (%)**

APS-SF scales*	Mild		Moderate		Severe	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Males</b>						
Substance Abuse Disorder	9	14	13	19	26	27
Conduct Disorder	9	4	23	32	19	24
Academic problems (ADP)*	11	13*	13	14	3	1
Attention-Deficit Hyper-activity Disorder [cf. ADP]	-	14		11	-	1
Anger/Violence Problems (AVP)	12	-	14	-	3	-
Anger [cf. AVP]*	-	8	-	14	-	1
Posttraumatic Stress Disorder	7	8	7	9	2	0
Suicide (ideation and behaviours)	3	3	4	1	1	5
Oppositional Defiant Disorder	9	8	7	12	1	3
Interpersonal Problems	7	26	4	12	1	4
Major Depression	5	9	3	3	1	1
Self-concept Problems	6	11	3	3	<1	0
Eating disorders (EAD)*	3	-	3		<1	-
Bulimia Nervosa [cf. EAD]	-	1	-	3	-	1
Anorexia Nervosa [cf. EAD]	-	1	-	1	-	0
Generalised Anxiety Disorder	1	3	2	5	<1	1
<b>Females</b>						
Substance Abuse Disorder	8	11	9	22	29	44
Conduct Disorder	8	0	17	50	18	22
Academic problems (ADP)*	10	-	12	-	6	-
Attention-Deficit Hyper-activity Disorder [cf. ADP]	-	22	-	22	-	6
Anger/Violence Problems (AVP)	14	-	23	-	5	-
Anger [cf. AVP]	-	6	-	33	-	6
Posttraumatic Stress Disorder	13	17	14	28	4	0
Suicide (ideation and behaviours)	2	11	10	0	4	6
Oppositional Defiant Disorder	12	17	9	22	5	0
Interpersonal Problems	15	33	11	17	1	17
Major Depression	9	11	12	11	3	0
Self-concept Problems	8	6	3	6	3	0
Eating disorders (EAD)*	11	-	9	-	3	-
Bulimia Nervosa [cf. EAD]	-	17	-	11	-	11
Anorexia Nervosa [cf. EAD]	-	11	-	6	-	0
Generalised Anxiety Disorder	9	17	7	17	3	0

\*APS-equivalent of APS-SF Academic Problems = Attention-Deficit Hyperactivity Disorder

\*APS-equivalent of APS-SF Eating Disorders = Anorexia Nervosa [cf. EAD] / Bulimia Nervosa

a Males=666-8, Females=117, Total=783-5; b M=161, F=18, T=179

Multiple responses permitted

### 7.3 Comorbidity

The issue of comorbidity is problematic for the categorical diagnostic system in current use. Kruger and Piasecki (2002)<sup>23</sup> quote findings from a large epidemiological survey in the United States that revealed that 79% of all respondents with at least one life time diagnosis of a mental illness reported an additional diagnosis. Further, 59% of the sample had comorbidity for three or more disorders within the past 12 months. They argued for a dimensional approach, based on

the observation that even in adult populations diagnoses are not stable, that comorbidity is the norm, not the exception, and that studies using path analytic and confirmatory factor analytic approaches to diagnosis have revealed that the super-ordinate dimensions of Internalising and Externalising Disorders may be more useful. Whitmore et al. (1997)<sup>24</sup> noted the high co-occurrence between Conduct Disorder, Attention Deficit Hyperactivity Disorder and Substance Abuse Disorder in an incarcerated adolescent population, and a

26% obtained scores in the severe range on the Substance Abuse Disorder Scale

19% obtained scores in the severe range on the Conduct Disorder Scale

4% obtained scores in the severe range on the Academic Problems Scale

Younger offenders were more likely to score in the severe range for Conduct Disorder and less likely to score in the severe range for Substance Abuse Disorder than older offenders

high correspondence between these disorders and depression in young substance dependent persons. Dixon, Howie and Starling (2004)<sup>25</sup> assessed 100 female offenders and found that while Conduct Disorder and Substance Abuse Disorder diagnoses were most prevalent, 55% met criteria for a diagnosis of Depression, 37% for a diagnosis of Post Traumatic Stress Disorder and 9% for Psychosis. Seventy-eight percent (78%) of the sample had three or more diagnoses, an indicator of complex cases with poor prognostic outcomes.

The APS-SF subscale profiles of the community orders sample were examined to identify comorbid psychopathology, defined in this report as scores in the severe range on two or more subscales.

Of particular interest were profiles that had comorbid Substance Abuse Disorder and Conduct Disorder, and either of these disorders in conjunction with any other disorder assessed by the APS-SF.

For the sample as a whole:

- 10% (n=80) had scores in the severe range for Substance Abuse and at least one other subscale (excluding Conduct Disorder)
- 9% (n=69) had scores in the severe range for Conduct Disorder and at least one other subscale (excluding Substance Abuse)
- 8% (n=62) had scores in the severe range for both Substance Abuse and Conduct Disorder
- 3% (n=21) had scores in the severe range for at least two scales excluding Substance Abuse and Conduct Disorder.

Ten percent (10%) (78) had subscale scores in the severe range on more than two clinical scales [YPiCHS 26%].

There was a trend for fewer young offenders with an intellectual disability (IQ<70) (19%) to score in the severe range for Substance Abuse Disorder than IQ70-84 (25%) or IQ>84

(31%). There were no differences between IQ classifications and proportions scoring in the severe range for Conduct Disorder.

### 7.4 Kessler Psychological Distress Scale (K-10 LM)

The *Kessler Psychological Distress Scale* (K-10 LM) is a 10-item questionnaire yielding a global measure of psychosocial distress.<sup>26</sup> The questions explore anxiety and depressive symptoms experienced in the previous four weeks. Scores range from 10 (no distress) to 50 (very high distress) and are categorised into four groups: low (10 to 15), moderate (16 to 21), high (22-29) and very high (over 30). Scores in the very high range are associated with a high probability of having an anxiety or depressive disorder.<sup>27</sup>

Population norms indicate that between 11% and 12% of the general population have high to very high scores on the K-10. In this sample, 25% (193) young offenders had high or very high psychological distress, consistent with a greater than 50% chance of having an anxiety or depressive disorder; 7% (56) had an almost 80% chance of having an anxiety or depressive disorder [6% (42) males and 12% (7) females]; [YPiCHS 8% (15) males, 13% (2) females]. Figure 7.1 (overleaf) shows distributions for moderate, high and very high scores on the K-10 LM.

More females (36%; n=40) tended to score in the high/very high range on K-10 than males (23%; n=153). There were no other significant differences in distribution of K-10 scores across the other key subgroups.

Those young offenders with scores in the severe range on the Substance Abuse Disorder Scale of the APS-SF were more likely to score in the high/very high range on K10 (36% vs. 21%). Table 7.2 shows that those young people who did not use drugs in the past four weeks were significantly less likely to score in the high/very high range on the K-10 than young people who had used multiple substances in the past four weeks.

30% had scored in the severe range on two APS scales

8% had scores in the severe range for both Substance Abuse and Conduct Disorder

10% young offenders had subscale scores in the severe range on more than two clinical scales [YPiCHS 26%]

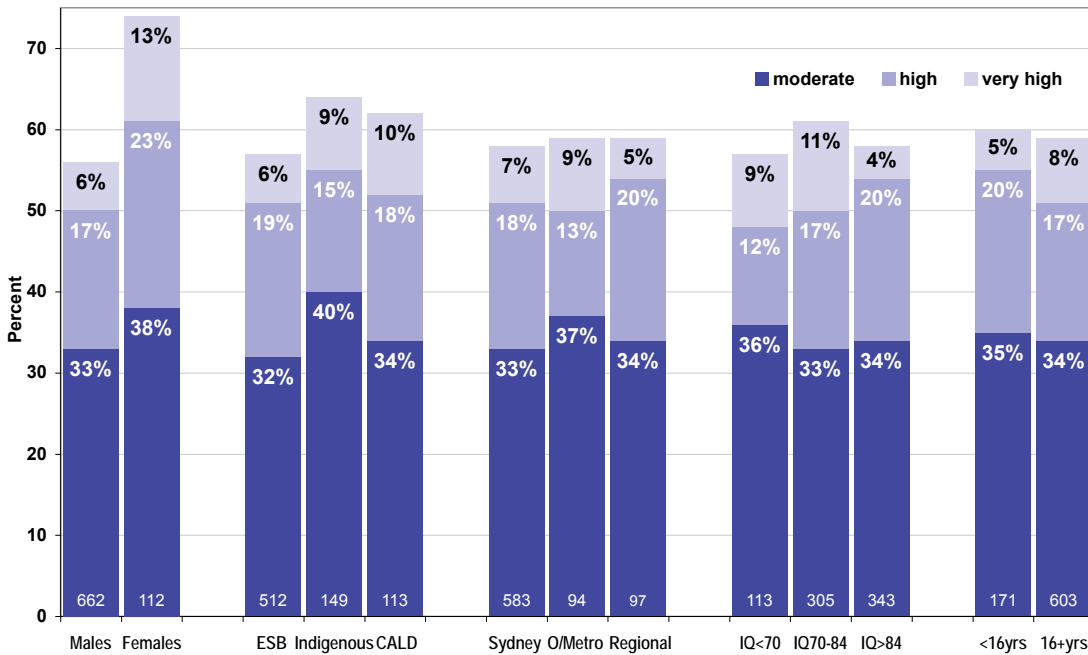
25% (23% males, 36% females) had high/very high psychological distress on K-10, compared with 11% general population

38% polydrug using young offenders scored in the high/very high distress range of the K-10, compared with 18% who reported no drug use

**Table 7.2 Drug use in past four weeks and K-10 category (%)**

Drug use in past 4 weeks	K-10 category	
	Low/moderate (n = 579)	High/very high (n = 192)
No drug use (n=298)	82	18
Single drug use (n=319)	75	25
Poly drug use (n=154)	62	38

**Figure 7.1 K-10 moderate, high and very high scores (%)**



There was also a trend for more young people with a drinking problem (29%; n=125) (coded as young people who drank too much and/or too often according to the Australian Alcohol guidelines<sup>28</sup> but excluding those who did so once a month or less) to score in the high/very high range on the K-10 compared with those who were not problematic drinkers (19%; n=64). These relationships are explored in more detail in Chapter 8.

### 7.5 Childhood Trauma Questionnaire (CTQ)

Young people are subject to trauma both through discrete acts (such as assaults and accidents) and as a function of poor parenting practices and child abuse. Child abuse is a major risk factor for later delinquency.<sup>29,30</sup>

The *Childhood Trauma Questionnaire* (CTQ) assesses experiences of physical, emotional and sexual abuse and the degree to which people minimise or deny experiences of abuse or trauma.<sup>31</sup> Scores are classified as none to minimal, low to moderate, moderate to severe, and severe to extreme, depending on the level of abuse. This report refers to the final three categories as low, moderate and severe.

Prior to interpretation of scores on the CTQ, an assessment of minimisation and denial was conducted for the key subgroups of the

sample (gender, region, ethnicity, IQ, age). Any score greater than 0 on this scale may suggest minimisation/denial. Forty percent (40%) (270) males and 29% (35) females endorsed at least one item on the Minimisation/Denial Scale of the CTQ (CTQ/MD), suggesting some under-reporting of abuse, neglect or trauma. Sixteen percent (16%) endorsed at least two of the three items and 6% scored the maximum (3) on this scale.

Young offenders with an intellectual disability (30%; n=35) and young offenders with IQ70-84 (20%; n=61) were more likely to endorse at least two out of three items on the CTQ/MD than young offenders with IQ>85 (9%; n=31). CALD (26%; n=30) showed a trend indicating that they were more likely than either ESB (14%; n=73) or Aboriginal (18%; n=27) to score at least two out of three on the CTQ/MD. No other subgroup differences in minimisation or denial were found. Given the overall high level of minimisation and denial in this sample, results on the CTQ may represent an under-reporting of abuse and neglect, in particular for young offenders with an intellectual disability and CALD.

Seventy-four percent (74%) young offenders reported some form of abuse or neglect in their childhood.

*More young offenders who drank too much and/or too often according to the AAG scored in the high/very high range on the K10 compared with those who were not problematic drinkers*

*There was a high level of minimisation and denial on the CTQ indicating under-reporting of abuse and neglect*

Table 7.3 presents the percentages of young offenders who reported abuse and/or neglect on the CTQ in the low, moderate and severe ranges.

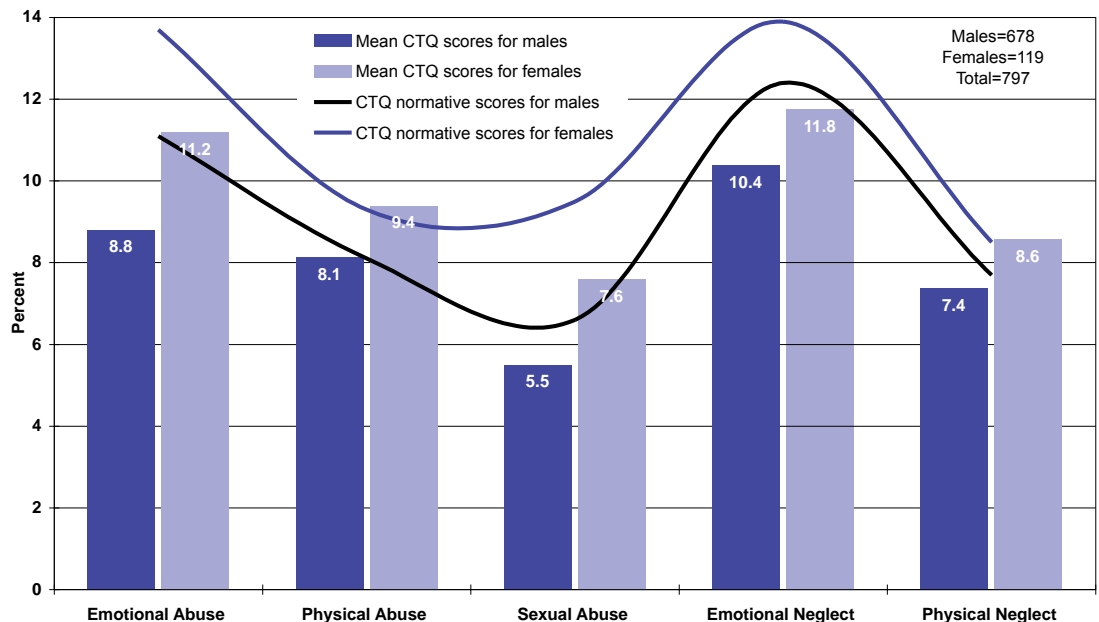
**Table 7.3 Childhood Trauma Questionnaire scale score classification (%)**

CTQ scales	Low		Moderate		Severe	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Males</b>						
Emotional Abuse	24	20	10	9	9	7
Physical Abuse	17	12	5	14	8	15
Sexual Abuse	3	4	4	3	2	2
Emotional Neglect	29	22	11	6	9	11
Physical Neglect	17	18	11	11	8	8
Any abuse (above)	59	53	32	32	23	25
<b>Females</b>						
Emotional Abuse	30	33	14	6	20	11
Physical Abuse	16	17	11	28	14	11
Sexual Abuse	8	11	19	6	11	22
Emotional Neglect	28	22	6	6	23	6
Physical Neglect	11	17	18	0	16	6
Any abuse (above)	58	67	45	44	38	28

a Males=678, Females=118; b M=198, F=18

Figure 7.2 provides a comparison of CTQ means for community-based young offenders with a normative sample of adolescent psychiatric inpatients.

**Figure 7.2 CTQ: Comparison of mean scores for community orders sample with normative population**



Across all categories of abuse, this sample of young offenders reported levels of abuse comparable to adolescent psychiatric patients. Sixteen (6.6%) young offenders in custody and 16 (2%) young offenders on community orders had committed sexual offences. Nineteen percent (19%; n=3) of the custody sample and

19% (n=3) of the community orders sample with convictions for sexual offences reported sexual trauma on the CTQ.

Figure 7.3 (overleaf) provides percentages of young offenders falling within the low, moderate and severe ranges on each of the CTQ scales, with composite classifications for

Females (38%) reported higher rates of abuse and neglect in the severe range on the CTQ compared with males (23%)

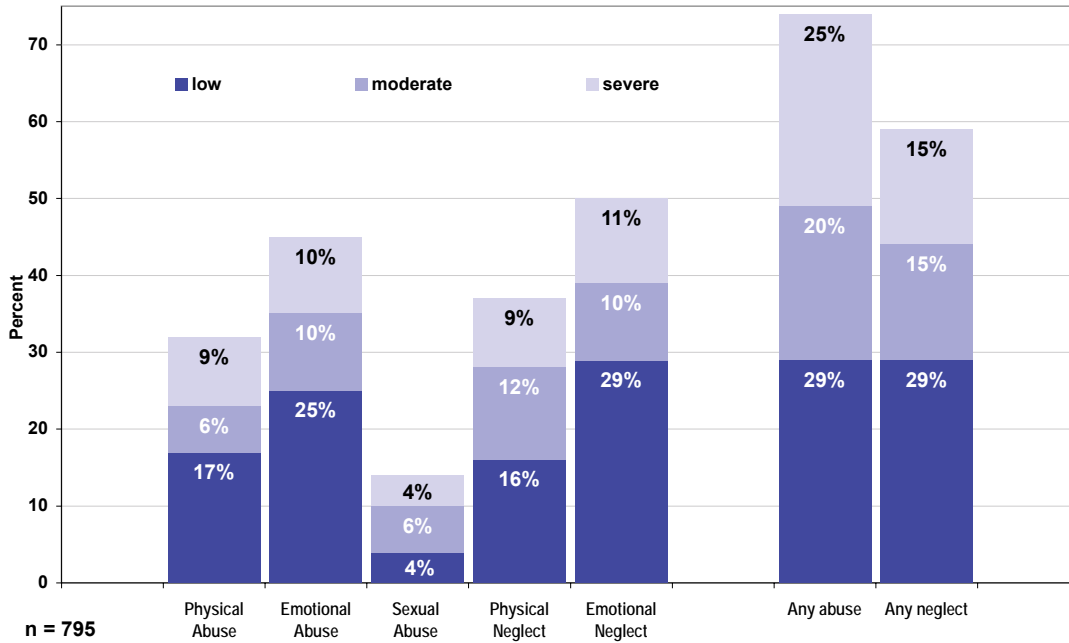
The most frequent forms of abuse/neglect in the severe range for females were emotional abuse and neglect

Males reported lower rates overall and there were no differences between emotional and physical abuse/neglect in the severe range

11% females and 2% males reported sexual abuse in the severe range

any form of abuse (physical and/or emotional and/or sexual) and for any form of neglect (physical and/or emotional).

**Figure 7.3 Childhood Trauma Questionnaire: Percentages in the low, moderate, and severe CTQ ranges for each scale, any abuse and any neglect**



Females (12%; n=14) were four times more likely than males (3%; n=19) to report three or more severe forms of abuse and less likely than males to report no severe abuse [females: 62%; n=71; males: 78%; n=508]. Males and females did not differ with respect to their reporting of one or two severe forms of abuse. Similar proportions of males and females reported experiencing either or both forms of neglect.

**7.6 CTQ, Conduct Disorder and Substance Abuse Disorder**

Table 7.4 shows that young offenders with scores in the severe range for Conduct Disorder scored significantly higher on the emotional and physical abuse scales of the CTQ than those not scoring in the severe range for Conduct Disorder. These findings support the contention that Conduct Disorder is related to

74% young offenders reported some form of abuse across all levels of severity; 59% reported some form of neglect

Females (12%) were four times more likely than males (3%) to report three or more severe forms of abuse and less likely than males to report no abuse

Scores in the severe range for Conduct Disorder were significantly associated with emotional and physical abuse

**Table 7.4 Association between CTQ scales (raw scores) and APS-SF Conduct Disorder categories**

	N	Conduct Disorder	Mean	SD	F <sup>i</sup>	Sig.
<b>Emotional Abuse</b>	636	Not severe	8.94	4.31	8.24	0.004
	146	Severe	10.10	4.82		
	782	Total	9.16	4.43		
<b>Physical Abuse</b>	636	Not severe	8.10	4.18	7.77	0.005
	146	Severe	9.22	5.20		
	782	Total	8.31	4.40		
<b>Sexual Abuse</b>	636	Not severe	5.80	2.74	0.53	0.467
	146	Severe	5.99	2.99		
	782	Total	5.84	2.78		
<b>Emotional Neglect</b>	636	Not severe	10.44	4.75	2.17	0.141
	146	Severe	11.08	4.87		
	782	Total	10.56	4.77		
<b>Physical Neglect</b>	636	Not severe	7.47	3.17	1.10	0.294
	146	Severe	7.77	2.98		
	782	Total	7.53	3.14		

<sup>i</sup> One way analysis of variance (ANOVA)

dysfunctional parenting and that this diagnosis is indeed reflective of contextual elements rather than intrapersonal characteristics.<sup>20</sup> There were no differences for sexual abuse or emotional or physical neglect between the two Conduct Disorder groups.

A strong association on all CTQ scales was observed for young offenders who scored in the severe range for Substance Abuse Disorder on the APS-SF. Those young offenders with scores in the severe range on the APS-SF Substance Abuse

scale were more likely to report some form of abuse on the CTQ (24%; n=50) than those with no to moderate Substance Abuse (14%; n=81). The same pattern of results was obtained for the association between substance abuse and the experience of emotional or physical neglect. Table 7.5 shows that for all scales on the CTQ, those young offenders with scores in the severe range for substance abuse scored significantly higher than those not scoring in the severe range for substance abuse.

**Table 7.5 Association between CTQ scales (raw scores) by APS-SF Substance Abuse Disorder categories**

	N	Substance Abuse	Mean	SD	F <sup>i</sup>	Sig.
<b>Emotional Abuse</b>	573	Not severe	8.81	4.13	13.27	0.000
	207	Severe	10.10	5.00		
	780	Total	9.15	4.41		
<b>Physical Abuse</b>	573	Not severe	7.97	4.01	12.65	0.000
	207	Severe	9.23	5.28		
	780	Total	8.30	4.41		
<b>Sexual Abuse</b>	573	Not severe	5.71	2.55	4.62	0.032
	207	Severe	6.19	3.33		
	780	Total	5.84	2.79		
<b>Emotional Neglect</b>	573	Not severe	10.31	4.69	6.70	0.010
	207	Severe	11.30	4.94		
	780	Total	10.57	4.78		
<b>Physical Neglect</b>	573	Not severe	7.31	3.03	10.75	0.001
	207	Severe	8.14	3.37		
	780	Total	7.53	3.14		

<sup>i</sup> One way analysis of variance (ANOVA)

Substance abuse may be understood as a (mal)adaptive response to the emotional distress that accrues to experiences of abuse during childhood. Engaging and maintaining substance abusing young offenders in treatment is a major challenge confronting the field. Current treatment programs for substance abusing young offenders need to maintain a strong focus on the management of issues related to abuse and abandonment.

In summary, this community based sample of young offenders had levels of psychopathology and abuse and neglect similar to a sample of incarcerated young offenders in the same juvenile justice jurisdiction.<sup>32</sup> For both groups, the main mental health concerns were Substance

Abuse and Conduct Disorder. Twenty-five (25%) had experienced some form of extreme abuse. These data on large representative samples have significant implications for service planning and delivery.<sup>33</sup>

Appropriate, standardised mental health assessment protocols and policies within juvenile justice authorities that mandate assessments once young people enter the juvenile justice system are needed to improve appropriate and timely referral for treatment for those young offenders with mental health concerns. Some progress toward achieving this goal has been made internationally.<sup>34,35</sup>

*Young offenders with scores in the severe range on the APS-SF Substance Abuse scale were more likely to report some form of abuse on the CTQ (24%) than those with no to moderate Substance Abuse (14%)*

*For all scales on the CTQ, those young offenders with scores in the severe range for Substance Abuse scored significantly higher scores than those not scoring in the severe range for Substance Abuse*

*Current treatment programs for substance abusing young offenders need to maintain a strong focus on the management of issues related to abuse and abandonment*

### 7.7 Self-report of mental health

Table 7.6 shows mental health disorders with which young offenders reported to have been diagnosed and the proportion of those

diagnosed who had received treatment for the disorder. In contrast to the results on the APS-SF, the most common self-reported mental health disorder was ADHD/ADD/hyperactivity (19%), followed by depression (6%).

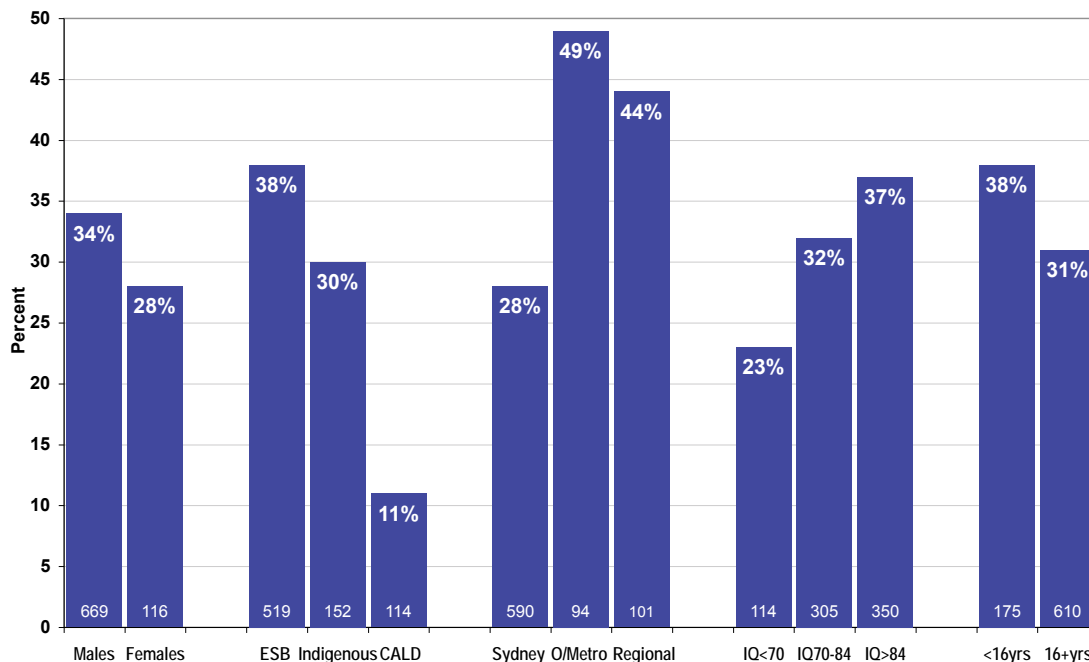
**Table 7.6 Self-reported mental health and report of treatment (n) (%)**

Problem	% with disorder	% (n) treated total
ADHD, ADD, Hyperactivity	19	17 (144)
Depression	6	5 (48)
Anger management problems	4	3 (29)
Schizophrenia, psychotic disorder	3	2 (24)
Conduct Disorder, Oppositional Defiant Disorder	2	2 (16)
Anxiety Disorders	2	1 (15)
Acute Stress Disorder, Post-Traumatic Stress Disorder	1	<1 (8)
Other mood disorder (non-depressive, elevated mood)	1	1 (10)
Intellectual Disability, Learning Difficulties	1	<1 (9)
Other	1	1 (9)
<b>Any disorder above</b>	<b>33</b>	<b>-</b>

Males=665-9; Females=117; Total=783-6

Figure 7.4 shows the data from table 7.6 broken down by the key sub groups in the sample.

**Figure 7.4 Young offenders ever told by a health professional they have a mental health or behavioural problem (%)**



The most common self-reported mental health disorder was ADHD/ADD/hyperactivity (19%) followed by Depression (6%)

More 'other metropolitan' (49%) and regional (44%) young offenders had been told they had a mental health or behavioural problem than Sydney-based young offenders (28%)

### 7.8 Suicide and Self-harm (SSH)

Self-harm is defined as behaviour designed to maim or harm the self without a conscious intention to die. Suicide is defined as behaviour accompanied by the expectation that death will eventuate. Self-harm and suicidal ideation

constitute thoughts of varying degrees of intensity about injuring or killing oneself. Expectations of lethality vary among different samples of suicidal youth<sup>36</sup> and the boundary between deliberate self-harm and suicide can be difficult to discern. Self-harm may occur

on a continuum of maladaptive behaviours and similar factors may predict criminality, substance abuse and violence.<sup>37</sup>

Self-harm behaviour and suicide attempts predict completed suicides. Australian research on suicidal behaviour suggests that 10% of attempters will eventually die by suicide and that half of those who have completed suicide will have had a previous recorded suicide attempt.<sup>38</sup> Although increased risk for suicide occurs between 12 to 18 months following a suicide attempt, the “re-attempt” probability was highest in the first 10 days following the index attempt. Nonetheless, attempts at predicting suicide from past behaviour (or a mix of past behaviour and triage signs such as current ideation, depression and hopelessness) generally result in poor predictive accuracy. Given the low base rate of self-harm, it is not surprising that prediction of suicide from any set of predictors is poor. However, in view of the devastating consequences of completed suicide for the young person and his/her extended family and friends, continuing efforts to reduce risk by improving prediction is an important endeavour.

Studies over the last 25 years reveal increasing rates of self-harm in adolescents. Lifetime suicidal ideation in the general adolescent population has been estimated at 29.9%.<sup>36</sup> Rates of self-harm in the general adolescent population vary from 6.2% to 12.4%.<sup>39</sup> Studies investigating self-harm and suicide ideation in young offenders reveal higher rates of self-harm and suicide attempts than in the general adolescent population.<sup>40,41,42</sup> In Australian young offenders, suicide has been identified as the leading cause of mortality after drug-related deaths.<sup>43</sup>

An analysis of data from the *Young People in Custody Health Survey*<sup>44</sup> on 242 incarcerated young offenders indicated that 19.2% had suicidal ideation and 18.2% had self-harm ideation at some time in their lives. In the 12 months prior to that survey, 8.4% had attempted suicide (44% in custody) and 9.1% had inflicted self-harm (75% in custody). Suicidality and self-harm (SSH) co-occurred. SSH young offenders reported more severe psychopathology, childhood trauma and psychological distress

than non-SSH young offenders. Past emotional abuse, current psychological distress and depersonalization disorder were significant risk factors for suicidal ideation. Past physical abuse and current psychological distress were significant risk factors for self-harm ideation.<sup>45</sup>

In contrast to a previous study,<sup>46</sup> changes in suicidal and self-harming ideation and behaviour varied when young offenders entered custody, with some young offenders reporting increases, some reporting no change and some reporting a decrease. For some young offenders, custody may be experienced as therapeutic, providing a safe, secure, predictable, drug free environment that results in decreased psychological distress. For others, the experience of confinement, humiliation and possible violence, abuse and discrimination may increase their suicidal or self-harming ideation and/or behaviour.<sup>47</sup> Routine assessment of suicidality and self-harm risk on entry to the juvenile justice system would seem warranted by these findings.

Studies differ with respect to the way in which suicidal and self-harming behaviour (SSH) are assessed eg self-reports of self-harm or suicide attempts (or ideation); scales assessing self-harm risk and use of formal records of SSH incidents, such as hospital records (for a comprehensive review of measurement issues, see Goldston 2003).<sup>48</sup> In this report, these factors were assessed using a series of questions taken from the *Youth Risk Behaviour Survey*.<sup>49</sup>

Table 7.7 (overleaf) shows the percentages of young offenders who reported suicidal and self-harm ideation and/or behaviour at some time in their lives and during the 12 months prior to the survey.

Table 7.8 (overleaf) shows suicide methods for the subset reporting suicide attempts in the 12 months prior to the survey.

*Self-harm behaviour and suicide attempts (SSH) predict completed suicide*

*Predicting suicide from past behaviour or triage signs such as current ideation result in poor predictive accuracy*

*Suicide is the leading cause of mortality in Australian young offenders after drug-related deaths*

*Data from the YPiCHS showed that SSH co-occurs. SSH young offenders reported more severe psychopathology, childhood trauma and psychological distress than non-SSH young offenders*



**Table 7.7 Percentages and frequencies (n) of suicidal and self-harm ideation and behaviour**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Suicide Ideation</b>						
Considered (ever)	14 (92)	19 (38)	32 (37)	20 (4)	17 (129)	19 (42)
Considered (past 12m)	7(47)	15 (30)	14 (16)	12 (2)	8 (63)	15 (32)
Made plan (ever)	9 (59)	10 (19)	13 (15)	6 (1)	10 (74)	12 (20)
Made plan (past 12m)	5 (32)	7 (14)	8 (9)	0 (0)	5 (41)	6 (14)
<b>Self-harm Ideation</b>						
Considered (ever)	19 (125)	18 (37)	40 (46)	18 (3)	22 (171)	18 (40)
Considered (past 12m)	10 (66)	12 (25)	27 (31)	12 (2)	12 (97)	12 (27)
Made plan (past12m)	4 (26)	7 (14)	13 (15)	0 (0)	5 (41)	6 (14)
Decreased*	7 (43)	50 (17)	18 (21)	50 (1)	(64)	50 (18)
Increased*	1 (9)	34 (12)	3 (3)	0 (0)	(12)	32 (12)
<b>Suicide Attempts</b>						
Attempted (ever)	8 (52)	n/r	18 (21)	n/r	9 (73)	n/r
Attempted (past 12m)	4 (27)	8 (16)	9 (10)	12 (2)	5 (37)	8 (18)
One attempt (past 12m)	2 (13)	3 (6)	2 (2)	12 (2)	2 (15)	4 (8)
2-3 attempts (past 12m)	2 (12)	4 (7)	4 (4)	0 (0)	2 (16)	3 (7)
>3 attempts (past 12m)	<1 (2)	2 (3)	4 (4)	0 (0)	<1 (6)	1 (3)
<b>Self Harm Episode</b>						
Attempted (ever)	15 (98)	13 (26)	28 (32)	6 (1)	17 (140)	12 (27)
Attempted (past 12m)	7 (49)	9 (19)	16 (18)	6 (1)	(67)	9 (20)
One incident (past 12m)	2 (16)	3 (6)	2 (2)	6 (1)	2 (18)	3 (7)
2-3 incidents (past 12m)	3 (20)	3 (6)	7 (8)	0 (0)	4 (28)	3 (6)
>3 incidents (past 12m)	2 (12)	3 (7)	4 (5)	0 (0)	2 (17)	3 (7)

a Males=665-7, F=114-6, T=779-783; \*past 12 months; b M=164-186, F=13-17, T=177-203; \*since entering custody

**Table 7.8 Most frequently reported methods for attempting suicide in past 12 months (%)**

Methods	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Attempted hanging	42	56	24	50	37	56
Slashing wrists/body parts	18	33	67	50	32	33
Overdose (pills and other)	26	19	39	0	30	17
Jumping in front of train, car	10	6	0	0	7	6
Swallowing poisons	2	0	19	0	7	0
Asphyxiation	6	25	0	0	7	22
Jumping from a height	10	6	0	0	7	6
Car accident	4	0	14	0	7	0
Stabbing self	4	6	10	0	6	6
Punch/kick things repeatedly	2	0	5	0	3	0
Attempted overdose (alcohol)	4	6	0	0	3	6
Attempted overdose (heroin)	4	0	0	0	3	0
Eating foreign objects	0	0	0	0	0	0
Banging head	0	13	0	0	0	11
Self-immolation	0	13	0	0	0	11
Drowning	0	6	0	0	0	6
Firearm/ gunshot	0	0	0	0	0	0

a Males=50, Females=21, Total=71; b M=16, F=2, T=18 [YPICHS: low n]; Multiple responses permitted

Table 7.9 (overleaf) shows the most frequently reported methods of self-harm used by this sample.

14% (7%) males and 32% (14%) females had considered suicide (past 12 months)

8% (4%) males and 18% (9%) females reported a suicide attempt (past 12 months)

19% (10%) males and 40% (27%) females had considered self-harming (past 12 months)

15% (7%) males and 28% (16%) females had self-harmed (past 12 months)

Hanging (37%) was the most common method used in suicide attempts, followed by slashing wrists and other body parts (32%) and overdosing (30%)

**Table 7.9 Most frequently reported methods for self-harm in the past 12 months for the sub sample who reported self-harming (%)**

Methods	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Cutting of skin	58	42	54	0	57	41
Punching/kicking (eg. fighting)	29	12	7	0	21	11
Banging/smashing head	13	15	7	0	11	15
Burning self (e.g. with lighter)	15	4	0	0	10	4
Blunt force (e.g. car crash)	9	-	0	-	6	-
Stabbing self	8	0	7	0	8	0
Overdose	8	4	7	0	8	4
Attempting to cut off oxygen	4	19	7	0	5	19
Eating foreign objects	2	4	0	0	2	4
Biting of skin	0	4	0	0	0	4

a Males=48, Females=28, Total=76; b M=26, F=1, T=27 [YPiCHS: low n]; Multiple responses permitted

*Cutting (57%) was the most frequently reported form of self-harm*

*16% knew a school peer who had committed suicide*

*28% knew someone who had committed suicide*

*Alcohol and cannabis use were the most commonly shared activities between young offenders and their friends*

*At least half of all males and females indicated that all their friends used alcohol and/or cannabis*

*31% males and 20% females reported that their peers broke the law*

*25% males and 19% females reported that their peers had dropped out of school*

Sixteen percent (16%) (117) stated that a school peer had committed suicide; 28% (212) said that they knew someone who had committed suicide.

### 7.9 Relationships: Peers and other sources of emotional support

Table 7.10 shows the characteristics and

behaviours of the peers of these young offenders. Alcohol and cannabis use were the most commonly shared activities between young offenders and their friends; at least half of all males and females indicated that all their friends used alcohol and/or cannabis.

**Table 7.10 Characteristics and behaviour of peers of young offenders (%)**

Number of friends	None		Few		Most		All	
	Comm. <sup>a</sup>	Custody <sup>b</sup>	Comm. <sup>a</sup>	Custody <sup>b</sup>	Comm. <sup>a</sup>	Custody <sup>b</sup>	Comm. <sup>a</sup>	Custody <sup>b</sup>
<b>Males</b>								
Have tried cannabis	11	10	18	21	19	18	53	51
Drink alcohol	8	8	18	24	23	22	52	46
Cut/skipped school without permission	13	18	22	25	18	16	48	42
Smoke cigarettes	7	8	22	24	28	24	44	44
Been suspended from school	16	17	29	31	21	16	34	35
Worked for employer or did odd jobs	13	15	29	32	24	25	34	29
Break the law (other than illicit drug use)	19	16	34	34	16	17	31	33
Dropped out of school	21	18	33	32	21	19	25	30
Have tried drugs other than cannabis	41	43	28	26	11	14	20	17
Have been in custody	32	31	35	42	15	11	19	16
<b>Females</b>								
Drink alcohol	11	6	20	35	20	12	50	47
Have tried cannabis	17	0	14	35	19	12	50	53
Smoke cigarettes	8	0	18	24	30	18	44	59
Cut/skipped school without permission	18	12	22	24	19	12	41	53
Worked for employer or did odd jobs	18	24	31	59	23	6	28	12
Have tried drugs other than cannabis	33	35	23	29	17	12	27	24
Break the law (other than illicit drug use)	27	6	41	41	11	6	20	47
Dropped out of school	28	0	31	41	23	6	19	53
Have been in custody	35	24	40	59	10	6	15	12
Been suspended from school	31	6	30	35	24	29	15	29

a Males=597-622, Females=104-5; b M=196-8, F=17

Table 7.11 shows the frequency with which young offenders talked to their friends about their problems. Fifteen (15%) males and 33%

females talked about personal problems to friends on a daily or near-daily basis.

**Table 7.11 Peer support: frequency of talking to peers about problems (%)**

Frequency	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Never	24	31	12	18	23	29
Once or twice a month	41	26	26	6	39	25
Once or twice a week	19	21	29	41	20	22
Nearly every day	15	22	33	35	18	23

a Males=622, Females=105, Total=727; b M=197, F=17, T=214

Table 7.12 shows the extent of peer influence on young people. Sixty-seven percent (67%) males and 71% females indicated that they

would consider their friends' opinions when faced with a decision.

**Table 7.12 Peer influence (%)**

Peer influence	True		Mostly true		Mostly false		False	
	Comm. <sup>a</sup>	Custody <sup>b</sup>	Comm. <sup>a</sup>	Custody <sup>b</sup>	Comm. <sup>a</sup>	Custody <sup>b</sup>	Comm. <sup>a</sup>	Custody <sup>b</sup>
<b>Males</b>								
Friends push me to succeed and do interesting things	27	35	32	28	11	9	30	28
Consider my friends' opinion when making a decision	35	44	32	31	11	5	22	19
Friends push me to do foolish or stupid things	12	11	17	16	24	15	47	57
<b>Females</b>								
Friends push me to succeed and do interesting things	35	29	24	41	11	6	30	24
Consider my friends' opinion when making a decision	45	41	26	29	9	18	21	12
Friends push me to do foolish or stupid things	10	6	12	29	18	18	60	47

a Males=623, Females=105; b M=197-8, F=17

Table 7.13 (overleaf) shows sources of emotional support. Emotional support was most commonly received from mothers (48%), followed by partners, either boyfriend or girlfriend (26%). There were no gender differences with respect to self-report of having people other than close friends to whom they could talk.

### 7.10 Bullying

Bullying is differentiated from other forms of aggressive behaviour in that it involves a more powerful group/individual dominating through violence, aggression or intimidation a less powerful group/individual over an extended period of time.<sup>50</sup> Based on research examining gender and developmental differences in children's aggression,<sup>51</sup> bullying behaviours have been classified into two distinct categories,

direct and indirect bullying.<sup>52</sup> Direct bullying is characterised by behaviours that involve hitting, kicking, pinching, taking money or belongings, name calling, teasing, taunting and threatening.<sup>53</sup> Crick and Grotpeter (1995)<sup>54</sup> define indirect bullying/aggression as the hurtful manipulation of peer relationships/friendships to inflict harm on others through behaviours such as social exclusion and rumour spreading.

Gender differences have been observed in school bullying. An extensive literature suggests that boys are more likely than girls to be both bullies and victims of bullying.<sup>55,56</sup> Although maleness itself is probably not a causal factor as some have suggested (e.g. Egger, 1995),<sup>57</sup> the social and situational forces that combine

15% males and 33% females talked about personal problems to friends on a daily or near-daily basis

24% males and 12% females reported that they never talked to their peers about their problems

67% males and 71% females indicated that they would consider their friends' opinions when faced with a decision

29% males and 22% females reported that their friends pushed them to do foolish or stupid things

**Table 7.13 People who provide emotional support (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Talk to people other than friends about personal problems<sup>i</sup></b>						
Yes	74	67	78	77	74	68
<b>Relationship to person providing support<sup>ii</sup></b>						
Mother	48	46	49	39	48	45
Girlfriend/boyfriend	25	N/A	31	N/A	26	N/A
Father	19	28	15	15	18	27
Sister	17	21	25	8	18	20
Other relative	13	17	18	31	14	18
Brother	15	24	7	0	13	22
Grandparent	6	14	5	15	6	14
Other (eg family Dr)	6	15	8	15	6	15
JJO/JJC	6	N/A	8	N/A	6	N/A
Friend of family or friend's parent	4	8	8	0	5	7
Parent's boyfriend/girlfriend	4	13	4	15	4	13
Psychologist/counsellor/youth/community worker	4	N/A	4	N/A	4	N/A
Stepfather	1	2	1	0	1	1
Coach or leader	2	2	1	0	1	1
Teacher	1	0	3	0	1	0
Stepmother	<1	0	1	0	<1	0

a (i) Males=666, Females=116, T=782; (ii) M=491, F=91, T=582; b (i) M=201, F=17, T=218; (ii) M=136, F=13, T=149

Between 68% (custody) and 74% (community) young offenders reported having someone other than a friend to talk to about personal problems

Mothers (48%) and partners (26%) were most frequently nominated

with masculinity may well be. School bullying seems to be more frequent among boys than girls and among younger than older students. Rigby and Slee (1993)<sup>58</sup> identified 10% of 201 boys aged 7-13 compared with 6% of 211 girls as victims of school bullying. Girls, however, may engage in more covert forms of indirect bullying behaviours such as rumour spreading, social rejection and exclusion<sup>59</sup> so that the actual rates of bullying among girls may have been underestimated. The majority of boys in this sample were bullied by older or same age males; girls were bullied by both older and same aged males and females.

At least four factors contribute to bullying and victimisation in schools (a) personal factors such as ethnic background, religion and gender; (b) socio-economic issues such as area of residence, perceptions of being rich or poor and the way people dress; (c) school-attitudes held by students, scholastic aptitude, sports ability and (d) being perceived as different. It is unclear whether these characteristics apply

equally to boys or girls and whether they apply differentially to those victimising or those being victimised.<sup>60</sup>

School children are concerned about bullying as indicated by the types of calls young people make to the Kids' Help Line. Although relationship difficulties remain the primary concern for young people, in 2002 the next most common problem area was school, involving problems like bullying. Calls to the Kids' Help Line about these problems increased from 11% in 1994 to 17% in 2002.<sup>13</sup>

Table 7.14 (overleaf) shows the patterns of bullying reported by victims. Bullying occurred most commonly between classes and before and after school hours (47%). The perpetrators of bullying were mostly older males (59%).

Table 7.15 (overleaf) shows young people's experiences of recent bullying. Eleven percent (11%) indicated that they had experienced some form of bullying in the six months preceding the survey.

**Table 7.14 Experience of being bullied at school (%)**

Bullied at school	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever been bullied<sup>i</sup></b>	<b>29</b>	<b>19</b>	<b>37</b>	<b>29</b>	<b>30</b>	<b>20</b>
<b>Frequency of bullying at last school<sup>ii</sup>:</b>						
Never	81	8	74	20	80	9
Once or twice a month	10	61	17	60	11	61
Once or twice a week	3	11	3	0	3	9
Nearly every day	6	21	6	20	6	21
<b>Bullying occurred<sup>iii</sup>:</b>						
Before/after school	48	49	43	25	47	46
Between classes	48	24	47	25	47	24
In class time	37	30	30	50	36	32
<b>Bullied by<sup>iv</sup>:</b>						
Older males	68	77	23	25	59	72
Same age males	46	29	38	25	44	28
Same age females	8	3	43	75	15	10
Older females	8	6	30	25	12	8
Younger males	5	11	13	0	6	10
Younger females	2	6	7	25	2	8

a (i) Males=668, Females=116, Total=784; (ii) M=667, F=116, T=783 (iii) M=128, F=30, T=158; (iv) M=128, F=30, T=158; b (i) M=201, F=17, T=218; (ii) M=38, F=5, T=43; (iii) M=33, F=4, T=37 (iv) M=35, F=4, T=39

**Table 7.15 Experiences of being bullied in last 6 months and feelings about being bullied (%)**

Being bullied	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Bullied in last 6 mths<sup>i</sup></b>	<b>10</b>	<b>8</b>	<b>16</b>	<b>13</b>	<b>11</b>	<b>8</b>
<b>Frequency of being bullied in the last 6 months<sup>ii</sup></b>						
Once or twice a month	81	50	88	50	82	50
Once or twice a week	11	6	0	0	8	6
Less than once a week	8	44	12	50	10	44
<b>Feelings about being the victim of bullying<sup>iii</sup></b>						
Made you angry	47	26	25	0	43	24
Doesn't bother you	23	32	19	0	22	29
Stressed you out	14	32	38	50	19	33
Made you sad	14	5	13	50	14	10
Mixed	0	0	6	0	1	0
Helpless	2	0	0	0	1	0
Intimidated	0	5	0	0	0	5

a (i) M=580 F=100 T=680 (ii) M=57 F=16 T=73 (iii) M=57 F=16 T=73; b (i) M=200 F=16 T=216 (ii) M=16 F=2 T=18 (iii) M=19 F=2 T=21

Crick and Dodge (1994)<sup>61</sup> have proposed a social cognitive filtering model to explain individuals' responses to social situations. The 'cognitive filter' in aggressive individuals is biased, interpreting neutral or ambiguous cues as hostile, making it more likely that such individuals will engage in aggressive behaviours. Bosworth, Espelage and Simon (1999)<sup>62</sup> found that misconduct, anger and beliefs supportive of violence were significantly related to bullying behaviours in a sample of adolescent high school students.

Fifty-six percent (56%) young people admitted to bullying others, most commonly targeting same-age males (67%). Twenty-two percent of

young offenders reported being both a victim and perpetrator of bullying.

Sixty-four percent (64%) bullies in this sample reported no or positive (feeling justified or superior) personal emotional consequences of their bullying behaviour. This lack of victim empathy is a major concern that predicts poor outcomes of intervention and recidivism and warrants further investigation.

Young offenders from regional (68%) areas were more likely to report bullying than Sydney offenders (52%), and younger offenders (<16 years) were more likely to report bullying (62%) than older offenders (53%).

30% reported that they had been bullied

6% reported being bullied nearly every day

Bullying occurred most commonly between classes and before and after school hours (47%)

59% reported being bullied by older males

56% admitted to bullying others, most commonly targeting same-age males

Younger offenders were more likely to report bullying than older offenders

Table 7.16 shows young offenders' bullying frequency, targets of bullying and emotional outcomes of bullying others.

**Table 7.16 Bullying frequency, bullying victims and emotional outcomes of bullying (%)**

Bullying others	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever bullied other kids<sup>i</sup></b>	<b>55</b>	<b>51</b>	<b>60</b>	<b>59</b>	<b>56</b>	<b>51</b>
<b>Frequency of bullying others<sup>ii</sup></b>						
Once or twice a month	75	72	73	70	74	71
Once or twice a week	13	19	14	30	13	20
Nearly every day	13	10	13	0	13	9
<b>Victims of bullying<sup>iii</sup></b>						
Same age males	72	74	41	50	67	72
Older males	50	54	29	50	47	53
Younger males	21	22	21	30	21	23
Same age females	5	4	73	70	16	10
Older females	5	3	34	60	9	8
Younger females	4	3	24	30	7	5
<b>Emotional consequences of bullying others<sup>iv</sup></b>						
Doesn't bother you	44	25	35	11	42	24
Guilt/shame/feel bad	15	14	13	22	15	15
Mixed feelings	10	6	23	11	12	6
Justified	8	4	7	33	8	7
Angry	6	7	13	0	7	6
Superior	8	17	3	0	7	15
Create positive feeling	8	20	4	11	7	19
Sad	1	1	1	11	1	2
Unpleasant/strange	1	7	0	0	1	6
<b>Both victim and perpetrator of bullying<sup>v</sup></b>	<b>20</b>	<b>12</b>	<b>29</b>	<b>29</b>	<b>22</b>	<b>13</b>

a (i) Males=668, Females=116, Total=784 (ii) M=368, F=70, T=438 (iii) M=369, F=70, T=439 (iv) M=358, F=69, T=427 (v) M=654, F=108, T=762; b (i) M=202, F=17, T=219 (ii) M=102, F=10, T=112 (iii) M=101, F=10, T=111 (iv) M=91, F=9, T=100 (v) M=202, F=17, T=219

Similar rates of bullying were reported by males and females

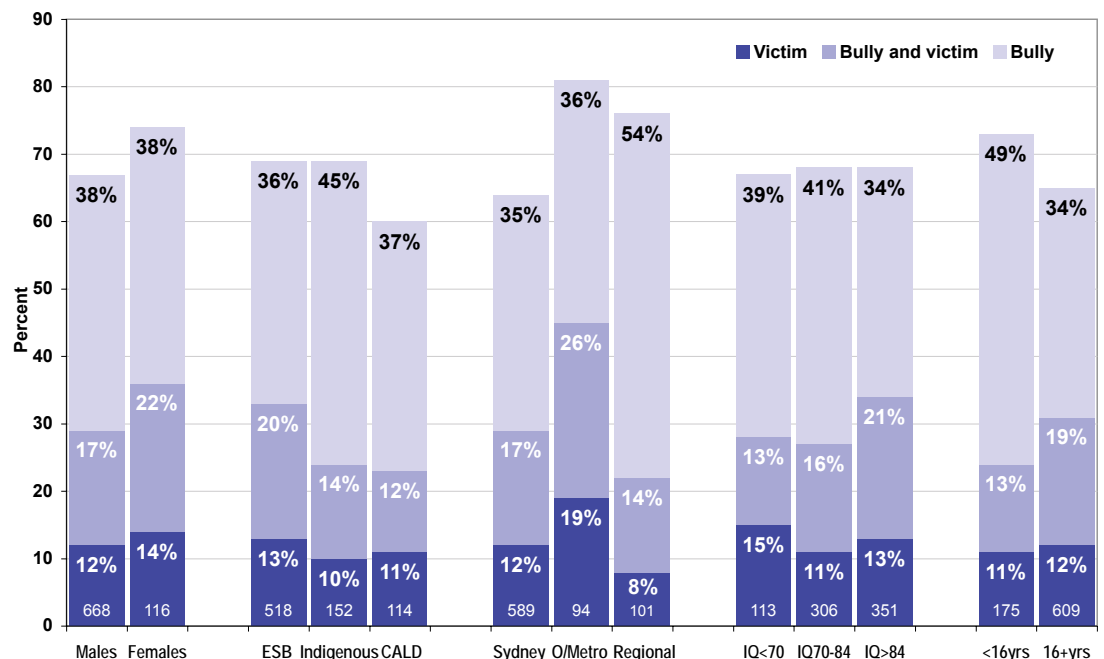
22% were both perpetrators and victims of bullying

64% bullies reported no or positive (feeling justified, superior) outcomes of their bullying behaviour

There were no differences between IQ groups in the report of bullying or victimisation from bullying

Figure 7.5 presents percentages of young offenders who were bullies, victims or both.

**Figure 7.5 Bullying experiences: Bully, bully and victim, and victim (%)**



### 7.11 Gambling

'Problem gamblers' are those who gamble in such a way that it impairs their occupational and social functioning.<sup>63</sup> Problem gambling is a complex phenomenon and not simply a matter of excessive expenditure on gambling. Nine key factors identifying youth problem gamblers have been developed.<sup>64</sup> These are:

1. Preoccupation with gambling
2. Need to gamble with increasing amounts of money in order to achieve desired level of excitement
3. Restlessness or irritability when attempting to reduce gambling
4. Uses gambling to escape from problems or reduce dysphoric mood
5. 'Chasing one's losses' i.e. return to gambling to recoup previous gambling losses
6. Lies to conceal extent of gambling
7. Often spends much more money on gambling than intended (loss of control)
8. Commits unsocial or illegal acts such as spending lunch money or bus fares or stealing from family and others to finance gambling
9. Jeopardises important relationships with

family and disrupts schooling because of gambling (e.g. truancy)

The data in this report supersedes those reported in the earlier Key Findings Report, which were derived from Fisher's earlier (and often misinterpreted<sup>63</sup>) DSM-IV-J<sup>64,65</sup> scoring system. The current data have been re-scored using Fisher's revised DSM-IV-MR-J juvenile gambling screen.<sup>66</sup>

Five percent (5%, n=36) males and 4% (n=5) females were classified as 'problem gamblers' according to the DSM-IV-MR-J (based on DSM-IV criteria).<sup>66</sup> These figures concur with the gambling study of English and Welsh young people aged 12-15 years conducted by Fisher,<sup>64</sup> in which 5% (549) of 9,774 young people surveyed scored in the range for problem gambling.

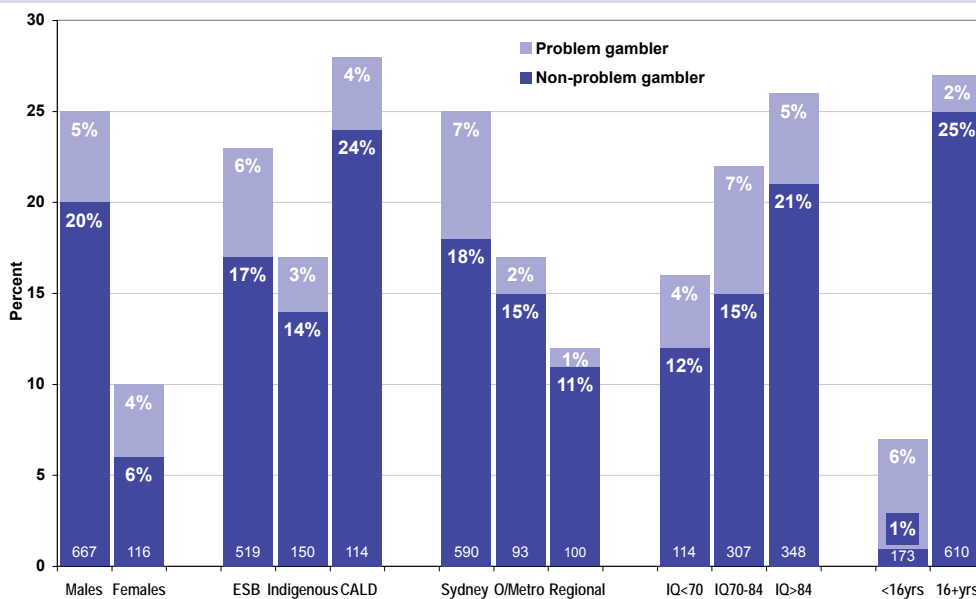
Table 7.17 (overleaf) presents problems associated with gambling in the past 12 months.

Figure 7.6 displays the percentages of young offenders who reported thinking about gambling more than twice ('sometimes' or 'often') in the past 12 months, stacked by 'problem gambler' status as classified by DSM-IV-J-R criteria.

*5% males and 4% females were classified as 'problem gamblers'*

*Problem gamblers in this sample were likely to be from Sydney and less than 16 years old*

**Figure 7.6 Thought about gambling more than once or twice in past 12 months stacked by problem gambling status (%)**



Young offenders who were from Sydney and/or less than 16 years old were more likely to be problem gamblers. Males, CALD, IQ>84 and

those who were 16+ years were more likely to have thought about gambling more than once or twice during the past 12 months.

**Table 7.17 Problems/behaviours associated with gambling in past 12 months (%)**

Problems/behaviours	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Spent more money than planned on gambling	11	19	5	24	10	20
Felt bad or fed up when tried to stop gambling	5	7	2	18	5	8
Led to arguments with friends	4	8	10	12	4	8
Taken money from outside family for gambling	3	8	1	0	2	8
Led to arguments with family	2	5	3	12	2	6
Taken money from family for gambling	2	4	2	6	2	4
Used school money/fare for gambling	2	3	2	6	2	3
Gambling led to missing school	1	4	0	12	1	4

a Males=673, Females=118, Total=791; b M=202-4, F=17, T=219-221

The most common concern associated with gambling was spending more money than planned

56% young offenders reported feeling 'delighted, pleased, or mostly satisfied' with their lives

22% young offenders were primarily concerned with substance use issues

Young female offenders were significantly more likely to be primarily concerned about sexual health than young male offenders

### 7.12 Life satisfaction

Self-reports in the 2004-05 *National Health Survey* show that the majority of young people aged 15-24 years were satisfied with their lives overall (88%). Most were satisfied with the safety aspects (85%), their health (81%), the home in which they lived (81%) and their neighbourhood (78%).<sup>67</sup>

Fifty-six percent (56%) young offenders in this sample reported feeling 'delighted, pleased, or mostly satisfied' with their lives as a whole. More females (57%) than males (42%) tended to have mixed feelings, or felt mostly unsatisfied or unhappy with their lives.

### 7.13 Life concerns

Of the 52% (n=386) young offenders who provided detail on their main concerns 32% (n=124) were concerned predominantly about their physical health (excluding substance use issues). Table 7.18 provides detail on the primary concerns of males and females.

Fifteen percent (15%, n=57) young offenders provided multiple responses to this question. This was most commonly observed for young offenders nominating substance use concerns (36%, n=30).

Females (25%, n=14) were more likely than males (12%, n=40) to nominate sexual health as their primary concern.

**Table 7.18 Primary life concerns (%)**

Life concern	Male	Female	Total
Physical health (body image)	34	22	32
Work/school/crime	15	13	15
Alcohol/tobacco/drug use	22	19	22
Mental health, family, relationships	16	21	17
Sexual health	12	25	15

Males=323 Females=60 Total=386. YPiCHS not available. \*Also includes settle down, buy a house, get rich.

### 7.14 Summary and conclusions

Thirty percent (30%) of young offenders scored in the severe clinical range on two scales of the *Adolescent Psychopathology Scale-Short Form* (APS-SF). The two highest frequencies occurred on the Substance Abuse Disorder (26%) and Conduct Disorder (19%) scales (8% of whom were comorbid for Substance Abuse Disorder and Conduct Disorder). ESB young offenders were more likely to have a Substance Abuse Disorder than CALD young offenders. Younger offenders (<16 years) were more likely to have a Conduct Disorder. Ten percent (10%) young offenders had more than two comorbid psychopathologies.

Twenty-five percent (25%) of young offenders scored in the high/very high psychological distress range on the K-10; 38% of polysubstance users scored in this range.

Using the *Childhood Trauma Questionnaire*, the majority of the sample (74%) reported that they experienced some form of abuse, with



females reporting higher rates than males. Twenty-three percent (23%) of males and 38% of females reported some form of abuse in the severe range. Females were four times more likely than males to report three or more severe forms of abuse.

Scores in the severe range for Conduct Disorder were significantly associated with emotional and physical abuse. Young offenders with scores in the severe range on the Substance Abuse scale were more likely to report some form of abuse on the CTQ (24%) than those with no to moderate substance abuse (14%).

Fifty-nine percent (59%) young offenders reported some form of neglect.

Suicide is the leading cause of mortality in Australian young offenders after drug-related deaths. In this sample, suicidality and self-harm co-occurred. In the community orders sample, 14% of males and 32% of females reported that they had considered suicide; 8% males and 18% females reported a least one suicide attempt. Fifteen percent (15%) of males and 28% of females had self-harmed. Sixteen percent (16%) knew a school peer who had committed suicide.

Peers exerted significant influence on the behaviour of this sample. Sixty-seven percent (67%) males and 71% of females indicated that they would consider their friends' opinions when faced with a decision. Alcohol and cannabis use were the most shared activities between young offenders and their friends. At least half of all males and females indicated that all their friends used alcohol and/or cannabis.

Being a bully (56%) and being bullied (30%) were prominent features in the psychosocial histories of these young offenders. Similar rates of bullying were reported by males and females. The majority (64%) of bullies showed no victim empathy.

Using Fisher's revised DSM-IV-MR-J juvenile gambling screen, 5% of males and 4% of females were identified as problem gamblers.

Given the multiple problems faced by these young offenders, 56% nonetheless reported feeling 'delighted, pleased or mostly satisfied with their lives.'

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# CHAPTER 8

## ALCOHOL, TOBACCO AND OTHER DRUG USE

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# 8. ALCOHOL, TOBACCO AND OTHER DRUG USE

Drugs of abuse refer to substances that act on the central nervous system to alter consciousness, mood and thinking processes. Substance abuse in young people is related to mood regulation and curiosity.<sup>1,2,3</sup> Neuro-adaptation and tolerance, the key features of dependent use, are relatively rare in adolescence.<sup>4</sup> DSM-IV-TR (2004)<sup>5</sup> criteria for substance dependence emphasise the physiological component of substance use, although a diagnosis of substance dependence without physiological dependence is possible. Physiological dependence is almost always accompanied by psychosocial harms (eg failure to fulfil major role obligations at home, work, or school; risky behaviours such as driving a car under the influence of substances; substance use related legal problems; constantly recurring social or interpersonal problems caused by the substance use). Substance abuse is typified by the psychosocial harms of substance use without the physiological features of dependence. In Australia, estimates of dependent use by young people vary from 5% to 10%.<sup>6,7</sup> Patterns of substance use established in adolescence are stable and predict chronic patterns of abuse, mortality, crime and morbidity.<sup>8</sup>

Different factors contribute to initiation (eg curiosity, peer influence) and maintenance of substance use. Maintenance factors are of primary importance in terms of rehabilitation.<sup>9,10,11</sup> These include:

- disrupted family background and low parental supervision;
- parental substance abuse;
- experience of physical and emotional abuse and neglect and sexual abuse;
- delinquent peer associations (anti-social attitudes and values);
- poor social skills;
- low psychological well-being;
- history of age inappropriate behaviour (early onset behavioural disturbance); and
- having been placed in out of home care.

Other factors associated with substance use include: personality traits (such as impulsiveness, extroversion), alienation and mental illness or psychological difficulties (including depression, low self-esteem and ADHD). In adult prisoners, prior juvenile detention is associated with likelihood of having used drugs, earlier age of initiation into cannabis and amphetamine use (14 years vs. 16 years), regular use of substances, substance use and self-reported addiction.<sup>12</sup>

Protective factors against engagement in substance use include parental conformity, calm temperament, supportive family environment, external support systems (that help develop coping) and “social bonding” (strong attachments to parents, connectedness to schools, regular involvement in church activities, and conventional belief systems).<sup>13,14</sup>

## 8.1 Alcohol use

Alcohol abuse and alcohol dependence affect a significant number of adolescents and young adults between the ages of 12 and 20. Adolescents who begin drinking before age 15 are four times more likely to develop alcohol dependence than those who begin drinking at age 21.<sup>15</sup> Howard (1997)<sup>16</sup> estimated that between 6% - 10% of adolescents who use drugs develop some form of substance dependence.

Early age of drinking onset is associated with alcohol-related violence. The three leading causes of death for 15- to 24-year-olds are automobile crashes, homicide and suicide – alcohol is a leading factor in all three.<sup>15</sup> Community data indicate that the mean age of alcohol initiation (drinking a full serve of alcohol) among young people aged 14-24 years is 14.6 years for males and 14.8 years for females.<sup>15</sup> NSW Health estimates that 22% boys and 18% girls aged between 12-16 years drink on a weekly basis; 40% of 16-17 year olds binge drink at least occasionally.<sup>17</sup>

Age of onset of alcohol use in the general population is 17.2 years.<sup>18</sup> Almost all young offenders on community orders had consumed alcohol and been drunk at some time in the past, with most having been drunk before age 16. The average age of first consuming alcohol

*The average age of first consuming alcohol was 13 years for both males and females*

*Almost all young offenders had been drunk before age 16*

was 13 years for both males (range: 5 to 18) and females (range: 5 to 18). Young men were, on average, aged 14 years (range: 5 to 19) and young women were, on average, aged 13 years (range: 5 to 18) when they first got drunk.

Table 8.1 reports on age of onset of alcohol use and age when first drunk, with comparisons from the *National Drug Strategy Household Survey (NDSHS)*<sup>18</sup> for the item 'ever tried alcohol.'

**Table 8.1 Alcohol use and drunkenness (%) [NDSHS]**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever tried alcohol<sup>i</sup></b>	<b>97 [72]<sup>*</sup></b>	<b>96</b>	<b>98 [75]</b>	<b>100</b>	<b>97 [73]</b>	<b>96</b>
<b>Had full serve alcohol<sup>i</sup></b>	<b>95</b>	<b>93</b>	<b>97</b>	<b>100</b>	<b>95</b>	<b>94</b>
Age first serve <sup>ii</sup> <11	14	15	9	0	13	14
Age first serve <sup>ii</sup> 11 -13	36	27	50	39	38	28
Age first serve <sup>ii</sup> >13	50	58	41	61	49	58
<b>Ever been drunk<sup>i</sup></b>	<b>90</b>	<b>84</b>	<b>93</b>	<b>100</b>	<b>90</b>	<b>85</b>
Age first drunk <sup>iii</sup> <12	10	15	8	0	10	14
Age first drunk <sup>iii</sup> 12 -13	30	28	45	33	32	28
Age first drunk <sup>iii</sup> 14 -15	41	37	34	45	40	38
Age first drunk <sup>iii</sup> >15	19	21	12	22	18	21

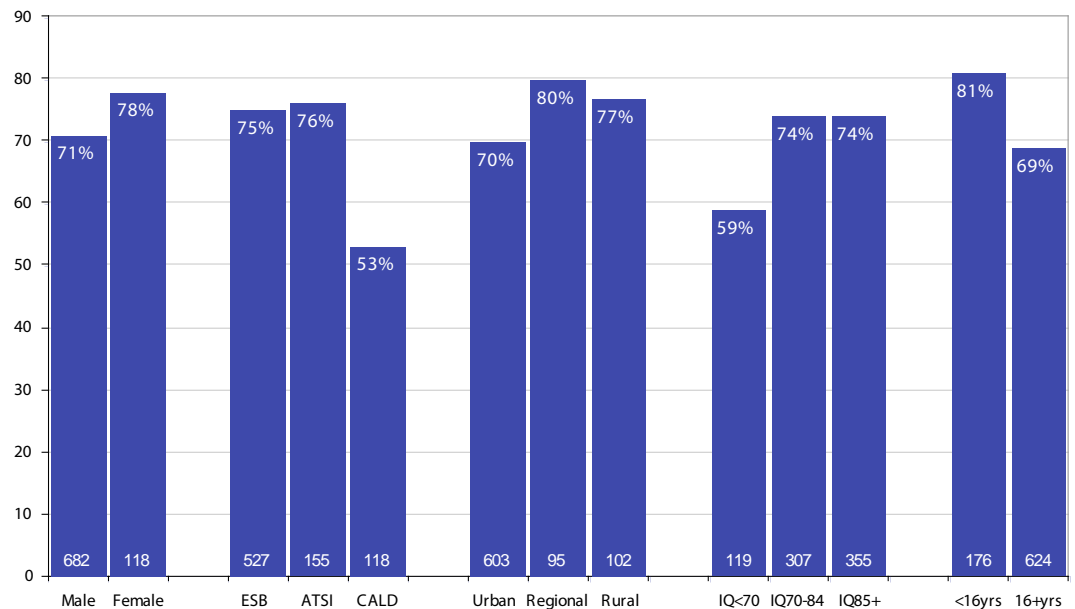
a (i) Males=673, Females=115, Total=788; (ii) M=635, F=112, T=747 (iii) M=595, F=105, T=700

b (i) M=207, F=18, T=225; (ii) M=206, F=18, T=224; (iii) M=204, F=18, T=222;

\*Source: NDSHS (2004) Table 3.9, ages 14-19<sup>18</sup>

Figure 8.1 shows patterns of drunkenness before age 16 for key subgroups.

**Figure 8.1 Drunk before age 16 by gender, ethnicity, region, IQ and age (%)**



Numerous assessment instruments and methods exist for the identification and classification of unsafe drinking.<sup>19</sup> Unsafe drinking may be

defined as excessive average daily or weekly consumption, excessive consumption in any one drinking session, or negative social,

95% young offenders reported having had a full serve of alcohol

90% had been drunk at least once

42% had been drunk by age 13

82% had been drunk by 16 years

CALD and IQ<70 young offenders were less likely to be drunk before age 16 than other sub groups



behavioural and physiological consequences arising from drinking (or attempting to cut down). Identifying problematic adolescent drinkers is difficult because no level of drinking is considered safe for young people less than 18 years of age.<sup>20</sup> Currently, quantitative measures for detecting unsafe adolescent drinking are based on adult guidelines that do not take into account issues relating to neurological development of young people. Further, adolescents tend to engage in occasional sporadic drinking episodes (binges) rather than regular moderate drinking. They may therefore be more likely to meet recommended cut-offs for minimising risk of long-term harm (standard drinks per week) but are at greater risk from short-term, physical and social alcohol-related harm. Adolescents' cognitive, social and sexual maturity and the uncontrolled environment in which they tend to drink significantly increase the risk of harm including unsafe sexual practices, self-harm behaviour, substance use, violence and physical injury. Many young offenders combine the use of illicit substances with alcohol, thus compounding the risks. Since physiological dependence develops as a result of sustained use, adolescents are less likely to be identified by dependence measures despite showing evidence of behavioural precursors to dependence that increase risk of brain damage and diseases such as diabetes.<sup>20</sup> Hence, it is appropriate to use multiple methods to identify unsafe drinking.

According to the Australian Alcohol Guidelines (AAG), one standard drink contains 10 grams of alcohol, approximately equivalent to one bottle of light beer, 30mL of spirits, or 150mL of wine. One can of full strength beer contains approximately 1.5 standard drinks. The guidelines advise that to minimise short and long term health risks, individuals should drink no more than four standard drinks (men) or two standard drinks (women) a day on average; never more than six standard drinks (men) or (four standard drinks women) on any one day; drinking should be spread over several hours; and both men and women should have at least one alcohol-free day each week.<sup>20</sup> The NDSHS

uses NHMRC guidelines to identify levels of risk. A drinking pattern that exceeds the daily limits described above carries with it short-term risks. Two levels of long term risk are also defined: Risky (29-42 standard drinks per week for males, 15-28 for females) and high risk (43 or more standard drinks per week for males, 29 or more for females).<sup>18</sup>

Fifty-three percent (53%; n=365) males and 64% (n=74) females in the community orders sample met one or both of these criteria for risky drinking in the past 12 months. Seventy-four percent (74%; n=210) of young people classified as low risk drinkers met WHO criteria<sup>21</sup> (see section 8.1.1) for binge drinking (six or more standard drinks for males or four or more for females in a single session) at least once in the past 12 months. Thirty percent (30%) males [YPiCHS 46%] and 36% females (combined n=244) reported drinking at or above this level at least weekly in the past 12 months. The quantities young people typically reported consuming indicated levels of drinking far exceeding the cut-offs for the AAG. (Responses included: "I keep drinking 'til I pass out", "I drink heaps," "Once I start, I can't stop," and "I drink until the bottle is empty"). Young offenders in the community (26%, n=172; males; 24%, n=27 females) who reported drinking on fewer than one occasion per month also reported consumption that met binge drinking criteria. Fifteen percent (15%; n=90) males and 6% (n=6) females who fell in the low risk drinking category reported getting drunk at least monthly.

Five percent (5%; n=31) males and 10% (n=11) females reported drinking daily or almost daily (at least five days times per week).

Table 8.2 (overleaf) displays the percentages of young offenders in five categories of alcohol consumption: never drinks, no drinks in past 12 months, low risk, risky and multiple/high risk. Multiple/high risk includes those who drink at risky levels in both the short and long term, as well as those who drink at high risk levels in the long term. Sample figures are compared with percentages from the NDSHS, using the weekly drinking cut-offs outlined above.<sup>18</sup>

*According to AAG, patterns of alcohol consumption have been defined as:*

- *Safe*
- *Short term risk*
- *Long term risk: 29-42 standard drinks for males, 15-28 for females per week*
- *Long term high risk: 43 or more standard drinks for males, 29 or more for females per week*

*55% young offenders met AAG and NHMRC guidelines for unsafe drinking in the past 12 months*

*30% males and 36% females reported binge drinking on a weekly basis or more often*

**Table 8.2 Risk level of drinking for community and custody samples by gender (%) [NDSHS]**

Alcohol consumption	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Never had a full serve of alcohol	5 [41]	7	3 [39]	0	5 [40]	6
No drinks in past 12 months	4 [3]	5	7 [2]	17	4 [3]	6
<b>Short term risk</b>						
Low risk	37 [32]	30	22 [30]	22	35 [32]	30
Risky/high risk	54 [37]	62	67 [42]	72	56 [40]	63
<b>Long term risk</b>						
Low risk	76 [62]	66	63 [60]	28	74 [61]	63
Risky	7 [5]	0	9 [8]	33	7 [7]	3
High risk	9 [3]	21	18 [4]	22	10 [3]	21
<b>Combined risk</b>						
Low risk	39	27	25	11	36	26
Risky*	37	40	39	17	38	38
Multiple/high risk	15	21	25	55	16	24

a (i) Males=671, Females=115, Total=786; b (i) M=206, F=18, T=224;

Source: NDSHS (2004) Tables 3.10/12/13, ages 12-19<sup>18</sup>

\*Key Findings Report defined risky (unsafe) as 6 or more (male)/4 or more (female) standard drinks on any day in the past year

Figure 8.2 presents the percentage of young offenders in each risk category for each of the main sub groups. The small proportions in each category (on average 9%) who reported that they were non-drinkers are not presented in the figure. A higher proportion of young

female offenders (25%) compared with male young offenders (15%) were high risk drinkers; similarly, 36% of Aboriginal young offenders were high risk drinkers compared with 20% ESB and 7% CALD.

9% males and 10% females did not drink in the past 12 months compared with 43% of the general adolescent population

56% young offenders drank at risky levels (short term) compared with 40% from NDSHS

17% young offenders were at risk of long term harm from alcohol abuse compared with 10% from NDSHS

54% young offenders were at short and long term risk of harm from alcohol abuse

Higher proportions of females and Aboriginal young offenders were high risk drinkers

**Figure 8.2 Level of drinking risk in past 12 months by gender, ethnicity, region, IQ and age (%)**

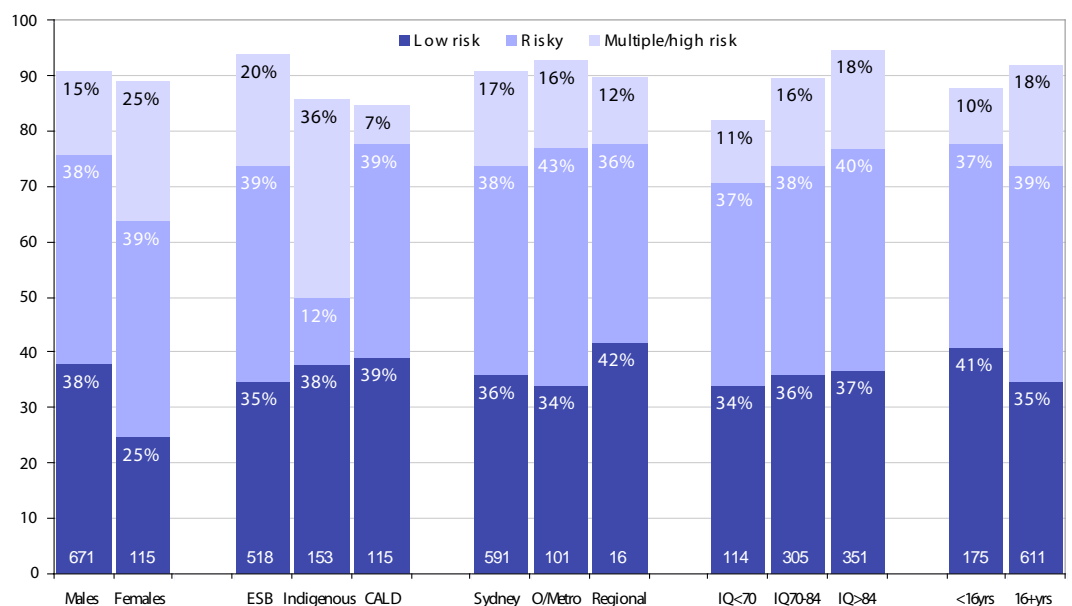


Table 8.3 reports on frequency of alcohol use, being drunk, and consuming six or more (males) or four or more (females) standard drinks in the past 12 months.

Twenty-seven percent (27%, n=182) males and 23% (n=27) females reported being drunk at least weekly in the past 12 months.

**Table 8.3 Frequency of alcohol use in past 12 months (%) [NDSHS]**

Alcohol use <sup>1</sup>	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Daily or almost daily	5 [<1]	15	10 [<1]	11	5 [<1]	15
Weekly	41 [20]	38	30 [17]	50	40 [19]	39
Less than weekly	45 [36]	35	50 [41]	22	46 [39]	34
None	9 [43]	12	10 [42]	17	9 [43]	12
<b>Being drunk in the past 12 months</b>						
Never	18	28	21	19	18	27
Less than once a month	32	22	37	25	32	21
Monthly	10	8	10	6	10	11
Fortnightly	14	8	10	6	13	7
1-2 days a week	20	25	15	19	19	25
3-4 days a week	6	3	6	19	6	4
Almost everyday or everyday	2	5	3	6	2	5
<b>Risky drinking (six or more drinks for males/ four or more for females) in the last 12 months (%)</b>						
Never	18	22	19	6	18	21
Less than once a month	26	12	24	0	26	11
Monthly	12	9	15	12	12	9
Fortnightly	14	11	7	12	13	11
1-2 days a week	22	24	20	35	21	25
3-4 days a week	7	9	8	18	7	9
Almost everyday or everyday	2	13	7	18	3	14

a Males=672-3, Females=114-6, Total=786-9; b M=200-7, F=16-18, T=216-225  
Source: NDSHS (2004), Table 3.10, Age group 12-19, Australia<sup>18</sup>

27% males and 23% females reported being drunk at least weekly in the past 12 months

5% males and 10% females reported drinking daily or almost daily (at least five days times per week)

2% young offenders reported being drunk almost every day or every day in the past 12 months

31% males and 35% females drank at risky levels at least weekly in the past 12 months

**8.1.1 Alcohol dependence**

Three items from the WHO *Alcohol Use Disorders Identification Test* (AUDIT)<sup>21</sup> were

used to assess drinking behaviours consistent with possible alcohol dependence (Table 8.4).

**Table 8.4 Indicators of alcohol dependence in community orders and custody samples (%)**

Indicator of dependence	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Unable to stop drinking once started (last 12 months)<sup>i</sup></b>						
Never	85	77	85	53	85	75
Less than once a month	3	2	3	0	3	1
Monthly	2	1	2	0	2	1
Fortnightly	2	3	3	12	2	4
1-2 days a week	4	8	2	6	4	8
3-4 days a week	2	3	3	18	2	4
Almost everyday/everyday	1	7	2	12	1	7
<b>Failed to do what was normally expected because of drinking<sup>ii</sup></b>						
Never	82	75	77	63	82	74
Less than once a month	7	2	9	0	7	2
Monthly	3	2	4	6	3	2
Fortnightly	2	4	2	6	2	4
1-2 days a week	4	9	4	13	4	10
3-4 days a week	1	2	3	13	2	3
Almost everyday/everyday	1	6	1	0	1	6
<b>Needed an alcoholic drink in the morning<sup>iii</sup></b>						
Never	96	91	95	82	96	90
Less than once a month	1	2	1	0	1	2
Monthly	0	1	0	0	0	1
Fortnightly	1	1	1	6	1	1
1-2 days a week	1	2	1	0	1	2
3-4 days a week	<1	1	1	6	<1	1
Almost everyday/everyday	1	3	1	6	1	4

a (i) Males=669, Females=114, Total=783; (ii) M=635, F=111, T=746; (iii) M=668, F=114, T=782  
 b (i) Males=204, Females=17, Total=221; (ii) M=206, F=16, T=222; (iii) M=205, F=17, T=222

A total AUDIT score, indicating the presence and severity of problem drinking must be calculated using data from all 10 AUDIT questions. This survey collected data on six of the ten AUDIT questions. However, scaled responses to the three items in Table 8.4 can be totalled to give a dependence score for the AUDIT. For problem drinkers (defined as risky and/or high risk drinkers in this survey; see Table 8.2), scores of 4 and above on the AUDIT dependence scale are considered indicative of existing or emerging alcohol dependence.<sup>22</sup>

Figure 8.3 (overleaf) reports on percentages of young offenders who meet AUDIT dependence criteria, percentages of young offenders scoring in the severe range on the APS-SF Substance Abuse Disorder Subscale, and those meeting both sets of criteria, by gender, ethnicity, region, IQ and age.

A higher proportion of those who had received custodial sentences displayed indicators of alcohol dependence, particularly female offenders, although the sample was small (n=19) for this group.

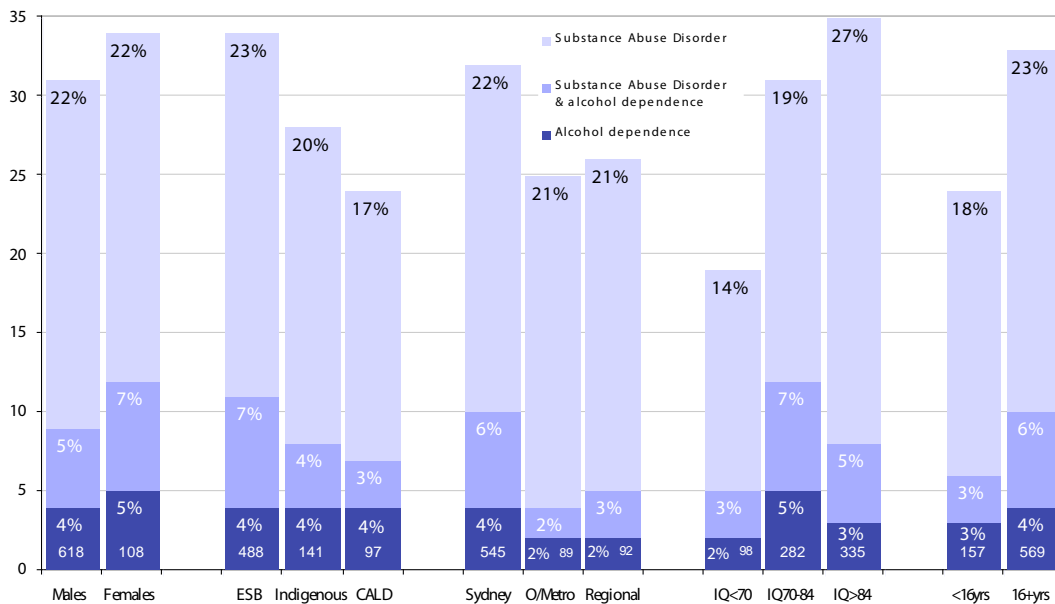
On at least one day per week in the past 12 months:

7% young offenders were unable to stop drinking once started

7% young offenders failed to do what was normally expected of them because of drinking

3% young offenders needed an alcoholic drink in the morning

**Figure 8.3 Alcohol dependence and Substance Abuse Disorder (APS-SF severe) by gender, ethnicity, region, IQ and age (%)**



Nine percent (9%; n=68) young offenders in the community orders sample who had drunk alcohol met AUDIT criteria for alcohol dependence. A further breakdown of dependent drinking by age indicated that 5% 14 year olds, 6% 15 year olds, 11% 16 year olds,

13% 17 year olds and 8% 18 year olds met AUDIT criteria for alcohol dependence.

Table 8.5 presents a breakdown of alcoholic beverages consumed by young offenders, with comparison with young Australians aged 15-17 years.<sup>20</sup>

**Table 8.5 Alcoholic beverages consumed by young offenders (%) [King et al (2005)]**

Beverage*	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Spirits (bottled)	61 [54]	73	65 [77]	77	61 [64]	73
Beer (all types)	51 [55]	41	28 [13]	35	48 [36]	40
Spirits (premixed)	43 [36]	31	62 [62]	24	45 [73]	31
Alcoholic cider/soda	10 [4]	12	20 [10]	12	12 [7]	12
Wine (all types)	6 [5]	8	14 [14]	30	3 [10]	10

a Males=637, Females=111, Total=748; b M=191, F=17, T=208; \*multiple responses permitted  
Source: King et al (2005): Australian 15-17 year olds in 2000 to 2004 Figures 9, 10, 16<sup>23</sup>

## 8.2 Tobacco use

The 2004 National Drug Strategy Household Survey (NDSHS) assessed the tobacco and illicit substance use of 30,000 people aged 12 years and over. Ninety-six percent (96%) 12- to 15 year-olds reported never having smoked a cigarette; 2% of this age group smoked daily. Eleven percent (10.7%) young people aged 14-19 years reported smoking daily, and females aged between 16 and 17 years were almost twice as likely as males to smoke daily. Young

people who do less well academically and who have a lower self-image are also more likely to smoke than other young people. Significant correlates of progression to established smoking include parental advice not to smoke, antismoking lessons in school, susceptibility to tobacco industry advertising and promotion, peer smoking and exposure to smoking at home.<sup>24</sup> According to the AIHW (2007),<sup>25</sup> the mean age of initiation into tobacco smoking among young people aged between 14-24 years was 14.7 years for males and 14.4 years

5% young offenders met both criteria for substance dependence

APS-SF (severe category score) identified significantly more young offenders than the AUDIT criteria

9% young offenders who had drunk alcohol met AUDIT criteria for alcohol dependence

- 5% 14 year olds
- 6% 15 year olds
- 11% 16 year olds
- 13% 17 year olds
- 8% 18 year olds

Spirits were the most frequently consumed alcoholic beverage (61%)

for females. Seventeen percent (17%) young people (12-17 year olds) identified themselves as smokers.<sup>25</sup>

In this sample of young offenders on community orders, the average age for commencing smoking was 12 years for both males and females, with 27% (199) reporting they had commenced smoking at ten years of age or younger.

Other characteristics include:

- 81% (545) males and 81% (95) females were current smokers

- 93% (594) of current smokers smoked daily or almost daily (75% of total sample - see Figure 8.4)
- 36% males and 53% females smoked 10 or fewer cigarettes on the days that they smoked
- 25% (156) young offenders felt that they required assistance to quit smoking.

Table 8.6 presents data on tobacco use and frequency with community comparison data.

**Table 8.6 Tobacco use and frequency (%) [NSW Health 2002] [NDSHS 2004]**

Smoking status <sup>i</sup>	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Ever smoked	94 [42]	94	95 [42]	94	95 [42]	94
Currently smokes	81 [12]	57	81 [15]	67	81 [13]	58
<b>Smoking frequency<sup>ii</sup></b>						
Daily	93 [75]	70	95 [85]	50	93 [79]	68
Weekly	6 [15]	23	5 [9]	25	6 [12]	23
Less than weekly	1 [10]	7	0 [7]	25	1 [9]	9
<b>Daily cigarettes smoked<sup>iii</sup></b>						
1 to 9 cigarettes	52	41	55	35	52	40
10 to 19	28	28	30	18	28	27
20 or more	21	31	15	47	20	32
<b>Age when first smoked<sup>iv</sup></b>						
10 or less	27	29	27	6	27	27
11 to 13	44	43	49	77	45	45
14 or more	29	29	24	18	29	28

a (i) Males=673, Females=116, Total=789; (ii-iii) M=545, F=94, T=639; (iv) M=636, F=110, T=746  
 b (i) M=207, F=18, Total=225; (ii) M=113, F=12, T=125; (iii) M=174, F=17, T=191; (iv) M=195, F=17, T=212  
 Sources: (i) NSW Health (2002)<sup>17</sup> Tables 4 & 5 (ii) NDSHS (2004) Table 3.3, Age group 14-19<sup>18</sup>

Twenty-seven percent (27%) young offenders had first smoked at age 10 years or younger. A further 45% commenced smoking between the ages of 11 and 13 years. In this sample, therefore, the majority (72%) had commenced smoking by 13 years of age. The mean number of cigarettes smoked per week was 106 for custody and 81 for young offenders on community orders. Forty-eight percent (48%) young offenders smoked ten or more cigarettes daily, with 20%

reporting that they smoked 20 cigarettes or more on a daily basis. By comparison, NDSHS data<sup>18</sup> reports a mean of 70 cigarettes smoked per week (males-68, females-70) for Australian smokers aged 14-19 years.

Figure 8.4 (overleaf) displays the daily cigarette smoking by gender, ethnicity, region, IQ and age (%).

Young offenders commenced smoking, on average, at 12 years of age

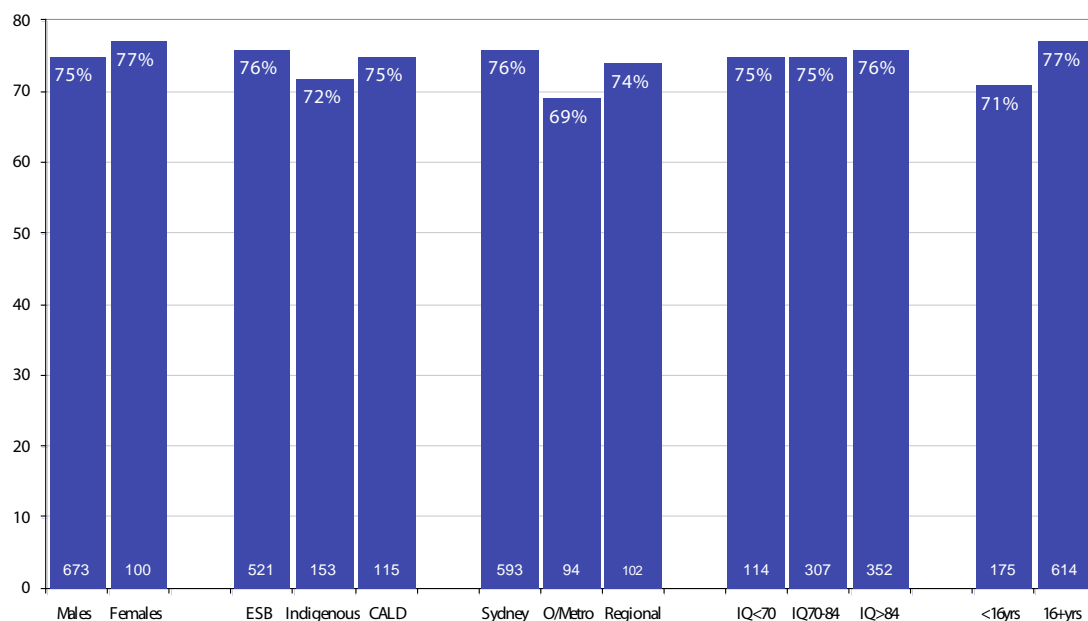
27% commenced smoking at ten years of age or younger

81% males and females were current smokers

93% current smokers smoked daily

48% current smokers smoked 10 or more cigarettes a day

72% smokers began smoking at 13 years of age or younger

**Figure 8.4 Daily cigarette smoking by gender, ethnicity, region, IQ and age (%)**

Recent research has shown that the most significant risk factor for smoking is having any family member currently smoking [OR 6.1 (95% CI: 4.0–9.3)].<sup>26</sup> A protective factor against tobacco use was participation in sports [OR 0.3 (95% CI 0.2–0.4)]. Having asthma did not prevent teenagers from smoking. Since having a smoking family member is the major risk factor for tobacco use, prevention programs should be directed at smoking families in

addition to the young person who smokes.<sup>26,27</sup>

Table 8.7 displays the smoking patterns of the parents of young offenders in both custody and community orders samples. Only 25% (22% YPiCHS) reported that neither parent smoked. Thirty-six percent (35%) of the community orders sample reported that both parents smoked. In the custody sample, 78% reported that either or both parents were smokers.

*There were no differences in daily smoking behaviour for sub groups of young offenders*

*75% of either or both parents of current smokers were also smokers*

*36% of both parents of young offenders who smoked were also smokers*

**Table 8.7 Parental tobacco use (%)**

Parent smokes	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
No - Neither	26	22	18	17	25	22
Yes - Mum	21	78	26	83	22	78
Yes - Dad	18		14		17	
Yes - Both	35 [40]		42 [41]		36 [41]	

a Males=641, Females=111, Total=752; b M=201, F=18, T=219

Source: Fairthorne et al (2002), Table 18 (Proportion of WA smokers living in household by age & gender - 2002)<sup>27</sup>

Seventy-five percent (75%; n=471) young offenders on community orders who smoked reported that their parents also smoked; 70% (n=93) young offenders who did not smoke reported that their parents smoked. This difference was not statistically significant. Of the young offenders who smoked, 96% smoked on three or more days per week. Those who smoked three or more days per week were more likely to have parents who smoked.

A comparison of smoking behaviour across regions in young offenders showed that 42% regional smokers commenced smoking at age

10 or younger compared with 27% for young offenders from metropolitan areas (Sydney and Other Metropolitan). This finding has clear implications for school based smoking prevention programs to commence in early primary school.

Table 8.8 shows the percentages of young offenders who wanted to quit smoking and their preferred methods of smoking cessation.

More young metropolitan offenders (65%) wanted to quit or had tried to quit smoking compared with regional young offenders (45%).

**Table 8.8 Intention to quit smoking (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Wants help to quit<sup>i</sup></b>	<b>24</b>	30	<b>25</b>	42	<b>24</b>	31
<b>Preferred help<sup>ii</sup></b>						
Nicotine patch / gum / medication	62	80	61	80	62	80
Social support / encouragement	10	-	8	-	10	-
Counselling*	8	20	15	20	9	20*
Self-discipline / cold-turkey	6	-	15	-	7	-
Distraction	6	-	0	-	5	-
Health care professional	5	-	0	-	4	-
Sport / exercise	3	-	0	-	3	-

a (i) Males=542, Females=93, Total=635; (ii) M=86, F=13, T=99; b (i) M=112, F=12, T=124; (ii) M=25, F=5, T=30; YPiCHS only two options coded

**8.3 Substance use**

The use of multiple (poly) substances in substance users is increasing in Australia,<sup>28</sup> a trend also in evidence internationally.<sup>29,30</sup> Substance users typically commence using tobacco and alcohol, then proceed to cannabis, followed by a combination of other 'hard' drugs such as amphetamines, opiates and cocaine.<sup>31</sup> Use of the initial substances continues even when users have progressed to other substances. Such use is dependent on access, availability and motivation to cease or reduce levels of use.

Although young people demonstrate poly-substance and opportunistic drug use patterns, alcohol and tobacco remain the most commonly abused substances, followed by cannabis for non-offender juveniles.<sup>32</sup>

Several large scale longitudinal studies of

delinquency<sup>33,34,35</sup> highlight the impact of substance abuse, particularly early onset abuse<sup>34,36,37</sup> both on offending onset and in delaying the trajectory out of offending. Hammersley et al (2003)<sup>38</sup> reported that more than 50% of their sample thought their drug use was causal in their offending.

In this sample, a similar relationship was observed. Of the 191 young offenders who had been convicted of seven or more offences in their court history, 100 (52%) smoked cannabis five or more days per week compared with 12% who never smoked cannabis, 17% who smoked less than three days per week and 19% who smoked 3-4 times per week.

Data on substance use in young offenders in Table 8.9 are compared with substance use of young people aged 14-19 years taken from the *NSW Health Behaviours of Secondary School Students Survey* (HBSSS) 2002.<sup>17</sup>

42% regional young offenders compared with 27% from metropolitan areas (Sydney and other metropolitan) commenced smoking at age 10 or younger

24% young offenders who smoked wanted help to quit smoking

62% of current smokers nominated nicotine patches/gum/medication as their preferred method to stop smoking

Alcohol and tobacco remain the most commonly abused substances



**Table 8.9 Substance use history (%) [NSW HBSSSS 2002]**

Ever used	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Cannabis	89 [24]	88	89 [19]	88	89 [22]	88
Amphetamines*	44 [6]	47	56 [5]	59	46 [5]	48
Other amphetamine related**	40 [5]	35	45 [4]	35	39 [4]	35
Cocaine	17 [3]	20	23 [2]	29	18 [3]	21
Heroin	13 [3]	18	20 [2]	47	14 [3]	20
Hallucinogens	11 [4]	13	12 [4]	18	11 [4]	14
Inhalants	7 [21]	2	10 [24]	12	7 [22]	3
Painkillers	5 [90]	n/r	7 [93]	n/r	5 [91]	n/r
Steroids	1 [3]	2	1 [2]	0	1 [3]	2

a Males=672, Females=114, Total=786; b M=206, F=17, T=223;

Source: HBSSSS (2002)<sup>17</sup> Table 17

\*Amphetamine, dexamphetamine, methamphetamine; \*\*DOB, DOM, MDA, MDEA, MDMA (Ecstasy), Mescaline, PMA, TMA

Cannabis was the most frequent substance ever used – the majority of young males (89%) and females (89%) in this sample had a history of cannabis use.

Figure 8.5 presents at-least weekly illicit substance use in the past 12 months by gender,

ethnicity, region, IQ and age. CALD young offenders were less likely to use cannabis at least weekly than ESB or Aboriginal young offenders. There were no other subgroup differences with respect to proportions who reported using cannabis at least weekly.

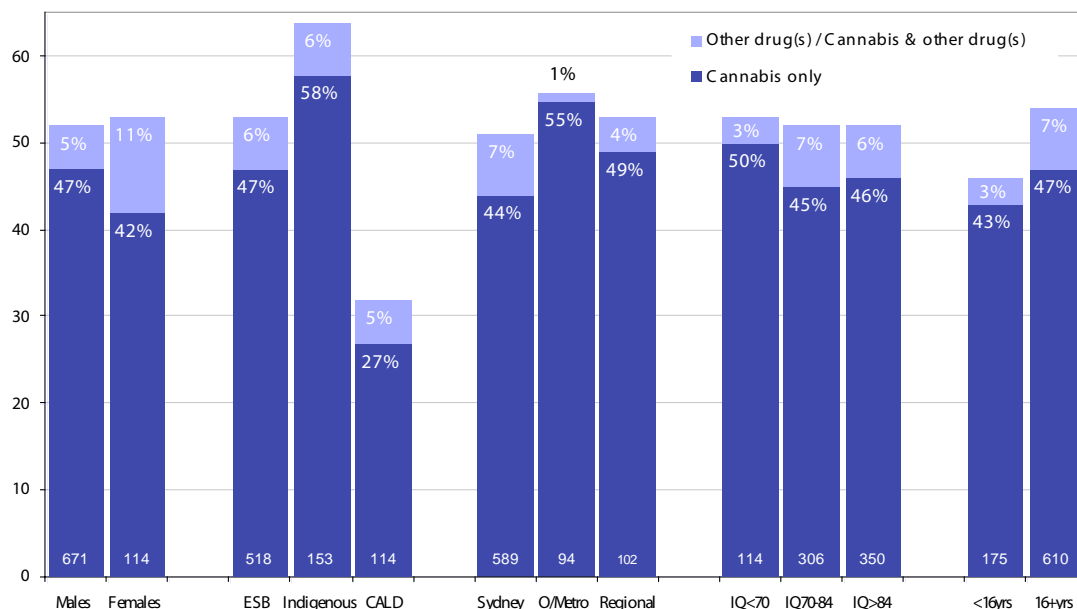
**Figure 8.5 'At least weekly' drug use in past 12 months: Cannabis only and other drug use by gender, ethnicity, region, IQ and age (%)**

Figure 8.6 (overleaf) presents cannabis use frequency in the past 12 months by gender, ethnicity, region, IQ and age. Aboriginal young offenders were more likely to use cannabis

daily, while CALD young offenders were less likely to use cannabis daily and more likely never to use cannabis.

89% young offenders had used cannabis

46% had used amphetamines

18% had used cocaine

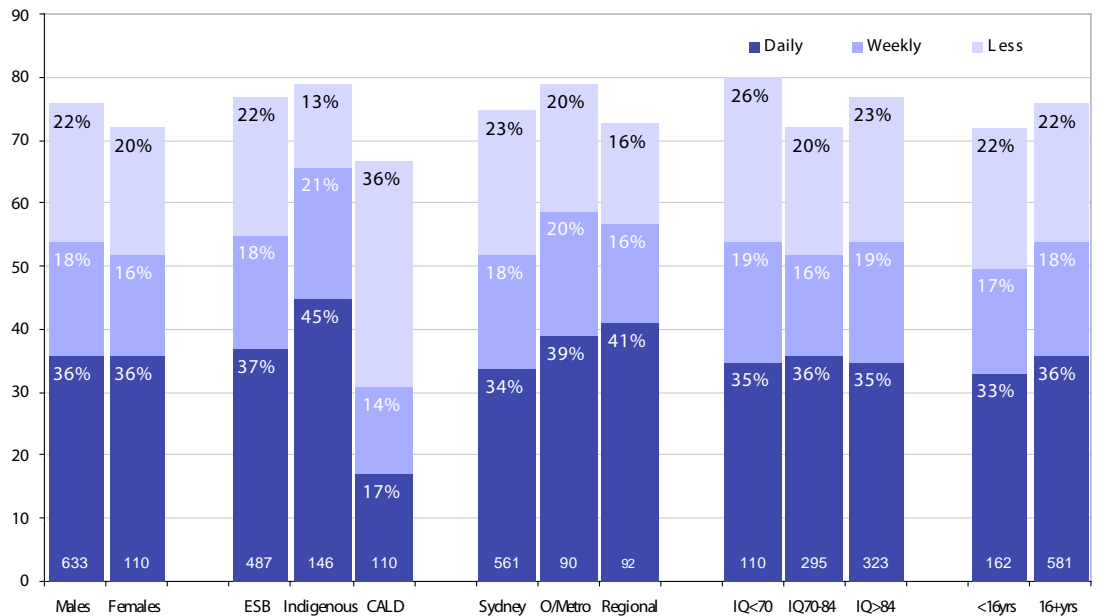
14% had used heroin

Of the 191 young offenders who had been convicted of seven or more offences in their court history, 100 (52%) smoked cannabis five or more days per week compared with 12% who never smoked cannabis

CALD young offenders were less likely to be weekly cannabis users

Females were more likely to be poly-substance users

**Figure 8.6 Cannabis use: 'Daily/almost daily', 'weekly' and 'less than weekly' in past 12 months by gender, ethnicity, region, IQ and age (%)**



Aboriginal young offenders were more likely to use cannabis daily

Young offenders initiated illicit substance use on average two years earlier than community samples of young people

Tobacco was the first substance used, followed by alcohol, solvent/inhalants and cannabis

In a 2001 community sample of young people aged 14-24 years, cannabis and inhalants were first used at mean age less than 16 years for both males and females, compared with amphetamines and speed, which were first used at 18 years for males and 17 years for females. The mean age of initiation into injecting drug use was 17 years for males and 18 years

for females.<sup>32</sup> The AIHW (2007) reported that the mean age of initiation was 15.7 years for marijuana, 18.0 years for meth/amphetamine and 18.4 years for ecstasy.<sup>25</sup> Young offenders initiated illicit substance use on average two years earlier than community samples of young people as indicated in Table 8.10.

**Table 8.10 Mean age of initiation/onset of drug use (standard deviation)**

Drug type	N (YPoCOHS)	Males		Females		Total	
		Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Tobacco	748	12.0 (2.7)	11.9 (2.5)	11.6 (2.6)	12.4 (1.1)	11.9 (2.7)	12.0 (2.5)
Alcohol	749	13.2 (2.5)	13.3 (2.6)	13.0 (2.1)	13.8 (1.3)	13.1 (2.4)	13.4 (2.5)
Solvents/inhalants	58	13.2 (2.3)	15.6 (1.0)	12.7 (1.8)	-	13.1 (2.2)	15.6 (1.0)
Cannabis	701	13.2 (2.3)	12.7 (2.5)	12.9 (2.1)	12.9 (1.7)	13.1 (2.3)	12.7 (2.5)
Painkillers	36	14.8 (2.3)	14.3 (1.3)	14.3 (2.1)	16.0 (2.8)	14.6 (2.2)	14.8 (1.8)
Benzodiazepines	105	14.9 (1.7)	15.1 (1.4)	14.1 (1.3)	14.5 (2.1)	14.6 (1.6)	15.1 (1.4)
Amphetamines	363	15.0 (1.7)	15.0 (1.5)	14.0 (1.4)	15.0 (1.3)	14.8 (1.7)	15.0 (1.4)
Hallucinogens	86	14.8 (1.9)	14.9 (1.3)	14.4 (1.1)	14.3 (1.2)	14.8 (1.8)	14.9 (1.2)
Heroin	110	15.2 (1.6)	14.8 (1.6)	13.5 (2.3)	15.0 (1.7)	14.9 (1.9)	14.8 (1.6)
Non-prescribed methadone	22	15.4 (1.9)	15.3 (1.3)	13.8 (2.2)	14.6 (1.3)	15.1 (2.0)	15.2 (1.3)
Cocaine	141	15.4 (1.8)	15.7 (1.1)	14.1 (1.4)	15.8 (0.8)	15.2 (1.8)	15.7 (1.1)
Other amphetamines	307	15.3 (1.5)	15.4 (1.3)	14.6 (1.4)	14.8 (0.8)	15.2 (1.5)	15.4 (1.2)
Other opiates	40	15.4 (2.0)	16.0 (0.0)	14.7 (1.8)	17.0 (0.0)	15.2 (1.9)	16.5 (0.7)
Other (specify)	13	15.3 (2.0)	12.4 (3.3)	15.0 (0.0)	15.5 (0.6)	15.3 (1.9)	13.0 (3.2)
Steroids	5	16.5 (1.3)	16.0 (2.0)	13.0 (0.0)	-	15.8 (1.9)	16.0 (2.0)
Prescribed methadone	5	16.7 (0.6)	16.5 (1.3)	16.0 (1.4)	15.5 (0.7)	16.4 (0.9)	16.2 (1.2)

Evidence is mounting that cannabis is not a benign substance. A recent study<sup>39</sup> followed 3,239 Australian young people from birth to the age of 21 years to ascertain whether age of first use or frequency of use of cannabis was associated with anxiety and depression (AD) in young adults. After controlling for confounding factors, including use of other illicit substances, those who started using cannabis before age 15 years and used it frequently at 21 years were more likely to report symptoms of AD in early adulthood (odds ratio 3.4; 95% CI: 1.9-6.1). The effects were similar for those who used only cannabis and for those who used cannabis in addition to other illicit substances. The study concluded that early-onset and frequent use of cannabis was strongly associated with symptoms of AD and that this relationship was independent of individual and family background and other illicit substance use. Further, Trimboli and Coumarelos (1998)<sup>40</sup> identified a dose response relationship between cannabis and crime: the greater the level of cannabis use, the greater the frequency of crime.

In 2004, researchers from the Murdoch Children's Research Institute surveyed 2,900 Victorian children in Years 5, 7 and 9 for their substance use. One in 50 (2%) Australian teenagers in Years 7 and 9 reported using cannabis weekly.

By comparison, although this sample is older than the Murdoch sample, 12% (n=81) young offenders on community orders (10% males [YPICHS 26%] and 18% females) used two or more illicit substances on a weekly or more frequent basis.

### 8.3.1 Injecting drug use

Injecting drug use and sharing contaminated injecting equipment pose additional risks to health such as exposure to blood borne viruses. Adult prisoner populations, particularly female prisoners, report high rates of injecting drug use.<sup>41</sup>

Amphetamine and heroin/amphetamine users (19%; n=67) [YPICHS 35%]; heroin users (45%; n=50), and cocaine users (14%; n=19) [YPICHS 32%] reported injection as the route of administration. Overall, 8% (n=64) (7% males, 17% females) [YPICHS 19% combined] had injected drugs in the past 12 months. Heroin and amphetamine (45% and 19% of injectors) were the two most commonly injected drugs. In the general population, amphetamines were found to be the most commonly injected substance and rates of injection of amphetamines were three times greater than for injection of heroin.<sup>18</sup>

Table 8.11 presents data on injecting drug use histories of young offenders and comparison data for young people aged 14-19 years old.<sup>18</sup>

**Table 8.11 Injecting drug use – 'ever used' and 'used in past 12 months' (%) [NDSHS 2004]**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Ever injected	9 [1]	19	23 [1]	53	11 [1]	22
Injected in last 12 months	7 [0.1]	16	17 [1]	53	8 [0.5]	19

a Males=672, Females=114, Total=786; b M=206, F=17, T=223;  
Source: NDSHS (2004) Table 3.29, Age group: 14-19<sup>18</sup>

Eight percent (8%, n=8) young offenders with histories of injecting drug use had shared needles or injecting equipment in the previous month. Three percent (3%, n=3) [YPICHS 29%] had shared injecting equipment between one and six months prior to the survey; 6% (n=7) [YPICHS 33%] shared injecting equipment between six months and two years ago.

Figure 8.7 (overleaf) displays history of injecting drug use by gender, ethnicity, region, IQ and age. Females and those with IQ>84 were more likely to inject substances than males and those with IQ<70.

10% males and 18% females used two or more illicit substances on a weekly or more frequent basis

11% young offenders had ever injected drugs, 8% in the past 12 months

Heroin and amphetamine were the two most commonly injected drugs

- 45% heroin users

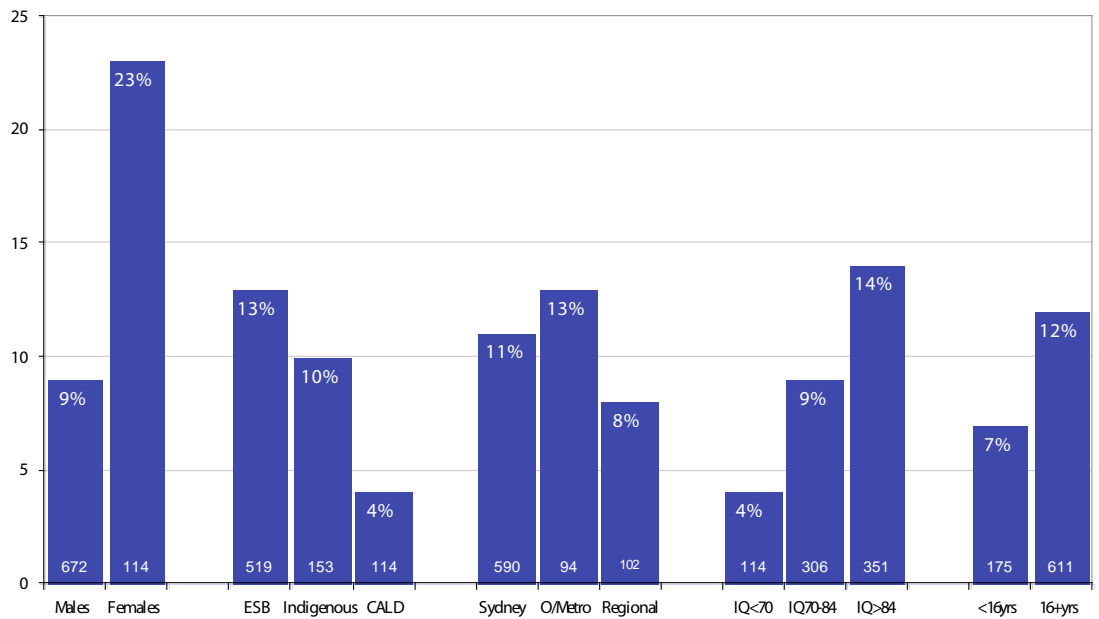
- 19% amphetamine users

- 14% cocaine users

reported injection as the route of administration

8% of injecting drug users had shared injecting equipment in the previous month

**Figure 8.7 Injecting drug use by gender, ethnicity, region, IQ and age (%)**



*Females were more likely to inject drugs than males*

*CALD were less likely to inject drugs than ESB young offenders*

*IQ<70 were less likely to inject drugs than IQ>84*

*68% of those who were injecting drug users began injecting by age 15 or younger*

The AIHW (2004) reported that the mean age of initiation for injecting drugs for males was 16.8 years and for females 17.1 years.<sup>42</sup> However, Day, Degenhardt and Hall<sup>43</sup> found that the 2001 Australian heroin shortage affected both the age at which substances were first injected (first injectors were older) and the first drug injected (change from heroin to methamphetamine).

The drop in heroin injecting was offset by an increase in methamphetamine injecting, although there appeared to be a net decrease in the overall levels of youth drug injecting. The current sample of young offenders report very young ages of first injecting drug use as indicated in Table 8.12.

**Table 8.12 Age at first injecting drug use (%)**

Age	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
< 12	7	0	4	0	6	0
12 - 13	9	16	46	33	20	19
14 - 15	47	29	31	22	42	28
16 or more	37	55	19	44	32	53

a Males=59, Females=26, Total=85; b M=38, F=9, T=47; [low n]

Table 8.13 (overleaf) presents data on the last drug injected by YPoCOHS participants and a community comparison sample [NDSHS].

**Table 8.13 Last drug injected for YPoCOHS [NDSHS]\* (%)**

Last drug injected	Males	Females	Total
	YPoCOHS <sup>a</sup>	YPoCOHS <sup>a</sup>	YPoCOHS <sup>a</sup>
Amphetamines**	59 [84]	63 [82]	60 [84]
Heroin	30 [21]	32 [26]	30 [23]
Heroin and methadone	3 [0]	5 [0]	3 [0]
Methadone	3 [7]	0 [8]	2 [7]
Steroids	3 [2]	0 [0]	2 [1]
MDMA	2 [0]	0 [0]	2 [0]
Buprenorphine	2 [0]	0 [0]	1 [0]
Other opiates	0 [5]	0 [5]	0 [5]
Cocaine	0 [5]	0 [10]	0 [7]
Hallucinogens	0 [3]	0 [5]	0 [4]
Ecstasy	0 [7]	0 [9]	0 [8]
Benzodiazepines	0 [1]	0 [ $<1$ ]	0 [1]
Other drugs	0 [18]	0 [7]	0 [7]

a Males=44, Females=19, Total=63; YPiCHS not available;

\*Source: NDSHS (2004)<sup>18</sup>

Table 3.31; \*\*Incl. speed and methamphetamine

### 8.3.2 Substances of choice

The three main substances of choice were tobacco, cannabis, and alcohol. This finding is consistent with many studies that show similar levels of use of alcohol (90%) and marijuana (92%) amongst young offenders as found in this study.<sup>36,38,44,45</sup> However, other substances also show high frequency use among young

offenders in New South Wales, who were nine times more likely to use amphetamines and 10 times more likely to have used heroin than non-offending school children.<sup>44</sup> Almost 70% indicated that their crime was attributable to or related to their drug use.<sup>44</sup>

Table 8.14 presents self-reported preferences for substances.

**Table 8.14 Self-reported substances of choice (%)**

Drug type	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Tobacco	34	28	45	41	35	30
Cannabis	33	46	27	29	32	45
Alcohol	24	17	13	12	23	16
Ecstasy/Designer Drugs	4	2	5	0	4	1
Amphetamines	3	4	3	0	3	4
Heroin	2	2	6	18	3	3

a Males=632, Females=110, Total=742; b M=191, F=17, T=208

Young offenders were asked about the factors that had influenced their decision to use illicit drugs (Table 8.15, overleaf).

*Amphetamines (60% of injecting drug users) and heroin (30% of injecting drug users) were the most frequent recently injected drugs*

*Preferred substances of young offender on community orders were tobacco (34%), cannabis (31%) and alcohol (22%)*

**Table 8.15 Factors influencing decision to first use illicit drugs (%)**

Influencing factors*	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Curiosity	70	59	73	53	69[65]	58
Peer pressure (friends used/offered drugs)	53	41	46	35	52[44]	40
To do something exciting	17	10	16	6	17[10]	10
Feel better /stop feeling unhappy	11	11	21	18	12 [5]	11
To take a risk	10	5	12	0	10 [3]	5
Family problems	7	8	9	6	7 [1]	8
Work/school/relationship problems	5	3	8	0	5 [1]	3
Traumatic experience	4	2	8	0	5	2
Family complicity	3	1	3	0	3	1
Don't know	3	2	4	6	3	3
To lose or gain weight	1	0	4	6	2	1
To relax or chill out	2	n/r	1	n/r	2	n/r
Drunk at the time	<1	0	0	0	<1 [2]	0

\*n/r' not recorded

a Males=576, Females=101, Total=677; b M=181, F=17, T=198; \*multiple responses permitted.

Source: Victorian Youth Alcohol and Drug Survey (2004), Illicit drug findings, Table 18<sup>46</sup>

The most common reasons cited for first using illicit drugs were:

- Curiosity (69%)
- Peer pressure (52%)

Poly-substance users were more likely to report tiredness, poor appetite and trouble sleeping than non-users and those using only one drug

Higher percentages of those using Benzodiazepines reported these three symptoms

**8.3.3 Problems associated with substance use**

Table 8.16 examines relationships between three commonly reported symptoms (in the last month) and compares those who report no illicit drug use (i.e. excluding alcohol or tobacco) in the last month, with those who have used some of the main drug classes (in the last month). Because polydrug use is common and carries additional risks to the use of one substance, the table also presents data on those who have used one illicit drug class

and those who have used two or more illicit drug classes (i.e. polydrug users). Significantly more polydrug users reported symptoms of tiredness, energy loss, poor appetite and trouble sleeping than single or non substance users. Approximately one third of no or mono-substance users reported tiredness/energy loss and trouble sleeping compared with more than half of poly-substance users. Appetite loss was reported by 15% of non-substance users compared with 26% mono-substance users and 43% poly-substance users.

**Table 8.16 Relationship between no, single and polydrug use and symptoms in past month (%)**

Substance use in past month <sup>a</sup>	n	Tiredness/energy loss <sup>b</sup>	Poor appetite <sup>c</sup>	Trouble sleeping <sup>d</sup>
No substance use	303	33	15	32
One drug class	330	36	26	38
Two or more drug classes	155	52	43	56
Benzodiazepines	18	89	61	72
Cocaine	29	38	35	59
Other amphetamines	93	44	38	52
Heroin	25	52	44	48
Cannabis	445	41	31	44

a N=792; b N=301; c N=197; d N=308

Table 8.17 (overleaf) reports on social problems associated with illicit drug use in the past 12 months.

**Table 8.17 Problems associated with illicit drug use in past 12 months (%)**

	Males	Females	Total
<b>Any problems*</b>	<b>42</b>	<b>45</b>	<b>43</b>
Problems with police (eg resisting arrest)	18	19	18
Problems at home (incl tension/conflict)	17	13	17
Problems with friends	14	10	13
Problems at school	13	9	12
Crime	12	7	11
Health problems (eg concentration, memory, fitness)	9	11	11
Lost friends	1	4	2
Mental health	2	2	2

Males=674, Females=118, Total =792; \*M=636, F=112, T=748

Comparable percentages of males (42%) and females (45%) reported some form of problem associated with their illicit substance use in the past 12 months, the most common of which was problems with police.

Subgroup analysis showed that more young offenders from metropolitan areas (42%) compared with regional young offenders (33%) reported that their substance use caused problems.

### 8.3.4 Substance use and offending

Fifty-three percent (53%, n=396) young offenders indicated that they had been under the influence of alcohol, drugs or both at the time of their offence [YPiCHS 54% (131)]. Table 8.18 displays the proportion whose offending behaviour was associated with alcohol and/or drug use.

**Table 8.18 Offending behaviour and alcohol and other drug use (%)**

Behaviour	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
Ever committed a crime to get drugs or alcohol	45	61	48	76	45	62
Affected by drugs	33	47	33	47	33	47
Affected by alcohol	35	37	36	41	36	38
Affected by either	52	59	53	59	53	59

a Males=641, Females=113, Total=754; b M=204-6, F=17, T=221-3

Figure 8.8 (overleaf) presents the percentage of the 'subset' who reported committing a crime to get drugs or alcohol.

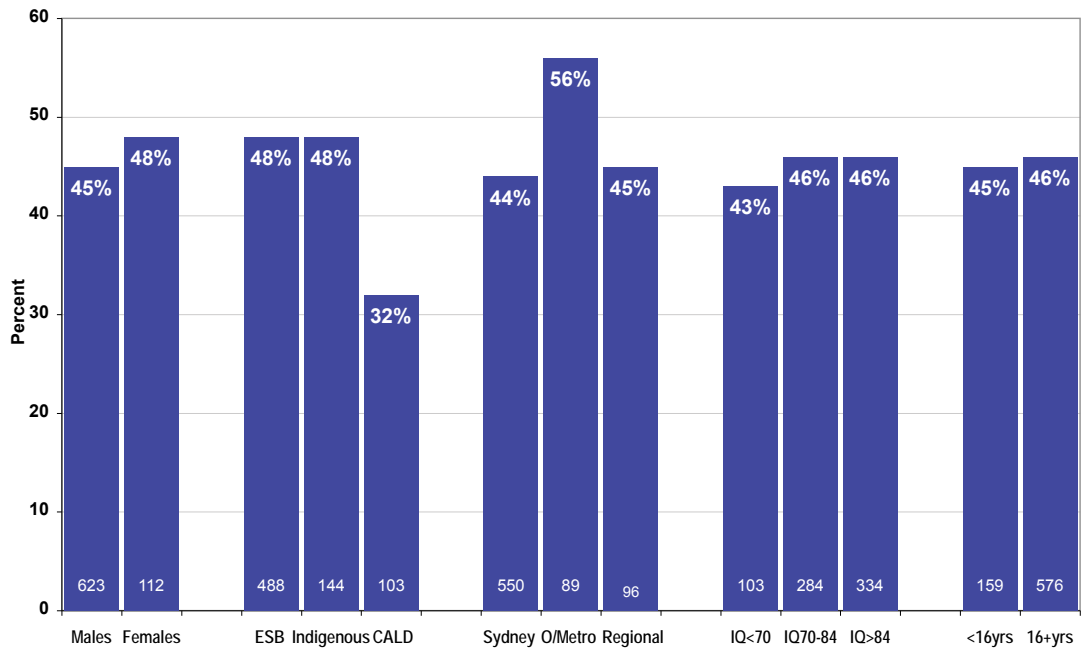
43% young offenders who used substances reported at least one problem associated with their substance use

29% reported problems with police or crime

53% young offenders were under the influence of alcohol, drugs or both at the time of their offence

45% young offenders had committed a crime to get drugs or alcohol

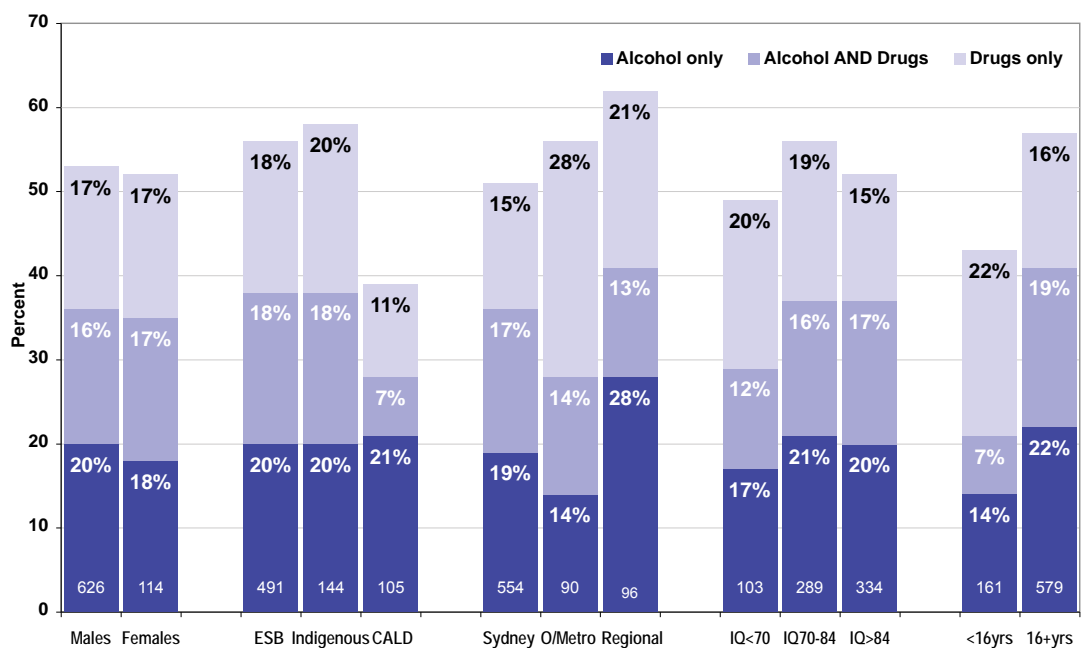
**Figure 8.8 Committed crime to get drugs or alcohol by gender, ethnicity, region, IQ and age (%)**



Fewer CALD young offenders admitted to committing a crime to get drugs or alcohol than other sub groups

Figure 8.9 presents data for the subset of young offenders with alcohol or substance use histories (n=767; 97%) who were under the influence of alcohol, drugs, or both at the time of their last offence.

**Figure 8.9 Affected by alcohol, drugs, or both at time of last offence by gender, ethnicity, region, IQ and age (%)**



Regional offenders were more likely to be under the influence of alcohol at the time of their last offence.



## 8.4 Drug treatment

To achieve reductions in substance use, drug policies need to simultaneously reduce both supply and demand. Supply reduction occurs through law enforcement and punishment for possession and distribution (i.e., the War on Drugs) as well as supply-reduction strategies designed to disrupt production and supply of illicit drugs. Demand-reduction strategies include the prevention of the initiation of drug use, reductions in pre-birth maternal use of drugs, environmental tobacco smoke, substance-impaired parenting, and harm-reduction strategies to reduce drug-related harm for individuals and communities.<sup>46,47</sup>

Prevention and demand-reduction should constitute central strategies for young people. There are two primary ways to approach prevention. The first is based on the medical model of primary, secondary, and tertiary prevention.<sup>3</sup> The alternative approach assesses level of risk of a disorder and structures interventions based on assessed risk. Universal interventions are directed at whole populations at average risk; selective interventions target groups at increased average risk, and indicated interventions target individuals with early emerging problems.<sup>8,48</sup>

Among adolescents, abstinence and zero-tolerance approaches to drug and alcohol prevention have been shown to be ineffective.<sup>49,50,51</sup>

Both international and Australian studies reveal very low rates of treatment utilisation for substance abuse among young offenders despite high problematic rates of abuse among this group. Given the strong association between substance abuse and crime and research that consistently identifies higher recidivism rates for substance abusing young offenders,<sup>33,52</sup> successful treatment of substance abusing young offenders could be expected to reduce offending. However, fewer than 5% of young offenders who abuse drugs require detoxification.<sup>6</sup> Despite using high levels of substances, most adolescent substance abusers do not reveal high rates of physiological

dependence. However, irrespective of the physiological withdrawal syndrome, young people can reveal high rates of problematic behaviours immediately after ceasing drug use. The very high drop out rates reported in both adolescent and adult residential treatment programs reflect, in part, the psychological distress experienced by habitual drug users deprived of their drugs and the difficulties in adjusting to being “straight”.<sup>53</sup>

A meta-analysis of 69 studies<sup>54</sup> investigating the impact of drug abuse treatments within the criminal justice system to reduce drug-related crime found that offenders assigned to a treatment program were 41% more likely to show a reduction in criminal behaviour than untreated offenders. Treatment was more effective for juvenile than for adult offenders. There were little data available about the effectiveness of follow-up or aftercare programs, although the few studies that were available suggested that the more intense the after-care program, the greater the reduction in crime-related behaviour. The results also showed that males but not females were more likely to reduce offending following treatment. Overall, the studies provided convincing support for the view that high intensity programs showed proportionally greater gains than low intensity programs with therapeutic communities and drug courts providing the best outcomes.

Nineteen percent (19%, n=125) male and 19% (n=22) female young offenders in the community sample reported receiving treatment for a drug or alcohol problem compared with 23% of the custody sample (22% males and 41% females). Of the young offenders with APSF Substance Abuse Disorder severe symptom range (timeframe: six weeks) and/or ‘multiple/high risk’ drinking (see Table 8.2), 30% (n=80) had received treatment for a drug or alcohol problem. In the custody sample, 16% (n=30) males and 23% (n=4) females believed they needed help for drug or alcohol problems.

Figure 8.10 (overleaf) reports perceived need for treatment for the sub sample of those young offenders who reported using drugs and alcohol.

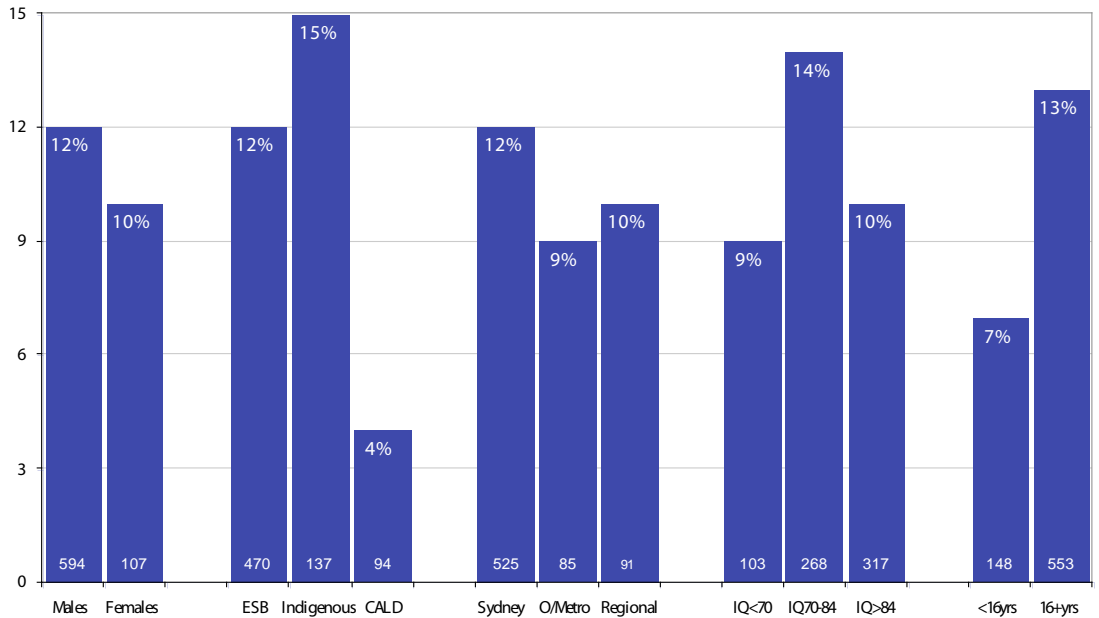
*Abstinence and zero-tolerance approaches to drug and alcohol prevention have been shown to be ineffective*

*19% young offenders had received some form of treatment for their substance use problem*

*30% young offenders with a substance use problem had received treatment*

<sup>3</sup> Primary prevention reduces risks and prevents new cases, secondary prevention limits harm in the early stages of a disorder, and tertiary prevention treats the long-term sequelae and consequences of the disorder

**Figure 8.10 Perceived need for treatment for young offenders with a history of drug or alcohol use by gender, ethnicity, region, IQ and age (%)**



An additional 31% young offenders not identified as having a current substance use problem reported that their substance use had caused them problems in the past year

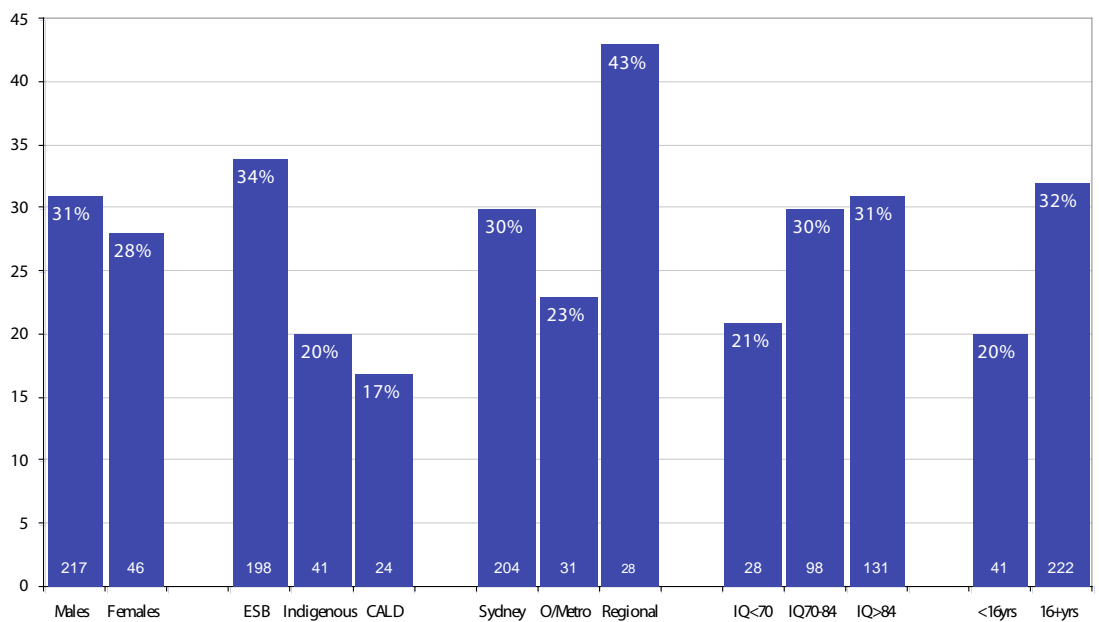
Regional young offenders with a substance use problem were more likely to have received drug or alcohol treatment than young offenders in other metropolitan

ESB young offenders with a substance use problem were more likely to have received treatment than CALD young offenders

Figure 8.11 reports on the lifetime history of drug or alcohol treatment for the sub-sample of young offenders with a current drug or alcohol problem (meeting criteria for APS-SF Substance Abuse Disorder severe range and/or 'multiple/high risk drinking'). An additional 31% (n=149)

young offenders not identified as having a current substance use problem reported that their substance use had caused them problems in the past year (with school, family, health, police, etc).

**Figure 8.11 Lifetime history of drug or alcohol treatment for young offenders with current drug or alcohol problems by gender, ethnicity, region, IQ and age (%)**



Detoxification is one component of a rehabilitation (addiction management) plan, and involves management of physical withdrawal from substances of dependence; it may be medicated or non-medicated, and can occur in a variety of settings.<sup>55</sup> Detoxification may be mandatory for those entering rehabilitation, which may be undertaken as an inpatient or as a participant in an outpatient program.

Table 8.19 shows the percentage of young offenders who had received treatment for a drug and alcohol problem, number of times in detoxification and rehabilitation centres, whether they had completed their program, and length of stay (for rehabilitation centres only).

**Table 8.19 Experience of detoxification and rehabilitation centres for the subset of young offenders who had received alcohol or drug treatment (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Been in detoxification centre<sup>i</sup></b>						
Yes	37	33	57	43	40	35
<b>Number of times in detoxification centre<sup>ii</sup></b>						
1	59	71	75	0	62	57
2	14	15	9	0	13	15
3 to 5	20	14	8	100	18	29
6 to 10	7	0	8	0	7	0
<b>Completed all detoxification programs<sup>iii</sup></b>						
Yes	45	50	42	0	44	41
<b>Been in a rehabilitation centre<sup>i</sup></b>						
Yes	48	39	41	57	47	41
<b>Number of times in a rehabilitation centre</b>						
1	62	75	78	25	64	65
2	15	0	11	25	15	5
3 to 5	23	25	11	50	21	30
<b>Length of stay<sup>iv</sup></b>						
<4 weeks	51	42	62	75	53	50
1-3 months	39	42	13	25	35	38
>3 months	10	16	25	0	12	12
<b>Completed all rehabilitation programs<sup>iii</sup></b>						
Yes	34	38	22	0	32	30

a (i) Males=119-122, Females=21-22, Total=140-144; (ii) M=43-44, F=12, T=54-55 (iv) M=58, F=9, T=67 [low n]

b (i) Males=42-44, Females=7, Total=49-51; (ii) M=14, F=3, Total=17; (iii) M=16, F=4, T=20 [low n]

Percentages of young offenders receiving substance abuse treatment in detoxification and rehabilitation centres were higher than the seven percent of the 398 young offenders in Dembo et al's longitudinal study of high risk young offenders who had spent time in a drug treatment facility,<sup>33</sup> or the survey of 493 Australian drug abusing young offenders in a detained police sample in which 13% had accessed treatment, of which half were residential treatment programs.<sup>56</sup>

Fifty-five (55%) young offenders on community orders who had received treatment reported having been in both rehabilitation and detoxification centres.

Table 8.20 (overleaf) presents data on other drug and alcohol treatment received by young offenders.

*Of those who had received treatment;*

- 40% had been in a detoxification centre
- 44% had completed detoxification treatment
- 47% had been in a rehabilitation centre
- 32% had completed treatment

*55% young offenders who had received treatment reported having been in both rehabilitation and detoxification centres*

**Table 8.20 Drug and alcohol treatment for total sample, and treatment received for young offenders receiving treatment other than detoxification and rehabilitation centres (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever received other drug and alcohol treatment<sup>i</sup></b>						
Yes	19	22	19	41	19	23
<b>Treatment source<sup>ii</sup></b>						
AOD counsellor	26	14	42	0	32	8
Youth workers	21	14	16	29	21	8
Outpatient counselling	16	23	21	15	21	13
Narcotics Anonymous (NA)	11	9	16	0	11	3
Juvenile Justice Officer	11	0	5	0	11	0
Psychologist	11	18	16	15	11	13
Drug Court	11	14	11	15	11	8
Alcoholics Anonymous (AA)	5	14	11	0	5	8
Intensive Program Unit (JJ)	5	14	0	0	5	5
General Practitioner	5	5	16	29	5	5
Psychiatrist	5	5	11	15	5	3
<b>Type of treatment received<sup>iii</sup> [low n]</b>						
Counselling	76	86	53	83	73	86
Support/encouragement	12	7	27	0	14	5
Medication	6	3	20	17	8	6
Rehab/detoxification	3	4	0	0	3	3
AA/NA	2	0	0	0	2	0
Education	1	0	0	0	1	0

Note: multiple response data

a (i) Males=661, Females=115, Total=776; (ii) M=125 F=22 T=147; (iii) M=87 F=15 T=102; b (i) M=204, F=17, T=221; (ii) M=44 F=7 T=51; (iii) M=29 F=6 T=35

Table 8.21 reports on help received from other sources.

**Table 8.21 Help from other sources (family, friends, religious & community organisations) (%)**

	Males		Females		Total	
	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>	Community <sup>a</sup>	Custody <sup>b</sup>
<b>Ever received help from other sources<sup>i</sup></b>						
Yes	22	14	13	24	20	14
<b>Sources from which help was sought<sup>ii</sup></b>						
Family	55	78	67	100	56	81
Friends	31	26	7	100	29	36
Other counsellor	25	0	13	0	24	0
Youth worker	10	4	20	50	11	10
Salvation Army	1	4	0	0	1	3
The Crossing	3	4	0	0	3	3
Aboriginal medical service	2	7	13	0	3	7
Priest	3	4	0	25	3	7
Sydney City Mission/Mission Beat	1	7	7	0	2	0
<b>Help received<sup>iii</sup></b>						
Family support unspecified	38	0	40	0	39	0
Support/encouragement	34	4	33	0	33	4
Counselling	23	86	20	70	23	84
Education	2	0	0	0	2	0
Rehab/detoxification	2	6	7	0	2	5
Medication	1	1	0	30	1	5
AA/NA	0	3	0	0	0	2

Note: multiple response data

a (i) Males=645, Females=114, Total=759; (ii/iii) M=140, F=15, T=155

b (i) M=198, F=17, T=215; (ii) M=27, F=4, T=31; (iii) M=70, F=10, T=80; \*[YPICHS: in custody]

19% of the total sample had received some form of drug and alcohol treatment

32% young offenders received treatment from an AOD counsellor; 21% from a youth worker and 21% from outpatient counselling

Family (56%) and friends (29%) were other sources of support for young offenders with AOD problems

Of the 147 who had received treatment for a drug or alcohol problem, 19% (n=28) young offenders in the community orders sample reported receiving pharmacological treatment; 18% (n=5) of this group had received methadone; 37% (n=10) had received buprenorphine; 26% (n=7) dexamphetamine; 19% (n=5) Ritalin; 7% (n=2) Naltrexone and 7% (n=2) other medications.

It is preferable that treatments occur in the prevention context rather than as a tertiary process.<sup>6</sup> Research in “prevention science”<sup>57</sup> indicates relative efficacy of life skills training programs as prevention programs for young substance abusers. The pessimism about treatment is associated with the observation that by the time a young person is offending and substance abusing, the complexity of their lives is a major restraining influence on the efficacy of treatment. For this reason, treatment programs should promote relationships and connectedness with socialisation units such as family, school and community as a strategy to enhance levels of resilience rather than maintaining a narrow focus on substance use per se.<sup>58,59</sup>

#### **8.4.1 Substance abusing parents and other relatives**

There are currently no national household data on numbers of children living in Australian households with parental substance misuse. International household surveys indicate that approximately 10% of children live in households where there is parental alcohol abuse or dependence and/or substance dependence.<sup>58</sup>

Trocmé et al. (2001)<sup>60</sup> using a representative sample of 51 child and protective services across Canada comprising 7,672 child maltreatment

investigations, estimated parental substance use in cases of child maltreatment at 15%. Families with substance abuse problems had significantly more personal and social disadvantage and less residential stability than those who were not identified as substance abusers.<sup>61</sup>

Parental alcohol or substance dependence for young offenders was more than four times higher than international estimates and three times higher than the child maltreatment notifications.

Forty-five percent (45%, n=326) young offenders’ parents and relatives were reported to abuse drugs or alcohol. Young offenders who reported dependent alcohol consumption on the AUDIT (58%, n=61) were more likely to have parents or relatives who abused drugs or alcohol than those who did not report dependence (42%, n=262). Young offenders scoring in the severe range for Substance Abuse Disorder on the APS-SF (55%, n=106) were more likely to have relatives who abused drugs or alcohol than those who did not score in the severe range (41%, n=211).

Young offenders with parents or relatives who abused drugs or alcohol were more likely to have a history of injecting drug use (62%, n=53) compared with those whose parents or relatives did not abuse drugs or alcohol (42%, n=272).

Table 8.22 (overleaf) reports on the relationship between young offenders’ alcohol and drug abuse and relatives who abuse drugs or alcohol. A small proportion of those with drug or alcohol abusing parents had other drug and alcohol abusing relatives of unspecified gender, and 12% (n=38) reported drug and alcohol abusing relatives without specifying their relationship or gender.

*Parental alcohol or substance dependence (45%) was more than four times higher than international estimates and three times higher than in families with child maltreatment notifications*

*Young offenders who reported dependent alcohol consumption on the AUDIT were more likely to have parents or relatives who abused drugs or alcohol than those who did not report dependence*

*Young offenders with parents or relatives who abused drugs or alcohol were more likely to have a history of injecting drug use*

**Table 8.22 Substance abusing relatives of young offenders who abuse drugs or alcohol\* (%)**

Relationship to young person	Males	Females	Total
Father	17	22	19
Mother	12	18	15
Both mother and father	12	12	12
Other relative(s)	44	32	42
<b>Gender of substance-abusing relative</b>			
Male	46	43	45
Female	15	22	18
Male and female	26	25	23
Unspecified	13	10	12

Males=178, Females=138, Total=316; [YPiCHS not available]

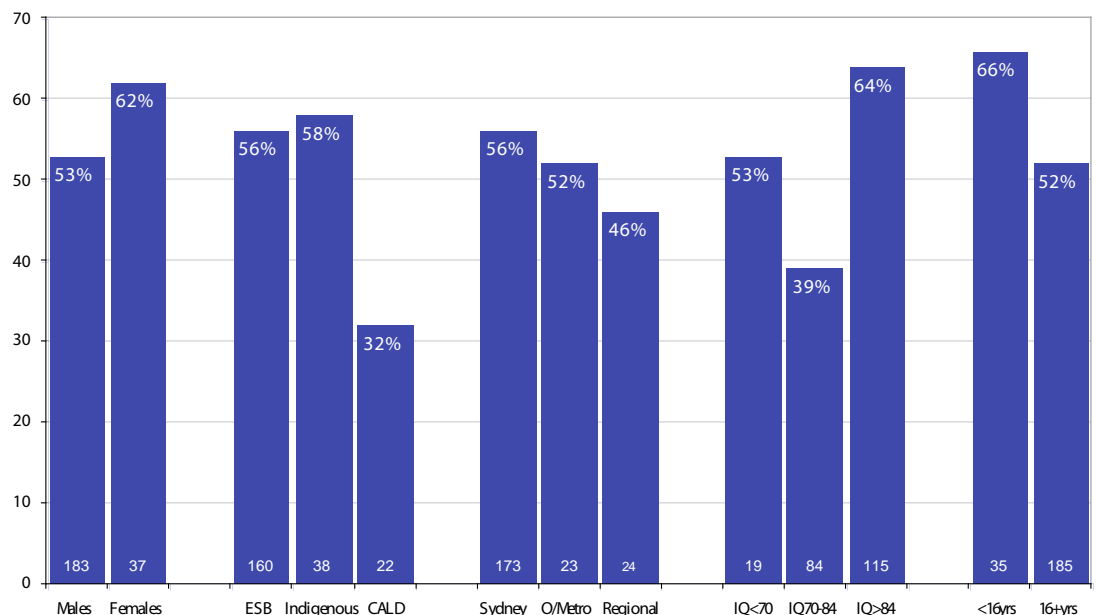
\*Young offenders in APS-SF Substance Abuse Disorder severe range and/or with multiple/high risk drinking (see Table 8.2)

19% fathers, 15% mothers, 12% both parents and 42% relatives of young offenders who currently abused drugs or alcohol also abused other substances

Young offenders with parents or relatives who abuse drugs or alcohol were more likely to score in the severe symptom range for conduct disorder (57%) compared with young offenders whose parents or relatives did not abuse drugs or alcohol (43%)

Figure 8.12 displays the percentages of young offenders' with severe range scores on APS-SF Substance Abuse Disorder scale who have relatives who abuse drugs or alcohol.

**Figure 8.12 Young offenders in the severe range for APS-SF Substance Abuse Disorder with relatives who abuse drugs or alcohol by gender, ethnicity, region, IQ and age (%)**



Young offenders with parents or relatives who abuse drugs or alcohol were more likely to score in the severe symptom range for conduct disorder (57%, n=75) compared with young offenders whose parents or relatives did not abuse drugs or alcohol (43%, n=57).

**8.5 Summary and conclusions**

Most (97%) young offenders were consumers of alcohol and 90% reported having being drunk at least once. Fifty-one percent (51%) had their first full serve of alcohol and 42% had been drunk before the age of 13 years. Only 5% of young offenders, compared with 40%

of a same aged comparison sample, had never had a full serve of alcohol. Using the AAG, 38% were classified as risky drinkers and 16% as high risk drinkers. Five percent (5%) drank daily or almost daily. Nine percent (9%) met AUDIT criteria for alcohol dependence.

Eighty-one percent (81%) of both male and female young offenders currently smoked, of whom 93% were daily smokers. Young offenders smoked an average of 81 cigarettes per week. Seventy-five percent (75%) of young offenders who smoked reported that either or both their parents also smoked. Only 25% of young offenders reported that neither of their parents smoked. Those living in rural/regional areas were likely to start smoking at an earlier age than urban dwelling young offenders.

Alcohol and tobacco are the most commonly abused substances both in the community at large and in this sample of young offenders. However, there was also significant use of other substances in this sample - 89% had tried cannabis, 46% had tried amphetamines, 18% had used cocaine and 14% had used heroin. Mean age of initiation ranged from 11.9 years (tobacco) to 13.1 years for both cannabis and alcohol, 14.8 years for amphetamines and 15.2 years for cocaine. Eleven percent (11%) of young offenders had injected substances (primarily heroin and amphetamines). Young

offenders with parents or relatives who abused substances were more likely to inject substances.

Forty-five percent (45%) of young offenders had committed a crime to get drugs or alcohol, and 53% reported being affected by substances during the commission of their offence. Nineteen percent (19%) of the total sample of young offenders on community orders had received some kind of substance based intervention. Thirty percent (30%) of young offenders with an identified drug or alcohol problem had received some form of treatment.

These data paint a sobering picture of the extent of substance use in this sample, the early age of onset and its strong associations with parental substance use. Early education beginning during primary school, harm minimisation approaches and parental education and involvement in management of young substance abusing offenders are the interventions most likely to achieve reductions in substance use in this group. However, structural issues such as early dislocation from pro-social networks such as school, unemployment and adverse peer influence must be addressed together with issues associated with abandonment and abuse.<sup>62</sup>

## 8.6 References

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# YPoCOHS

## YOUNG PEOPLE on COMMUNITY ORDERS HEALTH SURVEY 2003–2005



The  
University  
of Sydney



The University of Sydney  
Department of Juvenile Justice  
Corrections Health Service

THE FOLLOWING PEOPLE WERE INVOLVED IN THE DEVELOPMENT OF THIS SURVEY:

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MARK ALLERTON (DEPARTMENT OF JUVENILE JUSTICE)

MICHELLE MURPHY (CORRECTIONS HEALTH SERVICE)

UNA CHAMPION (CORRECTIONS HEALTH SERVICE)

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## PHYSICAL HEALTH ASSESSMENT

ID NUMBER.....

INTERVIEWER'S INITIALS.....

TIME COMMENCED.....

TIME FINISHED.....

TESTING LOCATION..... \_\_\_\_\_

DATE.....

### 1. PHYSICAL HEALTH CHECK

BP (SITTING).....

HEIGHT (NO SHOES) (CM).....

WEIGHT (NO SHOES, CLOTHED), (KG) .....

WAIST MEASUREMENT (CM).....

DIABETIC No  Yes

BLOOD SUGAR LEVEL   M MOL/L

### 2. BLOOD SAMPLE

BLOOD SAMPLE TAKEN No  Yes

IF NO, WHY? [TICK AS MANY AS APPLY]

- 1. COULD NOT FIND VEINS
- 2. REFUSED
- 3. DISLIKE OF NEEDLES
- 4. CONCERNED RE DNA
- 5. CONCERNED RE DRUG TESTING

### 3. VISUAL ACUITY

DO YOU CURRENTLY WEAR GLASSES OR CONTACT LENSES TO CORRECT, OR PARTIALLY CORRECT YOUR EYESIGHT?

No  Yes

**IF YES, WHAT SIGHT PROBLEMS DO YOUR GLASSES OR CONTACT LENSES CORRECT OR PARTIALLY CORRECT?**

[PLACE RELEVANT NUMBER IN BOX PROVIDED]

- 1. ASTIGMATISM  1
- 2. SHORT - SIGHTEDNESS  2
- 3. LONG - SIGHTEDNESS  3
- 4. DON'T KNOW  4
- 5. OTHER (SPECIFY) \_\_\_\_\_

**MUST BE STANDING EXACTLY 6 METRES FROM CHART.**

[START AT BOTTOM OF CHART]	LEFT	RIGHT
LINE 8		
LINE 7		
LINE 6		
LINE 5		
LINE 4		
LINE 3		
LINE 2		
LINE 1		

[IF NORMALLY WEARS SPECTACLES TEST TO BE PERFORMED WITH GLASSES ON.]

CODE ANSWERS **YES/NO**

## PHYSICAL HEALTH QUESTIONNAIRE

ID NUMBER.....

INTERVIEWER'S INITIALS.....

TIME COMMENCED.....

TIME FINISHED.....

TESTING LOCATION.....\_\_\_\_\_.

DATE.....

HELLO, MY NAME IS .....

I WORK FOR THE YOUNG PEOPLE ON COMMUNITY ORDERS HEALTH SURVEY.

### INTERVIEWERS INSTRUCTIONS

1. All UPPER CASE TEXT should be read ALOUD for each question.
2. All [text in square brackets] are guidelines for the interviewer
3. For all responses, mark the corresponding box with an **X**
4. Tick only one (1) answer box per question unless guidelines indicate otherwise.
5. All open responses, where a box is provided, should be written in the box
6. If the respondent is unsure how to respond, prompt without guiding the answer.
7. If the answer states  $\Rightarrow$ , skip ahead to the indicated question.
8. When you see the following (**show Flash card #**), use the numbered flash card to assist the participant with his/her response.
9. Monitor concentration and attention, and offer short breaks if necessary.



# 1. DEMOGRAPHICS

1.1 IN WHAT TOWN OR SUBURB DO YOU SPEND MOST OF YOUR TIME? [CODE POSTCODE IF KNOWN IN THE BOXES PROVIDED]

SUBURB\_\_\_\_\_

POSTCODE

--	--	--	--	--

STATE

--	--	--

1.2 IN WHICH COUNTRY WERE YOU BORN?

AUSTRALIA ⇒ 1.4  1

OTHER (SPECIFY)\_\_\_\_\_

1.3 IF BORN OVERSEAS, IN WHAT YEAR DID YOU FIRST ARRIVE IN AUSTRALIA?

--	--	--	--	--

1.4 IN WHICH COUNTRY WAS YOUR MOTHER BORN?

AUSTRALIA  1  
DON'T KNOW  2

OTHER (SPECIFY)\_\_\_\_\_

1.5 IN WHICH COUNTRY WAS YOUR FATHER BORN?

AUSTRALIA  1  
DON'T KNOW  2

OTHER (SPECIFY)\_\_\_\_\_

1.6 WHAT LANGUAGE IS MAINLY SPOKEN IN YOUR HOME?

ENGLISH  1

OTHER (SPECIFY)\_\_\_\_\_

1.7 ARE YOU OF ABORIGINAL OR TORRES STRAIT ISLANDER ORIGIN?

No  0  
ABORIGINAL  1  
TORRES STRAIT ISLANDER  2  
ABORIGINAL & TORRES STRAIT ISLANDER  3

1.8 HOW MANY TIMES HAVE YOU BEEN IN CUSTODY?

[INCLUDES DETENTION, REMAND, LOCK-UP]

--	--

1.9 DURING YOUR LIFETIME, WHAT IS THE TOTAL AMOUNT OF TIME YOU HAVE SPENT IN CUSTODY?

LESS THAN 6 MONTHS  1  
6 MONTHS TO 1 YEAR  2  
1 TO 2 YEARS  3  
2 TO 5 YEARS  4  
5 TO 10 YEARS  5  
DON'T KNOW  6

1.10 DURING YOUR LIFETIME, HOW MANY COMMUNITY ORDERS HAVE YOU HAD? BY THIS I MEAN PAROLE, PROBATION, BOND OR RECOGNISANCE, COMMUNITY SERVICE ORDER WHERE YOU DO COMMUNITY WORK

--	--

1.11 DURING YOUR LIFETIME, WHAT IS THE TOTAL LENGTH OF TIME YOU HAVE SPENT ON COMMUNITY ORDERS?

LESS THAN 6 MONTHS  1  
6 MONTHS TO 1 YEAR  2  
1 TO 2 YEARS  3  
2 TO 5 YEARS  4  
5 TO 10 YEARS  5  
DON'T KNOW  6

## 2. EDUCATION/OCCUPATION

2.1 DO YOU CURRENTLY GO TO SCHOOL?

No  0  
YES ⇒ 2.4  1

2.2 WHAT CLASS/YEAR WERE YOU IN WHEN YOU LEFT SCHOOL?

CLASS/YEAR

2.3 AT WHAT AGE DID YOU LEAVE SCHOOL?

(⇒ 2.4.1)

2.4 WHAT CLASS/YEAR ARE YOU IN?

CLASS/YEAR

2.4.1 HOW MANY DIFFERENT SCHOOLS HAVE YOU BEEN TO?

2.5 HOW OFTEN DO YOU/DID YOU JIG OR SKIP CLASS WITHOUT PERMISSION?

NEVER  1  
ABOUT ONCE A MONTH  2  
ABOUT ONCE A WEEK  3  
2-3 TIMES A WEEK  4  
MORE THAN 3 TIMES A WEEK  5

2.6 HAVE YOU EVER BEEN SUSPENDED FROM SCHOOL?

No  0  
YES  1

2.8 HAVE YOU EVER ATTENDED OR ARE YOU CURRENTLY ATTENDING A SPECIAL SCHOOL OR A SPECIAL CLASS AT SCHOOL?

No ⇒ 2.10  0  
SPECIAL SCHOOL  1  
SPECIAL CLASS  2

2.9 WHAT SPECIAL SCHOOLS OR SPECIAL CLASS ARE YOU ATTENDING/HAVE YOU ATTENDED? [SPECIFY CURRENT ATTENDANCE, IF APPLICABLE]

.....  
.....  
.....

2.10 ARE YOU CURRENTLY GOING TO TAFE?

No ⇒ 2.12  0  
YES  1

2.11 WHAT TYPE OF COURSE ARE YOU ENROLLED IN?

.....  
.....  
.....

2.12 ARE YOU CURRENTLY WORKING?

No ⇒ 2.15  0  
YES  1

2.13 WHAT IS YOUR CURRENT JOB?

.....  
.....

2.14 IS THIS WORK [TICK ALL THAT APPLY]

FULL TIME  1  
PART TIME  2  
CASUAL  3  
CDEP  4  
VOLUNTEER WORK  5  
WORK FOR THE DOLE  6

2.15 ARE YOU CURRENTLY RECEIVING ANY ALLOWANCES OR BENEFITS?

No ⇒ 2.19  0  
YES  1

2.16 WHAT ALLOWANCES OR BENEFITS ARE YOU RECEIVING?

NEWSTART  1  
YOUTH ALLOWANCE  2  
AUSTUDY  3  
ABSTUDY  4

OTHER (SPECIFY) \_\_\_\_\_

2.19 WHAT ARE YOUR PLANS FOR THE FUTURE?

.....  
.....  
.....

### 3. LIVING ENVIRONMENT

3.1 WHO WAS/IS **MAINLY** RESPONSIBLE FOR RAISING YOU/LOOKING AFTER YOU WHEN YOU WERE GROWING UP? [TICK ALL THAT APPLY]

- MOTHER  1
- FATHER  2
- STEPMOTHER  3
- STEPFATHER  4
- GRANDMOTHER  5
- GRANDFATHER  6
- AUNT  7
- UNCLE  8
- BROTHER(S)  9
- SISTER(S)  10
- STEP BROTHER(S)/SISTER(S)  11
- FOSTER FAMILY  12

OTHER ADULTS (SPECIFY)\_\_\_\_\_

3.2 ARE YOUR (BIOLOGICAL) PARENTS, BY THIS I MEAN YOUR **NATURAL PARENTS** [TICK ALL THAT APPLY]

- LIVING TOGETHER  1
- SEPARATED OR DIVORCED  2
- HAVE NEVER LIVED TOGETHER  3
- ONE OR BOTH OF YOUR PARENTS HAVE DIED  4
- YOU DON'T KNOW WHO YOUR PARENTS ARE  5

OTHER (SPECIFY)\_\_\_\_\_

3.3 [IF, **PARENT OR PARENTS DECEASED**], WHICH OF YOUR PARENTS HAS DIED?

- MOTHER  1
- FATHER  2
- BOTH  3

3.4 HAVE **ANY** OF YOUR RELATIVES **EVER** BEEN IN PRISON? [TICK ALL THAT APPLY]

- No =>3.8  0
- YES [USE TABLE BELOW]  1

3.5                      3.7

(CODERS: IF 1&2 CODE=3)	PREVIOUSLY	CURRENTLY
1. (BIRTH) MOTHER		
2. (BIRTH) FATHER		
4. STEPMOTHER		
5. STEPFATHER		
6. BROTHER(S)		
7. SISTER(S)		
8. COUSIN(S)		
9. OTHER (SPECIFY: UNCLE/AUNT/ GRANDPARENTS etc		

3.8 WHAT TYPE OF ACCOMMODATION ARE YOU CURRENTLY LIVING IN ?

- IN THE FAMILY HOME  1
- RENTING  2
- UNSETTLED LODGINGS  
(EG. SQUAT, B&B, HOSTEL-REFUGE, CARAVAN)  3
- SLEEPING ON THE STREETS  4
- SHARING WITH FRIENDS  5

OTHER (SPECIFY)\_\_\_\_\_

3.9 **BEFORE THE AGE OF 16**, WERE YOU **EVER** PLACED IN CARE? (DID YOU SPEND **ANY** PART OF YOUR CHILDHOOD LIVING AWAY FROM YOUR NATURAL PARENTS?) [NOT INCLUDING DETENTION.]

- No =>3.13  0
- YES  1

3.10 WHERE WAS THIS PLACEMENT?

[TICK ALL THAT APPLY]

- FOSTER CARE  1
- WITH OTHER FAMILY MEMBERS  
(EG, AUNTS OR UNCLES, SIBLINGS, GRANDPARENTS)  2
- IN A HOME  3
- ADOPTED  4

OTHER CARE (SPECIFY)\_\_\_\_\_

3.11 HOW MANY **TIMES** WERE YOU PLACED IN CARE?

--	--

3.12 HOW **OLD** WERE YOU WHEN YOU WERE **FIRST** PLACED IN CARE?

### 3B PARENTING

3.13 DO YOU HAVE ANY CHILDREN OF YOUR OWN?

No ⇒ SECTION 4  0  
 YES  1

3.14 HOW OLD WERE YOU WHEN YOUR FIRST CHILD WAS BORN?

3.15 HOW MANY CHILDREN DO YOU HAVE?

3.16/18/20 THINKING ABOUT YOUR [FIRST/SECOND/THIRD] CHILD, WHO HAVE THEY LIVED WITH SINCE THEY WERE BORN? 3.17/19/21 WHO IS YOUR [FIRST/SECOND/THIRD] CHILD CURRENTLY LIVING WITH?

[TICK ALL THAT APPLY]

	CHILD 1		CHILD 2		CHILD 3	
	3.16 EVER	3.17 CURRENT	3.18 EVER	3.19 CURRENT	3.20 EVER	3.21 CURRENT
YOUR PARTNER	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0
PARTNER'S MOTHER &/OR FATHER	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
YOUR MOTHER &/OR FATHER	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
OTHER RELATIVES	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
YOUR FRIENDS	<input type="checkbox"/> 4	<input type="checkbox"/> 4	<input type="checkbox"/> 4	<input type="checkbox"/> 4	<input type="checkbox"/> 4	<input type="checkbox"/> 4
FOSTER FAMILY	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
ADOPTED FAMILY	<input type="checkbox"/> 6	<input type="checkbox"/> 6	<input type="checkbox"/> 6	<input type="checkbox"/> 6	<input type="checkbox"/> 6	<input type="checkbox"/> 6
CHILD WELFARE INSTITUTION	<input type="checkbox"/> 7	<input type="checkbox"/> 7	<input type="checkbox"/> 7	<input type="checkbox"/> 7	<input type="checkbox"/> 7	<input type="checkbox"/> 7
DON'T KNOW	<input type="checkbox"/> 8	<input type="checkbox"/> 8	<input type="checkbox"/> 8	<input type="checkbox"/> 8	<input type="checkbox"/> 8	<input type="checkbox"/> 8
YOU AND YOUR PARTNER	<input type="checkbox"/> 9	<input type="checkbox"/> 9	<input type="checkbox"/> 9	<input type="checkbox"/> 9	<input type="checkbox"/> 9	<input type="checkbox"/> 9
YOU	<input type="checkbox"/> 10	<input type="checkbox"/> 10	<input type="checkbox"/> 10	<input type="checkbox"/> 10	<input type="checkbox"/> 10	<input type="checkbox"/> 10
OTHER (SPECIFY)	<input type="checkbox"/> 11	<input type="checkbox"/> 11	<input type="checkbox"/> 11	<input type="checkbox"/> 11	<input type="checkbox"/> 11	<input type="checkbox"/> 11
-----						

### 4. FAMILY HISTORY

4.1 DOES ANYONE YOU LIVE WITH HAVE A PHYSICAL, MENTAL, OR EMOTIONAL PROBLEMS OR LIMITATIONS THAT AFFECTS THEIR DAILY LIFE?

No ⇒ SECTION 5  0  
 YES  1

4.2 WHICH OF THESE PEOPLE YOU LIVE WITH HAVE A PROBLEM (S) OR LIMITATION?

	PERSON 1	PERSON 2	PERSON 3
WHO HAS THE PROBLEM OR LIMITATION?			
WHAT PROBLEM/LIMITATION DO THEY HAVE? (INCLUDE DRUG/ALCOHOL ABUSE)			
HOW DOES THIS PROBLEM AFFECT THEM?			
WERE/ARE YOU RESPONSIBLE FOR HELPING TO LOOK AFTER THEM?	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
DO THESE PROBLEMS AFFECT YOU?	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
HOW DO THESE PROBLEMS AFFECT YOU?	..... ..... .....	..... ..... .....	..... ..... .....

## 5. HEALTH STATUS

5.1 HAVE YOU EVER BEEN TOLD BY A HEALTH PROFESSIONAL YOU HAVE HAD OR HAVE ANY OF THE FOLLOWING ILLNESSES/CONDITIONS? [TICK ALL THAT APPLY]

- ALLERGY  1  
 (SPECIFY)\_\_\_\_\_
- ASTHMA  2  
 DIABETES  3  
 EPILEPSY  4  
 HEART PROBLEMS  5  
 CANCER/TUMOURS  6  
 (SPECIFY)\_\_\_\_\_
- HEPATITIS A  7  
 HEPATITIS B  8  
 HEPATITIS C  9  
 HIV  10  
 TONSILLITIS  11  
 BACK PROBLEMS  12  
 GASTROENTERITIS  13  
 EAR INFECTIONS  14  
 CHEST INFECTIONS  15  
 SKIN INFECTION  16  
 (SPECIFY)\_\_\_\_\_
- PARASITIC INFESTATIONS  17  
 GERMAN MEASLES (RUBELLA)  18  
 MUMPS  19  
 MEASLES  20  
 CHICKEN POX  21  
 WHOOPING COUGH  22  
 GLANDULAR FEVER  23

OTHER (SPECIFY)\_\_\_\_\_

5.2 HAVE YOU HAD YOUR CHILDHOOD IMMUNISATIONS? BY THIS I MEAN IMMUNISATIONS YOU HAD WHEN YOU WERE UNDER FIVE AND AT ABOUT 12 YEARS OF AGE?

- No  1  
 YES, ONLY WHEN I WAS UNDER 5 YEARS  2  
 YES, ONLY WHEN I WAS ABOUT 12 YEARS  3  
 YES, UNDER 5 YEARS AND ABOUT 12 YEARS  4  
 DON'T KNOW  5

5.3

5.4 HAVE YOU HAD ANY OF THE FOLLOWING IMMUNISATIONS/ VACCINATIONS IN THE LAST 5 YEARS?

	Yes	No	DON'T KNOW
TETANUS BOOSTER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RUBELLA (MMR)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
POLIO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MENINGITIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CHICKEN POX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WHOOPING COUGH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HEPATITIS B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MENINGOCOCCAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 6. DISABILITY/HEALTH PROBLEMS

6.1 DO YOU CURRENTLY HAVE ANY HEALTH PROBLEMS OR DISABILITIES THAT HAVE TROUBLED YOU FOR ABOUT 6 MONTHS OR MORE?

- No ⇒SECTION 7  0  
 YES  1

6.2 WHAT IS THIS HEALTH PROBLEM OR DISABILITY? PROBLEM/DISABILITY 1

.....

6.3 HOW DOES THIS PROBLEM LIMIT YOUR ACTIVITIES?

[PROMPT IF NECESSARY EG. UNABLE TO EXERCISE. IF NOT LIMITING, WRITE NOT LIMITING]

.....

6.4 WHAT ACTIVITIES DID YOU CUT DOWN ON IN THE LAST 2 WEEKS, BECAUSE OF THIS PROBLEM?

[IF DIDN'T CUT DOWN, WRITE NOT APPLICABLE, N/A]

.....

6.5 IS THERE ANOTHER HEALTH PROBLEM OR DISABILITY YOU WOULD LIKE TO TELL ME ABOUT?

- No ⇒SECTION 7  0  
 YES  1

6.6 WHAT IS THIS HEALTH PROBLEM OR DISABILITY? PROBLEM/DISABILITY 2

.....

6.7 HOW DOES THIS PROBLEM LIMIT YOUR ACTIVITIES?

[PROMPT IF NECESSARY EG. UNABLE TO EXERCISE. IF NOT LIMITING, WRITE NOT LIMITING]

.....

6.8 WHAT ACTIVITIES DID YOU CUT DOWN ON IN THE LAST 2 WEEKS, BECAUSE OF THIS PROBLEM?

[IF DIDN'T CUT DOWN, WRITE NOT APPLICABLE, N/A]

.....

## 7. SYMPTOM CHECKLIST

7.1 IN THE LAST 4 WEEKS, HAVE YOU HAD ANY OF THE FOLLOWING SYMPTOMS?

[TICK ALL THAT APPLY]

- TIREDFNESS/ENERGY LOSS  1
- POOR APPETITE  2
- WEIGHT LOSS/UNDERWEIGHT  3
- TROUBLE SLEEPING  4
- FEVER  5
- NIGHT SWEATS  6
- SWOLLEN GLANDS  7
- JAUNDICE/ YELLOWISH SKIN  8
- BLEEDING EASILY  9
- NOSE BLEEDS  10
- BRUISING EASILY  11
- TEETH PROBLEMS  12
- VISION TROUBLES  13
- HEARING TROUBLES  14
- EYE PROBLEMS  15
- EAR PROBLEMS  16
- ABSCESSES/SKIN INFECTIONS  17
- PROMINENT SCARRING/BRUISING  18
- PERSISTENT COUGH  19
- WHEEZING  20
- SORE THROAT  21
- SHORTNESS OF BREATH  22
- CHEST PAIN  23
- HEART RACING  24
- PAINFUL URINATION  25
- DISCHARGE FROM PENIS/VAGINA  26
- RASH ON OR AROUND PENIS/VAGINA  27
- JOINT PAINS/STIFFNESS  28
- MUSCLE PAIN  29
- HEADACHES  30
- BLACKOUTS  31
- TREMORS (SHAKES)  32
- NUMBNESS/TINGLING  33
- DIZZINESS  34
- FORGETTING THINGS  35
- HEARING VOICES  36
- WANTING TO HARM YOURSELF  37
- NAUSEA  38
- VOMITING  39
- STOMACH/ABDOMINAL PAINS  40
- CONSTIPATION  41
- DIARRHOEA  42
- DARK URINE  43
- ITCHINESS  44

## 8. MEDICATIONS

8.1 ARE YOU CURRENTLY TAKING ANY MEDICATIONS, WHICH HAVE BEEN GIVEN TO YOU BY A DOCTOR OR A NURSE? (EG: PILLS, CREAMS, AND LOTIONS ETC)

No ⇒ SECTION 9  0  
 YES  1

8.2 CAN YOU TELL ME WHAT MEDICATIONS YOU HAVE BEEN GIVEN BY THE DOCTOR OR NURSE IN THE LAST 2 WEEKS? [LEAVE BOXES FOR CODING]

-----  1

-----  2

-----  3

-----  4

-----  5

## 9. ASTHMA

[IF RESPONDS YES HAS ASTHMA IN HEALTH STATUS SECTION, 5.1 ITEM 2, COMPLETE THIS SECTION.]

9.1 WHEN DID YOU LAST HAVE AN ASTHMA ATTACK OR DIFFICULTIES BREATHING?

- LESS THAN 4 WEEKS AGO  1
- BETWEEN 1 AND 3 MONTHS AGO  2
- BETWEEN 3 AND 6 MONTHS AGO  3
- BETWEEN 6 AND 12 MONTHS AGO  4
- LESS THAN 1 YEAR AGO  5
- DON'T KNOW  6

9.2 HAVE YOU EVER BEEN TO HOSPITAL FOR ASTHMA?

No⇒9.4  0  
 YES  1

9.3 HOW MANY TIMES HAVE YOU BEEN TO HOSPITAL FOR ASTHMA?

9.4 HAVE YOU EVER BEEN PRESCRIBED MEDICATION FOR ASTHMA?

No  0  
 YES  1

9.5 ARE YOU CURRENTLY TAKING ANY MEDICATION FOR ASTHMA?

No ⇒ SECTION 9.7  0  
 YES  1

**9.6 WHAT MEDICATIONS ARE YOU TAKING AND HOW OFTEN DO YOU HAVE TO TAKE THEM?** [TICK NUMBERED BOXES ONLY]

	MEDICATION 1	MEDICATION 2
	----- □□□□□	----- □□□□□
<b>How OFTEN?</b>	DAILY OR MORE <input type="checkbox"/> 1 WEEKLY/MORE THAN 4X/MONTH <input type="checkbox"/> 2 2-4 TIMES/MONTH <input type="checkbox"/> 3 MONTHLY <input type="checkbox"/> 4 LESS THAN MONTHLY <input type="checkbox"/> 5	DAILY OR MORE <input type="checkbox"/> 1 WEEKLY/MORE THAN 4X/MONTH <input type="checkbox"/> 2 2-4 TIMES/MONTH <input type="checkbox"/> 3 MONTHLY <input type="checkbox"/> 4 LESS THAN MONTHLY <input type="checkbox"/> 5

**9.7 Do you have a written asthma plan?**

No  0  
Yes  1

## 10. DENTAL HEALTH

**10.1 Did you brush your teeth yesterday?**

Yes  1  
No ⇒10.4  2

**10.2 How many times did you brush your teeth yesterday?**

**10.3 Did you use toothpaste?**

No  0  
Yes  1

**10.4 In the last 12 months, how often have you had a toothache?**

VERY OFTEN  1  
OFTEN  2  
SOMETIMES  3  
HARDLY EVER  4  
NEVER (DURING THE LAST 12 MONTHS)  5  
DON'T KNOW  6

**10.5 In the last 12 months, have you had other problems with your teeth or gums other than a toothache?**

No ⇒10.8  0  
Yes  1  
DON'T KNOW ⇒10.8  2

**10.6 What problem(s) did you have (with your teeth or gums)?**

.....

.....

.....

**10.7 Have you seen a dental professional about any of these problems?**

No  0  
Yes  1

**10.8 How long is it since you last saw anyone about your teeth or gums?**

2 WEEKS AGO OR LESS  1  
MORE THAN 2 WEEKS AND LESS THAN 3 MONTHS  2  
> 3 MONTHS AND < 6 MONTHS  3  
> 6 MONTHS AND < 12 MONTHS  4  
> 12 MONTHS AND < 2 YEARS  5  
MORE THAN 2 YEARS AGO  6  
NEVER ⇒10.12  7  
DON'T KNOW ⇒10.12  8

**10.9 Thinking of your last dental visit, where did you attend?**

DENTIST IN CUSTODY  1  
SCHOOL DENTAL CLINIC  2  
AREA HEALTH SERVICE  3  
AMS/ABORIGINAL DENTAL SERVICE  4  
DENTAL HOSPITAL OR HOSPITAL SERVICE  5  
PRIVATE DENTIST  6  
ORTHODONTIST  7

OTHER (SPECIFY) \_\_\_\_\_

**10.11 How many times did you see a dental professional about your teeth or gums in the last 12 months?**

NEVER  0  
ONCE  1  
TWICE  2  
THREE TIMES  3  
MORE THAN THREE TIMES  4

**10.12 If never, what is the main reason for not visiting the dentist in the last 12 months? [TICK ALL THAT APPLY.]**

THE COST OF DENTAL VISITS  1  
YOU BELIEVED NO TREATMENT WAS NEEDED  2  
TRANSPORT IS A PROBLEM  3  
YOU HAVE GIVEN UP GOING TO THE DENTIST  4  
WAITING LIST/DIFFICULTY GETTING AN APPOINTMENT  5  
YOU ARE NERVOUS ABOUT GOING TO THE DENTIST  6  
YOU DID NOT HAVE A DENTIST OR KNOW WHERE TO FIND A CLINIC  7  
YOU DID NOT THINK DENTAL VISITS VERY IMPORTANT  8  
YOU WERE TOO BUSY  9  
FORGOT/DIDN'T THINK/NO ONE REMINDED YOU  10

OTHER (SPECIFY) \_\_\_\_\_

# 11. PHYSICAL INJURY

11.1 have you **EVER** had any accidents or injuries for which you SAW a **DOCTOR OR NURSE** or **WENT TO HOSPITAL?** [IF > FOUR INJURIES INCLUDE THE FOUR MOST SERIOUS]

No ⇒ 11.2  0  
 YES  1

	INJURY 1 (A)	INJURY 2 (B)	INJURY 3 (C)	INJURY 4 (D)
<b>1. WHAT WAS THE INJURY?</b> [PHYSICAL DESCRIPTION]				
<b>2. HOW DID THE INJURY HAPPEN?</b> [INJURY MECHANICS]				
<b>3. WHAT WERE YOU DOING WHEN THE INJURY OCCURRED?</b> [WHAT ACTIVITY]				
<b>4. WHERE WERE YOU WHEN YOU WERE INJURED?</b> [LOCATION]				
<b>5. WHAT TREATMENT DID YOU RECEIVE?</b>				
<b>5.1 WAS THE INJURY INTENTIONAL OR ACCIDENTAL?</b>	ACCIDENTAL <input type="checkbox"/> 0 INTENTIONAL <input type="checkbox"/> 1	ACCIDENTAL <input type="checkbox"/> 0 INTENTIONAL <input type="checkbox"/> 1	ACCIDENTAL <input type="checkbox"/> 0 INTENTIONAL <input type="checkbox"/> 1	ACCIDENTAL <input type="checkbox"/> 0 INTENTIONAL <input type="checkbox"/> 1
<b>6. WHEN DID THIS INJURY OCCUR?</b>	1-4 WKS AGO <input type="checkbox"/> 1 1-6 MTHS AGO <input type="checkbox"/> 2 >6 MTHS <2 YR AGO <input type="checkbox"/> 3 > 2YRS & <5 YRS <input type="checkbox"/> 4 > 5YRS <input type="checkbox"/> 5	1-4 WKS AGO <input type="checkbox"/> 1 1-6 MTHS AGO <input type="checkbox"/> 2 >6 MTHS <2 YR AGO <input type="checkbox"/> 3 > 2YRS & <5 YRS <input type="checkbox"/> 4 > 5YRS <input type="checkbox"/> 5	1-4 WKS AGO <input type="checkbox"/> 1 1-6 MTHS AGO <input type="checkbox"/> 2 >6 MTHS <2 YR AGO <input type="checkbox"/> 3 > 2YRS & <5 YRS <input type="checkbox"/> 4 > 5YRS <input type="checkbox"/> 5	1-4 WKS AGO <input type="checkbox"/> 1 1-6 MTHS AGO <input type="checkbox"/> 2 >6 MTHS <2 YR AGO <input type="checkbox"/> 3 > 2YRS & <5 YRS <input type="checkbox"/> 4 > 5YRS <input type="checkbox"/> 5
<b>8. DO YOU HAVE ANY LASTING INJURY OR DISABILITY?</b>	No⇒INJURY 2 <input type="checkbox"/> 0 YES <input type="checkbox"/> 1 DON'T KNOW <input type="checkbox"/> 2	No⇒INJURY 3 <input type="checkbox"/> 0 YES <input type="checkbox"/> 1 DON'T KNOW <input type="checkbox"/> 2	No⇒INJURY 4 <input type="checkbox"/> 0 YES <input type="checkbox"/> 1 DON'T KNOW <input type="checkbox"/> 2	No⇒11.2 <input type="checkbox"/> 0 YES <input type="checkbox"/> 1 DON'T KNOW <input type="checkbox"/> 2
<b>9. WHAT ARE THESE LASTING INJURIES OR DISABILITIES?</b>				

11.2 IN THE **PAST 12 MONTHS** HAVE YOU HAD A PHYSICAL INJURY THAT WAS DELIBERATELY CAUSED BY [TICK ALL THAT APPLY]

- NO PHYSICAL INJURY IN LAST 12 MONTHS  0
- A DETAINEE IN CUSTODY  1
- FATHER  2
- MOTHER  3
- POLICE  4
- BOYFRIEND/GIRLFRIEND  5

ANOTHER PERSON (SPECIFY) \_\_\_\_\_

11.3 IN THE **PAST 12 MONTHS**, DID ANY PERSON AFFECTED BY **ALCOHOL...**

- |                      | YES                        | NO                         |
|----------------------|----------------------------|----------------------------|
| VERBALLY ABUSE YOU   | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| PHYSICALLY ABUSE YOU | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| PUT YOU IN FEAR      | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |

11.4 IN THE **PAST 12 MONTHS**, DID ANY PERSON AFFECTED BY **DRUGS...**

- |                      | YES                        | NO                         |
|----------------------|----------------------------|----------------------------|
| VERBALLY ABUSE YOU   | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| PHYSICALLY ABUSE YOU | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| PUT YOU IN FEAR      | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |



# 12. HEAD INJURY

NEXT, WE WILL ASK YOU A FEW QUESTIONS ABOUT TIMES YOU MAY HAVE RECEIVED AN INJURY TO YOUR HEAD.  
 [NOTE THAT THIS CAN INCLUDE HEAD INJURIES ALREADY MENTIONED IN SECTION 11]

12.1 HAVE YOU **EVER** HAD A HEAD INJURY WHERE YOU BECAME **UNCONSCIOUS** OR “**BLACKED OUT**”?

12.2 HOW MANY **TIMES** HAS THIS HAPPENED?

--	--

NO ⇒ SECTION 13  0  
 YES  1

NOW I WOULD LIKE YOU TO TELL ME ABOUT THE **THREE** WORST HEAD INJURIES YOU HAVE HAD.

	<u>HEAD INJURY 1</u>	<u>HEAD INJURY 2</u>	<u>HEAD INJURY 3</u>
<b>12.3</b> WHAT <b>CAUSED</b> YOU TO BECOME <b>UNCONSCIOUS</b> ? [SPECIFY NATURE, MECHANISM, AGENCY AND LOCATION OF INJURY, EG. CONCUSSION– BLOW TO HEAD BY BOTTLE DURING FIGHT]			
<b>12.4</b> FOR HOW LONG WERE YOU <b>UNCONSCIOUS</b> ? [UNPROMPTED]	BRIEF MOMENT <input type="checkbox"/> 0 < 10 MINUTES <input type="checkbox"/> 1 > 10 MINUTES <input type="checkbox"/> 2 > 30 MINUTES <input type="checkbox"/> 3 > 24 HOURS <input type="checkbox"/> 4 DON'T KNOW <input type="checkbox"/> 5	BRIEF MOMENT <input type="checkbox"/> 0 < 10 MINUTES <input type="checkbox"/> 1 > 10 MINUTES <input type="checkbox"/> 2 > 30 MINUTES <input type="checkbox"/> 3 > 24 HOURS <input type="checkbox"/> 4 DON'T KNOW <input type="checkbox"/> 5	BRIEF MOMENT <input type="checkbox"/> 0 < 10 MINUTES <input type="checkbox"/> 1 > 10 MINUTES <input type="checkbox"/> 2 > 30 MINUTES <input type="checkbox"/> 3 > 24 HOURS <input type="checkbox"/> 4 DON'T KNOW <input type="checkbox"/> 5
<b>12.5</b> WHEN DID THIS OCCUR? [UNPROMPTED]	WITHIN LAST WEEK <input type="checkbox"/> 1 1–4 WEEKS AGO <input type="checkbox"/> 2 1–6 MONTHS AGO <input type="checkbox"/> 3 > 6MTH < 2YR AGO <input type="checkbox"/> 4 > 2 YEARS AGO <input type="checkbox"/> 5 DON'T KNOW <input type="checkbox"/> 6	WITHIN LAST WEEK <input type="checkbox"/> 1 1–4 WEEKS AGO <input type="checkbox"/> 2 1–6 MONTHS AGO <input type="checkbox"/> 3 > 6MTH < 2YR AGO <input type="checkbox"/> 4 > 2 YEARS AGO <input type="checkbox"/> 5 DON'T KNOW <input type="checkbox"/> 6	WITHIN LAST WEEK <input type="checkbox"/> 1 1–4 WEEKS AGO <input type="checkbox"/> 2 1–6 MONTHS AGO <input type="checkbox"/> 3 > 6MTH < 2YR AGO <input type="checkbox"/> 4 > 2 YEARS AGO <input type="checkbox"/> 5 DON'T KNOW <input type="checkbox"/> 6

<b>12.14</b> DID YOU HAVE ANY PROBLEMS AS A RESULT OF THIS/THESE HEAD INJURIES? [TICK ALL THAT APPLY]	<b>12.15</b> WHICH <b>HAVE NOT GONE AWAY (RESOLVED)</b> ?
<b>NO PROBLEMS</b> ⇒ 12.16 <input type="checkbox"/> 1	<input type="checkbox"/> 1
WEAKNESS IN ANY PART OF THE BODY <input type="checkbox"/> 2	<input type="checkbox"/> 2
POOR CONCENTRATION <input type="checkbox"/> 3	<input type="checkbox"/> 3
MEMORY LOSS <input type="checkbox"/> 4	<input type="checkbox"/> 4
PROBLEMS FINDING RIGHT WORDS WHEN SPEAKING <input type="checkbox"/> 5	<input type="checkbox"/> 5
PROBLEM W. COORDINATION/BALANCE <input type="checkbox"/> 6	<input type="checkbox"/> 6
PERSONALITY/BEHAVIOURAL CHANGES <input type="checkbox"/> 7	<input type="checkbox"/> 7
ANXIETY OR DEPRESSION <input type="checkbox"/> 8	<input type="checkbox"/> 8
HEADACHE <input type="checkbox"/> 9	<input type="checkbox"/> 8
OTHER (SPECIFY) _____	<input type="checkbox"/> 10

12.16 HAVE YOU **EVER** HAD ANY TESTS OR SCANS AS A RESULT OF ANY HEAD INJURIES?

NO ⇒ SECTION 13  0  
 YES  1

12.17 CAN YOU TELL ME THE **NAMES** OF THESE TESTS?

.....
-------

12.18 CAN YOU TELL ME THE **RESULTS** IF YOU KNOW THEM?

.....
-------

## 13. SF-12

13.1 IN GENERAL, WOULD YOU SAY YOUR HEALTH IS:

- EXCELLENT  1  
 VERY GOOD  2  
 GOOD  3  
 FAIR  4  
 POOR  5

THE FOLLOWING QUESTIONS ARE ABOUT ACTIVITIES YOU MIGHT DO DURING A TYPICAL DAY. DOES YOUR HEALTH NOW LIMIT YOU IN THESE ACTIVITIES? IF SO, HOW MUCH?

	YES, LIMITED A LOT	YES, LIMITED A LITTLE	NO, NOT LIMITED AT ALL
13.2 MODERATE ACTIVITIES, SUCH AS MOVING A TABLE, PUSHING A VACUUM CLEANER, BOWLING, OR PLAYING GOLF.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
13.3 CLIMBING SEVERAL FLIGHTS OF STAIRS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

DURING THE PAST 4 WEEKS HAVE YOU HAD ANY OF THE FOLLOWING PROBLEMS WITH YOUR WORK OR OTHER REGULAR DAILY ACTIVITIES AS A RESULT OF YOUR PHYSICAL HEALTH?

13.4 YOU ACCOMPLISHED LESS THAN YOU WOULD LIKE	YES <input type="checkbox"/> 1	NO <input type="checkbox"/> 0
13.5 YOU WERE LIMITED IN THE KIND OF WORK OR OTHER ACTIVITIES	YES <input type="checkbox"/> 1	NO <input type="checkbox"/> 0

DURING THE PAST 4 WEEKS, HAVE YOU HAD ANY OF THE FOLLOWING PROBLEMS WITH YOUR WORK OR OTHER REGULAR DAILY ACTIVITIES AS A RESULT OF ANY EMOTIONAL PROBLEMS (SUCH AS FEELING DEPRESSED OR ANXIOUS)?

13.6 YOU ACCOMPLISHED LESS THAN YOU LIKED	YES <input type="checkbox"/> 1	NO <input type="checkbox"/> 0
13.7 YOU DIDN'T DO WORK OR OTHER ACTIVITIES AS CAREFULLY AS USUAL	YES <input type="checkbox"/> 1	NO <input type="checkbox"/> 0

13.8 DURING THE PAST 4 WEEKS, HOW MUCH DID PAIN INTERFERE WITH YOUR NORMAL WORK (INCLUDING BOTH WORK OUTSIDE THE HOME AND HOUSEWORK)?

- NOT AT ALL  1  
 A LITTLE BIT  2  
 MODERATELY  3  
 QUITE A BIT  4  
 EXTREMELY  5

THESE QUESTIONS ARE ABOUT HOW YOU FEEL AND HOW THINGS HAVE BEEN WITH YOU DURING THE PAST 4 WEEKS. FOR EACH QUESTION, PLEASE GIVE THE ONE ANSWER THAT COMES CLOSEST TO THE WAY YOU HAVE BEEN FEELING.

13.9 HOW MUCH OF THE TIME DURING THE PAST 4 WEEKS...

	ALL THE TIME	MOST OF THE TIME	SOME OF THE TIME	A LITTLE OF THE TIME	NONE OF THE TIME
A. HAVE YOU FELT CALM AND PEACEFUL?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
B. DID YOU HAVE A LOT OF ENERGY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
C. HAVE YOU FELT DOWN HEARTED AND BLUE?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

13.10 DURING THE PAST 4 WEEKS, HOW MUCH OF THE TIME HAS YOUR PHYSICAL HEALTH OR EMOTIONAL PROBLEMS INTERFERED WITH YOUR SOCIAL ACTIVITIES (LIKE VISITING FRIENDS, RELATIVE, ETC)?

- ALL OF THE TIME  1  
 MOST OF THE TIME  2  
 SOME OF THE TIME  3  
 A LITTLE OF THE TIME  4  
 NONE OF THE TIME  5

## 14. SMOKING

14.1 HAVE YOU EVER SMOKED A CIGARETTE?

- NO ⇒ 14.18  0  
 YES  1

14.2 HOW OLD WERE YOU WHEN YOU FIRST SMOKED A CIGARETTE?

--	--

14.8 DO YOU CURRENTLY SMOKE CIGARETTES?

- NO ⇒ 14.18  0  
 YES  1

14.9 HOW OFTEN DO YOU CURRENTLY SMOKE?

- ALMOST EVERYDAY OR EVERYDAY  1  
 3-4 DAYS A WEEK  2  
 1-2 DAYS A WEEK  3  
 FORTNIGHTLY  4  
 MONTHLY  5  
 LESS THAN ONCE A MONTH  6

14.10 ON THE DAYS THAT YOU SMOKE, ABOUT HOW MANY CIGARETTES DO YOU USUALLY SMOKE?

14.13 DO YOU FEEL YOU NEED HELP TO QUIT SMOKING?

No ⇒ 14.18  0  
Yes  1

14.14 WHAT SORT OF ASSISTANCE WOULD HELP ?

.....  
.....

14.18 DO EITHER OF YOUR PARENTS SMOKE CIGARETTES?

No  0  
YES – MOTHER  1  
YES – FATHER  1

## 15. ALCOHOL

15.1 HAVE YOU EVER TRIED ALCOHOL?

No ⇒ SECTION 16  0  
Yes  1

15.2 HAVE YOU EVER HAD A FULL SERVE OF ALCOHOL? (EG. A CAN OF BEER)

No ⇒ SECTION 16  0  
Yes  1

15.3 HOW OLD WERE YOU WHEN YOU HAD YOUR FIRST FULL SERVE OF ALCOHOL?

15.4 IN THE LAST 12 MONTHS, HOW OFTEN DID YOU HAVE AN ALCOHOLIC DRINK (ANY KIND?)

NEVER  0  
ALMOST EVERYDAY OR EVERYDAY  1  
3–4 DAYS A WEEK  2  
1–2 DAYS A WEEK  3  
FORTNIGHTLY  4  
MONTHLY  5  
LESS THAN ONCE A MONTH  6

15.5 HAVE YOU EVER BEEN DRUNK?

No ⇒ 15.8  0  
Yes  1

15.6 HOW OLD WERE YOU WHEN YOU WERE DRUNK FOR THE FIRST TIME?

CANNOT REMEMBER  1

15.7 IN THE LAST 12 MONTHS, HOW OFTEN WERE YOU DRUNK? NEVER  0

ALMOST EVERYDAY OR EVERYDAY  1  
3–4 DAYS A WEEK  2  
1–2 DAYS A WEEK  3  
FORTNIGHTLY  4  
MONTHLY  5  
LESS THAN ONCE A MONTH  6  
CANNOT REMEMBER  7

15.8 WHEN YOU DRINK ALCOHOL, WHAT TYPE OF ALCOHOL WOULD YOU USUALLY HAVE TO DRINK? [UNPROMPTED, TICK ALL THAT APPLY]

CASK WINE  1  
BOTTLED WINE  2  
REGULAR STRENGTH BEER (>4% ALCM/VOL)  3  
MID STRENGTH BEER (3–3.9% VOL/VOL)  4  
LOW STRENGTH BEER (1–2.9% VOL/VOL)  5  
PREMIXED SPIRITS IN A CAN (EG. UDL)  6  
BOTTLED SPIRITS AND LIQUEURS  7  
PREMIXED BOTTLES (EG. SUB–ZERO)  8  
CIDER  9  
HOME BREWED WINE  10  
FORTIFIED WINE, PORT, VERMOUTH, SHERRY, ETC.  11  
OTHER (SPECIFY) \_\_\_\_\_

15.9 HOW MANY STANDARD DRINKS DO YOU HAVE ON A TYPICAL DAY WHEN YOU ARE DRINKING? [SHOW FLASH CARD 1]. [RECORD VERBATIM ANSWER IN TEXT BOX]

.....

15.10 HOW OFTEN DO YOU HAVE 6 OR MORE (MALES)/ 4 OR MORE (FEMALES) STANDARD DRINKS ON ONE OCCASION? [USE FLASH CARD 1]

NEVER  0  
ALMOST EVERYDAY OR EVERYDAY  1  
3–4 DAYS A WEEK  2  
1–2 DAYS A WEEK  3  
FORTNIGHTLY  4  
MONTHLY  5  
LESS THAN ONCE A MONTH  6

HOW OFTEN IN THE LAST 12 MONTHS HAVE YOU...	NEVER	5-7D/WEEK	3-4	1-2	FORTNIGHTLY	MONTHLY	< 1X/MTH
15.11 FOUND YOU WERE UNABLE TO STOP DRINKING ONCE YOU STARTED?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
15.12 FAILED TO DO WHAT WAS NORMALLY EXPECTED FROM YOU BECAUSE OF YOUR DRINKING?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
15.13 NEEDED A DRINK IN THE MORNING TO GET GOING?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

16. DRUG USE  16.1 TYPE OF DRUG	HAVE YOU EVER USED...? YES/NO	AGE FIRST USED IN YEARS	HOW OFTEN DID YOU USE IT IN THE LAST 12 MONTHS? [EG 3X/DAY, 1X, 2X/WEEK]	WHEN DID YOU LAST USE THIS DRUG? 1-4 WKS AGO <input type="checkbox"/> 1 1-6 MTHS AGO <input type="checkbox"/> 2 >6 MTHS <2YRS <input type="checkbox"/> 3 >2YRS <5 YRS <input type="checkbox"/> 4 >5YRS <input type="checkbox"/> 5	HOW HAVE YOU USED IT? [NOTE ALL THAT APPLY] SMOKE <input type="checkbox"/> 1 SNORT/SNIFF <input type="checkbox"/> 2 SWALLOW/INGEST <input type="checkbox"/> 3 INJECT <input type="checkbox"/> 4 INHALE/CHASE <input type="checkbox"/> 5 OTHER (SPECIFY) <input type="checkbox"/> 6	16.2 WHICH IS YOUR DRUG OF FIRST CHOICE [TICK ONE BOX ONLY]
A CANNABIS (MARIJUANA, POT, HASH, WEED, YANDII)						
B. HEROIN						
C. OTHER OPIATES: (PETHIDINE, MORPHINE, OPIUM)						
D. PRESCRIBED METHADONE						
E. NON PRESCRIBED METHADONE						
F. BENZODIAZEPINES (SEROPAX, VALIUM)						
G. AMPHETAMINES (SPEED, GEAR, GOEY): INCL. AMPHETAMINE, DEXIES (RITALIN), AND METHAMPHETAMINE (CRYSTAL METH OR ICE OR SHABU)						
H. COCAINE (COKE, CRACK)						
I. OTHER AMPHETAMINE RELATED SUBSTANCES: (EG. ECSTASY, DOB, DOM, MDA, MDEA, MDMA, PMA, TMA.						
J. HALLUCINOGENS (EG ACID, TRIPS, LSD, MAGIC MUSHROOMS, Mescaline)						
K. STEROIDS (DECA, STANAZOL, SUSTENOL)						
L. SOLVENTS / INHALANTS (EG. PETROL, GLUE, AEROSOL, AMYL NITRATE)						
M. PAIN KILLERS/ ANALGESICS (EG: PANADOL / ASPRO)						
N. OTHER DRUGS (PLEASE SPECIFY)?						
					O. TOBACCO	
					P. ALCOHOL	

[N.B. IF PARTICIPANT HAS NOT INJECTED DRUGS ⇒ 16.14]

16.3 ABOUT HOW OLD WERE YOU WHEN YOU FIRST INJECTED DRUGS? (THIS INCLUDES BEING INJECTED BY SOMEONE ELSE)

--	--

16.4 HAVE YOU INJECTED DRUGS IN THE LAST 12 MONTHS?

No ⇒ 16.16  0  
Yes  1

16.5 HOW OFTEN DID YOU INJECT IN THE LAST MONTH?

NOT IN THE LAST MONTH ⇒ 16.11  0  
LESS THAN WEEKLY  1  
MORE THAN WEEKLY, NOT DAILY  2  
ONCE A DAY  3  
2 TO 3 TIMES MOST DAYS  4  
MORE THAN 3 TIMES MOST DAYS  5

**16.6 TICK ALL PLACES WHERE YOU INJECTED IN THE LAST MONTH.**

- OWN HOME  1
- FRIEND'S HOME  2
- DEALER'S HOME  3
- STREET, PARK OR BEACH  4
- CAR  5
- PUBLIC TOILET  6
- COMMERCIAL "SHOOTING" ROOM  7
- SQUAT  8
- OTHER (SPECIFY)\_\_\_\_\_  9

**16.7 HOW OFTEN DID YOU USE A NEW FIT (STERILE NEEDLE AND SYRINGE) LAST MONTH?**

- ALL INJECTIONS  1
- MOST OF THE TIME  2
- HALF OF THE TIME  3
- SOME OF THE TIME  4
- NOT LAST MONTH  5

**16.8 TICK ANY EQUIPMENT THAT YOU USED AFTER ANYONE ELSE LAST MONTH.**

- SPOON  1
- WATER  2
- FILTER  3
- TOURNIQUET  4
- DRUG MIX  5

**16.9 HOW MANY TIMES LAST MONTH DID SOMEONE ELSE INJECT YOU AFTER INJECTING THEMSELVES OR OTHERS?**

- NONE  1
- ONCE OR TWICE  2
- 3 TO 5 TIMES  3
- MORE THAN 5 TIMES  4

**16.10 HOW MANY TIMES LAST MONTH DID YOU REUSE A FIT (NEEDLE & SYRINGE) AFTER SOMEONE ELSE (INCLUDING YOUR SEX PARTNER) HAD USED IT (EVEN IF IT WAS CLEANED)?**

- NONE ⇒ 16.11  1
- ONCE  2
- TWICE  3
- 3 TO 5 TIMES  4
- MORE THAN 5 TIMES  5

**16.11 HOW MANY PEOPLE, INCLUDING YOUR SEX PARTNER, SHARED A NEEDLE & SYRINGE WITH YOU IN THE LAST MONTH (EVEN IF CLEANED)?**

- 1 PERSON  1
- 2 PEOPLE  2
- 3 TO 5 PEOPLE  3
- MORE THAN 5 PEOPLE  4
- DON'T KNOW HOW MANY  5

**16.12 WHO WERE THESE PEOPLE?**

- REGULAR SEX PARTNER  1
- CASUAL SEX PARTNER  2
- CLOSE FRIEND  3
- ACQUAINTANCE  4
- OTHER (SPECIFY)\_\_\_\_\_  5

**16.13 IN THE LAST 12 MONTHS, HOW OFTEN DID YOU SHARE INJECTING EQUIPMENT (SYRINGE, SPOON, TOURNIQUET ETC) – EITHER USING SOMEONE ELSE'S OR LENDING YOURS TO ANOTHER PERSON?**

- NEVER  1
- ONCE  2
- A FEW TIMES  3
- OFTEN  4

**16.14 WHAT WAS THE LAST DRUG YOU INJECTED?**

- HEROIN  1
- HEROIN + COCAINE TOGETHER  2
- COCAINE  3
- AMPHETAMINE  4
- METHADONE  5
- MORPHINE  6
- ANABOLIC STEROIDS  7
- BENZODIAZEPINES  8
- OTHER (SPECIFY)\_\_\_\_\_  9

**16.15 WHEN DID YOU LAST SHARE NEEDLES OR INJECTING EQUIPMENT?**

- 1-4 WEEKS AGO  1
- 1-6 MONTHS AGO  2
- >6 MONTHS <2 YEAR AGO  3
- > 2YRS AGO <5 YRS  4
- > 5YRS  5

**16.16 WHAT FACTORS INFLUENCED YOUR DECISION TO FIRST USE AN ILLICIT DRUG (INCLUDING CANNABIS)? [TICK ALL THAT APPLY]**

- FRIENDS USED/OFFERED BY A FRIEND (PEER PRESSURE)  1
- WANTED TO SEE WHAT IT WAS LIKE (CURIOSITY)  2
- TO FEEL BETTER/TO STOP FEELING UNHAPPY  3
- TO TAKE A RISK  4
- TO DO SOMETHING EXCITING  5
- FAMILY PROBLEMS (EG: PARENTS SEPARATED, DIDN'T GET ON WITH PARENTS)  6
- WORK/SCHOOL/RELATIONSHIP PROBLEMS  7
- TRAUMATIC EXPERIENCE (EG: SEXUAL OR PHYSICAL ASSAULT, DEATH OF SOMEONE CLOSE)  8
- TO LOSE WEIGHT  9
- DON'T KNOW  10

OTHER (SPECIFY)\_\_\_\_\_

**16.17 HAS YOUR DRUG USE CAUSED YOU ANY PROBLEMS IN THE PAST YEAR? (EG.:WITH SCHOOL, FRIENDS, HEALTH, POLICE, PARENTS)**

No  0  
 YES  1

**16.18 IF YES, TELL ME WHAT YOU MEAN**

..... .....
----------------

**16.19 HAVE YOU EVER COMMITTED A CRIME TO GET DRUGS OR ALCOHOL?**

No  0  
 YES  1

**16.20 FOR YOUR CURRENT OFFENCE, WERE YOU UNDER THE INFLUENCE OF DRUGS AT THE TIME OF THE OFFENCE?**

No  0  
 YES  1

**16.21 FOR YOUR CURRENT OFFENCE, WERE YOU UNDER THE INFLUENCE OF ALCOHOL AT THE TIME OF THE OFFENCE?**

No  0  
 YES  1

**16.22 DO ANY OF YOUR CLOSE RELATIVES ABUSE DRUGS OR ALCOHOL?**

No  0  
 YES  1

**16.23**

WHO(SPECIFY)	.1:	.2:	.3:
SUBSTANCE(S)			

**16.24 HAVE YOU ATTEMPTED TO GIVE UP SUBSTANCE USE IN THE LAST 12 MONTHS?**

No  0  
 YES  1

**16.25 DID YOU ACTUALLY GIVE UP?**

No  0  
 YES  1

## 17. DRUG TREATMENT

[THIS SECTION IS FOR YES RESPONSES TO ALCOHOL AND DRUG USE]

**17.1 HAVE YOU EVER RECEIVED TREATMENT FOR A DRUG OR ALCOHOL PROBLEM (EG. GP, DETOX OR REHAB CENTRE, NARCOTICS ANONYMOUS, ALCOHOLICS ANONYMOUS)?**

No ⇒ 17.11  0  
 YES  1

**17.2 HAVE YOU EVER BEEN IN A DETOXIFICATION CENTRE FOR ALCOHOL OR DRUG PROBLEMS?**

No ⇒ 17.5  0  
 YES  1

**17.3 HOW MANY TIMES HAVE YOU BEEN IN A DETOX CENTRE FOR DRUG AND/OR ALCOHOL PROBLEMS?**

--	--

**17.4 DID YOU COMPLETE ALL YOUR DETOX PROGRAMME(S)?**

No  0  
 YES  1

**17.5 HAVE YOU EVER BEEN IN A REHABILITATION CENTRE FOR ALCOHOL OR DRUG PROBLEMS?**

No ⇒ 17.9  0  
 YES  1

**17.6 HOW MANY TIMES HAVE YOU BEEN IN A REHABILITATION CENTRE FOR DRUG AND/OR ALCOHOL PROBLEMS?**

--	--

**17.7 DID YOU COMPLETE YOUR REHABILITATION PROGRAMME?**

No  0  
 YES ⇒ 17.9  1

**17.8 HOW LONG DID YOU STAY?**

<4 WEEKS  1  
 > 1 MONTH <3 MONTHS  2  
 > 3 MONTHS  3

**17.9 FROM WHAT OTHER DRUG AND ALCOHOL SERVICES HAVE YOU RECEIVED HELP OR TREATMENT?**  
[TICK ALL THAT APPLY]

- GP  1
- NARCOTICS ANONYMOUS  2
- ALCOHOLICS ANONYMOUS  3
- OUTPATIENT COUNSELLING  4
- YOUTH WORKERS  5
- PSYCHIATRIST  6
- PSYCHOLOGIST  7
- OTHER COUNSELLOR (SPECIFY)  8
- OTHER (SPECIFY) \_\_\_\_\_

**17.10 WHAT HELP OR TREATMENT DID YOU RECEIVE?**

.....

.....

**17.11 HAVE YOU EVER RECEIVED HELP FOR A DRUG OR ALCOHOL PROBLEM FROM OTHER SOURCES? (EG. FAMILY, FRIENDS, PRIEST, SALVOS)?**

- No ⇒ 17.14  0  
Yes  1

**17.12 FROM WHOM DID YOU SEEK HELP?**  
[TICK ALL THAT APPLY]

- FAMILY  1
- FRIENDS  2
- PRIEST  3
- YOUTH WORKER  4
- SALVATION ARMY  5
- SYDNEY CITY MISSION  6
- MISSION BEAT  7
- OTHER COUNSELLOR (SPECIFY)  8
- OTHER (SPECIFY) \_\_\_\_\_

**17.13 WHAT HELP DID YOU RECEIVE?**

.....

.....

**17.17 DO YOU THINK THAT YOU NEED HELP FOR YOUR DRUG AND/OR ALCOHOL PROBLEMS?**

- No ⇒ SECTION 18  0  
Yes  1

**17.19 HAVE YOU EVER HAD ANY OF THE FOLLOWING TREATMENTS: [TICK ALL THAT APPLY]**

- METHADONE  1
- BUPRENORPHINE  2
- DEXAMPHETAMINE  3
- RITALIN  4
- NALTREXONE  5
- OTHER TREATMENT (SPECIFY) \_\_\_\_\_  6

## 18. SEXUAL HEALTH

**18.1 HAVE YOU EVER HAD SEX? (BY THIS I MEAN ORAL, VAGINAL, OR ANAL SEX. THIS DOES NOT INCLUDE MASTURBATION)**

- No ⇒ SECTION 19  0  
Yes  1

	ORAL	VAGINAL	ANAL
<b>18.2 HOW OLD WERE YOU WHEN YOU FIRST HAD:</b>			
<b>18.3 HOW MANY TIMES HAVE YOU EVER HAD:</b>	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8
<b>18.4 (/6/8) IN YOUR LIFETIME, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD:</b>	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8
<b>18.5 (/7/9) WAS THIS WITH MALES OR FEMALES?</b>	M <input type="checkbox"/> 1 F <input type="checkbox"/> 2 M+F <input type="checkbox"/> 3	M <input type="checkbox"/> 1 F <input type="checkbox"/> 2 M+F <input type="checkbox"/> 3	M <input type="checkbox"/> 1 F <input type="checkbox"/> 2 M+F <input type="checkbox"/> 3
<b>18.10 (/11) IN THE PAST 12 MONTHS, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD:</b>	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8	0 <input type="checkbox"/> 0 1 <input type="checkbox"/> 1 2 <input type="checkbox"/> 2 3-5 <input type="checkbox"/> 3 6-10 <input type="checkbox"/> 4 11-20 <input type="checkbox"/> 5 21-50 <input type="checkbox"/> 6 51-100 <input type="checkbox"/> 7 >100 <input type="checkbox"/> 8

**18.12 WHEN YOU HAVE SEX WITH CASUAL PARTNERS (E.G. A ONCE ONLY SEXUAL PARTNER OR A ONE-NIGHT STAND) HOW OFTEN DO YOU USE CONDOMS?**

- NEVER  0  
LESS THAN HALF THE TIME  1  
MORE THAN HALF THE TIME  2  
ALWAYS  3

**18.13 IF NEVER OR LESS THAN HALF THE TIME, THEN WHY?**

.....

.....

**18.14 WHEN YOU HAD/HAVE SEX WITH YOUR REGULAR PARTNER (IE SOMEONE YOU HAVE SEX WITH ON A REGULAR BASIS) DID/DO YOU USE CONDOMS?**

- NEVER  0  
 LESS THAN HALF THE TIME  1  
 MORE THAN HALF THE TIME  2  
 ALWAYS  3

**18.15 IF NEVER OR LESS THAN HALF THE TIME, THEN WHY?**

.....  
 .....  
 .....

**18.16 WHEN YOU HAVE SEX WHAT TYPES OF CONTRACEPTIVES DO YOU USE TO PREVENT PREGNANCY? [TICK ALL THAT APPLY]**

- NONE  1  
 ORAL CONTRACEPTIVES (PILLS)  2  
 CONDOM  3  
 DEPO PROVERA  4  
 INTRAUTERINE CONTRACEPTIVE DEVICE (IUCD)  5  
 DIAPHRAGM  6

OTHER (SPECIFY).....

**18.17 HAVE YOU EVER HAD SEX TO GET DRUGS OR MONEY?**

- No ⇒ 18.19  0  
 YES  1  
 DON'T WANT TO SAY  2  
 CAN'T REMEMBER  3

**18.18 IN YOUR LIFETIME, HOW MANY TIMES HAS THIS HAPPENED?**

**18.19 HAVE YOU EVER WORKED AS A SEX WORKER?**

- No ⇒ 18.24  0  
 YES  1

**18.20 IN WHAT VENUES DID YOU WORK WHEN YOU WERE PAID TO HAVE SEX? [TICK ALL THAT APPLY]**

- STREET WORK  1  
 SMALL 'HOUSE'  2  
 ESCORT AGENCY  3  
 MESSAGE  4  
 BROTHEL  5  
 PRIVATE OPERATOR  6  
 PIMP/MADAM  7

OTHER (SPECIFY).....

**18.21 WHAT PERIOD OF TIME OVERALL WERE YOU WORKING AS A SEX WORKER?**

- LESS THAN 1 MONTH  1  
 1-6 MONTHS  2  
 6-12 MONTHS  3  
 1-2 YEARS  4  
 2-3 YEARS  5  
 3-5 YEARS  6  
 > 5 YEARS  7

**18.22 HOW OFTEN DID YOU USE CONDOMS WHILE WORKING AS A SEX WORKER WHEN HAVING VAGINAL OR ANAL SEX?**

- NEVER  0  
 LESS THAN HALF THE TIME  1  
 MORE THAN HALF THE TIME  2  
 ALWAYS  3

**18.23 IF NEVER OR LESS THAN HALF THE TIME, THEN WHY?**

.....  
 .....

**18.24 HAVE YOU EVER HAD ANY OF THE FOLLOWING?**

CONDITION	HAVE YOU RECEIVED TREATMENT FOR THIS PROBLEM?
A. COLD SORES No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
B. GENITAL WARTS No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
C. CHLAMYDIA No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
D. GENITAL HERPES No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
E. PUBIC LICE OR CRABS No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
F. GONORRHOEA No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
G. HIV No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
H. SYPHILIS No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
J. OTHER (SPECIFY) .....	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1



18.25 DO YOU HAVE ANY SYMPTOMS AT THE MOMENT THAT MAKE YOU THINK YOU MAY HAVE AN SEXUALLY TRANSMITTED INFECTION?

- No ⇒ 18.27  0
- YES  1
- DON'T KNOW  2
- DON'T WANT TO SAY  3

18.26 WHAT SYMPTOMS ARE THEY?

.....

.....

18.27 HAVE YOU EVER HAD SEX AGAINST YOUR WILL?

- No ⇒ 18.30  0
- YES  1
- DON'T WANT TO SAY  2

18.27.1

Please describe this/these experiences:

.....

.....

18.30 HOW WOULD YOU DESCRIBE YOURSELF?

[TICK ALL THAT APPLY]

- HETEROSEXUAL (STRAIGHT)  0
- HOMOSEXUAL (GAY OR LESBIAN)  1
- BISEXUAL  2
- TRANSSEXUAL  3
- TRANSGENDER  4

OTHER: (SPECIFY)\_\_\_\_\_

## 19. WOMENS HEALTH (FEMALES ONLY)

19.1 HOW OLD WERE YOU WHEN YOU HAD YOUR FIRST MENSTRUAL PERIOD?

HAVE NOT STARTED MENSTRUATING⇒19.6  0

19.2 ARE YOUR PERIODS REGULAR?

- No  0
- YES  1

19.3 WHEN WAS YOUR LAST PERIOD?

- <1 MONTH AGO  0
- BETWEEN 1 AND 2 MONTHS AGO  1
- >3 BUT < 4 MONTHS AGO  2
- >4 BUT < 6 MONTHS AGO  3
- >6 BUT <12 MONTHS  4
- >12 MONTHS AGO  5

19.4 ARE YOU CURRENTLY PREGNANT?

- No  0
- YES  1
- UNSURE  2

19.5 DO YOUR PERIODS NORMALLY CAUSE YOU TO HAVE PAIN, DISCOMFORT, OR ANY OTHER PROBLEMS?

- NO PROBLEMS  1
- HEAVY  2
- PAINFUL  3
- HEAVY AND PAINFUL  4

OTHER PROBLEMS (SPECIFY)\_\_\_\_\_

19.6 HAVE YOU EVER HAD A PAP SMEAR?

- No ⇒ 19.11  0
- YES  1

19.7 HOW OFTEN DO YOU HAVE A PAP SMEAR?

- ONCE ONLY  1
- TWICE A YEAR  2
- YEARLY  3
- ONCE EVERY TWO YEARS  4

OTHER (SPECIFY)\_\_\_\_\_

19.8 WHERE WAS YOUR LAST PAP SMEAR DONE?

- IN CUSTODY  1
- IN THE COMMUNITY  2

19.9 WHEN WAS YOUR LAST PAP SMEAR?

- IN THE LAST SIX MONTHS  1
- > 6 MONTHS AND <12 MONTHS  2
- >12 MONTHS AND <2 YEARS  3
- >2 YEARS AND <4 YEARS  4
- >4 YEARS  5
- CAN'T REMEMBER  6

19.10 DO YOU KNOW WHAT THE RESULT OF THE PAP SMEAR WAS?

- NORMAL  1
- ABNORMAL  2
- DON'T KNOW  3

19.11 HAVE YOU EVER HAD A TERMINATION OF PREGNANCY?

- No ⇒ 19.14  0
- YES  1

19.12 HOW MANY TERMINATIONS HAVE YOU HAD?

19.13 HOW OLD WERE YOU WHEN YOU FIRST HAD A TERMINATION OF PREGNANCY ?

19.14 HAVE YOU EVER HAD ANY MISCARRIAGES?

- No ⇒ SECTION 20  0
- YES  1

19.15 HOW MANY?

## 20. GAMBLING

THE NEXT FEW QUESTIONS ARE ABOUT GAMBLING. FOR THIS SURVEY, "GAMBLING" IS DEFINED AS BETTING OR PLAYING GAMES OF CHANCE FOR MONEY OR TO WIN SOMETHING EVEN THOUGH YOU HAVE A STRONG CHANCE OF LOSING (E.G. POKER MACHINES, BETTING ON HORSES/DOGS).

20.1 IN THE LAST 12 MONTHS, HOW OFTEN HAVE YOU THOUGHT ABOUT GAMBLING OR PLANNING TO GAMBLE?

- NEVER ⇒ SECTION 21  1  
 ONCE OR TWICE  2  
 SOMETIMES  3  
 OFTEN  4

20.2 DURING THE COURSE OF THE LAST 12 MONTHS, HAVE YOU NEEDED TO GAMBLE WITH MORE AND MORE MONEY TO GET THE AMOUNT OF EXCITEMENT YOU WANT?

- No  0  
 Yes  1

IN THE <u>LAST 12 MONTHS</u> ...	NEVER	ONCE/TWICE	SOMETIMES	OFTEN
20.4 HAVE YOU FELT BAD OR FED UP WHEN TRYING TO CUT DOWN OR STOP GAMBLING?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20.3 HAVE YOU EVER SPENT MUCH MORE THAN YOU PLANNED TO ON GAMBLING?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20.5 HOW OFTEN HAVE YOU GAMBLLED TO HELP YOU TO ESCAPE FROM PROBLEMS OR WHEN YOU ARE FEELING BAD?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20.6 AFTER LOSING MONEY GAMBLING, HAVE YOU RETURNED ANOTHER DAY TO TRY AND WIN BACK THE MONEY YOU LOST?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20.7 HAS YOUR GAMBLING EVER LED TO LIES TO YOUR FAMILY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20.8 HAS YOUR GAMBLING EVER LED TO LIES TO YOUR FRIENDS?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

20.9 IN THE LAST 12 MONTHS, HAVE YOU TAKEN MONEY FROM THE FOLLOWING WITHOUT PERMISSION TO SPEND ON GAMBLING...

	NEVER	ONCE/TWICE	SOMETIMES	OFTEN
... A. SCHOOL LUNCH MONEY OR FARE MONEY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
... B. MONEY FROM YOUR FAMILY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
... C. MONEY FROM OUTSIDE THE FAMILY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

20.10 IN THE LAST 12 MONTHS, HAS YOUR GAMBLING EVER LED TO...

	NEVER	ONCE/TWICE	SOMETIMES	OFTEN
... A. ARGUMENTS WITH FAMILY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
... B. ARGUMENTS WITH FRIENDS OR OTHERS?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
... C. MISSING SCHOOL?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

20.11 WHAT TYPE OF GAMBLING DO YOU ENGAGE IN MOST OFTEN?

- POKIES  1  
 SCRATCHIES  2  
 LOTTERY TICKETS  3  
 GAMES OF CHANCE WITH CARDS  4  
 BETTING ON HORSES  5  
 BETTING ON DOGS  6

OTHER: (SPECIFY): \_\_\_\_\_

## 21. TATTOOING & BODY PIERCING

21.1 Do you have **ANY** BODY PIERCING OR TATTOOS?  
[INCLUDES EAR PIERCINGS]

- No ⇒ SECTION 22  0  
 YES – BOTH  1  
 YES – TATTOOS ONLY  2  
 YES – PIERCINGS ONLY  3

	TATTOOS	BODY PIERCINGS
21.1.2 HOW MANY		
21.1.3 WHERE WERE THEY DONE?	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
21.1.4 WHO DID THEM?	PROFESSIONAL ⇒ 21.2 <input type="checkbox"/> 0 NON-PROFESSIONAL <input type="checkbox"/> 1 BOTH <input type="checkbox"/> 2	PROFESSIONAL ⇒ 21.2 <input type="checkbox"/> 0 NON-PROFESSIONAL <input type="checkbox"/> 1 BOTH <input type="checkbox"/> 2
21.2 (/ .5) WHEN DONE BY A <u>NON PROFESSIONAL</u> , WAS EQUIPMENT CLEANED <u>BEFORE USE</u> ?	NEW EQUIPMENT ⇒ 21.5 <input type="checkbox"/> 1 CLEANED <input type="checkbox"/> 2 NOT CLEANED ⇒ 21.4 <input type="checkbox"/> 3 DON'T KNOW ⇒ 21.5 <input type="checkbox"/> 4	NEW EQUIPMENT ⇒ 21.5 <input type="checkbox"/> 1 CLEANED <input type="checkbox"/> 2 NOT CLEANED ⇒ 21.4 <input type="checkbox"/> 3 DON'T KNOW ⇒ 21.5 <input type="checkbox"/> 4
21.3 (/ .6) IF <u>CLEANED</u> HOW WAS THIS DONE? [TICK ALL THAT APPLY]	WIPED <input type="checkbox"/> 1 BLEACH <input type="checkbox"/> 2 BOILING WATER <input type="checkbox"/> 3 COLD WATER <input type="checkbox"/> 4  OTHER (SPECIFY) _____	WIPED <input type="checkbox"/> 1 BLEACH <input type="checkbox"/> 2 BOILING WATER <input type="checkbox"/> 3 COLD WATER <input type="checkbox"/> 4  OTHER (SPECIFY) _____
21.4 (/ .7) IF <u>NOT CLEANED</u> , WHY WAS IT NOT CLEANED? [TICK ALL THAT APPLY]	NOT ENOUGH TIME <input type="checkbox"/> 1 NOTHING TO CLEAN IT WITH <input type="checkbox"/> 2 DIDN'T THINK IT WAS NECESSARY <input type="checkbox"/> 3  OTHER (SPECIFY) _____	NOT ENOUGH TIME <input type="checkbox"/> 1 NOTHING TO CLEAN IT WITH <input type="checkbox"/> 2 DIDN'T THINK IT WAS NECESSARY <input type="checkbox"/> 3  OTHER (SPECIFY) _____

## 22. HEALTH EDUCATION

22.10 CAN YOU TELL ME THREE WAYS YOU CAN CATCH HEPATITIS B AND HIV?

1. ....
2. ....
3. ....

22.20 CAN YOU TELL ME THREE WAYS YOU CAN CATCH HEPATITIS C?

1. ....
2. ....
3. ....

## 23. PHYSICAL ACTIVITY

23.1 How OFTEN DO YOU PLAY SPORT OR DO EXERCISES?

- NEVER  1  
 LESS THAN ONCE A WEEK  2  
 TWO OR MORE TIMES A WEEK  3  
 EVERYDAY  4

23.2 WHEN YOU DO VIGOROUS EXERCISES, HOW LONG DO YOU USUALLY SPEND?

- LESS THAN 21 MINUTES  1  
 21-39 MINUTES  2  
 40-60 MINUTES  3  
 MORE THAN 1 HOUR  4

23.3 IN THE LAST 2 WEEKS HOW OFTEN HAVE YOU EXERCISED OR PLAYED SPORT OR GAMES THAT MADE YOU SWEAT AND BREATHE HARD (EG: BASKETBALL, NETBALL, FOOTBALL, SOCCER, JOGGING OR SIMILAR ACTIVITIES)?

- DAILY  1  
 THREE OR MORE TIMES A WEEK  2  
 ONCE A WEEK  3  
 NOT AT ALL  4

23.4 OVER THE PAST 12 MONTHS, NOT COUNTING PHYSICAL EDUCATION CLASSES AT SCHOOL, DID YOU TAKE PART IN AN ORGANISED SPORT?

- NO  0  
 YES  1

23.5 DO YOU FEEL THAT THERE ARE ENOUGH RECREATIONAL ACTIVITIES AVAILABLE FOR YOU TO DO IN YOUR FREE TIME, LIKE MOVIES, DISCO, SPORTS, AND PLACES TO GO?

- NO  0  
 YES  1

23.6 WHAT DO YOU LIKE TO DO IN YOUR FREE TIME?

.....

.....

.....

## 24. SUN PROTECTION

THINKING ABOUT SUNNY DAYS IN SUMMER, WHEN YOU ARE OUTSIDE FOR AN HOUR OR MORE BETWEEN 11AM AND 3PM, HOW OFTEN WOULD YOU DO ANY OF THE FOLLOWING? COULD YOU ANSWER THEM AS NEVER, RARELY, SOMETIMES, USUALLY, ALWAYS.

	NEVER	RARELY	SOMETIMES	USUALLY	ALWAYS
24.1 WEAR A HAT OR CAP?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24.2 WEAR CLOTHES COVERING MOST OF YOUR BODY (INCLUDING ARMS AND LEGS)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24.3 DELIBERATELY WEAR LESS OR BRIEFER CLOTHING SO AS TO GET SOME SUN ON YOUR SKIN?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24.4 WEAR MAXIMUM PROTECTION SUNSCREEN (30+)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24.5 WEAR SUNGLASSES?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24.6 STAY MAINLY IN THE SHADE?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24.7 HOW OFTEN WOULD YOU SPEND MOST OF YOUR TIME INSIDE?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

24.8 WHAT IS THE SPF (SUN PROTECTION FACTOR) OF THE SUNSCREEN YOU USUALLY USE ON A SUNNY DAY IN SUMMER?

- DON'T USE SUNSCREEN  0  
 SPF 12 OR LOWER  1  
 SPF 15  2  
 SPF 30+  3  
 CAN'T REMEMBER/DON'T KNOW  4

24.10 IF NEVER, RARELY OR SOMETIMES WHY DO YOU NOT USE SUN BLOCK?

.....

.....

24.11 ON AVERAGE HOW MANY HOURS DO YOU SPEND OUTSIDE EACH DAY?

- NONE  0  
 < 1 HOUR  1  
 1-2 HOURS  2  
 >2 HOURS LESS <4 HOURS  3  
 >4 HOURS <6 HOURS  4  
 >6 HOURS  5

24.12 OVER THE LAST SUMMER, DID YOU GET SUNBURN THAT WAS SORE OR TENDER THE NEXT DAY?

- NOT AT ALL  0  
 YES, JUST ONCE  1  
 YES, TWO OR MORE TIMES  2  
 YES, 4 OR MORE TIMES  3

## 25. NUTRITION

THESE QUESTIONS ARE ABOUT WHAT YOU NORMALLY EAT

25.1 HOW MANY TIMES A WEEK DO YOU EAT BREAKFAST?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.2 HOW MANY TIMES A WEEK A WEEK DO YOU EAT FRESH FRUIT?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.3 HOW MANY TIMES A WEEK DO YOU DRINK FRUIT JUICE?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.4 HOW MANY TIMES A WEEK DO YOU EAT GREEN SALAD?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.5 HOW MANY TIMES A WEEK DO YOU EAT FRESH VEGETABLES?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.6 HOW MANY TIMES A WEEK DO YOU EAT A MEAT PIE, HAMBURGER, HOT DOG OR SAUSAGE?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.7 HOW MANY TIMES A WEEK DO YOU EAT POTATO CHIPS OR CRISPS?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.8 HOW MANY TIMES A WEEK DO YOU EAT BISCUITS, DOUGHNUTS, CHOCOLATE BARS, ICE CREAM, PIE OR CAKE?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.9 HOW MANY TIMES A WEEK DO YOU EAT TAKEAWAY FOOD?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.10 HOW MANY TIMES A WEEK DO YOU DRINK MILK?

- NEVER  1  
1 OR 2 TIMES A WEEK  2  
3 OR 4 TIMES A WEEK  3  
EVERY DAY  4

25.11 WHEN YOU ARE THIRSTY, WHAT DO YOU USUALLY DRINK?

- WATER  1  
SOFT DRINK  2  
FRUIT JUICE  3  
CORDIAL  4  
MILK  5

OTHER (SPECIFY) \_\_\_\_\_

## 26. LIFESTYLE

### 26.1 HOW MANY BEST MATES OR CLOSE FRIENDS

DO YOU HAVE, BY THIS I MEAN THE PEOPLE THAT YOU TRUST AND CONFIDE IN. THEY CAN INCLUDE COUSINS, BROTHERS AND SISTERS. [RECORD NUMBER]

26.4 HOW MANY OF THEM:	NONE	FEW	MOST	ALL
A. SMOKE CIGARETTES?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
B. DRINK ALCOHOL?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
C. HAVE TRIED MARIJUANA?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
D. HAVE TRIED DRUGS OTHER THAN MARIJUANA?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
E. BREAK THE LAW? (IN WAYS OTHER THAN ILLICIT DRUG USE)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
F. HAVE BEEN IN CUSTODY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

26.5 HOW MANY OF THEM:	NONE	FEW	MOST	ALL
A. CUT OR SKIPPED SCHOOL WITHOUT PERMISSION?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
B. DROPPED OUT OF SCHOOL?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
C. BEEN SUSPENDED FROM SCHOOL?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
D. WORKED FOR AN EMPLOYER OR AT ODD JOBS?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

26.6 HOW TRUE ARE THE FOLLOWING STATEMENTS, WITH RESPECT TO YOUR SITUATION WITH YOUR FRIENDS	TRUE	TRUE MOSTLY	FALSE MOSTLY	FALSE
A. MY FRIENDS PUSH ME TO SUCCEED AND TO DO INTERESTING THINGS THAT I WOULD NOT DO BY MYSELF.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
B. WHEN I MAKE A DECISION, I TAKE MY FRIENDS' OPINION INTO ACCOUNT.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
C. MY FRIENDS SOMETIMES PUSH ME TO DO FOOLISH OR STUPID THINGS.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

26.7 HOW OFTEN DO YOU TALK TO YOUR FRIENDS ABOUT YOURSELF OR YOUR PROBLEMS?

- NEVER  0  
 ONCE IN A WHILE (ONCE OR TWICE A MONTH)  1  
 OFTEN (ONCE OR TWICE A WEEK)  2  
 NEARLY EVERY DAY  3

26.8 OTHER THAN YOUR FRIENDS, DO YOU HAVE ANYONE ELSE IN PARTICULAR YOU CAN TALK TO ABOUT YOURSELF OR YOUR PROBLEMS?

- NO  $\Rightarrow$  26.10  0  
 YES  1

### 26.9 WHAT IS THEIR RELATIONSHIP TO YOU?

[TICK ALL THAT APPLY]

- MOTHER  1  
 FATHER  2  
 STEPMOTHER  3  
 STEPFATHER  4  
 BROTHER  5  
 SISTER  6  
 GRANDPARENT  7  
 OTHER RELATIVE  8  
 A FRIEND OF THE FAMILY OR A FRIEND'S PARENT  9  
 PARENTS' BOYFRIEND/GIRLFRIEND  10  
 TEACHER  11  
 COACH OR LEADER (EG: SCOUT, GUIDE OR CHURCH LEADER)  12  
 OTHER (EG: FAMILY DOCTOR)  13  
 GIRLFRIEND/ BOYFRIEND  14

26.10 IN THE LAST 6 MONTHS, HOW OFTEN HAVE YOU BEEN IN A PHYSICAL FIGHT?

- NEVER  $\Rightarrow$  26.13  1  
 ONCE  2  
 2 OR 3 TIMES  3  
 4 OR 5 TIMES  4  
 6 OR MORE TIMES  5

26.11 THE LAST TIME YOU WERE IN A PHYSICAL FIGHT, WHO DID YOU FIGHT WITH?

[TICK ALL THAT APPLY]

- A STRANGER  1  
 A FRIEND OR SOMEONE I KNOW  2  
 A BOYFRIEND OR GIRLFRIEND  3  
 PARENT/BROTHER/SISTER/OTHER FAMILY MEMBER  4  
 SOMEONE ELSE (UNSPECIFIED)  5

26.12 DID YOU NEED TO BE TREATED BY A DOCTOR OR NURSE BECAUSE OF ANY OF THE FIGHTS YOU HAD IN THE LAST 6 MONTHS?

- NO  0  
 YES  1

**BULLYING** IS WHEN ANOTHER PERSON OR A GROUP OF PEOPLE, PICK ON SOMEONE, OR SAY NASTY AND UNPLEASANT THINGS, HITS, KICKS, THREATENS, SENDS NASTY NOTES, IGNORES THEM AND THINGS LIKE THAT.

26.13 HAVE YOU EVER BEEN BULLIED AT SCHOOL?

- NO  $\Rightarrow$  26.17  0  
 YES  1

26.14 AT YOUR LAST SCHOOL HOW OFTEN WERE YOU BULLIED?

- NEVER  $\Rightarrow$  26.17  0  
 ONCE IN A WHILE (ONCE OR TWICE A MONTH)  1  
 OFTEN (ONCE OR TWICE A WEEK)  2  
 NEARLY EVERY DAY  3

**26.15 WHEN DID THIS HAPPEN?**

[TICK ALL THAT APPLY]

- BEFORE/AFTER SCHOOL  1
- BETWEEN CLASSES  2
- IN CLASS TIME  3
- AT RECESS/ LUNCHTIME  4

**26.16 WHO BULLIED YOU?**

[TICK ALL THAT APPLY]

- YOUNGER MALES  1
- SAME AGE MALES  2
- OLDER MALES  3
- YOUNGER FEMALES  4
- SAME AGE FEMALES  5
- OLDER FEMALES  6

**26.17 HAVE YOU BEEN BULLIED IN THE LAST 6 MONTHS (EITHER IN OR OUT OF SCHOOL)?**

- No ⇒ 26.21  0
- Yes  1

**26.18 HOW OFTEN WERE YOU BULLIED IN THE LAST 6 MONTHS?**

- ONCE IN A WHILE (ONCE OR TWICE A MONTH)  1
- OFTEN (ONCE OR TWICE A WEEK)  2
- NEARLY EVERY DAY  3

**26.21 HOW DID YOU FEEL ABOUT BEING BULLIED?**

- MADE YOU SAD  1
- MADE YOU ANGRY  2
- DOESN'T BOTHER YOU  3
- STRESSED YOU OUT  4

OTHER (SPECIFY) \_\_\_\_\_

**26.22 HAVE YOU EVER BULLIED OTHER KIDS?**

- No ⇒ SECTION 27  0
- Yes  1

**26.23 HOW OFTEN HAVE YOU BULLIED OTHER KIDS?**

- ONCE IN A WHILE  1
- OFTEN  2
- NEARLY EVERY DAY  3

**26.25 WHO DID YOU BULLY? [TICK ALL THAT APPLY]**

- YOUNGER MALES  1
- SAME AGE MALES  2
- OLDER MALES  3
- YOUNGER FEMALES  4
- SAME AGE FEMALES  5
- OLDER FEMALES  6

**26.26 HOW DID YOU FEEL WHEN YOU BULLIED OTHER KIDS?**

.....

.....

## 27. BODY IMAGE

**27.1 HOW DO YOU DESCRIBE YOUR WEIGHT?**

- VERY UNDERWEIGHT  1
- SLIGHTLY UNDERWEIGHT  2
- ABOUT THE RIGHT WEIGHT  3
- SLIGHTLY OVERWEIGHT  4
- VERY OVERWEIGHT  5

**27.2 WHICH OF THE FOLLOWING ARE YOU TRYING TO DO ABOUT YOUR WEIGHT?**

- LOSE WEIGHT  1
- GAIN WEIGHT  2
- STAY THE SAME WEIGHT  3
- NOT TRYING TO DO ANYTHING ABOUT MY WEIGHT  4

**27.3 DURING THE LAST 4 WEEKS, DID YOU EAT LESS FOOD, FEWER CALORIES, OR FOODS LOW IN FAT TO LOSE WEIGHT OR TO KEEP FROM GAINING WEIGHT?**

- No ⇒ 27.5  0
- Yes  1

**27.4 ON HOW MANY DAYS IN THE LAST 4 WEEKS HAVE YOU DONE THIS?**

**27.5 DURING THE LAST 4 WEEKS (30 DAYS), DID YOU GO WITHOUT EATING FOR 24 HOURS OR MORE (ALSO CALLED FASTING) TO LOSE WEIGHT OR TO KEEP FROM GAINING WEIGHT?**

- No ⇒ 27.7  0
- Yes  1

**27.6 ON HOW MANY DAYS IN THE LAST 4 WEEKS HAVE YOU DONE THIS?**

**27.7 DURING THE LAST 4 WEEKS (30 DAYS) DID YOU VOMIT OR TAKE LAXATIVES TO LOSE WEIGHT OR TO KEEP FROM GAINING WEIGHT?**

- No ⇒ SECTION 28  0
- Yes  1

**27.8 ON HOW MANY DAYS IN THE LAST 4 WEEKS HAVE YOU DONE THIS?**

## 28. MENTAL HEALTH

**28.1 HAVE YOU EVER BEEN TOLD BY A HEALTH PROFESSIONAL (E.G. DOCTOR, PSYCHIATRIST, COUNSELLOR) THAT YOU HAVE OR HAVE HAD A MENTAL HEALTH OR BEHAVIOURAL PROBLEM?** [PROVIDE EXPLANATION IF REQUIRED]

NO ⇒ SECTION 29  0  
YES  1

**28.3 WHAT PROBLEM (S) HAVE YOU HAD TREATMENT OR COUNSELLING FOR?**

CONDITION	WHO DID YOU SEE ABOUT THIS PROBLEM?	WHAT TREATMENT DID YOU RECEIVE?	WHEN WAS THE <u>LAST TIME</u> YOU SAW SOMEONE ABOUT THIS PROBLEM?	WAS THIS IN CUSTODY OR IN THE COMMUNITY?
ANXIETY DISORDERS			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
ATTENTION DEFICIT /HYPERACTIVITY DISORDER (ADHD OR ADD OR HYPERACTIVITY)			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
CONDUCT DISORDER (OR OPPOSITIONAL-DEFIANT DISORDER)			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
DEPRESSION			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
OTHER MOOD DISORDER (NON DEPRESSIVE/WITH ELEVATED MOOD)			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
INTELLECTUAL DISABILITY OR LEARNING DIFFICULTIES			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
SCHIZOPHRENIA OR OTHER DISORDERS WITH PROMINENT PSYCHOTIC SYMPTOMS			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
STRESS DISORDERS (ACUTE STRESS DISORDER OR POST-TRAUMATIC STRESS DISORDER [PTSD])			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3
OTHER			PAST 12 MONTHS <input type="checkbox"/> 1 1 -5 YEARS <input type="checkbox"/> 2 OVER 5 YEARS AGO <input type="checkbox"/> 3 CAN'T REMEMBER <input type="checkbox"/> 4	CUSTODY <input type="checkbox"/> 1 COMMUNITY <input type="checkbox"/> 2 BOTH <input type="checkbox"/> 3

**28.8 IF YOU HAVE NOT SOUGHT HELP FOR A PROBLEM, WHY HAVE YOU NOT ACCESSED SERVICES?** [TICK ALL THAT APPLY]

DID NOT KNOW WHO TO GO AND SEE  1  
AFRAID OF WHAT THE DOCTOR WOULD SAY OR DO  2  
THOUGHT THE PROBLEM WOULD GO AWAY  3  
DIDN'T HAVE TIME  4

TOO EMBARRASSED  5  
DIDN'T THINK ANYONE COULD HELP  6

OTHER (SPECIFY) \_\_\_\_\_



## 29. K10

INSTRUCTIONS: THE FOLLOWING TEN QUESTIONS ASK ABOUT HOW YOU HAVE BEEN FEELING IN THE **LAST 4 WEEKS**. [FOR EACH QUESTION, MARK THE BOX UNDER THE OPTION THAT BEST DESCRIBES THE AMOUNT OF TIME THE SUBJECT FELT THAT WAY)

IN THE <b>LAST 4 WEEKS</b> , ABOUT HOW OFTEN DID YOU FEEL.....?	NONE OF THE TIME	A LITTLE OF THE TIME	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME
A. TIRED OUT FOR NO GOOD REASON?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
B. NERVOUS?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
C. SO NERVOUS THAT NOTHING COULD CALM YOU DOWN?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
D. HOPELESS?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
E. RESTLESS OR FIDGETY?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
F. SO RESTLESS YOU COULD NOT SIT STILL?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
G. DEPRESSED?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
H. EVERYTHING WAS AN EFFORT?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I. SO SAD THAT NOTHING COULD CHEER YOU UP?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
J. WORTHLESS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

## 30. SUICIDE AND SELF HARM

I AM GOING TO ASK YOU SOME QUESTIONS ABOUT SELF-HARM AND SUICIDE. THE ACT OF TRYING TO KILL YOURSELF IS ALSO CALLED ATTEMPTING SUICIDE. QUESTIONS ABOUT SUICIDE WILL BE ASKED SHORTLY. FIRST I AM GOING TO ASK YOU SOME QUESTIONS ABOUT SELF-HARM, WHICH IS THE ACT OF DELIBERATELY HURTING OR INJURING YOURSELF, BUT NOT TRYING TO KILL YOURSELF.

30.1 HAVE YOU **EVER** SERIOUSLY CONSIDERED HURTING OR INJURING YOURSELF?

No ⇒ 30.14  0  
 YES  1

30.2 DID YOU SERIOUSLY CONSIDER HURTING OR INJURING YOURSELF IN THE **LAST 12 MONTHS**?

No ⇒ 30.5  0  
 YES  1

30.3 DID YOU MAKE A PLAN ABOUT HOW YOU WOULD HURT OR INJURE YOURSELF IN THE **LAST 12 MONTHS**?

No  0  
 YES  1

30.4 **IN THE LAST 12 MONTHS** HAVE THE TIMES THAT YOU HAVE CONSIDERED OR PLANNED TO HURT OR INJURE YOURSELF:

GREATLY DECREASED  1  
 SOMEWHAT DECREASED  2  
 STAYED THE SAME  3  
 SOMEWHAT INCREASED  4  
 GREATLY INCREASED  5

30.5 HAVE YOU **EVER INTENTIONALLY OR DELIBERATELY** HURT OR INJURED YOURSELF?

No ⇒ 30.14  0  
 YES  1

30.6 DID YOU INTENTIONALLY OR DELIBERATELY HURT OR INJURE YOURSELF IN THE **LAST 12 MONTHS**?

No ⇒ 30.14  0  
 YES  1

30.7 DURING THE **LAST 12 MONTHS** HOW MANY TIMES DID YOU ACTUALLY HURT OR INJURE YOURSELF?

NEVER  1  
 1 TIME  2  
 2 OR 3 TIMES  3  
 4 OR 5 TIMES  4  
 6 OR MORE TIMES  5  
 DON'T KNOW  6

**30.8 WHAT METHODS DID YOU USE IN THE LAST 12 MONTHS TO DELIBERATELY HURT OR INJURE YOURSELF?**  
 [INTERVIEWERS: UNPROMPTED. TICK ALL THAT APPLY AND RECORD ANY OTHERS NOT LISTED]

- EATING FOREIGN OBJECTS  1
- CIGARETTE BURNS  2
- LIGHTER BURNS (SMILIES)  3
- CUTTING OF SKIN  4
- BITING OF SKIN  5
- ATTEMPTING TO CUT OFF OXYGEN  6
- BANGING HEAD  7
- PUNCHING/KICKING THINGS REPEATEDLY  8
- STABBING SELF  9

OTHER (SPECIFY) \_\_\_\_\_

**30.9 DID YOU TELL ANYONE THAT YOU WERE THINKING OF HARMING YOURSELF?**

- No  0
- Yes  1

**30.10 WHO DID YOU TELL?**

.....

.....

**30.11 IF YOU HAVE HURT OR INJURED YOURSELF IN THE LAST 12 MONTHS DID ANY ATTEMPT RESULT IN AN INJURY, POISONING OR OVERDOSE THAT HAD TO BE TREATED BY A DOCTOR, NURSE OR AN AMBULANCE OFFICER?**

- No  0
- Yes  1

30.12

**30.13 IN THE LAST 12 MONTHS HAVE THE TIMES THAT YOU HAVE DELIBERATELY HURT OR INJURED YOURSELF:**

- GREATLY DECREASED  1
- SOMEWHAT DECREASED  2
- STAYED THE SAME  3
- SOMEWHAT INCREASED  4
- GREATLY INCREASED  5

**NOW WE ARE GOING ON TO TALK ABOUT ATTEMPTED SUICIDE, WHICH IS THE ACT OF ATTEMPTING TO KILL YOURSELF**

**30.14 HAVE YOU EVER SERIOUSLY CONSIDERED ATTEMPTING SUICIDE?**

- No  $\Rightarrow$  30.26  0
- Yes  1

**30.15 DURING THE LAST 12 MONTHS, DID YOU SERIOUSLY CONSIDER ATTEMPTING SUICIDE?**

- No  0
- Yes  1

**30.16 HAVE YOU EVER MADE A PLAN ABOUT HOW YOU WOULD ATTEMPT SUICIDE?**

- No  $\Rightarrow$  30.18  0
- Yes  1

**30.17 DURING THE LAST 12 MONTHS HAVE YOU MADE A PLAN ABOUT HOW YOU WOULD ATTEMPT SUICIDE?**

- No  0
- Yes  1

**30.18 HAVE YOU EVER ATTEMPTED SUICIDE?**

- No  $\Rightarrow$  30.26  0
- Yes  1

**30.19 DURING THE LAST 12 MONTHS HOW MANY TIMES DID YOU ACTUALLY ATTEMPT SUICIDE?**

- NEVER  1
- 1 TIME  2
- 2 OR 3 TIMES  3
- 4 OR 5 TIMES  4
- 6 OR MORE TIMES  5
- DON'T KNOW  6

**30.20 DESCRIBE WHAT METHODS YOU HAVE USED TO ATTEMPT SUICIDE?** [INTERVIEWERS: UNPROMPTED, TICK RESPONSES AND RECORD ANY OTHERS NOT LISTED]

- EATING FOREIGN OBJECTS (METAL ETC)  1
- SWALLOWING POISONS  2
- BANGING HEAD  3
- PUNCHING/KICKING THINGS REPEATEDLY  4
- ATTEMPTED HANGING  5
- ATTEMPTED TO CUT OFF OXYGEN  6
- ATTEMPTED OVERDOSE (ALCOHOL)  7
- ATTEMPTED OVERDOSE (DRUGS) \_\_\_\_\_  8
- ATTEMPTED OVERDOSE (HEROIN)  9
- ATTEMPTED OVERDOSE (OTHER)  10
- ATTEMPTED OVERDOSE (POLYDRUG)  11
- FIREARMS/GUNSHOT  12
- STABBING SELF  13
- SLASHING WRISTS/OTHER BODY PARTS  14
- JUMPING FROM A HEIGHT  15
- CAR CRASH  16

OTHER (SPECIFY) \_\_\_\_\_

30.21 DID YOU TELL ANYONE THAT YOU WERE THINKING OF COMMITTING SUICIDE?

No =>30.23  0  
Yes  1

30.22 WHO DID YOU TELL?

.....  
.....  
.....

30.23 IF YOU HAVE ATTEMPTED SUICIDE IN THE LAST 12 MONTHS DID ANY ATTEMPT RESULT IN AN INJURY, POISONING OR OVERDOSE THAT HAD TO BE TREATED BY A DOCTOR OR A NURSE?

No  0  
Yes  1

(30.24)

30.25 IN THE LAST 12 MONTHS, HAVE THE TIMES THAT YOU HAVE ATTEMPTED SUICIDE:

GREATLY DECREASED  1  
SOMEWHAT DECREASED  2  
STAYED THE SAME  3  
SOMEWHAT INCREASED  4  
GREATLY INCREASED  5

30.26 HAS ANYONE IN YOUR SCHOOL COMMITTED SUICIDE?

NO, NEVER  0  
YES, WITHIN THE LAST YEAR  1  
YES, MORE THAN A YEAR AGO  2  
I DON'T KNOW  3

30.27 HAVE ANY FAMILY MEMBERS OR ANYONE THAT YOU KNOW PERSONALLY COMMITTED SUICIDE?

NO, NEVER  0  
YES, WITHIN THE LAST YEAR  1  
YES, MORE THAN A YEAR AGO  2  
I DON'T KNOW  3

SPECIFY WHO.....

## 31. COMMUNITY HEALTH SERVICES

31.1 WHILE IN THE COMMUNITY, IF YOU FEEL SICK OR NEED HEALTH CARE, WHO DO YOU USUALLY GO TO SEE?

NEVER GET SICK OR NEED HEALTH CARE  0  
FAMILY DOCTOR  1  
GP (LOCAL DOCTOR/MEDICAL CENTRE)  2  
LOCAL HOSPITAL  3  
COMMUNITY NURSE  4  
ABORIGINAL MEDICAL SERVICE  5  
CHEMIST  6  
NO-ONE  7

OTHER (SPECIFY).....

31.2 WHEN WAS THE LAST TIME YOU SAW A DOCTOR IN THE COMMUNITY ABOUT YOUR OWN HEALTH?

WITHIN THE PAST 3 MONTHS  1  
4-6 MONTHS AGO  2  
7-9 MONTHS AGO  3  
10-12 MONTHS AGO  4  
MORE THAN 1 YEAR AGO BUT LESS THAN 2 YEARS  5  
2 YEARS AGO OR LONGER  6  
NEVER SEEN A DOCTOR  7  
CAN'T REMEMBER  8

31.3 WHAT WAS THE MAIN REASON YOU WENT TO THE DOCTOR OR NURSE?

ILLNESS  1  
INJURY OR ACCIDENT  2  
VACCINE OR INNOCULATION  3  
ROUTINE CHECK UP OR PHYSICAL  4

OTHER (SPECIFY).....

31.4 WHERE DID YOU GO?

FAMILY DOCTOR  1  
GP (LOCAL DOCTOR/MEDICAL CENTRE)  2  
LOCAL HOSPITAL  3  
COMMUNITY NURSE  4  
ABORIGINAL MEDICAL SERVICE  5  
CHEMIST  6

OTHER (SPECIFY).....

31.5 HAVE YOU EVER HAD PROBLEMS SEEING A DOCTOR IN THE COMMUNITY, WHEN YOU FELT YOU NEEDED TO?

No=>31.7  0  
Yes  1

31.6 STATE REASONS:

.....  
.....  
.....

**31.7 HAS THERE BEEN A TIME IN THE LAST 12 MONTHS WHEN YOU THOUGHT YOU SHOULD GET MEDICAL CARE, BUT DID NOT?**

No ⇒ 31.10  0  
 YES  1

**31.8 WHAT TYPES OF PROBLEMS WERE YOU HAVING AT THE TIME? [TICK ALL THAT APPLY.]**

- NEEDED A ROUTINE CHECK-UP  1
- RAN OUT OF PRESCRIPTION MEDICATION  2
- FELT SICK OR HAD SYMPTOMS OF A HEALTH PROBLEM  3
- WERE INJURED BY AN ACCIDENT  4
- WERE INJURED DURING A PHYSICAL FIGHT  5
- HAD A PROBLEM RELATED TO HAVING SEX  6
- HAD A PROBLEM THAT RELATED TO SEVERE STRESS, DEPRESSION OR NERVOUSNESS  7
- HAD A PROBLEM RELATED TO USING, TOBACCO, ALCOHOL OR OTHER DRUGS  8
- HAD A PROBLEM RELATED TO THE WAY I FELT, THOUGHT OR BEHAVED  9

OTHER (SPECIFY) \_\_\_\_\_

**31.9 WHAT KEPT YOU FROM SEEING A HEALTH PROFESSIONAL WHEN YOU NEEDED TO? [TICK ALL THAT APPLY.]**

- DID NOT KNOW WHO TO GO AND SEE  1
- HAD NO TRANSPORTATION  2
- NO ONE WAS AVAILABLE TO GO ALONG  3
- PARENT OR GUARDIAN WOULD NOT GO WITH YOU  4
- DIDN'T WANT PARENTS TO KNOW  5
- DIFFICULT TO MAKE APPOINTMENT  6
- AFRAID OF WHAT THE DOCTOR WOULD SAY OR DO  7
- THOUGHT THE PROBLEM WOULD GO AWAY  8
- COULDN'T PAY  9
- DIDN'T HAVE TIME  10
- THOUGHT THE DOCTOR WOULD TELL YOUR PARTNER/PARENTS  11
- TOO EMBARRASSED  12
- THOUGHT THE DOCTOR WOULD REPORT SOMETHING TO THE POLICE OR OTHER LEGAL AUTHORITIES  13
- DIDN'T THINK A HEALTH PROFESSIONAL COULD HELP  14

OTHER (SPECIFY) \_\_\_\_\_

**31.10 IN THE LAST 12 MONTHS, DID A HEALTH PROBLEM GET WORSE BECAUSE YOU DID NOT GET CARE THAT YOU THOUGHT YOU SHOULD?**

No  0  
 YES  1

**31.11 HOW MANY TIMES HAVE YOU BEEN TO A HOSPITAL EMERGENCY DEPARTMENT (CASUALTY) OR THE OUTPATIENTS CLINIC AT A HOSPITAL ABOUT YOUR OWN HEALTH BUT DID NOT STAY OVERNIGHT?**

--	--

**31.12 HOW MANY TIMES HAVE YOU BEEN TO A HOSPITAL EMERGENCY DEPARTMENT (CASUALTY) OR THE OUTPATIENTS CLINIC AT A HOSPITAL ABOUT YOUR OWN HEALTH AND STAYED OVERNIGHT OR LONGER?**

--	--

	1.	2.	3.						
<b>31.13 THINKING ABOUT THE <u>THREE MOST RECENT PROBLEMS</u>, WHAT DID YOU GO TO HOSPITAL FOR?</b>									
<b>31.14 DID YOU STAY OVERNIGHT OR LONGER?</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1						
<b>31.15 IF ADMITTED HOW MANY DAYS WERE YOU IN HOSPITAL, THE LAST TIME YOU WERE IN HOSPITAL?</b>	<table border="1"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			<table border="1"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			<table border="1"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>		

	31.16 Do you know about any of the following?	31.17 Have you <u>EVER</u> used any of these services?
<b>A. KIDS HELP LINE</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>B. LIFE LINE</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>C. SALVO LINE</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>D. ADIS</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>E. THE G LINE</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>F. HEP C HELP LINE</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>G. QUIT LINE</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>H. FAMILY SUPPORT</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>I. 1 800 MENTAL HEALTH LINE</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>J. INTERNET HELP LINES</b>	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1	No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1
<b>K. ANY OTHER? (SPECIFY) _____</b>		No <input type="checkbox"/> 0 YES <input type="checkbox"/> 1

## 32. HEALTH SERVICES

THE FOLLOWING QUESTIONS RELATE TO SERVICES YOU MAY HAVE USED.	DOCTOR	PSYCHIA-TRIST	PSYCHOL-OGIST	NURSE	DRUG AND ALCOHOL WORKER	SEXUAL HEALTH WORKER
<b>32.1 HAVE YOU SEEN <u>ANY</u> OF THE FOLLOWING HEALTH CARE PROFESSIONALS?</b>	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 0 Yes <input type="checkbox"/> 1
<b>32.3 THINKING ABOUT YOUR <u>LAST VISIT</u> TO THE ..... HOW WOULD YOU RATE THE HEALTH CARE YOU RECEIVED?</b>	GOOD <input type="checkbox"/> 1 OK <input type="checkbox"/> 2 BAD <input type="checkbox"/> 3	GOOD <input type="checkbox"/> 1 OK <input type="checkbox"/> 2 BAD <input type="checkbox"/> 3	GOOD <input type="checkbox"/> 1 OK <input type="checkbox"/> 2 BAD <input type="checkbox"/> 3	GOOD <input type="checkbox"/> 1 OK <input type="checkbox"/> 2 BAD <input type="checkbox"/> 3	GOOD <input type="checkbox"/> 1 OK <input type="checkbox"/> 2 BAD <input type="checkbox"/> 3	GOOD <input type="checkbox"/> 1 OK <input type="checkbox"/> 2 BAD <input type="checkbox"/> 3
<b>32.4 How <u>MANY TIMES</u> HAVE YOU SEEN THE.....ABOUT YOUR HEALTH? [00 IF NONE]</b>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
<b>32.7 DID YOU FEEL THE ..... WHO YOU WENT TO FOR HELP OR TREATMENT, EXPLAINED THINGS IN A WAY YOU COULD UNDERSTAND?</b>	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3
<b>32.8 DID THE..... GIVE YOU AS MUCH INFORMATION AS YOU WANTED ABOUT WHAT YOU COULD DO TO MANAGE YOUR CONDITION?</b>	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3	NEVER <input type="checkbox"/> 1 SOMETIMES <input type="checkbox"/> 2 ALWAYS <input type="checkbox"/> 3

**33. HOW DO YOU FEEL ABOUT YOUR LIFE AS A WHOLE, TAKING INTO ACCOUNT WHAT HAS HAPPENED IN THE LAST YEAR AND WHAT YOU EXPECT TO HAPPEN IN THE FUTURE? TELL ME THE NUMBER THAT MOST CORRESPONDS TO HOW YOU FEEL?**

- DELIGHTED  1  
 PLEASED  2  
 MOSTLY SATISFIED  3  
 MIXED  4  
 MOSTLY DISSATISFIED  5  
 UNHAPPY  6

**34. THINKING ABOUT THE PHYSICAL AND MENTAL HEALTH PROBLEMS THAT YOU HAVE TOLD ME ABOUT TODAY, WHAT DO YOU THINK IS THE MOST IMPORTANT?**

-----  
 -----

## NOTES

# APPENDIX 2

## Publications and presentations arising from YPiCHS and YPoCOHS

### Book

1. Kenny, D.T. & Nelson, P.K. (2008). Young offenders on community orders: Health, welfare and criminogenic needs. Sydney, Australia: Sydney University Press.

### Book chapter

2. Kenny, D. T. & Lennings, C. J. & Nelson, P. (in press). Mental health of young offenders serving orders in the community: Implications for rehabilitation. In Daniel W. Phillips III (Edited). *Mental Health Issues in the Criminal Justice System*. New York: Hawthorne Press Inc.

### Refereed Journals

3. Kenny, D. T., Lennings, C. J., & Press, A. (in press). The relationship between head injury and violent offending in juvenile offenders. *Criminal Justice and Behavior*.
4. Kenny, D. T., Denney-Wilson, E., Nelson, P. & Hardy, L. (in press). Eating habits and associations with physical activity and body mass index of young offenders on community orders. *Nutrition and Dietetics*.
5. Ashkar, P. & Kenny, D.T. (in press). Young offenders' subjective experiences of incarceration. *Journal of Criminology and Offender Therapy*.
6. Butler, T., Belcher, J.M., Champion, U., Kenny, D.T., Allerton, M. & Fasher, M. (in press). The physical health status of young Australian offenders. *Australian and New Zealand Journal of Public Health*.
7. Kenny, D. T. & Lennings, C. J. (2007). Cultural group differences in social disadvantage, offence characteristics, experience of childhood trauma and psychopathology in incarcerated juvenile offenders in NSW, Australia: Implications for service delivery. *Psychology, Psychiatry and the Law*, 14, 2, 294-305.
8. Kenny, D. T. & Lennings, C. J. & Nelson, P. (2007). Mental health of young offenders serving orders in the community: Implications for rehabilitation. *Journal of Offender Rehabilitation*, 45, (1 and 2).
9. Van der Poorten D, Kenny, D. T., Butler, T. & George J. (2007). Liver disease in adolescents: A cohort study of high risk individuals. *Hepatology*, 46, 6, 1750-1758.
10. Denney-Wilson, E., Kenny, D.T., Hardy, L., & Nelson, P. (2007). Associations between overweight and obesity and risk factors for cardiovascular disease and fatty liver in young offenders serving community orders. *Vulnerable Children and Youth Studies*, 2, 2, 165-172.
11. Kenny, D. T. & Grant, J. (2007). Reliability of self-report of health in adolescent offenders. *Vulnerable Children and Youth Studies*, 2, 2, 127-142.
12. Lennings, C. J. & Kenny, D.T., Howard, J., Arcuri, A., Mackdady, L. (2007). The relationship between substance abuse and delinquency in female adolescents in Australia. *Psychiatry, Psychology and the Law*, 14, 100-110.
13. Cechaviciute, I. & Kenny, D.T. (2007). Neutralizations and delinquent self-concept in young offenders on community orders. *Criminal Justice and Behavior*, 34, 108-118.
14. Ashkar, P. & Kenny, D.T. (2007). Moral reasoning of adolescent male offenders: Comparison of sexual and nonsexual offenders. *Criminal Justice and Behavior*, 34, 108-118.
15. Lennings, C., Kenny, D.T., Nelson, P. (2006). Substance use and treatment seeking in young offenders on community orders. *Journal of Substance Abuse Treatment*, 31(4), 425-432.

16. Kenny, D.T., & Press, A. L. (2006). Impact of violence classification of young offenders on observed relationships with psychological measures and mental and physical health indicators. *Psychology, Public Policy and Law*, 12(1), 86–105.

### **Monograph**

17. Kenny, D.T., & Lennings, C. (2007). Relationship between head injury and violent offending in young offenders. *Crime and Justice Bulletin*, NSW Bureau of Crime Statistics and Research, March, No 107, p 1-15.

### **Invited Submission to Government Inquiry**

18. Kenny, D. T. & Lennings, C. (2007). *Provisional sentencing of serious young offenders*. NSW Sentencing Council, Attorney General's Department, NSW Government.

### **Invited presentations**

19. Kenny, D.T. (2007, June). *Juvenile sex offenders: Theory into practice*. Australian and New Zealand Association for the Treatment of Sex Abuse, Blacktown, Sydney, 21 June.
20. Kenny, D.T. (2007, June). *Cognitive and educational problems of young offenders*. School Education Directors of Education Twilight Seminars, Sydney, 26 June.
21. Kenny, D.T. (2006, August). *Strategic planning for research into young offenders*. Disability Strategic Group, NSW Department of Juvenile Justice.
22. Kenny, D.T. (2005, February). *Impact of violence classification on its relationship to psychological factors and mental health*. Prisoner health research symposium. JusticeHealth, Sydney, 18 February, Australia.
23. Kenny, D.T. (2004, November). *Researching juvenile offenders – the challenge of community based orders*. Presented in: Sex, drugs and stigmatization – researching marginalized groups. *MPH Elective (PHCM9614) Conference*. University of Sydney School of Public Health and Community Medicine, 27 November.
24. Kenny, D.T. (2004, July). *The health of juvenile offenders on community orders*. Presentation to the Epidemiology Special Interest Group, NSW Health Department.
25. Allerton, M., Kenny, D.T. et al. (2003, December). Young People in Custody Health Survey: How we did it and some key findings. *Australian Institute of Criminology Conference*, Sydney, 1-2 December.
26. Butler, T., Allerton, M., Kenny, D.T. et al. (2003, December). Young People in Custody Health Survey: Physical health. *Australian Institute of Criminology Conference*, Sydney, 1-2 December.
27. Kenny, D.T., Vecchiato, C., Allerton, M. (2003, December). Young People in Custody Health Survey: Mental health. *Australian Institute of Criminology Conference*, Sydney, 1-2 December.

### **Published abstracts and other conference presentations**

28. Kenny, D.T., Lennings, C. J. (2007). Young offenders in custody and the community: Similarities and differences. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.
29. Lennings, C. J., Kenny, D.T. & Butler, T. (2007). Physical health of young offenders. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.



30. Kenny, D.T. & Lennings, C. J. (2007). Mental health and psychological vulnerability of young offenders. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.
31. Kenny, D.T. & Lennings, C. J. (2007). The relationship between head injury and violent offending in juvenile offenders. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.
32. Lennings, C. J. & Kenny, D.T. (2007). Substance abuse, comorbidity and substance abuse treatment histories of young offenders. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.
33. Ashkar, P., & Kenny, D.T. (2007). Views from the inside: Young offenders' subjective experiences of incarceration. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.
34. Frize, M., Kenny, D.T. & Lennings, C. J. (2007). The differential criminogenic needs of juvenile offenders with and without an intellectual disability. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.
35. Kenny, D.T. Press, A.L. (2007). Impact of violence classification of young offenders on observed relationships with psychological measures and mental and physical health indicators. *3<sup>rd</sup> International Congress of Psychology and Law*, in conjunction with the *27<sup>th</sup> Annual Congress of ANZAPPL*, 3-8 July, Adelaide.
36. Van der Poorten D, Kenny DT, George J. (2007). *Liver disease in adolescents: A cohort study of high risk individuals*. Hepatology & Luminal Research Workshop and Clinical Update on Autoimmune Diseases of the Liver, June 1-3.
37. Van der Poorten D, Kenny DT, George J. (2007). *Liver disease in adolescents: A cohort study of high risk individuals*. Westmead Hospital Week, August.
38. Van der Poorten D, Kenny DT, George J. (2007). *Liver disease in adolescents: A cohort study of high risk individuals*. Australian Gastroenterology Week, October.
39. Denney-Wilson, E., Kenny, D.T., Nelson, P. & Hardy, L., (2007). Obesity prevalence and associated risk factors in juvenile offenders serving community supervision orders; comparison of indigenous and non-indigenous young people. *Australasian Society for the Study of Obesity*, 15<sup>th</sup> Annual Scientific Meeting, 31 August - 2 September.
40. Kenny, D. T., Nelson, P., Butler, T., Lennings, C., Allerton, M., & Champion, U. (2006). The Health of Young Offenders in the Community. From Babies to Blokes: The Making of Men. *Men's Advisory Network 2006 Conference* Esplanade Hotel, Fremantle WA 29 October – 1 November. <http://www.promaco.com.au/conference/2006/man>
41. Kenny, D. T., Nelson, P., Butler, T., Lennings, C., Allerton, M., & Champion, U. (2006). Substance use and young rural offenders. *Crime in Rural Communities: The Impact, Causes, Prevention*. Centre for Rural Crime, Institute for Rural Futures, University of New England, Armidale, NSW November 30 - December 1. <http://www.ruralfutures.une.edu.au/rurcrime/conference.htm>
42. Kenny, D. T., Nelson, P., Butler, T., Lennings, C., Allerton, M., & Champion, U. (2006). Mental health and substance use in young rural offenders. Help Hope and Hype: Recreating Mental Health in the New Century. Greater Western Area Health Service *11th NSW Rural Mental Health Conference*. Orange Ex-Services Club, Orange, NSW 29 November - 1 December. <http://www.rmhconference2006.com>
43. Kenny, D. T., Nelson, P., Butler, T., Lennings, C., Allerton, M., & Champion, U. (2006). Profiling Young People on Community Orders in NSW. *Australian Consortium for Social and Political Research (ACSPRI) Social Science Methodology Conference*. University of Sydney 10-13 December. <http://www.acspri.org.au/conference2006>

44. Nelson, P. K., Lennings, C. J., & Kenny D. T. (2006). Comorbidity: Drug use and mental health in young offenders in the community. *2nd International Summer Conference on Research in Forensic Psychiatry*. Regensburg, Germany, July.
45. Lennings, C., Kenny, D.T. & Nelson, P. (2005). Treatment seeking for substance use in young offenders on community orders. *ANZPPL conference*, New Zealand, 5-9 November.
46. Schaefer, G. A., Ahlers, C. J., Feelgood, S., Beier, K M., Kenny, D. T., Blaszczyński, A. (2004). Sex offending is everybody's business. *8th International Conference of the International Association of the Treatment of Sexual Offenders (IATSO)*, Athens, Greece, 6-9 October.

### **Research Team**

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### **Field Staff**

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- Research assistants: Istvan Schreiner, Emily Kwok, Rachel Cush

### **Cover design and type setting**

Miguel Yamin, University Printing Service, University of Sydney



## ABOUT THE BOOK

This unique book examines the characteristics of young offenders serving community orders and provides detailed comparisons with young offenders in custody and same-aged adolescents in the general population. It offers a wide-ranging assessment of their physical and mental health needs, cognitive function and educational achievement and offence profiles that can inform treatment planning and service delivery. Departments of Juvenile Justice and Corrective Services around Australia and internationally, developmental and forensic psychologists and researchers will find this book an invaluable resource.

## ABOUT THE AUTHORS

Dianna Kenny, Professor of Psychology, University of Sydney, has had a longstanding professional and research interest in disadvantaged youth and has been engaged in research on young offenders for the past 10 years. She is the author of over 150 scholarly journal articles, monographs and book chapters. Paul Nelson was the Project Manager of the *Young People on Community Orders Health Survey* (2003-2006) and is currently a PhD candidate at The University of Sydney.

## REVIEWS

*This comprehensive research work gives us a snapshot of an important and relatively little researched component of Australia's criminal justice system. It arms us with the empirical knowledge to profile young offenders on community orders, enabling us to reflect in an empirically informed way on what we can do to reduce their criminality by better understanding and addressing the causes of their offending.*

**Dr Ian Freckelton** Barrister and Professor of Law, University of Sydney; Editor, *Journal of Law and Medicine*.

*If as Dostoevsky said, the way society treats its offenders characterises the level of its civilization, then the landmark research of Professor Kenny and her colleagues now provides us with the scientific basis on which to proceed. Their painstaking research shows that young offenders have significant health and mental health problems, without help for which, many will be at high risk of re-offending. The implications of their research are far reaching and should be essential reading for forensic psychologists, criminologists and criminal justice system professionals.*

**Dr Timothy Keogh** Former Director, Psychological and Specialist Programs, NSW Department of Juvenile Justice

*This detailed and comprehensive book offers deep insights into the complex myriad of social, familial and personal factors that characterize young offenders on community orders. I have no doubt that the research reported in this book will be influential in directing public health policies to improve the physical and mental health of this at-risk and disadvantaged adolescent population. The imperative to address the distressingly disproportionate representation of indigenous adolescent offenders is clearly highlighted as a targeted area of need.*

**Dr Alex Blaszczyński** Professor of Psychology, University of Sydney

*It is impossible to develop effective juvenile crime prevention policy without a sound understanding of the characteristics and causes of juvenile delinquency. Research in Australia on this issue generally lags far behind similar research in the United States and Britain. This book on young offenders is therefore especially welcome, not only because it helps fill a significant void in Australian research on juvenile delinquency, but also because it is wide-ranging, insightful and multidisciplinary in outlook. The book should be of great interest to policy makers, administrators and researchers.*

**Dr Don Weatherburn** Director, Bureau of Crime Statistics and Research, NSW, Australia

