Risk for Hepatitis C: Transition and Initiation to Injecting Drug Use Among Youth in a Range of Infecting Drug User Networks

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Publication details:
Report No. NCHSR MONOGRAPH 8/2003
1875978666 (ISBN)

Publication Date:
2003

DOI:
https://doi.org/10.26190/unsworks/1218

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Monograph 8/2003

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ISBN 1-875978-66-6

The National Centre in HIV Social Research is funded by the Commonwealth Department of Health and Ageing and is affiliated with the Faculty of Arts and Social Sciences at the University of New South Wales.

CONTENTS

TABLES

ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ANCHARD	Australian National Council on AIDS, Hepatitis C and Related Diseases
ASHIDU	Australian Study of HIV and Injecting Drug Use
BBV	Blood-borne virus
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
IDRS	Illicit Drug Reporting System
IDU	Injecting drug use/injecting drug user
NCHECR	National Centre in HIV Epidemiology and Clinical Research, UNSW
NCHSR	National Centre in HIV Social Research, UNSW
NDARC	National Drug and Alcohol Research Centre, UNSW
NSP	Needle and syringe program
OD	Overdose
NSW	New South Wales
SD	Standard deviation
SDS	Severity of Dependence Scale
STI	Sexually transmitted infection
SPSS	Statistical Package for the Social Sciences
TB	Tuberculosis
UNSW	The University of New South Wales

DEFINITION OF TERMS

speed, pot	these terms are assumed to refer to (meth)amphetamine and cannabis/ marijuana, respectively. They are used in the text because they are the terms that appeared in the questionnaire.
chasing	the behaviour of trying to inhale the curling fumes of heroin vapour from a tube as the heated liquid heroin flows along a piece of foil.
fit	needle and syringe equipment used for injecting.
fitpack	a general term for a variety of equipment distributed by needle and syringe programs and other outlets and sold at pharmacies. A fit pack includes at least needles and syringes for injecting, a disposal box and in some cases, other equipment (such as swabs and sterile water).
snorting	the behaviour of sniffing drugs through the nose.

ACKNOWLEDGEMENTS

We thank the National Health and Medical Research Council and New South Wales Health Department, for funding the study.

We acknowledge the contribution of Lucy Zinkiewicz (NCHSR) and Erica Southgate (NCHSR) for project management in the design and data collection phase of the project, Loren Brener (NCHSR) for research assistance, Tamo Nakamura (NCHSR) for initial data analysis, Josephine Lopes and Limin Mao (NCHSR) for data coding, Janice Bull (Bull Consulting) for data entry, and Judi Rainbow (NCHSR) for layout and design.

We also wish to thank those who participated in the interviews, quantitative and qualitative, for the time that they gave and for allowing us to document some of the details of their lives.

1

INTRODUCTION

This project, funded by NHMRC and NSW Health, aimed to investigate and report on a number of aspects of initiation and transition to injecting drug use among young people.

The report focuses on issues of:

- transition to injecting – what drugs were used prior to injection, what was participants' contact with injectors;
- the initiation episode – describing the factors about the occasion (what drugs were used, where injecting equipment was accessed), as well as characteristics of the initiator and their social networks;
- the effect of drug most frequently used – between current stimulant and opioid injectors;
- age at initiation – differences between early and late initiators;
- hepatitis C status – self-reporting of positive hepatitis C serostatus;
- risk practice for blood borne viruses – variables of risk, demography, and social networks are examined in determining those more likely to self-report risk practices such as sharing, borrowing or re-using injection equipment
- transitions out of injecting – we examine patterns of drug use and efforts of participants to reduce or stop drug use.

This study comprised two arms (1) quantitative (2) qualitative.

The quantitative arm describes the sample by:

- recruitment location;
- drug most frequently injected in the past six months;
- age at initiation, and (briefly) length of time since first injection;
- hepatitis C status; and
- risk practice in relation to becoming infected with the hepatitis C virus.

The qualitative arm:

- identifies patterns of transition and initiation;
- develops a typology of patterns of initiation;
- identifies meanings attached to risk of exposure to hepatitis C;
- identifies a wide range of IDU networks occupied by young people;
- examines the role of key people in networks such as the initiator, key peers and lay experts, in relation to injecting risk during initiation and current injecting practice;
- increases understanding of the ways in which illicit drug users communicate, share and learn from each other vis-à-vis injecting practice; and
- identifies the meanings and processes associated with injecting drug use, especially those to which young injectors themselves subscribe and contribute (e.g. folk pharmacologies; meanings around blood, including blood awareness; understandings of the term "sharing").

The next section presents a review of the literature surrounding initiation and transitions to injecting and sets the frame for the types of questions posed to participants in this study and the main issues explored in this report.

2

LITERATURE REVIEW

Drug use has numerous psychological, social and physical consequences for users. It has been linked to specific chronic health conditions, increased engagement in high risk behaviours, increased criminal activity and decreased productivity. It also has psychological and financial consequences for the families of the user and often leads to increased family conflict and discord. Young people are a group particularly at risk of involvement in drugs. However, despite indications that drug use is an activity disproportionately engaged in by young people, the population prevalence estimates do not indicate a high level of drug use among young people in the general population, aside from cannabis use (Weatherburn, Topp, Midford, & Allsopp, 2000).

The most recent population statistics on injecting drug use in Australia, obtained in the 2001 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2002), reveal that only 0.6% of those surveyed had injected any illicit drug within the past 12 months, with 0.8% of males and 0.4% of females reporting recent use of injecting drugs. Amphetamines were the most commonly injected drug. Only 2.4% of males and 1.3% of females had ever injected, with an average of 1.8% overall. This was not a significant difference over the previous study period. However, due to the stigmatised and generally illegal nature of injecting, drug use is likely to be hidden and under-reported (Donoghoe & Wodak, 1998).

2.1 HEALTH RISKS AND SOCIAL CONSEQUENCES ASSOCIATED WITH INJECTING

Injecting drug use may have numerous harmful physical and psychological consequences for the user (Strang et al., 1998). Almost all opiates and opioids are more effectively absorbed when injected than when taken orally, intramuscularly, by smoking, or snorting, although this is affected by a number of factors, including the form of the drug (salt or base) and the addition of other substances (Strang, Griffiths, & Gossop, 1997). A number of sources indicate that injecting drug use leads to more rapid dependence in humans than other forms of drug use (Griffiths, Gossop, Powis, & Strang, 1992; Strang et al., 1998). Further, research suggests that drug users themselves believe that they are less likely to become dependent from snorting, smoking, or chasing heroin than from injecting it (Pearson, 1987; Strang et al., 1998).

The use of unsterile injection equipment or contaminated drugs may result in infection and complications such as gangrene and loss of limbs, septicemia, bacterial endocarditis cerebral vascular problems, septicemia and abscesses. Injecting may also be the means of transmission of infectious diseases from one drug user to another through the sharing of needles or other injecting paraphernalia. Sharing of equipment has been associated with outbreaks of malaria, hepatitis B

(HBV), the various strains of hepatitis C (HCV), hepatitis G, and human immunodeficiency virus (HIV) among injectors and, in some cases, their sexual partners (Strang et al., 1998). Of those infected with viral hepatitis, a proportion will develop chronic infection, which carries with it a high risk of late-onset development of acute or chronic hepatitis, cirrhosis, and liver cancer (Donoghoe & Wodak, 1998).

In Australia, HCV among those who inject drugs is of particular concern. Rates of HCV in IDUs in Australia are believed to be in the range of 50% to 70% since the 1970s, with prevalence among IDUs attending NSPs steady at around 50% for the period 1996 to 2000 (ANCHARD, 2002; Dore, Law, MacDonald, & Kaldor, 2003). Incidence of HCV in the population attending one centre in inner Sydney has remained at around 15 to 20 new HCV infections per 100 persons between 1992-2000 but notifications of HCV infection doubled in the 15-19 year old age group in the period 1996-2000 (Dore et al., 2003).

HCV is more infectious than HIV through blood to blood contact and more easily transmissible among IDUs. Therefore, certain behaviours are suggested as sufficiently risky for endemic spread of HCV, but not of HIV (Donoghoe & Wodak, 1998). Such behaviours may include sharing of needles, syringes, water, filters, spoons, and tourniquets.

Drug overdose is a major cause of death in many populations of injectors and, before the advent of HIV/AIDS, it was, and in some countries still is, the major cause of death among IDUs (Donoghoe & Wodak, 1998). Also, non-fatal overdose may result in brain damage and/or organ failure (Donoghoe & Wodak, 1998). Drug overdose appears to be highly route-dependent. Heroin overdose is frequently found among those who inject it, and rarely among those who smoke it (Strang et al., 1998). Deaths from heroin, methadone and other opiates have trebled since 1991 among both males and females with male deaths outnumbering female deaths at a rate of almost five to one (de Looper & Bhatia, 2001). The rate of fatal overdoses among 15-44 year olds in Australia was 71.5 per million population in 1997 (Hall, Degenhardt, & Lynskey, 1999).

The impact of injecting drug use on social functioning is difficult to assess, as it is difficult to attribute causality. Long-term opioid users have often been reported to have poor employment histories, family and relationship problems, involvement in crime (including experience of prison), and poor academic achievement. There is a tendency for more visible problem drug users to be concentrated in areas of socioeconomic deprivation, generally characterised by high levels of unemployment (Donoghoe & Wodak, 1998; Pearson, 1987). The lifestyle associated with the acquisition and injection of illegal drugs increases the risk of involvement in crime, violence and sex work (Donoghoe & Wodak, 1998). In some jurisdictions, the act of injecting a drug is considered illegal and signifies an involvement in criminal activity. Experience of imprisonment is therefore common among injectors, especially males (Donoghoe & Wodak, 1998). However, injection may continue in prison, where access to sterile equipment is limited, and this may lead to HIV, HCV and other blood-borne infections.

2.2 THE TRANSITION TO INJECTING

"Transitions" in the major route of drug administration is defined as "a change in the exclusive or predominant route of administration lasting one month or more" (Griffiths, Gossop, Powis & Strang, 1994).

Overall, studies of transition have tended to show that a single transition from non-injecting to injecting route of administration is most common (Swift, Maher, Sunjic, & Doan, 1997). However, there is a smaller group of users who, rather than making one irreversible transition to injecting, continue to move between different routes of administration at different times in their lives (Casriel, Rockwell, & Stepherson, 1988). Some never shift to injection as the sole route of administration (van Ameijden, van den Hoek, Hartgers, & Coutinho, 1994), and others may take a

long time to do so. In addition, while individuals may be injecting one drug, they may prefer to use alternative routes of administration for other drugs. As Loimer (1992: 112) suggests, "transition is not a single irreversible event of a first injection leading to injection as the dominant mode of drug administration, but rather there may be a prolonged period of time experimenting with injection while continuing non-injected drug use". Des Jarlais and colleagues (1992; 1994) even argue that, in some cases, it may be better to think of a blurring of the distinction between injecting and non-injecting, rather than a replacement of one mode of administration by another.

An increased risk of switching from chasing, i.e., trying to inhale fumes of heroin vapour (see Definition of Terms) to injecting has been shown for those who continue to use heroin (Griffiths et al., 1994; van Ameijden et al., 1994). Essentially, the longer heroin is used the more likely the user is to make a transition to injecting. Among London heroin users, the longer heroin was used, the more likely the user was to make a transition to injecting (Griffiths et al., 1994). The fourth year of heroin use was associated with a higher chance of transition to injecting than the preceding years.

When a main route of administration had been established, this is likely to remain the predominant, or even exclusive route, for a period of years. Difference in transition rates and patterns have been reported for men and women (Griffiths et al., 1994), and for various ethnic groups (e.g., Indochinese and Caucasian) (Swift et al., 1997).

The length of time between first use of a drug and the injecting of it, and also between first injection and a full transition to injection, varies (van Ameijden et al., 1994). Reported average intervals between first use of a drug and first injection of that drug range from less than a year (Dinwiddie, Reich, & Cloninger, 1992) to 7.7 years (Hando & Hall, 1993).

Within Australia, researchers based at the National Drug and Alcohol Research Centre (NDARC) have conducted a number of transition studies, generally using the Transitions Questionnaire developed by the centre. Darke, Cohen, Ross, Hando and Hall (1994) investigated transitions between routes of administration of regular amphetamine users; Ross, Darke and Hall (1996) looked at transitions between routes of benzodiazepine administration amongst Sydney heroin users; and Swift et al. (1997) focus on transitions between routes of heroin administration among Caucasian and Indochinese users in south-west Sydney.

2.3 REASONS FOR THE TRANSITION TO INJECTING

Patterns of use and routes of administration are sensitive to cultural, social, economic and law enforcement factors (Swift et al., 1997), and may be influenced by migration, and the presence of foreign soldiers and refugees (Samuel R. Friedman et al., 1998). Regional and cultural variations have been highlighted as important factors influencing the preferred route of administration of drugs (Power, 1989). If a particular route of administration is dominant at a given time then with the introduction of a new substance, the same route of administration will be adopted for the new substance (Pearson, 1987). Perceptions of injecting heroin as a problem of whites (Power, 1989), the taboo associated with skin penetration (van Ameijden et al., 1994), and undesirable connotations of injecting (Swift et al., 1997) have been associated with differential rates of transition to injecting in a variety of ethnic and cultural groups.

Changes in the availability of traditionally used non-injectable drugs have contributed to a transition to the use of injectable drugs in some countries (Samuel R., Friedman et al., 1998). When injectable drugs are cheap and readily available, this can increase the likelihood of injecting being the chosen route of drug administration (Loimer, 1992; Stephens, 1991). In some cases, the preferred drug has remained the same, with the route of administration changing. For example, in some reports those who have preferred to smoke or chase opiates have reverted to injecting because the opiate on the market has been unsuitable for smoking or chasing (Panda et

al., 1997; Pearson, 1987). In other situations, the route of administration predominates, and drug of choice is dependent on the preferred route of administration.

While some studies have reported that participants believe increased availability of needles may be a reason for starting to inject (Casriel et al., 1988; Loimer, 1992), others suggest that easy access to equipment does not play an important role in the decision to inject.

Despite suggestions to the contrary in the popular press, there is no evidence that reducing access to injection services and equipment reduces the incidence and prevalence of injecting, beyond such settings as prisons (McKeganey, Friedman, & Mesquita, 1998).

A commonly reported reason for making the transition to injection is the quick and intense rush, the reportedly better 'high' produced by injecting, when compared to other routes of administration (Casriel et al., 1988; Hando & Hall, 1993; Kelsall, Higgs, Lam, & Crofts, 1998; Loimer, 1992; Swift et al., 1997; van Ameijden et al., 1994). Some IDUs report that injecting is the best way of enjoying a drug (Loimer, 1992). Some also report that the length of time the effect of injecting lasts is an important reason for preferring to inject (Swift et al., 1997).

Related to the physiological effects of injecting is the efficiency of injecting, and its cost. One of the most powerful pressures to inject is the economic one (Casriel et al., 1988; Samuel R. Friedman, Des Jarlais, & Goldsmith, 1989; Hando & Hall, 1993; Kelsall et al., 1998; Loimer, 1992; Panda et al., 1997; Power, 1989; Rumbold & Fry, 1999; Swift et al., 1997; Taylor, 1998). In the initial stage after transition to injecting, smaller quantities of the drug are needed to obtain the same effect. However, these benefits do not seem to be long lasting and soon after the switch to injecting is made, tolerance increases and larger amounts of the drug are needed. The heroin supply in Australia is generally available in salt form making it easier to inject than smoke (Wodak, 1997).

Curiosity and the desire to experiment commonly emerge as important reasons for injecting (Blogg et al., 1997; Casriel et al., 1988; Kelsall et al., 1998; Stephens, 1991; Swift et al., 1997; Taylor, 1998). Personality factors, such as sensation seeking, may be related to injection at an early age (Franken & Kaplan, 1997). These persons who began their high-risk drug careers at an earlier age may first be attracted to and then continually reinforced by a specific high-risk context.

A number of commentators have spoken about 'needle fixation' being an important reason for injecting (McBride, Pates, Arnold, & Ball, 2001). Classical conditioning may play a part here. Also a sample of young white middle-class users reported finding needles more sexy, and the injection process more fun and exciting because of the longer process of preparation and anticipation (Pierce, 1999).

However, others report a phobia of needles, that must be overcome in order to inject (Casriel et al., 1988). In fact, some of Casriel et al.'s (1988) subjects cited the challenge to overcome such a phobia as a reason for starting to inject.

Peer pressure is sometimes reported as a reason for the transition to injecting (Barnard & McKeganey, 1990; Blogg et al., 1997; Kelsall et al., 1998; Loimer, 1992; Panda et al., 1997; Rhodes & Quirk, 1998; Stephens, 1991). It is often unclear whether 'peer pressure' refers to overt pressure or more subtle modelling of injecting. However, in many instances, it may refer to both. Stephens (1991) suggests that some persons are susceptible to social pressures because they want to become members of an opiate-using group, either of older, more experienced users or of their own peers.

Even if overt peer pressure is not a factor in the decision to inject, close association with drug injectors seems to be a powerful influence in determining whether or not a person will make the transition to injecting (Barnard & McKeganey, 1990; Casriel et al., 1988; Des Jarlais, Casriel, &

Friedman, 1989; Loimer, 1992; Pierce, 1999; Rumbold & Fry, 1999; Swift et al., 1997; Taylor, 1998). Non-injecting drug users are often part of a wider drug-using network which includes injecting drug users. As Barnard and McKeganey (1990) point out, for many young people, drug use occurs in a social context and it is friends who introduce each other to drugs; most people do not experiment with drugs or injecting on their own. Such interactions enable processes of social influence and social learning to occur (Stephens, 1991). Having an IDU sexual partner is a particular risk factor for the transition to injecting (Rhodes & Quirk, 1998; Swift et al., 1997; van Ameijden et al., 1994), especially for women (Powis, Griffiths, Gossop, & Strang, 1996; Rhodes & Quirk, 1998; Taylor, 1998).

In some cases, young people may identify with injectors, and seek to be one. This may be because injecting is considered to be cool or chic (Blogg et al., 1997; Pierce, 1999), or a way to gain status by demonstrating strength and fearlessness to a non-injecting peer group (Stephens, 1991). In other cases, young people may seek to take on an identity as a drug user, injector, or addict (Biernacki, 1986; Franken & Kaplan, 1997). Stephens (1991) suggests that only those who aspire to be opiate addicts deliberately seek out situations in which they can first inject. He argues that many opiate addicts are drawn from the ranks of those who are already seen as deviant because of their temperament, lack of education, or involvement in delinquency. They experiment with other drugs prior to opiate use, and their role models are drug users. Many of those who choose to use opiates already possess prior roles and self-concepts that are congruent with the street-addict role or identity, and are limited in the number and variety of other social roles they can play.

2.4 THE FIRST INJECTING EVENT

In relation to initiation to injecting, Claire (1995) reported that subjects described their first injection as an initiation into a ritual of injecting drug use, an event they saw as being crystallised in their memory. Despite the vividness of initiation to IDUs, however, only a small number of studies focus on individuals' initiation to injecting (Crofts, Louie, Rosenthal, & Jolley, 1996; Fitzgerald, Louie, Rosenthal, & Crofts, 1999; Wightman, 1999; Williams, 1999, 2000; Williams & Crane, 2000).

Until fairly recently, the age of initiation of IDU has tended to be in the late teens, around the time of school leaving (around 18-20 years of age) (Battjes, Leukefeld, & Pickens, 1992; Griffiths et al., 1994; Stowe & Ross, 1992). Age of initiation may vary in different ethnic and cultural groups, with studies in Australia showing slightly older ages of initiation for Vietnamese-speaking IDUs (Kelsall et al., 1998; Louie, Krouslos, Gonzalez, & Crofts, 1998).

Differences in age of initiation have been associated with particular drugs. Swift et al. (1997) found a mean age of first injection of 19 years, with those who had commenced injecting with amphetamine initiating at a younger age on average (17 years) than those commencing with opiate (19 years).

Transition to injecting in Australia appears to be occurring at younger ages than previously. Loxley and colleagues (Wendy Loxley & Marsh, 1990; W. Loxley, Marsh, & Lo, 1991) found that respondents under the age of 23 had begun to inject drugs, on average, two years younger than did respondents over 23. Hando and Hall (1993) reported an earlier transition to injecting occurring among amphetamine users over the previous decade. Lynskey and Hall (1998a; 1998b), in a study of cohort trends in age of initiation to opiate use, found a consistent decrease in age of initiation to opiate use among later cohorts. This finding is supported by results from the Illicit Drug Reporting System (Topp et al., 2002), which notes this decline in the average age of IDUs, as well as a decrease in the age at which overdose mortality peaks.

Initiation to injecting drug use is typically preceded by use of alcohol, cannabis and solvents by several years: "injection without very substantial exposure to illicit drugs is quite rare" (Dinwiddie et al., 1992:7). Once again, the choice of drug for first injection varies by social network and availability of particular drugs in the relevant region. In Perth, Loxley and Marsh (1990) found evidence that amphetamine injecting was an early stage in a drug using career which, if it continued, may progress to heroin injection. The 1999 Illicit Drug Reporting System (IDRS) found that the first drug injected depended on the city of residence: heroin was the drug most frequently injected first in Sydney, but amphetamine in Adelaide (McKetin et al., 2000).

Cultural factors may also influence choice of drug for initiation. Swift et al. (1997), in their report on south-western Sydney injectors, found that heroin was the drug most commonly injected first for 100% of Indochinese injectors and 72% of Caucasians, with the other 28% of Caucasians commencing with amphetamines. Melbourne studies of Vietnamese IDUs reveal that heroin is the first drug injected for the majority of users. Louie et al. (1998) reported that heroin was the first drug ever injected for 83% of subjects, and Kelsall et al. (1998) found that 98% had first injected opiates. Rumbold and Fry's (1999) IDRS study of Melbourne IDUs in 1998, however, found that the majority of respondents first injected amphetamines. The 1998 data were consistent with findings from the 1997 IDRS: there was a shift from amphetamines to opiates as the drug first injected, with 57% of those who began injecting within the previous five years reporting that they first injected opiates, compared to 22% of those who had first injected between 6–10 years ago.

The location of the first injection may also vary. Among NSW Juvenile Justice detainees, 26% reported they first injected in the street, 31% at a friend's house, and 15% at home (Copeland, Howard, Keogh, & Siedler, 1999). A significant minority of participants in a second Australian study had first injected in prison (Kelsall et al., 1998). First injections by migrants have been documented as occurring in the country of destination rather than the country of origin (Kelsall et al., 1998; Louie et al., 1998; Spizzichino et al., 1995).

Most IDUs report that their first injection occurred in social circumstances and, for many, their first use appears to have been largely accidental in nature (Stephens, 1991). Copeland et al. (1999) found that in 74% of cases the decision was unplanned and in such situations, the novice injector may be quite unprepared for injecting (Claire, 1995). However, in some cases users may actively seek out established injectors, and ask to be included in their drug-using activities (Chein, Gerard, Lee, & Rosenfeld, 1964).

Regardless of degree of planning of first injection, most injectors are at pains to demonstrate that they were eagerly and willingly involved in the decision to inject, and were not passive, helpless victims who had been coerced or seduced into injecting drug use (Chein et al., 1964; Taylor, 1998). Consistent with this, a number of studies found that initiators generally had not intended to introduce their non-using partners or friends to injecting (Pierce, 1999; Rhodes & Quirk, 1998). Friedman et al. (1998) cites anecdotal evidence that many users try to protect others by refusing to initiate them even when asked.

It is unusual for the first injection to be taken alone. Two studies show that 74% (Copeland et al., 1999) and 88% respectively (Swift et al., 1997) reported being injected by somebody else the first time. Claire (1995) reported that initiation of injection would take place only if a more experienced injector was present to oversee the injection process and to teach novice injectors the correct procedure for preparing a safe drug mixture. Most studies reveal that injectors were initiated (which may mean injected or just assisted to inject themselves) by a sexual partner (Pierce, 1999; Power, 1989; Powis et al., 1996; Rhodes & Quirk, 1998), friend (Louie et al., 1998; Pierce, 1999; Power, 1989; Stephens, 1991), or acquaintance (Stephens, 1991). It was rare to be initiated by a stranger (Chein et al., 1964).

Some gender differences have emerged in studies of initiation. For example, Powis et al. (1996) reported that female opiate users were far more likely to have been given their first injection by a sexual partner than were males (51% versus 10%). Men were more likely to have been injected for the first time by a friend (90% compared with 49% for the women). However, Taylor (1998), in an ethnographic study of 50 female IDUs, found that both female and male acquaintances could act as initiators for women IDUs, with similar patterns found by Pierce (1999).

While a quarter to over three-quarters of novice injectors report euphoria on first injection (Fitzgerald et al., 1999; Stephens, 1991), large percentages of initiates experience nausea and vomiting upon first use, particularly those initiated into opiate injection. Why do people continue to use such drugs, if they have such a negative reaction to the first injection? McAuliffe (1975) found a number of reasons for such continued use. Firstly, the negative effects of nausea and vomiting usually occur only in the first few instances of use. Secondly, the vomiting is often described as not being that unpleasant, possibly due to the analgesic effects of the opiate. Thirdly, and perhaps most importantly many persons who continue to use report they were forewarned about possible vomiting the first few times and were assured that these effects were short-lasting and to be expected. However, those who found the first injection, and associated feelings, to be decidedly unpleasant were less likely to continue to inject.

The time between initiation of injecting and the next injection, like other aspects of initiation, may vary. Copeland et al. (1999) reported that 15% of their sample of young people in Juvenile Justice next injected the same day, with another 14% within a couple of days.

In relation to the time to regular injection, Stowe and Ross (1992) reported that 83% of their participants had become regular (once a month or more often) injectors within a year of their first injection, with regular injection for all participants occurring within two years of their first injection. However, no difference in the speed of this transition emerged in those IDUs who considered themselves to be 'addicts' and those who did not.

2.5 INITIATION TO INJECTING AND RISK PRACTICES

Crofts and colleagues (Crofts et al., 1996), in one of the few Australian studies on initiation to injecting, suggest that the way in which a person is first initiated into injecting is likely to influence their future injecting practice and risk-taking behaviour.

Consistent with this, Garfein et al. (1998) found a number of relationships between circumstances at initiation and HCV seroprevalence. The only initiation-related predictor of HCV was initiating with someone at least five years older than the participant (versus someone who was less than five years older than the participant). New injectors who share injecting equipment with older IDUs are presumably at higher risk for HCV infection, as age and duration of injecting are highly correlated and duration of injecting is the most important predictor of HCV seroconversion (Crofts, Jolley, Kaldor, van Beek, & Wodak, 1997). Thus, those whose initiation involves older IDUs may be exposing themselves to a greater likelihood of HCV than those initiating with younger IDUs. Watching others inject before injecting oneself, and supplying one's own drug, were associated with being less likely to be positive. These apparent protective factors may be indicative of more preparation and planning for the injection and hence a more controlled environment at initiation and greater attention to self-care.

There is a complex interaction between age of initiation, risk and social networks. Often very little accurate information is passed on during unplanned initiation into injecting, despite the fact that this experience usually occurs with people from a peer group. New and young IDUs are

considered even more difficult to reach with health messages than other IDUs because of their lower levels of contact with and access to health services, NSPs and drug treatment services. However, youth may also be a protective factor, if interacting with older users. For example, Power et al. (1995) describe an IDU network in which older members of the network adopted a caring attitude toward the younger users, who were seen as 'drug novices', educating them in safe injecting and drug use.

New injectors often know little about injecting, what to expect during injection, or how to engage in it safely (Claire, 1995). New users are less likely than more experienced users to have knowledge that might motivate them to protect themselves from drug-related harm, and are also less likely to engage in safe sex practices. There may be a tendency on the part of new injectors to reject messages from official sources as 'scare tactics' (Kleinman, Goldsmith, Friedman, Hopkins, & Des Jarlais, 1990).

However, in some cases novice injectors may have witnessed previous injections, and therefore have gained some vicarious knowledge or explicit tuition of injecting technique and of the consequences of injecting, both good and bad (Claire, 1995; Copeland et al., 1999; Swift et al., 1997). Other types of knowledge, about health issues around injecting, use of particular drugs, amounts, and combinations, and the basic survival skills needed to be a safe drug injector, are also likely to come from more experienced injectors (Claire, 1995; Power et al., 1995).

Of particular concern in relation to the first injection experience is the issue of sharing or reuse of injection equipment. Power (1989) notes that it is through initiation into injecting that many have their first experience of sharing, as injecting requires not only specific technology and equipment, but also a level of expertise not needed for other routes of administration. As the initiation is often an unplanned event, the novice injector is likely to be unprepared and therefore unequipped with clean equipment. Consistent with this, Louie et al. (1998) reported that 65% of their participants had used a needle and syringe provided by someone else at initiation, and 13% of these did not know whether it had previously been used or not. An additional factor is that the initiation may be interpreted as an experience of bonding — where those present form a personal bond through sharing equipment — rather than an experience of risk taking. The manner in which the drug is prepared also impacts on degree of sharing, even inadvertent sharing, such as use of a single spoon or syringe to make up and share jointly purchased drugs.

Research in Europe, the US, and Australia shows that an earlier age of initiation to injecting drug use is associated with higher levels of risk for HIV infection (Battjes et al., 1992; Carniero, Fuller, Doherty, & Vlahov, 1999; Franken & Kaplan, 1997; Wendy Loxley & Marsh, 1990; W. Loxley et al., 1991; Lynskey & Hall, 1998a, 1998b). Research also suggests that older initiates may adopt safer practices more readily (Carniero et al., 1999). Lynskey and Hall (Lynskey & Hall, 1998a, 1998b) reported that, independent of the effects of duration of opiate use, earlier age of initiation to opiate use was associated with increased risk of poly-drug use, overdose, and money earned from crime. There was also a marginally significant association between age of initiation and amount spent on illicit drugs in the past month.

It is important to note that age at initiation and duration of injecting are often confounded so that in some situations it is unclear what role each plays. In Australia, the prevalence of HCV appears to be strongly related to duration of injecting (Carruthers, Loxley, Phillips, & Bevan, 1997; Crofts, 1999), with rates of 26% in people who have injected for less than three years, 39% in those injecting for 3–5 years, and 63% in those injecting for 6 or more years and who attend NSPs (NCHECR, 2001). A parallel situation emerges in relation to HIV: higher rates of HIV positivity are found in more experienced injectors than in recent initiates (S. R. Friedman et al., 1989; S. R. Friedman, Neaigus, Des Jarlais, Stepherson, & Sterk, 1992; Spizzichino et al., 1995) though in Australia the rates of HIV among injecting drug users are very low (i.e., less than 2% incidence in 2001) (Dore et al., 2003; NCHECR, 2001).

Increased interaction with longer-term injectors may be associated with increased exposure to HIV and HCV positive IDUs and therefore may lead to greater risk of contracting these viruses. However, on the up side, as noted above, such exposure can also lead new injectors to be socialised into a greater understanding of safe injecting practices and, concomitantly, into more deliberate implementation of risk-reduction strategies. Claire (1995) reported that as users became more experienced there was a significant increase in knowledge about risk practices, particularly in how to inject safely, the adverse effects of injecting particular drugs, the location of NSPs, the benefits of using safe preparation items such as medicated swabs, sterile water for injecting and mixing drugs, and new injecting equipment. These findings are consistent with Kleinman et al.'s (1990) suggestion that persons who have been using drugs for a long time are more closely integrated than new users with a network of other drug users, among whom information exchange occurs. Persons who are well integrated into the IDU subculture appear both to possess salient knowledge about drug use and HIV (and more recently HCV) transmission, and to attempt to implement behavioural strategies to protect themselves. By contrast, new users are least likely to have knowledge about safe injecting strategies, and are least likely to engage in safe drug or sex practices.

A number of more recent studies have investigated both age at initiation and time since first injection in relation to injecting-related harms, in an attempt to clarify the relationship between these three variables (Crofts et al., 1994; Fennema, van Ameijden, Van den Hoek, & Coutinho, 1997; Garfein et al., 1998).

It appears that there is some evidence for both duration of injecting and age at initiation as predictors of adverse injecting-related outcomes. Age at initiation appears negatively related to a variety of adverse outcomes — that is, the lower the age at initiation, the more negative the outcomes — with such a relationship likely to be due to higher risk behaviour and lesser knowledge of potential harms and harm minimisation strategies. By contrast, duration of injecting is positively related to HIV and HCV seroconversion, with those injecting for longer being more likely to be HIV and HCV. However, this appears to be due to increasing exposure to other IDUs and therefore to the pool of infection and not to more risky behaviour associated with longer duration of injection. Risky behaviour does not increase with duration of injecting. In fact, the reverse appears to be more true with more experienced injectors having greater awareness of harm and harm minimisation strategies. Nevertheless the data show that the longer the time of injecting, the greater risk of acquiring HCV.

2.6 OTHER FACTORS IMPACTING ON INJECTING AND RISK

Another factor which seems to be related to risk behaviour and outcomes is functionality of drug use. Functional use is defined by Sharp et al. (1991: 3) as "a pattern of drug use which is stable or non-disruptive, and reproducible within a socially patterned mode of existence". Such life patterns include financial commitments, work schedules, and relationships with friends, partner, and family. Dysfunctional users, by contrast, experience difficulties in terms of the social context of their drug use (Sharp et al., 1991).

A number of differences between functional and dysfunctional IDUs have emerged in the literature. Sharp et al. (1991) reported that IDUs with problems related to drug use, i.e., dysfunctional users, were much more likely to inject alone. More functional users have been reported as having less contact with doctors for drug related matters, but visited them more frequently for HIV/AIDS tests, had less contact with the judicial system, were more likely to inject amphetamine and less likely to inject opioids, and were more likely to clean their equipment (Stowe & Ross, 1992).

Risk practice and health consequences may differ according to drug injected. Crofts et al. (1994) found that those who reported their current primary injected drug to be amphetamines were at greater risk of HIV infection than were current heroin injectors, while the reverse applied for HCV. They suggested that this probably reflects users' interactions with different social networks. For opiate injectors, exposure to HCV was common, even those who had only injected for a few years. Crofts et al. (1994) suggested that HIV prevention programs have reached opiate injectors as a group, but have not been nearly as effective in reaching amphetamine injectors.

In relation to cocaine, studies have suggested that the injection of cocaine is frequently characterised by binge injecting with a consequent elevated risk of HIV and other BBV infection (Garfein et al., 1998; Peters, Davies, & Richardson, 1997; Strang et al., 1998).

Different levels of risk may be associated with membership of different social networks: the more non-IDU friends or contacts, the less risky the behaviour (Neaigus et al., 1994). In the male-dominated drug use scene, women tend to be involved in networks of drug use concordance and have only restricted involvement in large, casual drug injecting networks. It is not clear whether this difference between men and women's networks is related to smaller networks for women, or whether women tend to mix less, to avoid the greater social repercussions for their "deviant" lifestyle (Miller & Neaigus, 2001).

Other work has expanded this understanding of networks of IDU and developed typologies of network types and associated risks (Curtis et al., 1995). However, as noted previously members of social networks can also play a part in educating and mentoring other network members (Kleinman et al., 1990).

Most studies of IDUs have included only urban IDUs, although the few studies that have looked at urban and rural IDUs reveal differences in behaviour and serology. This may be due to the distance of most rural dwellers from major drug markets and large concentrations of IDUs, a more restricted range of drugs being available, and difficulty accessing treatment and prevention services (Aitken, Brough, & Crofts, 1999).

Aitken, Brough and Crofts (1999) suggest that the relative isolation of the rural IDUs may have kept overall HCV prevalence below that of the urban IDUs, but that this may be changing. A greater density of social networks among rural IDUs may mean that IDUs are more often exposed to someone infected with HCV, meaning greater risk of infection despite lower viral prevalence and less injecting risk behaviour, although this could not be verified with the data collected. It was also possible that the lower average educational level of the rural IDUs could be associated with lower awareness of recommended equipment cleaning procedures. However, a lower level of HIV/HCV prevention resources and poorer penetration of prevention messages in rural areas also be a factor.

This literature review raises many possible questions that can be posed to young injectors. We used this review to develop and frame questionnaire items for this project in order to examine many of these issues. It is not possible to cover the broad range of aims within one report. This report focuses on examining the situations and variables associated with:

- transition to injection
- the initiation episode
- drug of choice
- age at initiation
- hepatitis C status
- risk practices for blood-borne viruses such as sharing, borrowing and re-using injection equipment
- transition out of injecting

3

METHOD

The study was approved by the Ethics Committees of the University of New South Wales Central Sydney Area Health Service, Manly Hospital and Community Health Services, Northern Rivers Area Health Service, South Eastern Sydney Area Health Service, South Western Sydney Area Health Service, and Wentworth Area Health Service.

A. QUANTITATIVE

3.1 PROCEDURE

All participants were required to be between 16 and 25 years of age and to report an injecting history of four years or less. Persons who were not currently injecting but who had injected illicit drugs in the past six months were also included in the sample. Data for calculating response rate were not collected.

Participants were recruited between December 2000 and February 2002 by convenience sampling from three sites on East Coast Australia: urban Sydney (n=165), urban Brisbane (n=119), and the rural Northern Rivers area of New South Wales (NSW, n=52). The Northern Rivers area is located on the North Coast of NSW and encompasses Tweed Heads in the far north to the Clarence Valley in the south (Sinden & Wansbrough, 1996).

A fourth site in Western NSW was included in the initial recruitment. However, data from this area was found to be unusable and excluded from analysis (see methodological comment, section 11.7).

A range of young people were sought, including youth attached to treatment or other services, involved in street-based drug markets and/or a variety of subcultural settings, youth who used a variety of drugs, and youth involved in hidden networks of injectors. Also sought were drug users with varying levels of functionality (i.e., having regular patterns of daily social activity).

In an attempt to recruit a heterogeneous sample of young injectors, the researchers posted fliers and posters in various settings where young injecting drug users (IDUs) were likely to attend, including youth shelters, treatment centres, emergency rooms, public health clinics, and needle and syringe programs (NSPs). The study was also advertised in a wide range of local and subcultural press with a view to including a broad spectrum of IDUs ranging from those who inject drugs occasionally, for example, at dance parties, to those who inject several times a day. Participants were reimbursed A$20 for their travel expenses at the completion of the interview.

Peer interviewers were recruited through drug user organisations, NSPs, and subcultural press. The three criteria that were used in selecting peer researchers were designed to promote establishment of rapport with participants. These were: a) current or past history of injecting, b) being part of the injecting network, and c) being young. Peer interviewers screened participants for eligibility, obtained informed verbal consent, and administered the structured questionnaire. All peer interviewers were provided with comprehensive training, a peer educational manual, and support to assist them in carrying out their role in the study. The peer interviewers provided referrals when participants requested information on drug treatment or other social services during the interview. Peer interviewers were used in Brisbane and Sydney to conduct interviews. The interviewer in the Northern Rivers area was not a peer interviewer.

3.2 QUESTIONNAIRE

The structured questionnaire contained approximately 140 questions. The questions were developed on the basis of the literature review and consultation with key informants in the field. The areas covered in the questionnaire included: sociodemographics; self-reported HCV status; first injecting experience; factors associated with initial injecting; knowledge about acquisition and treatment of blood-borne viruses (BBVs), namely, HBV, HCV, and HIV, and of sexually transmitted infections (STIs); and current and past patterns of drug use and injecting practice. The questionnaire was administered in a face-to-face structured interview and took approximately 30 minutes to complete. A copy of the questionnaire is provided in Appendix 1.

3.3 DATA ANALYSIS AND PRESENTATION

A number of scales were constructed, and reliability analyses were performed to estimate reliability statistics for the components of multiple-item additive scales (SPSS Inc., 1999).

A number of key variables, including scales, are described below.

Drug most frequently injected

Throughout this report, survey participants who most frequently injected heroin or methadone, or combinations of drugs including heroin or methadone, are referred to as 'opioid users'; and those who most frequently injected (meth)amphetamine, cocaine, or combinations of drugs including (meth)amphetamine, but excluding heroin and methadone, are referred to as 'stimulant users'. Participants using both heroin/methadone and (meth)amphetamine were classified as opioid users.

Frequency of injecting

To measure the frequency of injecting in the past six months, participants scored 1 if they had been injecting once a day at any time during the past six months, and 2 if they had been injecting more than once a day. If, in the past 6 months, they had at no time injected less often than this, they received a score of 3. Otherwise their score was 0. This score was based on Question 6 (p.3; Appendix 1). Higher scores indicate more frequent injecting. Scores on the frequency of injecting scale ranged from 0 to 3, with a median of 1.0.

Injecting risk practice

The injecting risk practice dependent variable consisted of a combination of responses to two questions: 'In the last 6 months how many times have you reused someone else's fit, even if it was cleaned?'; 'In the last 6 months have you used any of the following after someone else? spoon, swab, filter, tourniquet' (Questions 40 & 45, p.7; Appendix 1). Only those who stated that they

never re-used or borrowed fits/equipment from others were included in the non-risk-taking category.

HCV status

Rather than asking 'What is your hepatitis C status?', self-reported HCV status was assessed by a two-part question: 'When were you last tested for hepatitis C?' followed by 'What was the result of your most recent hepatitis C test?' (Questions 20 & 21, p.19; Appendix 1). Assumptions about HCV status in the absence of formal testing were thus avoided.

Severity of dependence

A severity of dependence scale (SDS) was used to measure the degree of dependence experienced by users of different classes of drugs. The scale was based, with slight modifications on the SDS (Gossop et al., 1995). The period of time used in the present questionnaire was 'in the last six months'. Higher total scores indicated higher levels of dependence. Scores on this scale ranged from 0 to 15, with a mean of 5.5. The scale reliability coefficient alpha in the sample was 0.89.

Social involvement with IDUs

The social involvement with IDUs scale was based on two items: 'Do any of your friends currently inject?' and 'How much of your time is spent with people who inject?' (Questions 33 & 35, p.6; Appendix 1). Items were coded so that high scores on the scale indicated a higher degree of social involvement with IDUs. Scores on this scale ranged from 0 to 8, with a mean of 4.0. Coefficient alpha in the sample was 0.69.

BBV knowledge scale

The knowledge scale was formed from 16 items concerning knowledge about prevention, acquisition and treatment of HBV, HCV, HIV, and STIs (Question 29, p.20; Appendix 1). Items were coded so that high scores on the scale reflected a greater degree of knowledge about BBVs and STIs. Scores on this scale ranged from 0 to 16, with a mean of 11.9. Coefficient alpha in the sample was 0.79.

Negative life events scale

The negative life events scale relates to negative life events since the time of first injection. The scale was formed from 13 items concerning health, study, work, interpersonal and financial problems, and being a victim of violence (Question 1, p.15; Appendix 1). Items were coded so that high scores on the scale reflected a greater number of negative life events in different categories. Scores on this scale ranged from 0 to 13, with a mean of 6.0. Coefficient alpha in the sample was 0.82.

Positive life events scale

The positive life events scale related to positive life events since initiation. It was formed from nine items concerning health, social life, problem-solving skills, stability in life, and finance (Question 1, p.15; Appendix 1). Items were coded so that high scores on the scale reflected a greater number of positive life events in different categories. Scores on this scale ranged from 0 to 9, with a mean of 2.3. Coefficient alpha in the sample was 0.71.

The data are presented for the sample as a whole and, where relevant, are broken down by location, class of drug most frequently injected in the last six months, age at initiation, self-reported HCV status, and risk of being infected with HCV.. The total number of participants included in analyses may vary as a result of missing data. Where this occurs, the total number of

participants is reported. The summary statistics are presented mainly as counts and proportions. Chi-square tests of association were used to examine statistical significance between categorical variables. Means were compared using analysis of variance. Simple linear regression analyses were conducted to investigate relationships between two continuous variables. Logistic regressions were carried out to ascertain major characteristics of section key variables and, in these, a type I error rate of 0.01 was used to determine statistical significance (Lang & Secic, 1997).

Analysis of the data is continuing and it is possible new findings may lead to some reinterpretation of data reported here.

B. QUALITATIVE

3.4 PROCEDURE

The sample consisted of survey participants, aged 25 years or less, who were current drug injectors, had injected for five years or less and were living in Sydney or Brisbane. Participants were mostly drawn from those who completed the quantitative survey. A small number of additional participants were recruited for the Sydney sample. These participants were identified and recruited through snowballing sampling with participants of another project. Participants were reimbursed A$20 for their travel expenses at the completion of the interview.

3.5 INTERVIEW SCHEDULE

Participants were asked to provide retrospective accounts of transition and initiation to injecting. Information was also requested with regard to: drug use career; contexts of use; past and current membership of IDU networks; mobility between networks; the user's initiation process, including the role of the initiator (where applicable); factors influencing transition to injecting; barriers to use of non-injecting routes of administration; current pattern of drug use; knowledge of risk and HCV transmission; and past and present sources of knowledge.

3.6 DATA ANALYSIS AND PRESENTATION

Interviews were audio-tape recorded with participants' consent and recordings were transcribed verbatim. All identifying information was removed and each participant was assigned a pseudonym. A timeline for each participant was constructed from the interview data to summarise their drug use career and corresponding social networks and living arrangements. A summary was made of the context, practices and stated knowledge at the time of first injection. Further, descriptions of subsequent injecting practices were summarised. Close reading of these summaries produced themes and associations between experiences. These are presented in the results sections with attribution by pseudonym, age of first injection and current age, drug of initiation and current drug most frequently injected, e.g. James 17–23, 'speed'-heroin.

In the following sections, quantitative data are presented to address the key questions outlined in Section 1. Following this, the qualitative data are presented to elaborate issues raised by the quantitative survey data.

4

DEMOGRAPHICS OF SURVEY SAMPLE

This section examines in univariate analysis sample demographics (at the time of interview), and key variables, including, drug most frequently injected in the last 6 months, age at initiation, time since first injection (i.e. duration of injecting), frequency of injecting, severity of dependency, positive and negative life events, social involvement with IDUs, knowledge of BBVs and STIs, disclosure of injecting status, HCV status, and risk taking. It also examines information handling, and circumstances prior to and at the time of initiation.

4.1 DEMOGRAPHIC VARIABLES AT TIME OF INTERVIEW

The sample comprised 336 participants, 165 in Sydney, 119 in Brisbane and 52 in Northern Rivers (for differences between recruitment locations, see section 5). Participants were 16 to 25 years of age, with a mean age of 21.2 years. Forty-one percent of the sample was female, and 58 percent male. Three participants described themselves as 'transgender'. Eighty-six percent of participants were born in Australia, and 13%, overseas. About two-thirds of those born overseas were from non-English-speaking countries. Of the sample as a whole, 17% identified as Aboriginal or Torres Strait Islander. Seventy-three percent of respondents described themselves as heterosexual, 8% as gay or lesbian, and 15% as bisexual. Four percent said they were 'unsure' or had 'other' sexual identity. Of those describing themselves as homosexual, 73% were male and 27% female. Of those describing themselves as bisexual, 58% were female and 42% male.

Sixty-four percent of the sample had completed up to or including Year 10 schooling, and 35% had completed a level of education above Year 10. Forty-three percent left school before the age of 16, while the remaining 57% left at 16 or older, or were still at school at time of interview. Fifty-eight percent relied for their main source of income on government benefits including unemployment benefit, temporary benefits, pension, or student allowance; 16% were in full-time employment; 12% in part-time employment; 13% were supported by others, or had no income, or had other sources of income including, in a few instances, drug dealing. Forty-one percent of the sample was employed, 36% unemployed, and 19% were students or performed home duties. Just over one percent reported being involved in crime.

Sixty-seven percent of participants lived in a rented house or unit, or a boarding house or caravan; 18% lived in a shelter, refuge, or squat, or were homeless; 15% lived in a privately owned house or unit. Nearly 83% of participants lived with one or more persons, while 17% lived alone.

Twenty percent of respondents reported having immediate family who injected and 4% had extended but no immediate family who currently injected. Forty percent had a (current) partner who injected. See Total column, in Table 5a and 5b, Section 5 below.

4.2 KEY VARIABLES

Respondents were divided into two groups, opioid and stimulant injectors respectively, depending on the drug they most frequently injected in the last 6 months (See Table 4). Overall, 52% of the sample were categorised as 'Opioid injectors' while 48% were 'Stimulant injectors'.

Table 4: Drug most frequently injected in the past six months

Class of drugs			n	%
Opioids				
	Heroin			
		Heroin only	146	43.5
		Heroin & (meth)amphetamine	7	2.1
		Heroin & cocaine	6	1.8
		Heroin & steroids	1	0.3
		Heroin & bezodiazepine	2	0.6
		Heroin, 'speed', & cocaine	6	1.8
	Methadone			
		Methadone only	4	1.2
		Methadone & cocaine	1	0.3
		Methadone & benzodiazepines	1	0.3
		Methadone, benzodiazepines, & speed	1	0.3
	Tramal[1]		1	0.3
	Total		176	52.4
Stimulants				
	(Meth)amphetamine			
		(Meth)amphetamine only	141	42.0
		(Meth)amphetamine & cocaine	2	0.6
		(Meth)amphetamine & benzodiazepines	1	0.3
	Cocaine		16	4.8
	Total		160	47.6

[1] Tramadol is classified as an opioid (Karch, 1998).

The average age at initiation was 18.5 years. Forty-three percent of the sample was HCV negative, 24% HCV positive and 33% did not know their HCV status. Almost half the sample (46%) reported having re-used someone else's injecting equipment of some kind in the past 6 months ("borrowed"), either needles, syringes or swabs, tourniquets, spoons etc.

Fifty-six percent of the sample had been injecting for over 24 months, and frequency of injecting was on average once a day. Severity of dependency, as reported by participants, was not particularly high (mean=5.5, on a scale with range 0–15). On average, participants had experienced a fairly low level of positive life events since they became injectors (mean=2.3, on scale with range 0–9), a medium level of negative life events (mean=6, on scale with range 0–13), and a higher level of social involvement with IDUs (mean=4, on scale with range 0–8).

Knowledge of BBVs and STIs was, on average, quite high (mean=12, on scale with range 0–16). On average, the fact that respondents were injecting drug users was known to at least 3 categories of people (e.g. family, friends, partner/ex-partner, dealer, local cops, health workers/doctors, etc). On average, participants had lent a used fit to someone else only rarely in the last 6 months (mean=0.5, i.e. between 'never' and 'rarely'). See Total column, in Table 5c and 5d, Section 5 below.

4.3 INFORMATION HANDLING

Respondents' most common sources of information about HCV and safe injecting practices were: pamphlets (64%), NSP (63%), friends (47%) and doctors or nurses (34%). For the purpose of analysis, participants were grouped according to whether or not they nominated reliable sources (pamphlets, NSP, youth services, drug treatment venues, doctors and nurses, fit packs, and school teachers). A majority of respondents (89%) reported having obtained at least some of their information from reliable sources. Twenty-eight percent reported obtaining information only from reliable sources; and 10%, only from unreliable sources. See Total column, Table 5e, Section 5 below.

Participants had sometimes passed information on to other IDUs. Twenty-two percent has passed on information about hepatitis B, 35% about hepatitis C and 30% about HIV. In addition, 46% had passed on information about needle and syringe programs (NSP), 48% about needle disposal and 25% about the law relating to injecting drug use. Thirty-nine percent reported having passed on information about blood-borne viruses with or without other information. Forty-five percent claimed not to have passed on any information.

4.4 CIRCUMSTANCES PRIOR TO INITIATION

Nearly all participants reported that, prior to first injection, they had used drugs by other routes. Nearly all had used alcohol (95%) or marijuana (90%). Forty-five percent had used 'speed'. About a third had used ecstasy or LSD ('trips'), a quarter heroin or benzodiazepines, and a fifth cocaine. Other drugs, such as methadone and steroids, had been used by only a few participants. Alcohol and 'pot' were the drugs first used at the youngest age (on average, between 13 and 14 years of age); for other drugs, the mean age of first use was usually above 16 years. See Total column, Table 5f, Section 5 below.

Respondents were also asked whether they had used the first drug injected in other ways (by non-injection routes) prior to their first injection. Sixty-seven percent had done so, while 30% had not.

Nineteen percent of participants reported that, when they started to inject, they had immediate family, with or without extended family, who already injected (16%), or extended family only who did so (3%). Prior to initiation, a majority of participants (70%) had seen friends inject drugs. About 25% had seen their partner, and 10% their schoolmate/s, inject.

The first injection was planned by 39% of IDUs, but a majority (58%) did not plan it.

The most commonly cited reasons for initiation into injecting drug use were the desire for experimentation (82%), 'fun' (44%), a 'rush' or 'high' (50%). Also frequently endorsed reasons were availability (37%) and offer of drug for injection (44%). Peer pressure (24%), issues of economy (24%) and perception of injection as having a quicker effect than other routes of drug administration (29%) were each endorsed by about a quarter of participants. (More than one reason could be endorsed by respondents.) See Total column, Table 5g, Section 5 below.

4.5 CIRCUMSTANCES AT TIME OF INITIATION

The average age of initiation into injecting drug use was 18.5 years (range 12–25 years). At the time of initiation, 33% of participants were in part-time or full-time employment, while 46% were dependent on government benefits. Sixty-four percent of participants were living in some form of rented accommodation, including rented house or flat, boarding house, hostel or caravan, 19% in a privately owned house or flat, and 13% in a squat, shelter, refuge, prison, detention centre, or other temporary or unspecified accommodation or were homeless. Twelve percent were living alone, and 87% with other people. See Total column, Table 5h, Section 5 below.

Note that the percentage on government benefits was lower at time of initiation than at interview (46%, versus 58%), as was the percentage living alone (12%, versus 17%) and the percentage with immediate family who inject (16%, versus 20%).

Most initiation experiences (76%) occurred in a private home, the participant's or someone else's. Only one occurred in a shooting gallery. Fewer initiation experiences (24%) occurred in public places such as the street, a squat, public toilet, car, etc. See Total column, Table 5i, Section 5 below.

Most participants reported that the needle and syringe, or 'fit', used for their first injection was obtained at a NSP, chemist, hospital or vending machine (82%). About 15% did not know or did not remember the source of the injecting equipment used at their initiation. Three percent obtained it from a friend or dealer. The most common responses to the question about who obtained the 'fit' for their initiation was, the participant him/herself (28%), a partner (18%), or others (55%) the majority of whom where friends or acquaintances.

For most participants, their first injection was administered by a friend (41%) or their partner (23%). A smaller proportion stated that they initiated themselves (19%). Four percent reported being initiated by a schoolmate, and 4% by a dealer.

Forty-five percent injected an opioid (usually heroin or methadone) at first injection, and 54% a stimulant (usually (meth)amphetamine). In terms of other (non-injected) drugs used at initiation along with injection, 35% reported that they used no other drugs; 22% percent said they used alcohol and/or 'pot', and a further 42% used other drug(s) apart from, or as well as, these.

Most participants (58%) reported that two or more other persons were present at their initiation (see Total column, Table 5j below). However, 10% reported initiating alone, and 30% with only one other person present. Most participants (86%) knew the people who were present at their initiation, and reported that most of them were also injecting at the time. Those present were most commonly described as friends (35%), partner or a mix of people, including both friends and partner (27%). Eighty-six percent of participants stated that most or all persons present were also injecting. Only 6% said that none, or only some, were injecting. Most participants (79%) stated that at the time of their initiation they were the only person present who was having their *first* injection.

In relation to age, over half (55%) stated that the other people present were about the same age as themselves, while 26% said that the others present were older than themselves, and 4% that they were younger. If there were others present having their first injection, these others were generally described as about the same age as the respondent.

Forty-four percent of the sample indicated that the others present were all or mostly men; a mix of genders was reported by 34%, while 14% said that others were all or mostly female.

Thirty-four percent of women reported that the other people present at their initiation were all or mostly men. See Total column, Table 5k below.

At time of interview, most participants (71%) were still in touch with some, if not all, of the persons present at their initiation.

Most of the variables that were examined in univariate analysis were also examined in bivariate analysis by: recruitment location (section 5), drug most frequently injected in the last 6 months (section 6), age at initiation (section 7), HCV status (section 8), and risk-taking behaviours (section 9). Key variables were examined by time since first injection as well as by age at initiation (section 7.7).

5

RECRUITMENT LOCATION OF SURVEY PARTICIPANTS

5.1 DEMOGRAPHICS BY RECRUITMENT LOCATION

There were a number of differences in the sample depending on recruitment location.

Participants recruited in Sydney (n=165) were, on average, younger (M=20.7 years) than those recruited in Brisbane (n=119) or Northern Rivers (n=52) (M=21.7 years and M=21.6 years, respectively). Also, Sydney participants, compared with those from the other locations, were more likely to have higher levels of education (44% over Year 10, versus 29% and 25% in Brisbane and Northern Rivers, respectively), and to have left school at an older age (68% over 16, versus 44% and 54% over 16, respectively), and less likely to receive their main source of income from government benefits (48%, versus 66% and 75%). They were also more likely to be in full-time employment than Northern Rivers participants (20% versus 0%). Sydney participants were more likely to live in privately owned accommodation (19%) compared with Northern Rivers respondents (6%), while those in Brisbane and Northern Rivers were more likely to be living in shelters/refuges/squats or to be homeless (25% and 33%, versus 8% in Sydney).

Finally, participants recruited in Sydney (30%) were less likely to have a partner who currently injected than participants recruited in Brisbane or Northern Rivers (45% and 62%, respectively).

Recruitment location was not associated with gender, country of birth, ethnicity, sexual identity/preference, employment status, living with others or alone; and it was not associated with having relatives who currently injected. Statistics for demographic variables are given in Tables 5a and 5b.

Table 5a. Numerical demographic variable, by recruitment location

	Sydney		Brisbane		Northern Rivers		Total	
	n	Mean	n	Mean	N	Mean	n	Mean
Current age**	163	20.7	119	21.7	52	21.6	334	21.2

** p<.01.

Table 5b. Categorical demographic variables, by recruitment location

	Sydney		Brisbane		Northern Rivers		Total	
	n	%	n	%	N	%	n	%
Gender								
Male	92	55.8	70	58.8	34	65.4	196	58.3
Female	71	43.0	49	41.2	17	32.7	137	40.8
Transgender	2	1.2	0	0.0	1	1.9	3	0.9
Country of birth								
Australia	135	81.8	108	90.8	45	86.5	288	85.7
Overseas	27	16.4	10	8.4	7	13.5	44	13.1
NR	3	1.8	1	0.8	0	0.0	4	1.2
Ethnicity								
Aboriginal/Torres Strait Islander	28	17.0	20	16.8	8	15.4	56	16.7
Other	129	78.2	83	69.7	42	80.8	254	75.6
NR	8	4.8	16	13.4	2	3.8	26	7.7
Sexual identity								
Heterosexual	115	69.7	91	76.5	38	73.1	244	72.6
Gay	18	10.9	6	5.0	3	5.8	27	8.0
Bisexual	26	15.8	17	14.3	8	15.4	51	15.2
NR	6	3.6	5	4.2	3	5.8	14	4.2
Highest level of education**								
Up to & including Year 10	92	55.8	84	70.6	39	75.0	215	64.0
Over Year 10	72	43.6	34	28.6	13	25.0	119	35.4
NR	1	0.6	1	0.8	0	0.0	2	0.6
Age at leaving school**								
<16	53	32.1	67	56.3	24	46.2	144	42.9
16 and over/still at school	112	67.9	52	43.7	28	53.8	192	57.1
Current main source of income**								
Full-time employment	33	20.0	21	17.6	0	0.0	54	16.1
Part-time employment	21	12.7	14	11.8	6	11.5	41	12.2
Government benefits	79	47.9	78	65.5	39	75.0	196	58.3
Other	31	18.8	6	5.0	7	13.5	44	13.1
NR	1	0.6	0	0.0	0	0.0	1	0.3
Current employment status								
Unemployed	56	33.9	48	40.3	17	32.7	121	36.0
Home duties/student	35	21.2	20	16.8	9	17.3	64	19.0
Employment	63	38.2	51	42.9	25	48.1	139	41.4
NR	11	6.7	0	0.0	1	1.9	12	3.6
Current housing situation***								
Rent/boarding/caravan	120	73.2	73	61.3	32	61.5	225	67.2
Squat/shelter/homeless	13	7.9	30	25.2	17	32.7	60	17.9
Privately owned house or flat	31	18.9	16	13.4	3	5.8	50	14.9
NR	1	0.6	0	0.0	0	0.0	1	0.3
Current living situation								
With others	137	83.0	98	82.4	43	82.7	278	82.7
Alone	28	17.0	21	17.6	8	15.4	57	17.0
NR	0	0.0	0	0.0	1	1.9	1	0.3
Family who currently inject								
Immediate family	35	21.2	19	16.0	12	25.1	66	19.6
Extended family only	4	2.4	4	3.4	5	9.6	13	3.9
Neither	126	76.4	96	80.7	35	67.3	257	76.5
NR								
Current partner who injects***								
Yes	49	29.7	54	45.4	32	61.5	135	40.2
No	31	18.8	17	14.3	11	21.2	59	17.6

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01 *** p=<001.

5.2 KEY VARIABLES BY RECRUITMENT LOCATION

Participants recruited in Sydney were more likely to be opioid injectors (70%), while those recruited in Brisbane or Northern Rivers were more likely to be stimulant injectors (61% and 73%, respectively). Sydney participants had on average initiated injecting drug use at a slightly younger age (18.1 years) than Brisbane or Northern Rivers participants (18.9 and 19.0 years, respectively). A higher percentage of Sydney and Brisbane participants were HCV positive (24% and 28%, respectively) than Northern Rivers participants (14%). Sydney participants were, however, less likely to have borrowed injecting equipment in the last 6 months (39% borrowed) than Brisbane or Northern Rivers participants (51% and 56% borrowed, respectively).

Brisbane participants were more likely than Sydney or Northern Rivers participants to have been injecting for longer than 12 months (89%, versus 75% and 77%), whereas a higher percentage of Sydney participants had only started injecting in the 24 months prior to interview (54%), compared with Brisbane and Northern Rivers (33% and 39%, respectively). There was a significant difference between all three locations in relation to positive life events experienced since starting to inject, and between Sydney and the other locations in relation to social involvement with IDUs since starting to inject. The greatest number of types of positive life events since starting to inject was reported in Northern Rivers (M=3.8 types), the second greatest number, in Brisbane (M=2.1) and the lowest number in Sydney (M=1.9). Social involvement with IDUs was also reportedly higher in Brisbane and Northern Rivers (slightly above midpoint on the scale, 6.4) than in Sydney (slightly below midpoint on the scale, 5.6; scale range 0–8). Northern Rivers participants had on average disclosed their injecting drug use to more categories of persons (over three categories) than either Brisbane or Sydney participants (over two categories). Respondents from Brisbane were more likely to have lent a used fit in the last 6 months than were respondents from Sydney or Northern Rivers, although on average still between 0 'never' and 1 'rarely' (M=0.7, Brisbane; M=0.4, Sydney; M=0.3 Northern Rivers).

There was no difference between recruitment locations in relation to frequency of injecting in the last six months, severity of dependency, experience of negative life events since first injection, or knowledge of BBVs and STIs.

Statistics for key variables are given in Table 5c, and 5d.

Table 5c. Numerical key variables, by recruitment location

	Sydney N=165		Brisbane N=119	Northern Rivers N=52		Total N=336
	Mean		Mean	Mean		Mean
Age at initiation**	18.1		18.9	19.0		18.5
Frequency of injecting	1.3		1.0	1.0		1.1
Severity of dependency (SDS)	5.8		5.7	4.3		5.5
Positive life events**	1.9		2.1	3.8		2.3
Negative life events	5.9		6.2	6.1		6.0
Social involvement with IDUs**	6.3	(n=163)	4.4	4.4	(n=51)	4.0 (n=333)
Knowledge	11.7		12.0	12.5		11.9
Disclosure**	2.9		2.8	3.8		3.0
Lent fit**	0.4		0.7	0.3		0.5

** p<.01.

Table 5d. Categorical key variables, by recruitment location

	Sydney		Brisbane		Northern Rivers		Total	
	n	%	n	%	n	%	n	%
Drug most frequently injected in last 6 mths***								
Opioid	116	70.3	46	38.7	14	26.9	176	52.4
Stimulant	49	29.7	73	61.3	38	73.1	160	47.6
HCV status*								
Negative	61	37.0	54	45.4	29	55.8	144	42.9
Positive	40	24.2	33	27.7	7	13.5	80	23.8
Status unknown	64	38.8	32	26.9	16	30.8	112	33.3
Borrowing of injecting equipment*								
Not borrowed in last 6 months	101	61.2	58	48.7	23	44.2	182	54.2
Borrowed in last 6 months	64	38.8	61	51.3	29	55.8	154	45.8
Time since first injection**								
24 months or less	89	53.9	39	32.8	20	38.5	148	44.0
25 months or more	76	46.1	80	67.2	32	61.5	188	56.0

*** p=<.001 ** p=<.01 * p=<.05.

5.3 INFORMATION HANDLING, BY RECRUITMENT LOCATION

Details of information sources for each location are given in Table 5e. More respondents from Northern Rivers than from Sydney or Brisbane reported having passed on information about blood-borne viruses (58%, versus 40% and 29% respectively).

There was no difference between recruitment locations in terms of use of reliable sources of information. There was also no difference in terms of use of unreliable sources of information only.

Table 5e. Information handling, by recruitment location

Information sources		Sydney		Brisbane		Northern Rivers		Total	
		n	%	n	%	n	%	n	%
Reliable source									
	Pamphlets	109	66.1	64	53.8	41	80.4	214	63.9
	NSP	105	63.6	74	62.2	31	60.8	210	62.7
	Youth services	48	29.1	44	37.0	11	22.0	103	30.8
	Drug treatment centre	50	30.3	20	16.8	10	20.8	80	24.1
	Doctors or nurses	70	42.4	22	18.5	22	43.1	114	34.0
	Fit packs	30	18.2	27	22.7	33	68.8	90	27.1
	School teachers	23	13.9	7	5.9	11	21.6	41	12.2
Unreliable source									
	Partner/s	25	15.2	12	10.1	18	36.0	55	16.5
	Family	26	15.8	12	10.1	8	16.3	46	13.8
	Schoolmates	18	10.9	0	0.0	6	12.2	24	7.2
	Workmates	7	4.2	4	3.4	3	6.1	14	4.2
	Club buddies	15	9.1	12	10.1	11	22.4	38	11.4
	Friends	73	44.2	50	42.0	34	68.0	157	47.0
	Acquaintances	34	20.6	23	19.3	15	30.6	72	21.6
	Dealer/s	6	3.6	12	10.1	11	22.4	29	8.7
	Other	12	7.3	7	5.9	9	33.3	28	8.3

../continued

Information sources	Sydney		Brisbane		Northern Rivers		Total	
	n	%	n	%	n	%	n	%
Passed on information about:								
Hepatitis B	36	21.8	24	20.2	15	28.8	75	22.3
Hepatitis C	56	33.9	33	27.7	30	57.7	119	35.4
HIV	52	31.5	27	22.7	20	38.5	99	29.5
NSP	79	47.9	43	36.1	31	59.6	153	45.5
Needle disposal	80	48.5	46	38.7	36	69.2	162	48.2
Law	46	27.9	23	19.3	16	30.8	85	25.3
Used reliable information sources +/-other sources	149	90.3	102	85.7	47	90.4	290	88.7
Used less reliable sources only	14	8.5	13	10.9	5	9.6	32	9.5
Passed on information about BBVs +/- other info**	66	40.0	34	28.6	30	57.7	130	38.7

** p=<.01 *** p=<.001.

5.4. DRUG USE AND DEMOGRAPHICS PRIOR TO INITIATION, BY LOCATION

Non-injecting drug use prior to first injection differed by recruitment location. More participants from Sydney than from Brisbane or Northern Rivers had used heroin (42%, versus 5% and 21%, respectively), and cocaine (29%, versus 10% and 19%, respectively) by a non-injection route prior to first injection; more from Northern Rivers had used (meth)amphetamine (62%, versus 52% Sydney and 27% Brisbane), and LSD (62%, versus 25% Sydney and 24% Brisbane); and more from Sydney and Northern Rivers had used ecstasy (36% and 37%, versus 19% Brisbane). See Table 5f.

Sydney participants were more likely than others to have used the first drug they injected in other ways prior to first injection, while Brisbane participants were more likely than Northern Rivers respondents to have done so (Sydney, 75%, Brisbane 62%, and Northern Rivers 54%). See Table 5g.

More participants from Sydney than from Brisbane or Northern Rivers had seen schoolmates inject prior to their first injection (16%, versus 2% and 8%). In addition, Sydney participants were more likely than others to have planned their first injection (46%, versus 32% Brisbane and 35% Northern Rivers). Finally, there were some differences between locations with respect to reasons given for starting to inject. Northern Rivers' respondents more frequently endorsed the 'fun' and 'quicker effect' motives, and 'because it was available' or 'because it was offered'. Both Sydney and Northern Rivers more frequently endorsed 'for a rush/high'. Brisbane participants were less likely than others to endorse 'peer pressure'.

There was no significant difference between recruitment locations in relation to family members who inject, or the witnessing of partners, friends or schoolmates injecting prior to initiation, or in relation to use of the injecting drug prior to first injection. Further, there were no differences between locations in relation to use prior to injection of alcohol, marijuana, benzodiazepine, methadone, or steroids, or in relation to the experimentation, and economy reasons for starting to inject. See Tables 5f and 5g.

Table 5f. Non-injected drugs used prior to first injection, with mean age of first use, by recruitment location

	Sydney			Brisbane			Northern Rivers			Total		
	n	%	Mean age at 1st use	n	%	Mean age at 1st use	n	%	Mean age at 1st use	n	%	Mean age at 1st use
Alcohol	154	93.3	13.4	114	95.8	13.5	50	96.2	13.2	318	94.6	13.4
'Pot'	142	86.1	13.6	109	91.6	13.9	51	98.1	13.2	302	89.9	13.6
Non-injected opioids												
Heroin***	70	42.4	16.7	6	5.0	17.3	11	21.2	16.6	87	25.9	16.7
Methadone	2	1.2	14.0	8	6.7	19.5	4	7.7	17.0	14	4.2	18.3
Benzodiazepine	40	24.2	16.2	26	21.8	16.2	17	32.7	16.5	83	24.7	16.3
Non-injected stimulants												
'Speed'***	86	52.1	15.8	32	26.9	16.9	32	61.5	16.1	150	44.6	16.1
Cocaine**	48	29.1	17.2	12	10.1	16.6	10	19.2	16.8	70	20.8	17.0
Ecstasy*	59	35.8	16.6	23	19.3	17.0	19	36.5	16.8	101	30.1	16.8
LSD***	41	24.8	16.2	28	23.5	16.1	32	61.5	15.4	101	30.1	15.9
Steroids	1	0.6	20.0	1	0.8	16.0	2	3.8	16.5	4	1.2	17.3
Other	14	8.5	16.0**	4	3.4	18.5	6	31.6	14.5	24	7.9	16.8

* p=<.05 ** p=<.01 *** p=<.001.

Table 5g. Categorical demographic variables prior to 1st injection, by recruitment location

	Sydney		Brisbane		Northern Rivers		Total	
	n	%	n	%	n	%	n	%
Had family who injected prior to own first injection								
Immediate family +/- extended	28	17.0	15	12.6	10	19.2	53	15.8
Extended family only	3	1.8	3	2.5	3	5.8	9	2.7
Neither/NR	134	81.2	101	84.9	39	75.0	274	81.5
Had seen friends inject prior to 1st								
Yes	127	77.0	76	63.9	33	64.7	236	70.4
No	37	22.4	41	34.5	18	35.3	96	28.7
Had seen partner inject prior to 1st								
Yes	38	23.0	32	26.9	13	27.1	83	25.0
No	126	51.2	85	71.4	35	72.9	246	74.1
Had seen schoolmates inject prior to 1st** injection								
Yes	26	15.8	2	1.7	4	8.3	32	9.6
No	138	83.6	115	96.6	44	91.7	297	89.5
Whether or not drug first injected was used in other ways prior to first injection**								
Yes	123	74.5	74	62.2	28	53.8	225	67.0
No	33	20.0	45	37.8	24	46.2	102	30.4
NR	9	5.5					9	2.7
Planning of first injection*								
Not at all /not very planned	84	50.9	79	66.4	33	63.5	196	58.3
Fairly /very planned	76	46.1	38	31.9	18	34.6	132	39.3
NR	5	3.0	2	1.7	1	1.9	8	2.4
Why injected first time								
To experiment	138	83.6	91	76.5	46	88.5	275	81.8
For fun***	62	37.6	43	36.1	41	78.8	146	43.5
For rush/high***	95	57.6	39	32.8	33	63.5	167	49.7
Because available***	48	29.1	36	30.3	38	73.1	122	36.7
Because offered**	59	35.8	56	47.1	33	63.5	148	44.0
Peer pressure**	51	30.9	16	13.4	14	26.9	81	24.1
Cheaper than other ways	30	18.2	34	28.6	15	28.8	79	23.5
Quicker effect **	32	19.4	39	32.8	25	48.1	96	28.6

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01 *** p=<.001.

5.5 DEMOGRAPHICS AND CIRCUMSTANCES AT TIME OF INITIATION, BY LOCATION

In Sydney average age of initiation was slightly younger (18.1 yrs) than in either of the other locations (18.9 years Brisbane, and 19.0 years Northern Rivers) (see above, Key variables, Table 5c). Also, dependence on government benefits at the time of initiation was lower in Sydney (39%) than in Brisbane or Northern Rivers (53% and 54%, respectively). Sydney and Brisbane participants were more likely to be living in privately owned accommodation (19%, 24%, respectively) than Northern Rivers' participants (6%). Participants from Brisbane and Northern Rivers reported the most homeless/squat etc. living, while Sydney participants reported the least (18% and 15% Brisbane and Northern Rivers, respectively, versus 9% Sydney). See Table 5h.

In Sydney, by contrast with other locations, fits used at first injection were more likely to have been obtained from a NSP, chemist, hospital or vending machine than from more informal sources (89% Sydney, 81% Northern Rivers, and 74% Brisbane). Sydney participants were also more likely than those from other locations to have injected themselves at first injection (22% Sydney, versus 16% Brisbane, and 14% Northern Rivers) or to have had a schoolmate inject them (7% Sydney, versus 0% other locations). They were also more likely to have injected heroin or a heroin derivative at first injection (61% Sydney, versus 27% Brisbane and 39% Northern Rivers), whereas Brisbane and Northern Rivers respondents were more likely to have used a stimulant at first injection (72% Brisbane and 60% Northern Rivers, versus 39% Sydney). Sydney and Brisbane participants were most likely to have taken, with their first injection, either no other drugs at all (40% Sydney, 37% Brisbane, versus 12% Northern Rivers) or alcohol and/or marijuana (28% Sydney, 20% Brisbane, versus 9% Northern Rivers). Northern Rivers respondents were more likely to have used some other form of drug with their first injection (83%, versus 42% Brisbane, 29% Sydney). See Table 5i.

Brisbane and Northern Rivers participants were more likely than Sydney respondents to report that no one else (other than themselves) was having their first injection at their initiation (82% Brisbane, 87% Northern Rivers, versus 73% Sydney). See Table 5j.

There was no difference between recruitment locations in relation to: living situation at initiation (alone or with others), place of initiation, person who obtained fit for initiation, number of people present at initiation, number of persons present known to respondent, number of others injecting, identity of those present, identity of others injecting, relative age and gender of those present. Also there was no difference in relation to whether or not respondents were still in touch with those present at their initiation. See Tables 5h, 5i and 5j.

Table 5h. Categorical variables: Demographics at time of initiation, by recruitment location

	Sydney		Brisbane		Northern Rivers		Total	
	n	%	n	%	n	%	n	%
Main source of income at time of initiation**								
Full-time employment	30	18.2	30	25.2	9	17.3	69	20.5
Part-time employment	21	12.7	14	11.8	8	15.4	43	12.8
Government benefits	64	38.8	63	52.9	28	53.8	155	46.1
Other	44	26.7	9	7.6	7	13.5	60	17.9
NR	6	3.6	3	2.5	0	0.0	9	2.7
Housing situation at time of initiation**								
Rented/boardg/hostel/caravan	112	67.9	69	58.0	35	67.3	216	64.3
Squat/shelter/prison/homeless etc	15	9.1	21	17.7	8	15.4	44	13.1
Privately owned house or flat	32	19.4	28	23.5	3	5.8	63	18.8
NR	6	3.6	1	0.8	6	11.5	13	3.9
Living situation at time of initiation								
With others	139	84.2	105	88.2	47	90.4	291	86.6
Alone	21	12.7	14	11.8	5	9.6	40	11.9
NR	5	3.0	0	0.0	0	0.0	5	1.5

NR - no response/don't know/missing data.

** p=<.01.

Table 5i. Categorical variables: Circumstances of initiation, by recruitment location

	Sydney		Brisbane		Northern Rivers		Total	
	n	%	n	%	n	%	n	%
Place of first injection								
Home (own/friend's/partner's/ dealer's/shooting gallery)	130	78.8	90	75.6	36	69.2	256	76.2
Other (street/squat,etc)	34	20.6	29	24.4	16	30.8	79	23.5
NR	1	0.6	0	0.0	0	0.0	1	0.3
Where fit was obtained*								
NSP /chemist/ hospital/ vending machine	143	88.3	88	73.9	36	78.3	267	81.7
Friend/dealer/other	3	1.9	6	5.0	2	4.3	11	3.4
NR	16	9.9	25	21.0	8	17.4	49	15.0
Person who obtained injection equipment								
Self	56	33.9	27	22.7	10	19.2	93	27.7
Partner	22	13.3	27	22.7	11	21.2	60	17.9
Other/NR	87	52.7	65	54.6	31	59.6	183	54.5
Person who first injected participant***								
Self	37	22.4	19	16.0	7	13.5	63	18.8
Partner	34	20.6	30	25.2	12	23.1	76	22.6
Schoolmate	12	7.3	0	0.0	0	0.0	12	3.6
Friend	67	40.6	45	37.8	24	46.2	136	40.5
Dealer/Other	1	0.6	11	9.2	0	0.0	12	3.6
Other	12	7.4	25	21.0	9	17.3	46	13.8
NR	3	1.8	0	0.0	0	0.0	3	0.9
First drug injected***								
Opioids	100	60.6	32	26.9	20	38.5	152	45.2
Stimulants	65	39.4	86	72.3	31	59.6	182	54.2
Missing	0	0.0	1	0.8	1	1.9	1	0.6
Other (non-injection) drugs taken with first injection***								
None	66	40.0	44	37.0	6	11.5	116	34.5
Alcohol &/or 'pot'	46	27.9	24	20.2	3	5.8	73	21.7
Other drugs	48	29.1	50	42.0	43	82.7	141	42.0
NR	5	3.0	1	0.8	0	0.0	6	1.8

NR - no response/don't know/missing data.

* p=<.05 *** p=<.001.

Table 5j. Categorical variables: Others present at initiation, by recruitment location

	Sydney		Brisbane		Northern Rivers		Total	
	n	%	n	%	n	%	n	%
Number of other people at initiation								
None	15	9.1	14	11.8	3	5.8	32	9.5
One	47	28.5	42	35.3	13	25.0	102	30.4
Two or more	98	59.4	62	52.1	36	69.2	196	58.3
NR	5	3.0	1	0.8	0	0.0	6	1.8
Number of others known to participant at initiation								
No/some	8	4.8	6	5.0	6	11.5	20	6.0
Most/all	142	86.1	103	86.6	44	84.6	289	86.0
NR	15	9.1	10	8.4	2	3.8	27	8.0
Identity of those present								
Friends	66	40.0	34	28.6	18	34.6	118	35.1
Partner/ partner +others	30	23.0	37	31.1	17	32.7	92	27.4
Family/schoolmates	14	8.5	7	5.9	7	13.5	28	8.3
Acquaintances/others	31	18.8	34	28.6	9	17.3	74	22.0
NR	16	9.7	7	5.9	1	1.9	24	7.1
Others injecting								
No/some	8	4.8	6	5.0	6	11.5	20	6.0
Most/all	142	86.1	103	86.6	44	84.6	289	86.0
NR	15	9.1	10	8.4	2	3.8	27	8.0
Others having first injection*								
None	121	73.3	98	82.4	45	86.5	264	78.6
Various	30	18.2	9	7.6	6	11.5	45	13.4
NR	14	8.5	12	10.1	1	1.9	27	8.0
Relative age of others present								
Same age as self	98	59.4	63	52.9	25	48.1	186	55.4
Older	31	18.8	35	29.4	20	38.5	86	25.6
Younger	8	4.8	3	2.5	2	3.8	13	3.9
Mixed ages	14	8.5	6	5.0	4	7.7	24	7.1
NR	14	8.5	12	10.1	1	1.9	27	8.0
Relative age of other initiates								
Same	24	14.5	13	10.9	6	11.5	43	12.8
Older/younger/both	6	3.6	2	1.7			8	2.4
NR	135	81.8	104	87.4	46	88.5	285	84.8
Gender of others present								
All/mostly male	79	47.9	45	37.8	25	48.1	149	44.3
All/mostly female	20	12.1	19	16.0	9	17.3	48	14.3
Mix	52	31.5	45	37.8	17	32.7	114	33.9
NR	14	8.5	10	8.4	1	1.9	25	7.4
For female: gender of other present								
All/most male	18	25.4	20	40.8	8	47.1	46	33.6
All/most female	15	21.1	10	20.4	4	23.5	29	21.2
Mix	30	42.3	16	32.7	5	29.4	51	37.2
NR	8	11.3	3	6.1			11	8.0
Still in touch with others present								
No, none	29	17.6	27	22.7	15	28.8	71	21.1
Some/most/all	121	73.3	83	69.7	36	69.2	240	71.4
NR	15	9.1	9	7.6	1	1.9	25	7.4

NR - no response/don't know/missing data.

* p=<.05.

6

DIFFERENCES BETWEEN CURRENT OPIOID AND STIMULANT INJECTORS

Demographic variables at time of interview, key variables, and also demographics at and prior to initiation, were further examined in bivariate analyses to ascertain whether there were differences on these variables between current opioid and stimulant injectors. Just over half the sample (n=176, 52%) were opioid users, and just under half were stimulant users (n=160, 48%). See Table 4 above.

6.1 DEMOGRAPHIC VARIABLES, BY CURRENT INJECTING DRUG

Current opioid users were twice as likely as stimulant users to be recruited in Sydney (66% vs 31%). Stimulant users were more likely than opioid users to be recruited in Brisbane (45% vs 26%) or Northern Rivers (24% vs 8%).

Current stimulant injectors were more likely than current opioid injectors to be presently employed (49%, versus 34%). They were also less likely than opioid injectors to be living in rented accommodation (61%, versus 73%). However, a greater percentage was also living in shelters or refuges or was squatting or homeless (24%, versus 13%).

There was no difference between current stimulant and current opioid injectors on other demographic variables at time of interview, including: age, gender, country of birth, ethnicity, sexual identity, highest level of education reached, age at leaving school, current main source of income, living alone or with others, family who currently inject, partner who currently injects. See Tables 6a and 6b.

Table 6a. Numerical demographic variable, by current injecting drug

	Opioid injectors		Stimulant injectors		Total	
	n	Mean	n	Mean	n	Mean
Current age	175	21.0	159	21.3	334	21.2

Table 6b. Categorical demographic variables, by current injecting drug

	Opioid injectors		Stimulant injectors		Total	
	n	%	n	%	n	%
Recruitment location***						
Sydney	116	65.9	49	30.6	165	49.1
Brisbane	46	26.1	73	45.6	119	35.4
Northern Rivers	14	8.0	38	23.8	52	15.5
Gender						
Male	94	53.4	102	63.8	196	58.3
Female	81	46.0	56	35.0	137	40.8
Transgender	1	0.6	2	1.3	3	0.9
Country of birth						
Australia	149	84.7	139	86.9	288	85.7
Overseas	24	13.6	20	12.5	44	13.1
NR	3	1.7	1	0.6	4	1.2
Ethnicity						
Aboriginal/Torres Strait Islander	31	17.6	24	15.0	55	16.4
Other	140	79.5	132	82.5	272	81.0
NR	5	2.8	4	2.5	9	2.7
Sexual identity						
Heterosexual	129	73.3	115	71.9	244	72.6
Gay	12	6.8	15	9.4	27	8.0
Bisexual	29	16.5	22	13.8	51	15.2
NR	6	3.4	8	5.0	14	4.2
Highest level of education						
Up to & including Year 10	104	59.1	111	69.4	215	64.0
Over Year 10	71	40.3	48	30.0	119	35.4
NR	1	0.6	1	0.6	2	0.6
Age at leaving school						
< 16	73	41.5	71	44.4	144	42.9
16 and over/still at school	103	58.5	89	55.6	192	57.1
Current main source of income						
Full-time employment	26	14.8	28	17.5	54	16.1
Part-time employment	22	12.5	19	11.9	41	12.2
Government benefits	97	55.1	99	61.9	196	58.3
Others	30	17.0	14	8.8	44	13.1
NR	1	0.6	0	0.0	1	0.3
Current employment status**						
Employment	60	34.1	79	49.4	139	41.4
Unemployed	62	35.2	55	34.4	117	34.8
Student/Home duties	40	22.7	24	15.0	64	19.0
Criminal	3	1.7	1	0.6	4	1.2
NR	11	6.3	1	0.6	12	3.6
Current housing situation*						
Rent/boardg/caravan	128	73.1	97	60.6	225	67.2
Shelter/squat/homeless	22	12.6	38	23.8	60	17.9
Privately owned house or flat	25	14.3	25	15.6	50	14.9
Current living situation						
Alone	29	16.5	28	17.5	57	17.0
With others	147	83.5	131	81.9	278	82.7
NR	0	0.0	1	0.6	1	0.6
Family who currently inject						
Immediate family	36	20.5	30	18.8	66	19.6
Extended family only	3	1.7	10	6.3	13	3.9
Neither/NR	137	77.8	120	75.0	257	76.5
Current partner who injects						
Yes	72	40.9	63	39.4	135	40.2
No	28	15.9	31	19.4	59	17.6
NR	76	43.2	66	41.3	142	42.3

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01 *** p=<.001.

6.2 KEY VARIABLES, BY CURRENT INJECTING DRUG

On the whole, current opioid injectors had been initiated into injecting drug use at a slightly younger age than current stimulant injectors (M=18.19 years, versus M=18.81 years). They also had significantly higher dependency scores (M=7.2, versus M=3.7) and reported fewer positive life events (M=1.7, versus M=2.8), and more negative life events (M=7.1, versus M=4.9) since first starting to inject. Also a higher percentage was HCV positive (32%, versus 14%).

There was no difference between current opioid and current stimulant injectors with respect to frequency of injecting, social involvement with IDUs, knowledge of BBVs and STDs, disclosure of injecting drug status, borrowing of injection equipment, lending of used fits, or time since first injection. See Tables 6c and 6d.

Table 6c. Numerical key variables, by current injecting drug

	Opioid injectors N=176		**Stimulant injectors N=160**		**Total N=336**	
		Mean		Mean		Mean
Age at initiation*		18.2		18.8		18.5
Frequency of injecting		1.4		0.8		1.2
SDS***		7.2		3.7		5.5
Positive life events***		1.7		2.9		2.3
Negative life events***		7.1		4.9		6.0
Social involvement with IDUs	(n=174)	4.1	(n=159)	3.9	(n=333)	4.0
Knowledge		11.9		12.0		11.9
Disclosure		3.0		3.0		3.0
Lent fits		0.5		0.4		0.5

* p=<.05 *** p=<.001

Table 6d. Categorical key variables, by current injecting drug

	Opioid injectors		**Stimulant injectors**		**Total**	
	n	%	n	%	n	%
HCV status***						
Negative	62	35.2	82	51.3	144	42.9
Positive	57	32.4	23	14.4	80	23.8
Unknown	57	32.4	55	34.4	112	33.3
Borrowing of injecting equipment						
Not borrowed in last 6 months	97	55.1	85	53.1	182	54.2
Borrowed in last 6 months	79	44.9	75	46.9	154	45.8
Time since first injection						
24 months or less	76	43.2	72	45.0	148	44.0
25 months or more	100	56.8	88	55.0	188	56.0

NR - no response/don't know/missing data.

*** p=<.001.

6.3 INFORMATION HANDLING, BY CURRENT INJECTING DRUG

Stimulant injectors were more likely than opioid injectors to report that they had relied solely on less reliable sources of information about HCV and/or safe injecting practice (friends, etc). However, numbers are very small (13%, versus 6%). Opioid injectors were slightly more likely than stimulant injectors to report that they had used at least some reliable information sources (92%, versus 85%). See Table 6e.

There were no differences in relation to the passing on of information about BBVs or safe injecting.

Table 6e. Information handling, by current injecting drug

	Opioid injectors		Stimulant injectors		Total	
	n	%	n	%	n	%
Used reliable information sources +/-other sources*	162	92.0	136	85.0	298	88.7
Used less reliable/unreliable sources only*	11	6.3	21	13.1	32	9.5
Passed on information about BBVs +/- other info	70	39.8	60	37.5	130	38.7

* p=<.05 ** p=<.01 *** p=<.001.

6.4 CIRCUMSTANCES PRIOR TO INITIATION, BY CURRENT INJECTING DRUG

Current opioid injectors were more likely than current stimulant injectors to have used heroin by non-injection routes prior to first injection (39%, versus 12%), but they were no more or less likely to have used stimulants prior to first injection. See Table 6f.

There was no difference between current opioid and stimulant injectors in terms of other variables relating to the period prior to first injection, including: use of non-injecting drugs prior to first injection, family who already injected, having seen persons injecting, use of injecting drug prior to first injection, planning of first injection, or reasons given for first injection. See Tables 6f and 6g.

Table 6f. Non-injected drugs used prior to first injection, with mean age of first use, by current injecting drug

	Opioid injectors			Stimulant injectors			Total		
	n	%	Mean age at 1st use	n	%	Mean age at 1st use	n	%	Mean age at 1st use
Alcohol	165	93.8	13.3	153	95.6	13.5	318	94.6	13.4
'Pot'	158	89.8	13.7	144	90.0	13.6	302	89.9	13.6
Non-injected opioids									
Heroin***	68	38.6	16.7	19	11.9	16.9	87	25.9	16.7
Methadone	7	4.0	20.2	7	4.4	16.7	14	4.2	18.3
Benzodiazepine	49	27.8	16.4	34	21.3	16.1	83	24.7	16.3
Non-injected stimulants									
'Speed'	78	44.3	16.1	72	45.0	16.1	150	44.6	16.1
Cocaine	40	22.7	17.2	30	18.8	16.8	70	20.8	17.0
Ecstasy	49	27.8	16.8	52	32.5	16.7	101	30.1	16.8
LSD	48	27.3	15.9	53	33.1	15.9	101	30.1	15.9
Steroids	2	1.1	18.0	2	1.3	16.5	4	1.2	17.3
Other	14	8.3	15.8	10	7.4	17.1	24	7.9	16.8

*** p=<.001.

Table 6g. Categorical demographic variables prior to 1st injection, by current injecting drug class

	Opioid injectors		Stimulant injectors		Total	
	n	%	n	%	n	%
Had family who injected prior to own 1st injection						
Immediate family+/- extended	25	14.2	28	17.5	53	15.8
Extended family only	4	2.3	5	3.1	9	2.7
Neither/NR	147	53.5	127	79.4	274	81.5
Saw friends inject prior to own 1st injection						
Yes	125	71.0	111	69.8	236	70.4
No	50	28.4	46	28.9	96	28.7
NR	1	1.6	2	1.3	3	0.9
Saw partner inject prior to own 1st injection						
Yes	51	29.1	32	20.4	83	25.0
No	123	70.3	123	78.3	246	74.1
NR	1	0.6	2	1.3	3	0.9
Saw schoolmates inject prior to own 1st injection						
Yes	22	12.6	10	6.4	32	9.6
No	152	86.9	145	92.4	297	89.5
NR	1	1.6	2	1.3	3	0.9
Whether or not drug first injected was used in other ways prior to first injection						
Yes	116	65.9	109	68.1	225	67.0
No	52	29.5	50	31.3	102	30.4
NR	8	4.5	1	0.6	9	2.7
Planning of 1st injection						
Not at all/not very planned	95	54.0	101	63.1	196	58.3
Fairly/very planned	76	43.2	56	35.0	132	39.3
NR	5	2.8	3	1.9	8	2.4
Why injected first time						
To experiment	149	84.7	126	78.8	275	81.8
For fun	75	42.6	71	44.4	146	43.5
For rush/high	95	54.0	72	45.0	167	49.7
Because available	59	33.5	63	39.4	122	36.3
Because offered	73	41.5	75	46.9	148	44.0
Peer pressure	48	27.3	33	20.6	81	24.1
Cheaper than other ways	37	21.0	42	26.3	79	23.5
Quicker effect	42	23.9	54	33.8	96	28.6

NR - no response/don't know/missing data.

6.5 CIRCUMSTANCES AT TIME OF INITIATION, BY CURRENT INJECTING DRUG

There were differences between participants classified as opioid and stimulant injectors on a number of variables relating to the time of initiation.

A higher percentage of opioid injectors (versus stimulant injectors) reported that their first fit was obtained from a more formal such as a NSP, chemist, hospital, or vending machine (86%, versus 78%). A larger percentage of stimulant injectors (versus opioid injectors) did not know, or did not remember, where the equipment for their first injection had been obtained (17%, versus 13%).

A higher percentage of opioid injectors were injected at first injection by themselves (21%, versus 17%) or their partner (27%, versus 18%), rather than by another person. Stimulant users were more likely than opioid injectors to have initiated injecting with the same drug that they currently use for injection (83%, versus 72%). Compared with stimulant users, opioid users were more likely to have changed the drug they inject (28%, versus 18%). In other words, starting to inject with stimulants and moving over to opioids is more common than a switch in the opposite direction (from opioid to stimulant use).

Current stimulant injectors were more likely to have used non-injecting drugs (alcohol, 'pot' or other drugs) along with their first injection than current opioid injectors (75%, versus 53%).

Current opioid injectors, compared with current stimulant injectors, were more likely to have been alone (11%, versus 8%) or with only one other person (35%, versus 26%) at initiation, and they were more likely to have been with a partner (30%, versus 24%). Current stimulant injectors were more likely to have been in the company of friends or acquaintances (65%, versus 49%). There was no difference between the two groups in relation to family or schoolmates present at initiation.

There was no difference between current opioid injectors and current stimulant injectors in terms of the following variables at time of initiation: source of income, housing, living situation (alone or with others), place of first injection, number of persons present at initiation known to participant, number present and injecting, others having their first injection, relative age of others present, relative age of others having their first injection, gender of those present, number still in touch with respondent at time of interview. See Tables 6h, 6i, and 6j.

Table 6h. Categorical variables: Demographics at time of initiation, by current injecting drug class

	Opioid injectors		Stimulant injectors		Total	
	n	%	n	%	n	%
Main source of income at time of initiation						
Full-time employment	34	19.3	35	21.9	69	20.5
Part-time employment	22	12.5	21	13.1	43	12.8
Government benefits	78	44.3	77	48.1	155	46.1
Others	36	20.5	24	15.0	60	17.9
NR	6	3.4	3	1.9	9	2.7
Housing situation at time of initiation						
Rented/boarding/hostel/caravan	119	67.6	97	60.6	216	64.3
Squat/shelter/prison/homeless etc	19	10.8	25	15.6	44	13.1
Privately owned house or flat	34	19.3	29	18.1	63	18.8
Other/NR	4	2.3	9	5.6	13	3.9
Living situation at time of initiation						
With others	149	84.7	142	88.8	291	86.6
Alone	23	13.1	17	10.6	40	11.9
NR	4	2.3	1	0.6	5	1.5

NR - no response/don't know/missing data.

Table 6i. Categorical variables: Circumstances of initiation, by current injecting drug

	Opioid injectors		Stimulant injectors		Total	
	n	%	n	%	n	%
Place of first injection						
Home (own/friend's/partner's/ dealer's/shooting gallery)	139	79.0	117	73.1	256	76.2
Other (street/squat, etc)	39	20.5	43	26.9	79	23.5
NR	1	0.6	0	0.0	1	0.3
Where fit was obtained**						
NSP/chemist/ hospital/ vending machine	151	85.8	125	78.1	276	82.1
Friend/dealer	3	1.7	8	5.0	11	3.3
NR	22	12.5	27	16.9	49	14.6
Person who obtained injection equipment						
Self	55	31.3	38	23.8	93	27.7
Partner	36	20.5	24	15.0	60	17.9
Other/NR	85	48.3	98	61.3	183	54.5
Person who first injected participant***						
Self	36	20.5	27	16.9	63	18.8
Partner	47	26.7	29	18.1	76	22.6
Schoolmate	10	5.7	2	1.3	12	3.6
Friend	72	40.9	64	40.0	136	40.5
Dealer	4	2.3	8	5.0	12	3.6
Other	4	2.3	30	18.8	34	10.1
NR	3	1.7	0	0.0	3	0.9
First drug injected***						
Opioids	126	71.6	28	17.5	154	45.8
Stimulants	50	28.4	132	82.5	182	54.2
Other (non-injection) drugs taken with first injection**						
None	77	43.8	39	24.4	116	34.5
Alcohol &/or 'pot'	31	17.6	42	26.3	73	21.7
Other drugs	63	35.8	78	48.8	141	42.0
NR	5	2.8	1	0.6	6	1.8

NR - no response/don't know/missing data.

* p<.05 ** p<.01 *** p<.001.

Table 6j. Categorical variables: Others present at initiation, by current injecting drug

	Opioid injectors		Stimulant injectors		Total	
	n	%	n	%	n	%
Number of other people present at initiation**						
None	20	11.4	12	7.5	32	9.5
One	61	34.7	41	25.6	102	30.4
Two or more	98	50.6	107	66.9	196	58.3
NR	6	3.4	0	0.0	6	1.8
Number known to participant						
None/some	9	5.1	11	6.9	20	6.0
Most/all	148	84.1	141	88.1	289	86.0
NR	19	10.8	8	5.0	27	8.0
Identity of those present**						
Friends	60	34.1	58	36.3	118	35.1
Partner/ Part +others	53	30.1	39	24.4	92	27.4
Family/schoolmates	16	9.1	12	7.5	28	8.3
Acquaintances/Others	27	15.3	47	29.4	74	22.0
NR	20	11.4	4	2.5	24	7.1
Others injecting						
No/Some	15	8.5	21	13.1	36	10.7
Most/all	138	78.4	133	83.1	271	80.7
NR	23	13.1	6	3.8	29	8.6
Others having first injection						
None	138	78.4	126	78.8	264	78.6
Various	20	11.4	25	15.6	45	13.4
NR	18	10.2	9	5.6	27	8.0
Relative age of others present						
Same age as self	105	59.7	81	50.6	186	55.4
Older	38	21.6	48	30.0	86	25.6
Younger	3	1.7	10	6.3	13	3.9
Mixed ages	12	6.8	12	7.5	24	7.1
NR	18	10.2	9	5.6	27	8.0
Relative age of others having first injection						
Same	21	11.9	22	13.8	43	12.8
Older/younger/both	3	1.7	5	3.1	8	2.4
NR	152	86.4	133	83.1	285	84.8
Gender of others present						
All/mostly male	73	41.5	76	47.5	149	44.3
All/mostly female	24	13.6	24	15.0	48	14.3
Mix	60	34.1	54	33.8	114	33.9
NR	19	10.8	6	3.8	25	7.4
Still in touch with others present						
No, none	38	21.6	33	20.6	71	21.1
Some/most/all	119	67.6	121	75.6	240	71.4
NR	19	10.8	6	3.8	25	7.4

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01.

6.6 PROFILE OF OPIOID INJECTORS VERSUS STIMULANT INJECTORS

A multivariate logistic regression was performed (using alpha .01) to ascertain characteristics distinguishing current opioid injectors from stimulant injectors. The full model included most key variables – age at initiation, frequency of injecting, severity of dependency, social involvement with IDUs, knowledge of BBVs and STIs, disclosure of injecting status, HCV status, risk taking (borrowing of equipment), time since first injection. It also included a number of variables that were significantly related to 'drug most frequently used in the last 6 months' in the bivariate analyses, namely, recruitment location, current employment status (at time of interview), current housing situation, person who injected respondent at initiation, non-injecting drugs used with first injection, persons present and injecting at initiation, where fit for initiation was obtained, and who obtained fit for first injection. However, two variables that were significantly related to drug most frequently injected were omitted from the regression because they were so closely related to drug most frequently injected as to appear tautological with it. These were: drug first injected and heroin use prior to first injection.

The full model explained 67% of the variance, and the reduced model, 45% of the variance in drug most frequently injected in the last 6 months. The reduced model comprised four variables (in order of significance): recruitment location, severity of dependence (both, $p=<.001$), experience of negative events since starting to inject drugs ($p=.001$), and non-injecting drugs used with first injection ($p=.006$). In other words, opioid users were likely to be living in Sydney (rather than Brisbane or Northern Rivers), to have high (rather than low) dependency scores, and to have experienced a relatively large number of negative life events since starting to inject. They were also unlikely to have taken non-injecting drugs along with their first injection. Stimulant users, by contrast, were likely to be living in Brisbane or Northern Rivers, to have relatively low dependency scores and few negative life events, and they were likely to have used non-injecting drugs, especially alcohol or 'pot', with their first injection.

Further analysis revealed that HCV positive status became a feature of the opioid user profile when severity of dependence and experience of negative events were excluded from the model. This suggests that the latter variables are connected with HCV positive status.

7

DIFFERENCES BETWEEN EARLY AND LATE INITIATORS

Demographics at time of interview, key variables, and demographics prior to and at initiation, were also examined in bivariate analyses with age at initiation, to ascertain whether there were differences between those who had initiated injecting drug use at a younger age (12 to 18 years; 'early initiators') and those who had initiated at an older age (19 to 24 years of age; 'late initiators'). About half the sample (50.3%, n=169) were 'early initiators' and half were 'late initiators' (49.7%, n=167). The mean age ± SD at initiation was 18.5 ± 2.39 years.

7.1 DEMOGRAPHIC VARIABLES, BY AGE AT INITIATION

Those who started injecting at the younger age were on the whole younger at interview (M=19.1 years) than those who started injecting at the older age (M=21.2 years). See Table 7a.

Table 7a. Numerical demographic variables, by age at initiation

	Early initiators		Late initiators		Total	
	n	Mean	n	Mean	n	Mean
Current age***	168	19.1	166	23.3	334	21.2

*** p=<.001.

There were also differences with respect to recruitment location and ethnicity. In Sydney, a higher percentage of participants were early initiators (57%, versus 41%), while the opposite was true in Brisbane (30%, versus 41%) and Northern Rivers (12%, versus 19%). Similarly, a higher percentage of Aboriginal/Torres Strait Islander participants were early rather than late initiators (21%, versus 11%). Further, early initiators were more likely (than late initiators): to have completed at most a Year 10 level of education (rather than higher than this; 78%, versus 50%), to have left school before their 16th birthday (50%, versus 35%), to be unemployed (44%, versus 25%), and to be dependent for their income on sources other than full-time employment (full-time employment: 7%, versus 26%). Compared with late initiators, early initiators were more likely to have family members who inject (24%, versus 15%), and were less likely to be living alone at time of interview (12%, versus 22%).

There was no difference between early and late initiators in terms of gender, country of birth, sexual identity, current housing situation, or current partner who injects. See Tables 7a and 7b.

Table 7b. Categorical demographic variables, by age at initiation

	Early initiators		Late initiators		Total	
	n	%	n	%	n	%
Recruitment location**						
Sydney	97	57.4	68	40.7	165	49.1
Brisbane	51	30.2	68	40.7	119	35.4
Northern Rivers	21	12.4	31	18.6	52	15.5
Gender						
Male	90	53.3	106	63.5	196	58.3
Female	78	46.2	59	35.3	137	40.8
Transgender	1	0.6	2	1.2	3	0.9
Country of birth						
Australia	139	82.2	149	89.2	288	85.7
Overseas	26	15.4	18	10.8	44	13.1
NR	4	2.4			4	1.2
Ethnicity*						
Aboriginal/Torres Strait Islander	36	21.3	19	11.4	55	16.4
Other	127	75.1	145	86.8	272	81.0
Missing (NR)	6	3.6	3	1.8	9	2.7
Sexual identity						
Heterosexual	126	74.6	118	70.7	244	72.6
Gay/les	12	7.1	15	9.0	27	8.0
Bisexual	26	15.4	25	15.0	51	15.2
NR	5	3.0	9	5.4	14	4.2
Highest level of education***						
Up to/inc Year 10	132	78.1	83	49.7	215	64.0
Above Year 10	36	21.3	83	49.7	119	35.4
NR	1	0.6	1	0.6	2	0.6
Age at leaving school**						
< 16	85	50.3	59	35.3	144	42.9
16 and over/still at school	84	49.7	108	64.7	192	57.1
Current main source of income***						
Full-time employment	11	6.5	43	25.7	54	16.1
Part-time employment	20	11.8	21	12.6	41	12.2
Government benefits	102	60.4	94	56.3	196	58.3
Other	35	20.7	9	5.4	44	13.1
NR	1	0.6	0	0.0	1	0.3
Current employment status***						
Employed	51	30.2	88	52.7	139	41.4
Unemployed	75	44.4	42	25.1	117	34.8
Student/parent	37	21.9	27	16.2	64	19.0
Criminal	2	1.2	2	1.2	4	1.2
NR	4	2.4	8	4.8	12	3.6
Current housing situation						
Rent/boarding/caravan	111	65.7	114	68.7	225	67.2
Squat/shelter/homeless	33	19.5	27	16.3	60	17.9
Privately owned house or flat	25	14.8	25	15.1	50	14.9
NR	0	0.0	1	0.6	1	0.3
Current living situation*						
Alone	21	12.4	36	21.6	57	17.0
With others	148	87.6	130	77.8	278	82.7
NR	0	0.0	1	0.6	1	0.3
Family who currently inject*						
Immediate +/-extended	41	24.3	25	15.0	66	19.6
Extended only	4	2.4	9	5.4	13	3.9
None	124	73.4	133	79.6	257	76.5
Current partner who injects						
Yes	67	39.6	68	40.7	135	40.2
No	30	17.8	29	17.4	59	17.6
NR	72	42.6	70	41.9	142	42.3

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01 *** p=<.001.

7.2 KEY VARIABLES, BY AGE AT INITIATION

Early initiators injected slightly more frequently (closer to twice a day) in the past six months (M=1.31) than late initiators (M=1.15). Early initiators were more likely than late initiators to be opioid injectors rather than stimulant injectors (58%, versus 47%). Also, they were more likely to self-report as HCV status unknown (40%, versus 27%) less likely to self-report as HCV negative (37%, versus 49%), and equally likely to self-report as HCV positive (24%, for both groups). They were more likely than late initiators to have borrowed injecting equipment in the past 6 months (54%, versus 37%).

Age at initiation was not associated with: self-reported severity of dependency, levels of positive or negative life events since initiation, levels of social contact with other drug users, knowledge of BBVs and STIs, disclosure of intravenous drug use, lending of used fits to other, or time since first injection. See Tables 7c and 7d.

Table 7c. Numerical key variables, by age at initiation

	Early initiators N=169	Late initiators N=167	Total N=336
	Mean	Mean	Mean
Frequency of injecting**	1.3	1.0	1.2
SDS	5.9	5.2	5.5
Positive life events	2.4	2.1	2.3
Negative life events	6.1	6.0	6.0
Social involvement with IDUs	(n=166) 4.2	3.9	(n=333) 4.0
Knowledge of BBVs/STIs	11.7	12.2	11.9
Disclosure	3.0	3.0	3.0
Lent fits	0.4	0.5	0.5

** p=<.01.

Table 7d. Categorical key variables, by age at initiation

	Early initiators		Late initiators		Total	
	n	%	n	%	n	%
Drug most frequently injected in the past six months*						
Opioids	98	58.0	78	46.7	176	52.4
Stimulants	71	42.0	89	53.3	160	47.6
Time since first injection						
24 months or less	81	47.9	67	40.1	148	44.0
25 months or more	88	52.1	100	59.9	188	56.0
HCV status*						
Negative	62	36.7	82	49.1	144	42.9
Positive	40	23.7	40	24.0	80	23.8
Unknown	67	39.6	45	26.9	112	33.3
Borrowing of injecting equipment**						
Not borrowed in last 6 months	77	45.6	105	62.9	182	54.2
Borrowed in last 6 months	92	54.4	62	37.1	154	45.8

* p=<.05 ** p=<.01.

7.3 INFORMATION HANDLING, BY AGE AT INITIATION

There were no differences between early and late initiators in relation to reported sources of information, or in relation to the passing on of information to other IDUs. See Table 7e.

Table 7e. Information handling, by age at initiation

	Early initiators		Late initiators		Total	
	n	%	n	%	n	%
Used reliable information sources +/-other sources	155	91.7	143	85.6	298	88.7
Used less reliable sources only	11	6.6	21	12.6	32	9.5
Passed on information about BBVs +/- other info	62	36.7	68	40.7	130	38.7

7.4 CIRCUMSTANCES PRIOR TO INITIATION, BY AGE AT INITIATION

Early initiators were less likely than late initiators to have used benzodiazepine (17%, versus 32%) and LSD (25%, versus 35%) prior to first injection. In addition, early injection initiators appeared to have started all their drug use at a younger age. The mean age for first use of alcohol, 'pot', heroin, benzodiazepine, 'speed', cocaine, ecstasy and LSD by non-injection routes was younger for early (injection) initiators than for late (injection) initiators (all drugs: M=13.9 years, versus M=15.3 years). See Table 7f.

Early initiators were less likely than late initiators to give, as a reason for their first injection, the explanation that injecting is cheaper than alternative drug routes (18%, versus 29%). See Table 7g.

There was no difference between early and late initiators with respect to: having family members who injected prior to (respondents') first injection, having seen friends, partners, schoolmates inject prior to first injection, use of the first drug injected by non-injection routes prior to first injection, planning of first injection, or other reasons given for starting to inject. See Tables 7f and 7g.

Table 7f. Non-injecting drugs used prior to first injection, with mean age of first use, by age at initiation

	Early initiators			Late initiators			Total		
	n	%	Mean age at 1st use	n	%	Mean age at 1st use	n	%	Mean age at 1st use
Alcohol	157	92.9	12.9***	161	96.4	13.9	318	94.6	13.4
'Pot'	151	89.3	13.0***	151	90.4	14.3	302	89.9	13.6
Non-injected opioids									
Heroin	45	26.6	15.6***	42	25.1	18.1	87	25.9	16.1
Methadone	5	3.0	17.0	9	5.4	19.1	14	4.2	18.3
Benzodiazepine**	29	17.2	15.5*	54	32.3	16.7	83	24.7	16.3
Non-injected stimulants									
'Speed'	80	47.3	15.2***	70	41.9	17.2	150	44.6	16.1
Cocaine	33	19.5	16.0***	37	22.2	18.0	70	20.8	17.0
Ecstasy	45	26.6	15.8***	56	33.5	17.6	101	30.1	16.8
LSD*	42	24.9	15.0***	59	35.3	16.5	101	30.1	15.9
Steroids	2	1.2	16.5	2	1.2	18.0	4	1.2	17.3

* p=<.05 ** p=<.01 *** p=<.001.

Table 7g. Categorical demographic variables prior to 1st injection, by age at initiation

	Early initiators		Late initiators		Total	
	n	%	n	%	n	%
Had family who injected prior to own first injection						
Immediate +/-extended	32	18.9	21	12.6	53	15.8
Extended only	3	1.8	6	3.6	9	2.7
None	134	79.3	140	83.8	274	81.5
Had seen friends inject prior to first						
Yes	116	68.6	120	72.3	236	70.4
No	51	30.2	45	27.1	96	28.7
NR	2	1.2	1	0.6	3	0.9
Had seen partner inject prior to first						
Yes	38	22.6	45	27.4	83	25.0
No	128	76.2	118	72.0	246	74.1
NR	2	1.2	1	0.6	3	0.9
Had seen schoolmates inject prior to first						
Yes	22	13.1	10	6.1	32	9.6
No	144	85.7	153	93.3	297	89.5
NR	2	1.2	1	0.6	3	0.9
Whether or not drug first injected was used in other ways prior to 1st injection						
Yes	114	67.5	111	66.5	225	67.0
No	50	29.6	52	31.1	102	30.4
NR	5	3.0	4	2.4	6	2.7
Planning of first injection						
Not at all/not very planned	93	55.0	103	61.7	196	58.3
Fairly/very	73	43.2	59	35.3	132	39.3
NR	3	1.8	5	3.0	8	2.4
Why injected first time						
To experiment	133	78.7	142	85.0	275	81.8
For fun	77	45.6	69	41.3	146	43.5
For rush/high	91	53.8	76	45.5	167	49.7
Because available	67	39.6	55	32.9	122	36.3
Because offered	77	45.6	71	42.5	148	44.0
Peer pressure	48	28.4	33	19.8	81	24.1
Cheaper than other ways*	31	18.3	48	28.7	79	23.5
Quicker effect	46	27.2	50	29.9	96	28.6

NR - no response/don't know/missing data.

* p=<.05.

7.5 CIRCUMSTANCES AT TIME OF INITIATION, BY AGE AT INITIATION

Early initiators were less likely than late initiators to have been in full-time employment when they first started injecting (8%, versus 34%). Also, they were more likely than late initiators to have been living in disadvantaged circumstances, e.g. a squat, shelter, prison, detention centre or on the streets (homeless), at the time of initiation (18%, versus 8%), and less likely to have been living in rented accommodation (58%, versus 71%).

There was no difference between early and late initiators in relation to other variables at the time of initiation: living alone or with others, place of first injection, person who first injected the participant, first drug injected (opioid or stimulant), non-injecting drugs taken with first injection, or the many variables relating to persons present at participant's initiation. See Tables 7h, 7i, and 7j.

Table 7h. Categorical variables: Demographics at time of initiation, by age at initiation

	Early initiators		Late initiators		Total	
	n	%	n	%	n	%
Main source of income at time of initiation***						
Full-time employment	13	7.7	56	33.5	69	20.5
Part-time employment	22	13.0	21	12.6	43	12.8
Government benefits	82	48.5	73	43.7	155	46.1
Other	49	29.0	11	6.6	60	17.9
NR	3	1.8	6	3.6	9	2.7
Housing at time of initiation*						
Rented/boardg/hostel/caravan	98	58.0	118	70.7	216	64.3
Squat/shelter/prison/homeless	31	18.3	13	7.8	44	13.1
Privately owned house or flat	35	20.7	28	16.8	63	18.8
Other/NR	5	3.0	8	4.8	13	3.9
Living situation at time of initiation						
Alone	18	10.7	22	13.2	40	11.9
With others	148	87.6	143	85.6	291	86.6
NR	3	1.8	2	1.2	5	1.5

NR – no response/don't know/missing data.

* p=<.05 *** p=<.001.

Table 7i. Categorical variables: Circumstances of initiation, by age at initiation

	Early initiators		Late initiators		Total	
	n	%	n	%	n	%
Place of first injection						
Home (own/friend's/partner's/ dealers/shooting gallery	123	72.8	133	79.6	256	76.2
Other (street/squat/etc.)	45	26.6	34	20.4	79	23.5
NR	1	0.6	0	0.0	1	0.3
Where fit was obtained						
NSP/chemist/ hospital/ vending machine	141	83.4	135	80.8	276	82.1
Friend/dealer	4	2.4	7	4.2	11	3.3
NR	24	14.2	25	15.0	49	14.6
Person who obtained injection equipment						
Self	42	24.9	51	30.5	93	27.7
Partner	27	16.0	33	19.8	60	17.9
Other/NR	100	59.2	83	49.7	183	54.5
Person who first injected participant						
Self	25	14.8	38	22.8	63	18.8
Partner	40	23.7	36	21.6	76	22.6
Schoolmate	10	5.9	2	1.2	12	3.6
Friend	70	41.4	66	39.5	136	40.5
Dealer	7	4.1	5	3.0	12	3.6
Other	15	8.9	19	11.4	34	10.1
NR	2	1.2	1	0.6	3	0.9
First drug injected						
Opioids	86	50.9	68	40.7	154	45.8
Stimulants	83	49.1	99	59.3	182	54.2
Non-injecting drugs taken with first injection						
None	59	34.9	57	34.1	116	34.5
Alcohol &/or 'pot'	43	25.4	30	18.0	73	21.7
Other drugs	63	37.3	78	46.7	141	42.0
NR	4	2.4	2	1.2	6	1.8

NR - no response/don't know/missing data.

Table 7j. Categorical variables: Others present at initiation, by age of initiation

	Early initiators		Late initiators		Total	
	n	%	N	%	n	%
Number of other people present at initiation						
None	19	11.2	13	7.8	32	9.5
One	42	24.9	60	35.9	102	30.4
Two or more	104	61.5	92	55.1	196	58.3
NR	4	2.4	2	1.2	6	1.8
Number of others known to participant						
No/some	13	7.7	7	4.2	20	6.0
Most/all	143	84.6	146	87.4	289	86.0
NR	13	7.7	14	8.4	27	8.0
Identity of those present						
Friends	60	35.5	58	34.7	118	35.1
Partner/ Part +others	45	26.6	47	28.1	92	27.4
Family/schoolmates	12	7.1	16	9.6	28	8.3
Acquaintances/Others	39	23.1	35	21.0	74	22.0
NR	13	7.7	11	6.6	24	7.1
Others injecting						
No/Some	19	11.2	17	10.2	36	10.6
Most/all	134	79.3	137	82.0	271	80.7
NR	16	9.5	13	7.8	29	8.6
Others having first injection						
None	130	76.9	134	80.2	264	78.6
Various	23	13.6	22	13.2	45	13.4
NR	16	9.5	11	6.6	27	8.0
Relative age of others present						
Same age as self	88	52.1	98	58.7	186	55.4
Older	46	27.2	40	24.0	86	25.6
Younger	7	4.1	6	3.6	13	3.9
Mixed ages	15	8.9	9	5.4	24	7.1
NR	13	7.7	14	8.4	27	8.0
Relative age of other initiates						
Same	21	12.4	22	13.2	43	12.8
Older/younger/both	5	3.0	3	1.8	8	2.4
NR	143	84.6	142	85.0	285	84.8
Gender of others present						
All/mostly male	70	41.4	79	47.3	149	44.3
All/mostly female	24	14.2	24	14.4	48	14.3
Mix	63	37.3	51	30.5	114	33.9
NR	12	7.1	13	7.8	25	7.4
Still in touch with others present						
No, none	32	18.9	39	23.4	71	21.1
Some/most/all	124	73.4	116	69.5	240	71.4
NR	13	7.7	12	7.2	25	7.4

NR - no response/don't know/missing data.

7.6. PROFILE OF EARLY VERSUS LATE INITIATORS

A multivariate logistic regression was carried out (using alpha .01) to ascertain characteristics distinguishing early initiators from late initiators. The full model included most key variables — frequency of injecting, severity of dependence, positive and negative life events since initiation, social involvement with IDUs, knowledge of BBVs/STIs, disclosure of injecting status, drug most frequently injected in last 6 months, time since first injection, HCV status, borrowing fits or equipment from others — and a number of the variables that were significantly related to age at initiation in bivariate analysis, namely, recruitment location, ethnicity, highest level of education reached, age when left school, current source of income, current employment status (at time of interview), current living situation (alone or with others), family who currently inject, use of benzodiazepine prior to initiation, having started injecting because it was cheaper, and source of income and housing situation at time of initiation. Two variables that were highly significant in their relationship with age at initiation were omitted from the regression analysis because they appeared somewhat tautological with the dependent variable. These were current age at interview and mean age at which started to use non-injecting drugs.

The full model explained 44% of the variance and the reduced model, 33% of the variance, in age at initiation. The reduced model included the following five variables (in order of significance): highest level of education reached, source of income at initiation (both, p=<.001), recruitment location (p=.001), borrowing fits or other injecting equipment (p=.002), and HCV status (p=.007). Early initiators (compared with late initiators) were more likely to be reliant on sources of income other than full-time employment at time of initiation, to have education no higher than Year 10, to live in Sydney rather than Brisbane or Northern Rivers, to borrow fits or other injection equipment from others, and to be unaware of their HCV status.

7.7 KEY VARIABLES, BY TIME SINCE INITIATION

Time since initiation is an important variable in the literature which is conceptually, but not statistically, related to age at initiation. Consequently, the relationship of time since initiation to key variables is also given here. See Tables 7k and 7l. Longer time since initiation (25 months or more) was associated with having been recruited in Brisbane (43%, versus 26%), experience of more negative (as well as more positive) life events since initiation (M=6.8, versus M=5.1), greater social involvement with IDUs (M=4.3, versus M=3.7), more knowledge about sexually transmitted diseases and blood-borne viruses (M=12.6, versus M=11.1), greater disclosure of injecting drug status (M=3.3, versus M=2.7), greater likelihood of HCV positive status (34%, versus 11%), and greater likelihood of borrowing (risk-taking) behaviour (53%, versus 37%). Shorter time since first injection was associated with having been recruited in Sydney (60%, versus 40%), and not knowing one's HCV status (48%, versus 22%).

Longer time since initiation was also related to low education levels (69%, versus 58%) and younger school leaving age (48%, versus 36%).

Table 7k. Numerical key variables, by time since initiation

	Up to 24 mths N=148		25 mths or longer N=188		Total N=336	
		Mean		Mean		Mean
Frequency of injecting		1.0		1.2		1.1
SDS		5.1		5.9		5.5
Positive life events *		2.0		2.5		2.0
Negative life events ***		5.1		6.8		6.0
Social involvement with IDUs**	(n=145)	3.7		4.3	(n=333)	4.0
Knowledge of BBVs/STIs***		11.1		12.6		11.9
Disclosure**		2.7		3.3		3.0
Age at first injection		18.5		18.5		18.5

* p=<.05 ** p=<.01 *** p=<.001.

Table 7l. Categorical key variables, by time since initiation

	Up to 24 mths		25 mths or longer		Total	
	n	%	n	%	n	%
Recruitment location**						
Sydney	89	60.1	76	40.4	165	49.1
Brisbane	39	26.4	80	42.6	119	35.4
Northern Rivers	20	13.5	32	17.0	52	15.5
Drug most frequently injected in the past six months						
Opioids	76	51.4	100	53.2	176	52.4
Stimulants	72	48.6	88	46.8	160	47.6
HCV status***						
Negative	61	41.2	83	44.1	144	42.9
Positive	16	10.8	64	34.0	80	23.8
Unknown	71	48.0	41	21.8	112	33.3
Borrowing of injecting equipment**						
Not borrowed in last 6 months	93	62.8	89	47.3	182	54.2
Borrowed in last 6 months	55	37.2	99	52.7	154	45.8

* p=<.05 ** p=<.01.

Table 7m. Education variables, by time since initiation

	Up to 24 mths		25 mths or longer		Total	
	n	%	n	%	n	%
Highest level of education*						
Up to & including Year 10	86	58.1	129	68.6	215	64.0
Over Year 10	62	41.9	57	30.3	119	35.4
NR	0	0.0	2	1.1	2	0.6
Age at leaving school*						
<16 years	53	35.8	91	48.4	144	42.9
16 and over/still at school	95	64.2	97	51.6	192	57.1

* p=<.05.

8

DIFFERENCES RELATING TO HCV STATUS

Demographic variables at time of interview, key variables, and also demographics at initiation (but not prior to initiation), were examined in bivariate analyses to ascertain whether these variables were related to HCV status.

8.1 DEMOGRAPHIC VARIABLES, BY HCV STATUS

A number of demographic variables were related to HCV status.

Participants who were HCV positive were on average older (M=21.88) than those with negative and unknown HCV status (M=21.5 and 20.2, respectively); i.e., the status unknown, or untested group, had the youngest average age. See Table 8a.

Table 8a. Numerical demographic variables, by HCV status

	Negative		Positive		Unknown		Total	
	n	Mean	n	Mean	n	Mean	n	Mean
Current age***	143	21.5	80	21.9	111	20.2	334	21.2

*** p=<.001

Fifty percent of participants with positive HCV status were recruited in Sydney, 41% in Brisbane (no significant difference between these cities) and 9% in the Northern Rivers area. HCV positive respondents were more likely to have a low education level, Year 10 or less, than HCV negative respondents or the untested group (84%, versus 56% negative, 60% untested). The HCV positive group was also more likely than other groups to have left school before the age of 16 years (63%, versus 35% negative, and 38% untested). HCV positive respondents were less likely to rely on full-time employment for their main source of income, than HCV negative or HCV untested respondents (9%, versus 18% and 19%, respectively). Finally, tested respondents were more likely than untested respondents to have a partner who injects (49% positive, 42% negative, and 32% untested). See Table 8b.

The following demographic variables were not related to HCV status: gender, country of birth, ethnicity, sexual identity, current employment status, current housing situation, current living situation (alone or with others), and having family who inject.

Table 8b. Categorical demographic variables, by HCV status

	Negative		Positive		Unknown		Total	
	n	%	n	%	n	%	n	%
Recruitment location*								
Sydney	61	42.4	40	50.0	64	57.1	165	49.1
Brisbane	54	37.5	33	41.3	32	28.6	119	35.4
Northern Rivers	29	20.1	7	8.8	16	14.3	52	15.5
Gender								
Male	91	63.2	42	52.5	63	56.3	196	58.3
Female	52	36.1	36	45.0	49	43.8	137	40.8
Transgender	1	0.7	2	2.5	0	0.0	3	0.9
Country of birth								
Australia	124	86.1	67	83.8	97	86.6	288	85.7
Overseas	19	13.2	13	16.3	12	10.7	44	13.1
NR	1	0.7	0	0.0	3	2.7	4	1.2
Ethnicity								
Aboriginal/Torres Strait Isl.	21	14.6	13	16.3	21	18.8	55	16.4
Other	121	84	66	82.5	85	75.9	272	81.0
NR	2	1.4	1	1.3	6	5.4	9	2.7
Sexual identity								
Heterosexual	107	74.3	54	67.5	83	74.1	244	72.6
Gay/les	10	6.9	9	11.3	8	7.1	27	8.0
Bisexual	21	14.6	15	18.8	15	13.4	51	15.2
NR	6	4.2	2	2.5	6	5.4	14	4.2
Highest level of education**								
Up to/inc Year 10	81	56.3	67	83.8	67	59.8	215	64.0
Above Year 10	62	43.1	13	16.3	44	39.3	119	35.4
NR	1	0.7	0	0.0	1	0.9	2	0.6
Age at leaving school***								
< 16	51	35.4	50	62.5	43	38.4	144	42.9
16 and over/still at school	93	64.6	30	37.5	69	61.6	192	57.1
Current main source of income*								
Full-time employment	26	18.1	7	8.8	21	18.8	54	16.1
Part-time employment	20	13.9	9	11.3	12	10.7	41	12.2
Government benefits	89	61.8	50	62.5	57	50.9	196	58.3
Other	9	6.3	14	17.5	21	18.8	44	13.1
NR	0	0.0	0	0.0	1	0.9	1	0.3
Current employment status								
Employed	62	43.1	33	41.3	44	39.3	139	41.4
Unemployed	57	39.6	25	31.3	35	31.3	117	34.8
Student/parent	21	14.6	18	22.5	25	22.3	64	19.0
Criminal	0	0.0	3	3.8	1	0.6	4	1.2
NR	4	2.8	1	1.3	7	6.3	12	3.6
Current housing situation								
Rent/boarding/caravan	97	67.4	58	72.5	70	63.1	225	67.2
Squat/shelter/homeless	25	17.4	17	21.3	18	16.2	60	17.9
Privately owned house or flat	22	15.3	5	6.3	23	20.7	50	14.9
NR	0	0.0	0	0.0	1	0.9	1	0.3
Current living situation								
Alone	21	14.6	17	21.3	19	17.0	57	17.0
With others	123	85.4	63	78.8	92	82.1	278	82.7
NR	0	0.0	0	0.0	1	0.9	1	0.3
Family who currently inject								
Immediate +/-extended	107	74.3	59	73.8	91	81.3	257	76.5
Extended only	27	18.8	20	25.0	19	17.0	66	19.6
None	10	6.9	1	1.3	2	1.8	13	3.9
Current partner who injects***								
Yes	60	41.7	39	48.8	36	32.1	135	40.2
No	36	25.0	12	15.0	11	9.8	54	17.6
NR	48	33.3	29	36.3	65	58.0	142	42.3

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01 *** p=<.001.

8.2 KEY VARIABLES, BY HCV STATUS

Most of the 'key' variables were related to HCV status.

Participants who knew themselves to have HCV negative status were, on average, older at initiation (M=18.8 years) than those with status unknown (M=18.0 years). Participants with HCV positive status had a higher average frequency of injecting (M=1.6) than those with HCV negative or unknown status (M=1.2, and 0.8, respectively). Those with HCV positive status were injecting an average of one and a half times a day, while those with negative status were injecting just over once a day, and those with unknown status were injecting less than once a day. Self-reported severity of dependency was higher among HCV positive respondents (M=7.4) than HCV negative (M=5.3) or untested (M=4.6) respondents. HCV positive participants reported, on average, more negative life events since time of initiation (M=8.3) than either of the other groups (M=5.8 HCV negative, and 4.8 untested). The HCV positive group was also more involved socially with injecting drug users (M=4.6) than the untested group (M=3.6). (The negative group were between these groups and not significantly different from either of them; M=4.0). The two tested groups, negative and positive, had higher average knowledge scores (M=12.5 and 12.5, respectively) than the untested group (M=10.8). The negative group were likely to have disclosed their injecting status to slightly more categories of persons (M=3.3 categories), than the untested group (M=2.6 categories); while the positive group were between these other groups in terms of disclosure of injecting status (M=3.1 categories), and not significantly different from either of them. HCV positive respondents were more likely to have lent their used fits to others in the last 6 months than HCV negative or HCV untested respondents (M=0.7, positive, versus M=0.5, negative; M=0.2 untested). See Table 8c.

Participants with HCV positive status were more likely to be current opioid users (71%) than either of the other groups (43% HCV negative, and 51% untested). They were less likely than the other groups to be stimulant users (29%, versus 57% HCV negative, and 49% untested). They were more likely to have started injecting more than 24 months ago than either of the other groups (80%, versus 58% HCV negative, and 37% untested), and less likely to have started injecting within the last 12 months (8%, versus 16% HCV negative, and 39% untested). Finally, they were more likely to have borrowed equipment in the last 6 months than either of the other groups (73%, versus 41% HCV negative, and 33% untested). See Table 8d.

There were no differences between HCV groups in terms of number of positive life events since time of initiation.

Table 8c. Numerical key variables, by HCV status

	Negative N=144	**Positive N=80**	**Unknown N=112**	**Total N=336**
	Mean	Mean	Mean	Mean
Age at initiation*	18.8	18.6	18.0	18.5
Frequency of injecting ***	1.2	1.6	0.8	1.2
SDS***	5.3	7.4	4.6	5.5
Positive life events	2.5	2.0	2.1	2.3
Negative life events***	5.8	8.3	4.8	6.0
Social involvement with IDUs***	4.0	4.6	(n=109) 3.6	(n=333) 4.0
Knowledge of BBVs/STIs***	12.5	12.5	10.8	11.9
Disclosure**	3.2	3.1	2.6	3.0
Lent fits**	0.5	0.7	0.2	0.5

* p=<.05 ** p=<.01 *** p=<.001.

Table 8d. Categorical key variables, by HCV status

	Negative		Positive		Unknown		Total	
	n	%	n	%	n	%	n	%
Drug most frequently injected in the past six months***								
Opioids	62	43.1	57	71.3	57	50.9	176	52.4
Stimulants	82	56.9	23	28.8	55	49.1	160	47.6
Time since first injection***								
24 months or less	61	42.4	16	20.0	71	63.4	148	44.0
25 months or more	83	57.6	64	80.0	41	36.6	188	56.0
Borrowing of injecting equipment***								
Not borrowed in last 6 months	85	59.0	22	27.5	75	67.0	182	54.2
Borrowed in last 6 months	59	41.0	58	72.5	37	33.0	154	45.8

*** p=<.001.

8.3 INFORMATION HANDLING, BY HCV STATUS

A higher percentage of participants with HCV positive status, than with HCV negative or unknown status, claimed to have used reliable sources of information, with or without other less reliable sources (95%, versus 90% and 82%, respectively). Also, a higher percentage of positive participants claimed to have passed on information about both blood-borne viruses (60%, versus 39% negative, and 23% untested, respectively). There was no difference between HCV groups with respect to use of less reliable sources of information. See Table 8e.

Table 8e. Handling of information, by HCV status

	Negative		Positive		Status unknown		Total	
	n	%	n	%	n	%	n	%
Used reliable information sources +/-other sources *	130	90.3	76	95.0	92	82.0	299	88.7
Used less reliable sources only	13	9.0	4	5.0	15	13.4	32	9.5
Passed on information about BBVs +/- other info***	56	38.9	48	60.0	26	23.2	130	38.7

* p=<.05 ** p=<.01 *** p=<.001.

8.4 CIRCUMSTANCES AT THE TIME OF INITIATION, BY HCV STATUS

A higher percentage of HCV positive respondents (versus negative or untested) were first injected by their partner at the time (30%, versus 22% and 19%), and a higher percentage had used an opioid as their first drug injected (56%, versus 38% and 49% respectively). Compared with other HCV groups, a higher percentage of HCV negative respondents were first injected by a friend (47%, versus 33% HCV positive, and 38% untested) or dealer (6%, versus 2.5% HCV positive, and 2% untested). Finally, compared with other HCV groups, a smaller percentage of HCV positive participants were still in touch, at time of interview, with persons who had been present at their initiation (64%, versus 71% HCV negative, and 78% untested).

There was no difference between HCV groups in terms of: main source of income at initiation, housing at initiation, living situation at initiation, planning of first injection, place of first injection, non-injecting drugs taken with first injection, or persons present at initiation. See Tables 8f, 8g, and 8h.

Table 8f. Categorical variables: Demographics at time of initiation, by HCV status

	Negative		Positive		Unknown		Total	
	n	%	n	%	n	%	n	%
Main source of income at time of initiation								
Full-time employment	33	22.9	15	18.8	21	18.8	69	20.5
Part-time employment	18	12.5	12	15.0	13	11.6	43	12.8
Government benefits	70	48.6	36	45.0	49	43.8	155	46.1
Other	19	13.2	16	20.0	25	22.3	60	17.9
NR	4	2.8	1	1.3	4	3.6	9	2.7
Housing at time of initiation								
Rented/boarding/hostel/caravan	99	68.8	55	68.8	62	55.4	216	64.3
Squat/shelter/prison/homeless etc	16	11.1	13	16.3	15	13.4	44	13.1
Privately owned house or flat	21	14.6	11	13.8	31	27.7	63	18.8
Other/NR	8	5.6	1	1.3	4	3.6	13	3.9
Living situation at time of initiation								
Alone	15	10.4	8	10.0	17	15.2	40	11.9
With others	126	87.5	72	90.0	93	83.0	291	86.6
NR	3	2.1	-	-	1	1.8	5	1.5

NR - no response/don't know/missing data.

Table 8g. Categorical variables: Circumstances of initiation, by HCV status

	Negative		Positive		Unknown		Total	
	n	%	n	%	n	%	n	%
Planning of first injection								
Not at all or not very planned	84	58.3	56	70.0	56	50.0	196	58.3
Fairly or very planned	57	39.6	23	28.8	52	46.4	132	39.3
NR	3	2.1	1	1.3	4	3.6	8	2.4
Where fit was obtained								
NSP/chemist/hospital/ vending machine	117	81.3	61	76.3	98	87.5	276	82.1
Friend/dealer	7	4.9	2	2.5	2	1.8	11	3.3
NR	20	13.9	17	21.3	12	10.7	49	14.6
Person who obtained injection equipment								
Self	42	29.2	17	21.3	34	30.4	93	27.7
Partner	25	17.4	19	23.8	16	14.3	60	17.9
Other/NR	77	53.5	44	55.0	62	55.4	183	54.5
Place of first injection								
Home (own/friends'/partner's/ dealer's) or shooting gallery	115	79.9	60	75.0	81	72.3	256	76.2
Other	29	20.1	19	23.8	31	27.7	79	23.5
NR	0	0.0	1	1.3	0	0.0	1	0.3
Person who first injected participant*								
Self	23	16.0	18	22.5	22	19.6	63	18.8
Partner	31	21.5	24	30.0	21	18.8	76	22.6
Schoolmate	4	2.8	0	0.0	8	7.1	12	3.6
Friend	67	46.5	26	32.5	43	38.4	136	40.5
Dealer	8	5.6	2	2.5	2	1.8	12	3.6
Other	11	7.6	10	12.5	13	11.6	34	10.1
NR	0	0.0	0	0.0	3	2.7	3	0.9
First drug injected*								
Opioids	54	37.5	45	56.3	55	49.1	154	45.8
Stimulants	90	62.5	35	43.8	57	50.9	182	54.2
Non-injecting drugs taken with first injection								
None	49	34.0	26	32.5	41	36.6	116	34.5
Alcohol &/or 'pot'	31	21.5	14	17.5	28	25.0	73	21.7
Other drugs	62	43.1	39	48.8	40	35.7	141	42.0
NR	2	1.4	1	1.3	3	2.7	6	1.8

NR - no response/don't know/missing data.

* p=<.05.

Table 8h. Categorical variables: Others present at initiation, by HCV status

	Negative		Positive		Unknown		Total	
	n	%	n	%	n	%	n	%
Number of other people at initiation								
None	12	8.3	4	5.0	16	14.3	32	9.5
One	45	31.3	27	33.8	30	26.8	102	30.4
Two or more	87	60.4	46	57.5	63	56.3	196	58.3
NR	0	0.0	3	3.8	3	2.7	6	1.8
Number of others known to participant								
No/some	9	6.3	2	2.5	9	8.0	20	6.0
Most/all	127	88.2	72	90.0	90	80.4	289	86.0
NR	8	5.6	6	7.5	13	11.6	27	8.0
Identity of those present								
Friends	60	41.7	23	28.8	35	31.3	118	35.1
Partner/ Part +others	37	25.7	27	33.8	28	25.0	92	27.4
Family/schoolmates	10	6.9	6	7.5	12	10.7	28	8.3
Acquaintances/Others	30	20.8	18	22.5	26	23.2	74	22.0
NR	7	4.9	6	7.5	11	9.8	24	7.1
Others injecting								
No/Some	17	11.8	11	13.8	8	7.1	36	10.7
Most/all	118	81.9	64	80.0	89	79.5	271	80.7
NR	9	6.3	5	6.3	15	13.4	29	8.6
Others having first injection								
None	116	80.6	64	80.0	84	75.0	264	78.6
Various	19	13.2	8	10.0	18	16.1	45	13.4
NR	9	6.3	8	10.0	10	8.9	27	8.0
Relative age of others present								
Same age as self	89	61.8	35	43.8	62	55.4	186	55.4
Older	29	20.1	30	37.5	27	24.1	86	25.6
Younger	4	2.8	4	5.0	5	4.5	13	3.9
Mixed ages	12	8.3	6	7.5	6	5.4	24	7.1
NR	10	6.9	5	6.3	12	10.7	27	8.0
Relative age of other initiates								
Same	18	12.5	10	12.5	15	13.4	43	12.8
Older/younger/both	4	2.8	0	0.0	4	3.6	8	2.4
NR	122	84.7	70	87.5	93	83.0	285	84.8
Gender of others present								
All/mostly male	65	45.1	38	47.5	46	41.1	149	44.3
All/mostly female	22	15.3	12	15.0	14	12.5	48	14.3
Mix	48	33.3	25	31.1	41	36.6	114	33.9
NR	9	6.3	5	6.3	11	9.8	25	7.4
Still in touch with others present*								
No, none	34	23.6	24	30.0	13	11.6	71	21.1
Some/most/all	102	70.8	51	63.8	87	77.7	240	71.4
NR	8	5.6	5	6.3	12	10.7	25	7.4

NR - no response/missing data.

* p=<.05.

8.5 PROFILE OF HCV POSITIVE VERSUS NON-POSITIVE GROUPS

A multivariate logistic regression was carried out (using alpha .01) to ascertain characteristics distinguishing HCV positive respondents from other respondents (HCV negative or untested). The full model included most key variables — age at initiation, frequency of injecting, severity of dependency, positive and negative life events since initiation, social involvement with IDUs, knowledge of STIs and BBVs, disclosure of injecting status, drug most frequently inject, time since initiation, borrowing of equipment in past 6 months — and variables that were significantly related to HCV status in bivariate analysis, namely, current age, recruitment location, highest level of education attained, age at which left school, current source of income, having a current partner who injects, use of reliable sources of information, passing on information about BBVs and safe injecting practice, person who first injected participant, and first drug injected.

The full model explained 49% of the variance, and the reduced model, 43% of the variance in HCV status. The reduced model consisted of six variables (in order of significance): current age in years (at time of interview), highest level of education reached, borrowing of fits or other injection equipment in the last 6 months (all p=<.001), negative life events since first injection, drug most frequently injected in the last 6 months (both p=.001), passing on of information about BBVs (p=0.006). In other words, HCV positive status was related to older age, lower education levels (Year 10 or below), more self-reported negative life events since initiation, current opioid rather than stimulant use (for injecting purposes), passing on of information about BBVs, and a tendency to borrow fits and other injecting equipment.

Note that, having many negative life events since initiation, passing on information about BBVs, and borrowing injecting equipment may all be consequences rather than precursors of HCV status.

9

DIFFERENCES BETWEEN RISK TAKERS AND NON-RISK TAKERS

Demographic variables at time of interview, key variables, and also demographics prior to and at initiation, were examined in bivariate analyses to ascertain whether these variables are related to risk taking status. Risk taking was defined as having borrowed fits or other injecting equipment in the past 6 months. Participants who borrowed equipment in the last 6 months are here referred to as 'risk takers' or 'borrowers'. Borrowers comprised 46% of participants (n=154) and non-borrowers 54% (n=182).

9.1 DEMOGRAPHIC VARIABLES, BY RISK-TAKING STATUS

Location and sexuality were both related to risk practice. Risk takers were more likely to have been recruited in Sydney or Brisbane than in Northern Rivers. Forty-two percent of risk takers were from Sydney, 40% from Brisbane and 19% from Northern Rivers. Also, risk takers were more likely to be heterosexual than homosexual or bisexual. Seventy-eight percent of risk takers were heterosexual and 6% were homosexual (gay or lesbian), while 15% were bisexual. Note that bisexuals fell between heterosexuals and homosexuals in terms of their risk taking.

Education levels and employment were also related to risk practice. Compared with non-risk takers, risk takers were more likely to have relatively low levels of education (up to/including Year 10; 73% risk takers, versus 57% non-risk takers) and to be early school leavers (who left school under 16 years of age; 51%, versus 36%). They were relatively unlikely to be in full-time employment (10%, versus 21%), and were relatively more likely to be dependent on government benefits (64%, versus 53%).

Further, risk takers, compared with non-risk takers, were more likely to be living with others at time of interview (90% risk takers, versus 77% non-risk takers), and less likely to be living alone (10%, versus 23%). They were also more likely than non-risk takers to have a current partner who injects drugs (49%, versus 33%).

The following demographic variables were not related to risk taking: current age (at interview), gender, country of birth, ethnicity, current employment status, current housing situation, having family who currently inject. See Tables 9a and 9b.

Table 9a. Numerical demographic variables, by risk-taking status

	Not borrowed		Borrowed		Total	
	n	Mean	n	Mean	n	Mean
Current age	181	21.4	153	20.9	334	21.2

Table 9b. Categorical demographic variables, by risk- taking status

	Not borrowed		Borrowed		Total	
	n	%	n	%	n	%
Recruitment location*						
Sydney	101	55.5	64	41.6	165	49.1
Brisbane	58	31.9	61	39.6	119	35.4
Northern Rivers	23	12.6	29	18.8	52	15.5
Gender						
Male	104	57.1	92	59.7	196	58.3
Female	76	41.8	61	39.6	137	40.8
Transgender	1	1.1	1	0.6	3	0.9
Country of birth						
Australia	158	86.8	130	84.4	288	85.7
Overseas	21	11.5	23	14.9	44	13.1
NR	3	1.6	1	0.6	4	1.2
Ethnicity						
Aboriginal/Torres Strait Islander	28	15.4	27	17.5	55	16.4
Other	148	81.3	124	80.5	272	81.0
NR	6	3.3	3	1.9	9	2.7
Sexual identity**						
Heterosexual	124	68.1	120	77.9	244	72.6
Gay/les	18	9.9	9	5.8	27	8.0
Bisexual	27	14.8	24	15.6	51	15.2
NR	13	7.1	1	0.6	14	4.2
Highest level of education**						
Up to/inc Year 10	103	56.6	112	72.7	215	64.0
Above Year 10	78	42.9	41	26.6	119	35.4
NR	1	0.5	1	0.6	2	0.6
Age at leaving school**						
< 16	66	36.3	78	50.6	144	42.9
16 and over/still at school	116	63.7	76	49.4	192	57.1
Current main source of income*						
Full-time employment	39	21.4	15	9.7	54	16.1
Part-time employment	25	13.7	16	10.4	41	12.2
Government benefits	97	53.3	99	64.3	196	58.3
Other	20	11.0	24	15.6	44	13.1
NR	1	0.5	0	0.0	1	0.3
Current employment status						
Employed	74	40.7	65	42.2	139	41.4
Unemployed	61	33.5	56	36.4	117	34.8
Student/parent	35	19.2	29	18.8	64	19.0
Criminal	1	0.5	3	1.9	4	1.2
NR	11	6.0	1	0.6	12	3.6
Current housing situation						
Rent/boarding/caravan	116	64.1	109	70.8	225	67.2
Squat/shelter/homeless	32	17.7	28	18.2	60	17.9
Privately owned house or flat	33	18.2	17	11.0	50	14.9
Current living situation**						
Alone	41	22.5	16	10.4	57	17.0
With others	140	76.9	138	89.6	278	82.7
NR	1	0.5	0	0.0	1	0.3

…/continued

	Not borrowed		Borrowed		Total	
	n	%	n	%	n	%
Family who currently inject						
Immediate +/-extended	140	76.9	117	76.0	257	76.5
Extended only	34	18.7	32	20.8	66	19.6
None	8	4.4	5	3.2	13	3.9
Current partner who injects**						
Yes	60	33.0	75	48.7	135	40.2
No	30	16.5	29	18.8	59	17.6
NR	92	50.5	50	32.5	142	42.3

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01.

9.2 KEY VARIABLES, BY RISK-TAKING STATUS

Several key variables were related to risk taking, including age of initiation, frequency of injecting, severity of drug dependence, positive and negative life events, and social involvement with IDUs. Risk takers were likely to have been initiated into injecting drug use at a younger age (M=18.1 years, versus M=18.8 years). Risk takers were likely to inject more frequently, i.e. an average of more than once a day (M=1.36), while non-risk takers tended to inject less often than this (M=0.95). Risk takers were likely to have a higher score on the self-report severity of dependency scale than non-risk takers (M=6.14, versus M=5.04). Risk takers also had higher average scores than non-risk takers on both the positive (2.5 and 7.1, respectively) and the negative (2.1 and 5.2, respectively) life events scales, the difference in negative life events being greater (almost 2.0) than the difference in positive life events (just 0.4). Social involvement with IDUs was on average higher among risk takers than among non-risk takers (M=4.5, and M=3.6, respectively). Risk-takers were also more likely than non-risk takers to have lent their used fits to others in the last 6 months (M=0.8, versus M=0.2).

Finally, time since first injection and HCV status were related to risk taking. Compared with non-risk takers, risk takers were more likely to have been injecting for longer than 24 months (64%, versus 49%) and they were more likely to have been tested (know their HCV status: 76%, versus 59%). Also, risk takers were more likely than non-risk takers to be HCV positive (38%, versus 12%) and less likely to be HCV negative (38%, versus 47%). See Tables 9c and 9d.

Risk taking was not related to knowledge of BBVs or STIs, disclosure of injecting drug status, or drug most frequently injected in the last 6 months.

Table 9c. Numerical key variables, by risk-taking status

	Not borrowed N=182		Borrowed N=154		Total N=336	
		Mean		Mean		Mean
Age at initiation**		18.8		18.1		18.5
Frequency of injecting***		1.0		1.4		1.1
SDS*		5.1		6.1		5.5
Positive life events*		2.1		2.5		2.3
Negative life events ***		5.2		7.1		6.0
Social involvement with IDUs***	(n=181)	3.6	(n=152)	4.5	(n=333)	4.0
Knowledge of BBVs/STIs		11.7		12.2		11.9
Disclosure		2.9		3.2		3.0
Lent fits***		0.2		0.8		0.5

* p=<.05 ** p=<.01 *** p=<.001.

Table 9d. Categorical key variables, by risk-taking status

	Not borrowed		Borrowed		Total	
	n	%	n	%	n	%
Drug most frequently injected in the past six months						
Opioids	97	53.3	79	51.3	176	52.4
Stimulants	85	46.7	75	48.7	160	47.6
Time since first injection**						
24 months or less	93	51.1	55	35.7	148	44.0
25 months or more	89	48.9	99	64.3	188	56.0
HCV status***						
Negative	85	46.7	59	38.3	144	42.9
Positive	22	12.1	58	37.7	80	23.8
Unknown	72	41.2	37	24.0	112	33.3

*** p=<.001.

9.3 INFORMATION HANDLING, BY RISK-TAKING STATUS

Risk takers were more likely than non-risk takers to have passed on information about blood-borne viruses (47%, versus 31%). Other differences in relation to information acquisition were not significant. See Table 9e.

Table 9e. Information handling, by risk-taking status

	Not borrowed		Borrowed		Total	
	n	%	n	%	n	%
Used reliable information sources +/-other sources	159	87.4	139	90.3	298	88.7
Used less reliable sources only	19	10.4	13	8.4	32	9.5
Passed on information about BBVs +/- other info**	57	31.3	73	47.4	130	38.7

** p=<.01.

9.4 CIRCUMSTANCES PRIOR TO INITIATION, BY RISK-TAKING STATUS

A number of variables concerning experience prior to first injection were significant. Risk takers were less likely to have used heroin by non-injection routes prior to first injection than non-risk takers (19%, versus 32%). However, mean age of first use of non-injecting drugs was lower for risk takers than for non-risk takers. This was true at the trend level overall (M=14.1 years for risk takers, versus M=15.0 years for non-risk takers, p=<.001) but, in particular, those who had started using alcohol, 'pot', 'speed', or LSD at a younger age were more likely to be risk takers than those who had started at an older age. See Table 9f.

Some other demographics prior to first injection were related to risk taking. Risk takers were less likely to have seen schoolmates inject prior to first injection than non-risk takers (4%, versus 14%).

Risk takers were more likely than non-risk takers to have started injecting 'for fun' (58%, versus 31%), because injection was 'available' (48%, versus 26%), because it was 'offered' (56%,

versus 34%), because it was 'cheaper' (29%, versus 19%), or because it has a 'quicker' effect (36%, versus 22%). See Table 9g.

Other demographic variables prior to first injection were not related to risk taking. These included: having family who injected prior to own first injection, having seen friends or partner inject prior to first injection, whether or not the first drug injected had been used in other ways prior to first injection, and planning of first injection. Also, other reasons for injecting the first time — to 'experiment', for a 'rush or high', because of 'peer pressure' — were not related to risk taking.

Table 9f. Non-injecting drugs used prior to first injection, with mean age of first use, by risk-taking status

	Not borrowed			Borrowed			Total		
	n	%	Mean age at 1st use	n	%	Mean age at 1st use	n	%	Mean age at 1st use
Alcohol	169	92.9	13.9***	149	96.8	12.9	318	94.6	13.4
'Pot'	160	87.9	14.1***	142	92.2	13.1	302	89.9	13.6
Non-injected opioids									
Heroin*	58	31.9	17.0	29	18.8	16.2	87	25.9	16.7
Methadone	5	2.7	18.4	9	5.8	18.3	14	4.2	18.3
Benzodiazepine	47	25.8	16.4	36	23.4	16.1	83	24.7	16.3
Non-injected stimulants									
'Speed'	85	46.7	16.5*	65	42.2	15.7	150	44.6	16.1
Cocaine	45	24.7	17.2	25	16.2	16.7	70	20.8	17.0
Ecstasy	62	34.1	17.1	39	25.3	16.4	101	30.1	16.8
LSD	58	31.9	16.3*	43	27.9	15.4	101	30.1	15.9
Steroids	1	0.5	16.0	3	1.9	17.7	4	1.2	17.3

* p=<.05 *** p=<.001.

Table 9g. Categorical demographic variables prior to 1st injection, by risk-taking status

	Never borrow		Borrow		Total	
	n	%	n	%	n	%
Had family who injected prior to own first injection						
Immediate +/-extended	151	83.0	123	79.9	274	81.5
Extended only	26	14.3	27	17.5	53	15.8
None	5	2.7	4	2.6	9	2.7
Had seen friends inject prior to first						
Yes	134	73.6	102	66.7	236	70.4
No	45	24.7	51	33.3	96	28.7
NR	3	1.6	0	0.0	3	0.9
Had seen partner inject prior to first						
Yes	39	21.5	44	29.1	83	25.0
No	139	76.8	107	70.9	246	74.1
NR	3	1.7	0	0.0	3	0.9
Had seen schoolmates inject prior to first***						
Yes	26	14.4	6	4.0	32	9.6
No	152	84.0	145	96.0	297	89.5
NR	3	1.7	0	0.0	3	0.9

…/continued

	Never borrow		Borrow		Total	
	n	%	n	%	n	%
Whether or not drug first injected was used in other ways prior to 1st injection						
Yes	126	69.2	99	64.3	225	67.0
No	49	26.9	53	34.4	102	30.4
NR	7	3.8	2	1.3	9	2.7
Planning of first injection						
Not at all/not very planned	101	55.5	95	61.7	196	58.3
Fairly/very	76	41.8	56	36.4	132	39.3
NR	5	2.7	3	1.9	8	2.4
Why injected first time						
To experiment	154	84.6	121	78.6	275	81.8
For fun***	56	30.8	90	58.4	146	43.5
For rush/high	88	48.4	79	51.3	167	49.7
Because available***	48	26.4	74	48.1	122	36.3
Because offered***	62	34.1	86	55.8	148	44.1
Peer pressure	47	25.8	34	22.1	81	24.1
Cheaper than other ways*	34	18.7	45	29.2	79	23.5
Quicker effect**	40	22.0	56	36.4	96	28.6

NR - no response/don't know/missing data.

* p=<.05 ** p=<.01 *** p=<.001.

9.5 CIRCUMSTANCES AT THE TIME OF INITIATION, BY RISK-TAKING STATUS

There were also a few differences between risk takers and non-risk takers at time of initiation.

Risk takers, compared with non-risk takers, were relatively unlikely to be living alone at the time of their first injection (7%, versus 16%). They were somewhat less likely to report that they obtained their first fit from a more formal place (NSP, chemist, hospital, vending machine; 76%, versus 87%). They were also less likely to have injected themselves at first injection (14%, versus 23%) and more likely to have been injected by their partner (28%, versus 18%). Compared with non-risk takers, they were more likely to have taken non-injecting drugs other than alcohol or 'pot' along with their first injection (54%, versus 32%).

There were also differences in terms of the age of other persons present at initiation. Compared with non-risk takers, a smaller percentage of risk takers reported that the others present at their initiation were the same age as themselves (48%, versus 62%), while a higher percentage reported that the others present were older than themselves (34%, versus 19%). See Tables 9h, 9i and 9j.

Other variables at the time of initiation were not related to risk taking, including: source of income and housing situation at time of initiation, place of first injection, first drug injected, number of persons present at initiation, and variables, apart from age, relating to the identity and characteristics of the persons present at initiation.

Table 9h. Categorical variables: Demographics at time of initiation, by risk-taking status

	Never borrow		Borrow		Total	
	n	%	n	%	n	%
Main source of income at time of initiation						
Full-time employment	45	24.7	24	15.6	69	20.5
Part-time employment	23	12.6	20	13.0	43	12.8
Government benefits	83	45.6	72	46.8	155	46.1
Other	25	13.7	35	22.7	60	17.9
NR	6	3.3	3	1.9	9	2.7
Housing at time of initiation						
Rented/boardg/hostel/caravan	117	64.3	99	64.3	216	64.3
Squat/shelter/prison/homeless	20	11.0	24	15.6	44	13.1
Privately owned house or flat	37	20.3	26	16.9	63	18.8
Other/NR	8	4.4	5	3.2	13	3.9
Living situation at time of initiation*						
Alone	29	15.9	11	7.1	40	11.9
With others	149	81.9	142	92.2	291	86.6
NR	4	2.2	1	0.6	5	1.5

NR - no response/don't know/missing data.

* p=<.05.

Table 9i. Categorical variables: Circumstances of initiation, by risk-taking status

	Never borrow		Borrow		Total	
	n	%	n	%	n	%
Place of first injection						
Home (own/friend's/partner's/ dealers/shooting gallery	137	75.3	119	77.3	256	76.2
Other (street/squat/etc.)	44	24.2	35	22.7	79	23.5
NR	1	0.5	0	0.0	1	0.3
Where fit was obtained*						
NSP/chemist/hospital/vending machine	159	87.4	117	76.0	276	82.1
Friend/dealer	3	1.6	8	5.2	11	3.3
NR	20	11.0	29	18.8	49	14.6
Person who obtained injection equipment						
Self	57	31.3	36	23.4	93	27.7
Partner	29	15.9	31	20.1	60	17.9
Friend/Other/NR	96	52.7	87	56.5	183	54.5
Person who first injected participant*						
Self	42	23.1	21	13.6	63	18.8
Partner	33	18.1	43	27.9	76	22.6
Schoolmate	10	5.5	2	1.3	12	3.6
Friend	72	39.6	64	41.6	136	40.5
Dealer/Other	23	12.6	23	14.9	46	13.7
NR	2	1.1	1	0.6	3	0.9
First drug injected						
Opioids	90	49.5	64	41.6	154	45.8
Stimulants	92	50.5	90	58.4	182	54.2
Non-injecting drugs taken with first injection***						
None	74	40.7	42	27.3	116	34.5
Alcohol &/or 'pot'	45	24.7	28	18.2	73	21.7
Other drugs	58	31.9	83	53.9	141	42.0
NR	5	2.7	1	0.6	6	1.8

NR - no response/don't know/missing data.

* p=<.05 *** p=<.001.

Table 9j. Categorical variables: Others present at initiation, by risk-taking status

	Never borrow		Borrow		Total	
	n	%	n	%	n	%
Number of other people present at initiation						
None	20	11.0	12	7.8	32	9.5
One	57	31.3	45	29.2	102	30.4
Two or more	101	55.5	95	61.7	196	58.3
NR	4	2.2	2	1.3	6	1.8
Number of others known to participant						
No/some	9	4.9	11	7.1	20	6.0
Most/all	155	85.2	134	87.0	289	86.0
NR	18	9.9	9	5.8	27	8.0
Identity of those present						
Friends	68	37.4	50	32.5	118	35.1
Partner/ Part +others	45	24.7	47	30.5	92	27.4
Family/schoolmates	15	8.2	13	8.4	28	8.3
Acquaintances/Others	38	20.9	36	23.4	74	22.0
NR	16	8.8	8	5.2	24	7.1
Others injecting						
No/Some	18	9.9	18	11.7	36	10.7
Most/all	144	79.1	127	82.5	271	80.7
NR	20	11.0	9	5.8	29	8.6
Others having first injection						
None	144	79.1	120	77.9	264	78.6
Various	24	13.2	21	13.6	45	13.4
NR	14	7.7	13	8.4	27	8.0
Relative age of others present*						
Same age as self	112	61.5	74	48.1	186	55.4
Older	34	18.7	52	33.8	86	25.6
Younger	5	2.7	8	5.2	13	3.9
Mixed ages	14	7.7	10	6.5	24	7.1
NR	17	9.3	10	6.5	27	8.0
Relative age of other initiates						
Same	22	12.1	21	13.6	43	12.8
Older/younger/both	2	1.1	6	3.9	8	2.4
NR	158	86.8	127	82.5	285	84.8
Gender of others present						
All/mostly male	83	45.6	66	42.9	149	44.3
All/mostly female	24	13.2	24	15.6	48	14.3
Mix	59	32.4	55	35.7	114	33.9
NR	16	8.8	9	5.8	25	7.4
Still in touch with others present						
No, none	31	17.0	40	26.0	71	21.1
Some/most/all	134	73.6	106	68.8	240	71.4
NR	17	9.3	8	5.2	25	7.4

NR - no response/don't know/missing data.

* p=<.05.

9.6 PROFILE OF RISK TAKERS VERSUS NON-RISK TAKERS

Since risk taking is closely associated with HCV status, and since having HCV positive status alters the meaning of borrowing equipment for the HCV infected person, two multivariate analyses were carried out (using alpha .01) to ascertain the characteristics distinguishing risk takers from non-risk takers. In the first, HCV status was included among the independent variables while, in the second, it was excluded. In both analyses, the full model included most key variables — age at initiation, frequency of injecting, severity of dependence scale, positive life events since initiation, negative life events since initiation, social involvement with IDUs, knowledge of BBVs/STIs, disclosure of injecting status, drug most frequently injected in past 6 months, time since first injection — and also all the variables that were significantly related to risk taking in bivariate analysis, namely, recruitment location, sexual preferences, highest level of education reached, age at leaving school, current source of income, current living situation (alone or with others), current partner who injects, passing on of BBV information, heroin use prior to first injection, age at which first used alcohol and/or 'pot', had seen schoolmates inject prior to first injection, started injecting 'for fun', because 'available', because 'offered', because 'cheaper', because 'quicker', living situation at time of initiation (alone or with others), where fit was obtained for first injection, person who first injected participant, non-injecting drugs taken with first injection, relative age of others present at initiation.

With HCV status included, the full model explained 51% of the variance, and the reduced 32% of the variance in risk taking. The reduced model comprised five variables, including: HCV status, age at initiation, reason for starting to inject (all p=<.001), current living arrangements (alone or with others) (p=.002), and drug most frequently injected in past 6 months (p=.009). Risk takers were likely to be HCV positive, to have started injecting at a relatively young age, to have started injecting 'for fun', to be current stimulant (rather than opioid) injectors, and to be currently living with others rather than alone.

With HCV status excluded, the full model explained 47% of the variance and the reduced 28% of the variance in risk taking. This reduced model consisted of five variables: social involvement with IDUs, starting to inject 'for fun', living situation (with others or alone), witnessing of schoolmates injecting prior to first injection, and age at initiation. Risk takers were likely to be relatively highly involved socially with IDUs, to have started injecting 'for fun' rather than for other reasons (both p=<.001), to be currently living with others rather than alone (p=.005), and to have been younger at initiation (p=.009). Also, they were *not* likely to have seen schoolmates inject prior to first injection (p=.008). The significance of *not* having seen schoolmates inject prior to first injection is not clear since this variable is not a substitute for age at initiation.

10

QUALITATIVE INTERVIEW RESULTS

This section presents the results of the in-depth interviews undertaken with 24 young injectors. The presentation of some sections of data differ from that of the quantitative survey data in that the focus is on the key variable of risk with other variables (such as drug most frequently injected, early/late initiation and HCV status) used to explore risk in terms of participants' knowledge, behaviour and social networks. Also, participants' experiences of attempts to reduce or stop drug use are explored: these data were not collected in the quantitative survey.

10.1 SAMPLE DEMOGRAPHICS AND KEY VARIABLES

A total of 24 interviews were conducted: 11 in Brisbane and 13 in Sydney. Most participants were male (n=15), ranged in age from 16 to 25 and were not employed (n=12 unemployed, n=4 employed, n=2 student, n=6 not recorded). Twelve participants were living in rented accommodation and eight in transient accommodation (homeless, lived in a squat, refuge or hotel): data were not recorded for 4 participants. Fifteen participants described opioids as the drug of choice (i.e., drug most frequently used), eight stimulants, and one could not differentiate between opioids and stimulants as drug of choice. Length of time since first injection ranged from less than one year to more than 5 years, with most injecting for 3–5 years. Six participants self-reported a positive HCV status. One of these participants stated that she had purposely reused someone else's injection equipment to infect herself with HCV. Two other participants stated that they had acquired HCV through an accident which did not involve injecting drugs. Fourteen participants self-reported as having HCV negative status, while four did not know their status or had not been tested. Selected demographics of the qualitative sample are shown in Table 10a.

Table 10a. Demographic characteristics of participants in qualitative sample

	Sydney	Brisbane
Males	9	6
Females	4	5
Age at interview		
16-19	2	6
20-23	5	4
24-25	6	1
Time since first injection		
< 1 year		1
1-3 years	1	3
3-5 years	4	6
> 5 years	8	1

The age of initiation into injecting in the qualitative sample ranged from 13 to 23 years. Participants were divided into three age groups by age of initiation: an early (13–15 years), middle (16–20 years) and late (23 years) group. Most participants (n=14) in this sample began injecting between the ages of 16 and 20 years: eight participants began injecting drugs between the ages of 13 and 15, and two at the age of 23 years. There did not appear to be differences between early and later initiates in terms of whether the drug was used in other ways before injection or was injected first. A typical pattern across the qualitative data, regardless of age at initiation, was that an older person (sometimes partner) was described as first offering the opportunity to inject.

In the qualitative data, there appeared to be an association between living arrangements and earlier age of initiation. Most of the participants in the qualitative study who first injected between the ages of 13 and 15 (early injectors) were not living at home when they first injected but on the streets, with older friends: one participant was living at home with "junkie" parents.

The living arrangements of those who initiated injecting between 16 and 20 years of age were more variable. The two 16 year-old initiators were living out of home, one with friends and the other in a squat. One of the 17 year-old initiators was living on the streets. Those who initiated injecting between 18 and 20 typically described their decision to inject in ways (described below) that appeared to be unrelated to the stability of their accommodation. Table 10b shows the pattern of age of initiation by first drug injected.

Table 10b. Age of initiation to injecting drug use by drug first injected

	Drug First Injected	
Age of initiation (years)	Stimulant	Opioid
13		1
14	2	1
15	4	
16	2	
17	1	3
18	3	
19	2	1
20		2
21		
22		
23	2	

Generally, in the qualitative sample, those who had initiated injection with opioids continued to use opioids as their drug of choice: only one had changed over to stimulants. About half of those who had injected stimulants first, currently used stimulants as their drug of choice.

Other stimulant initiators had moved to opioids as their current drug of choice. One stimulant initiator was currently using both stimulants and opioids.

Table 10c. Patterns of drug use: Current drug most frequently used by drug first injected, and first route(s) of administration (pseudonyms presented)

	Drug first injected (age of first injection)				
	Stimulants		Opioids		
Current drug used most frequently	**Used in other ways prior to injection**	**First used by injection**	**Used in other ways prior to injection**	**First used by injection**	**Total**
Stimulants	Snowball (16) Liz (18) Jon (18-19) Beth (23) Alice (23)	Scott (?14) Jocko (16)		Homer (14)	8
Opioids	Grace (14) James (17) Sam (19)	Clint (15) Jim (15) Kerrie (15) Jack (18) Jill (19)	Steven (13) Garth (16) Jasmine (17) Lux (20)	Dennis (17) Josephine (19) Rob (20)	15
Stimulants + Opioids	Chris (15)				1
Total	9	7	4	4	24

A general pattern emerged from the qualitative data: that stimulants were more likely than opioids to have been used in non-injecting ways prior to injecting. Opioid use was likely to be more evenly distributed between injection and non-injection administration.

10.2 CIRCUMSTANCES PRIOR TO AND AT INITIATION

This section examines patterns of drug use, social networks and life events in the period prior to initiation of injection, at the time of initiation and during establishment of injecting as the main route of administration.

The general pattern for participants was use of illicit drugs for some time before initiation of injecting. Participants described this as "the done thing" in their circle of friends (Josephine 19–20, heroin-heroin). Rob (19–24, heroin-heroin) claimed that he "wanted to be a bad boy" and that drugs were a way of achieving that.

Some participants mentioned that their decision to use illicit drugs was not a result of "peer pressure" but that they wanted to "expand" their "mind" (Grace 14–17, 'speed'-heroin) or that they "digged the ideas of drugs ... liked escaping from reality" (Sam 19–24, 'speed'-heroin).

Social networks appeared to be related to choice of drug. For example, most people initiated injecting with stimulants or had used stimulants in other ways before injecting opioids. Stimulant use was associated with the music scene (Liz 18–21, 'speed'-'speed', Snowball 16–19, 'speed'-'speed'), the stripping industry (Alice 23–25, 'speed'-'speed'), and the gay dance scene (Jon 18–24, 'speed'-'speed').

Most participants claimed they were offered drugs for injection by a trusted friend, partner, family member or friend of a friend. These contacts were typically older and, in some cases, acted as dealers.

Use of drugs to "block out" emotional issues (Dennis 17–25, heroin-heroin) or to feel "comfortable and happy" (Jasmine 17–21, heroin-heroin) were also given as reasons for initiating injection. However, reasons related to fun, opportunity and experimentation were more typical in this sample.

Some participants recalled that, prior to use, they had held very strong negative attitudes to injecting drugs, yet they went on to become part of the injecting drug culture.

> *"Because I didn't feel comfortable because it was my first time I'd ever done it and I – like I don't know, like a year before I ever injected I was like really dead set against it, and I knew that my ex-boyfriend was doing it and I used to go, 'oh you fuckin' pin cushion, why do you go fuckin' stick needles in your arm?', and then when I started doin' it I was like really quiet and I didn't want anybody to know because it was like a bad thing for me because of, you know". (Alice 23–25, 'speed'-'speed')*

Economic reasons for injecting were mentioned only infrequently. Garth (17–25, heroin-heroin) was told that it was a "waste" not to inject heroin and Snowball (16–19, 'speed'-'speed') claimed that 'speed' was "easier to share evenly" when injected.

Presented below are a series of case studies of transition into injecting drugs to highlight the issues discussed above. These cases have been chosen because they illustrate typical as well as unusual elements in transition to injection patterns.

Case 1: Grace 14–17, 'speed'-heroin

Grace on the whole illustrates a typical pattern of transition into injecting for the younger group of initiators. Like most participants, Grace had a history of illicit drug use prior to injecting. She described using 'pot', LSD, "mushies", alcohol, valium and "rohies" from the age of 12 years. She tried drinking and snorting 'speed' at the age of 13 years. She described her decision to use drugs as "not peer pressure" but that she wanted to "expand [her] mind". She used drugs with trusted older friends among the music and band scene, some of whom injected drugs. She first injected 'speed' at the age of 14 and a half years. At the time, she was living with friends. A friend, also a dealer, injected her. Her boyfriend was also present. At 15 and a half years she began to inject heroin and described herself as "being friends with all the dealers". At the time of interview, she was 17 and described herself as a "heroin junkie" and "poly drug user".

Some elements of Grace's story are typical of young initiators. She was living out of home at a young age. Like other young initiators, she had considerable experience with illicit drugs prior to injecting. Her involvement with older people and associated networks of IDUs gave her opportunities for drug injecting and ready access to drugs and equipment. Her decision to inject drugs was not, in her view, due to peer pressure but was couched in positive language. She stressed the fun of the social context. However, while Grace did not perceive the presence of her boyfriend as in any way coercive, the issue of gender was relevant for some older female participants (see below).

In other respects, Grace was not typical of intravenous drug users in this sample. Her current attitude to her drug use was different from most and she was one of the few people in the sample who had not taken repeated steps to reduce her drug use and who still described herself as a "positive drug user". Also, she was atypical of this sample in continuing to refer to the dealing and drug use network in terms of friendship. Other participants, who had often attempted to reduce their drug use, commented on the false friendships or even overt manipulation, or exploitation that occurs in drug use networks.

Case 2: Steve 13–17, heroin-heroin

Steve is the earliest initiate in this sample. His story of transition to injection shares some common elements with Grace above. However, other elements of Steve's story represent significant departures from other younger initiates.

Steve first experienced drug injecting at the age of 13. Prior to that, he had snorted heroin, smoked 'pot', sniffed spray paint and drunk alcohol. He described his home life as a "junkie environment" where his parents were active in using and dealing illicit drugs. A dealer injected him at the age of 13 to develop Steve as a customer. Steve expressed extreme resentment of the dealer: "I want to kill the cunt". The second injection of heroin occurred not long after the first. Steve was expelled from school in Year 8 and was living out of home in a flat at 13 years of age. He described "hanging out with the streeties" and getting "turned onto" greater drug use through street-based networks and culture. At the time of interview, Steve was 17, injecting heroin and "smoking cones" of 'pot' every day. He uses 'speed' "once in a blue moon".

Steve's story is similar to Grace's in terms of early use of illicit drugs and living out of home at an early age. His family background and close association with drug use networks is atypical as is the manner of his first injecting experience.

Case 3: Sam 19–24, 'speed'-heroin

Sam was chosen as typical of those who initiated drug use in their late teens. Like most participants, Sam had a long history of illicit drug use prior to injecting and the offer to try injecting drugs was made by a member of his social network. Sam's story is also typical in terms of the shift he made from using drugs for fun to reliance on drugs for emotional release or support.

Sam's pattern of drug use prior to first injection involved the sampling of a wide range of illicit drugs, including 'pot' at age 13, "getting pissed as much as I could at 14" and use of 'trips', 'eckies', 'speed' (eaten) and inhalants. Sam's first injecting experience was with 'speed' and occurred at age 19, in a group setting. He was offered an injection by an older relative. At the time, he was living with his girlfriend and a few friends. He stated that he had "always had an idea that [he] would try it [injecting]". The second injection of drugs occurred a couple of weeks later. After a couple of months his use escalated to every Friday. A further eight months later, a relationship break up led him to consider trying heroin. Sam described his early illicit drug use as an attempt to escape reality and that he "digged the idea of drugs". He did not describe any particular negative events in relation to this. In contrast, his use of heroin was linked to escaping the reality of the relationship breakup: "bugger it, I'm going to get some heroin ... I had nothing else to do … That's how I escaped reality. Same old story as everyone". After six months, his use of heroin had increased to daily use. After a number of years of use (and attempts to reduce his use) he now uses heroin to "block [him]self out". He is "unhappy" that he does not use "for fun anymore".

Case 4: Dennis 17–25, heroin-heroin

Dennis also had a history of illicit drug use prior to injecting. He used marijuana in order to "get rid" of his stepfather whom he described as abusive. At 17, a friend suggested that he try heroin if he wanted to "block [him]self out, block it all out". He tried heroin with his cousin. His second injection of heroin occurred at 21 years of age, after a gap of about four years. Nine months later, he tried heroin again. At that time, he had money and bought a bag of heroin to sell for profit. He described being assaulted by his stepfather at that time and his cousin told him "you need it". Dennis said: "I couldn't take any more, I was ready to snap". From this point forward, Dennis' injection of heroin escalated to weekends, then alternate days, and then daily use.

Dennis' story is unusual in the length of time between initiation of injection and establishment of a regular injecting drug use pattern. His description of initiation of injecting drug use as being for emotional release or support is similar to some other opioid initiators. Only one stimulant initiator (who, after two injecting experiences, claimed he would not use stimulants again) described his injecting drug use in these terms.

Case 5: Alice 23–25, 'speed'–'speed'

The final case study is Alice who is one of the few late initiators. During her teens Alice had smoked 'pot' with her father and tried 'E' and 'acid'. She described a period where she "started hating all drugs, all drugs were bad". At 21 years, she started work as a stripper and found that "heaps of drugs" were available in that industry. At about this time, she used 'speed' by eating, snorting and drinking it. At 23 years, she injected 'speed' at her boyfriend's house, with her boyfriend and two other men present. The second injection occurred the next day. Alice's use of 'speed' increased to each Thursday, Friday and Saturday. She said she would sleep on Sunday. Alice said that her preference is to drink 'speed', but she injects it because this is her boyfriend's preference.

Although Alice was a relatively late initiate to injecting, she shared with other participants a history of illicit drug use prior to injection and drug contacts within her immediate social network. It was as a result of the social network that she eventually "just ended up getting onto drugs". Of interest in Alice's transition to injecting, is the role played by her boyfriend. Alice reported that she preferred to drink 'speed' – she enjoys the effect more this way than with injected 'speed'. However, she nevertheless continues to inject because her boyfriend is "full on into it". Issues of gender were important also for the transition of the other older female initiate.

FUNCTIONALITY

It was intended that the research would explore differences in transition to injecting between those who had maintained functional drug use patterns and those who had not. Functionality was defined as being able to reproduce the patterns of daily life (Sharp et al., 1991). However, functionality proved a difficult concept to examine in this data set.

Functionality, or dysfunctionality, can be a transient or temporary state for IDUs. The length of drug injecting in this sample ranged from 1 year to more than 5 years. For those who had injected for a longer time, there were greater opportunities for immersion in drug use networks and to be removed from accepted daily patterns of life. It is difficult to know whether those with a shorter period of injecting will continue to maintain functional drug use patterns or not. It is therefore difficult to compare those with longer and shorter histories of injecting drug use. An alternative is to compare those with the same history of drug use.

Allowing for the smallness of the qualitative sample, comparisons do appear to show that functionality was maintained by some stimulant users. This may be related to the difference in assumed effects of the drugs (stimulants as "uppers", versus opioids as "downers) or to the types of people who are attracted to each type of drug (i.e. those seeking drugs to enhance fun scenes or those wishing to escape emotional issues). In this sample, those who stated they were seeking emotional release or support or wanting to "block" out issues, typically chose to inject opioids.

Functionality may also be examined by the extent and type of attempts made to reduce drug use. Section 10.5 shows that opioid users described numerous professional treatment and self-management attempts to reduce their drug use. This could be related to a lower degree of functionality for opioid users, more limited treatment options available to stimulant users, or an opioid "culture" which educates and supports users to attempt to seek and apply professional or self-management strategies.

10.3 HCV STATUS

Most participants (n=14) stated that they had been tested for HCV and did not have the virus. Some participants attributed their negative status to their "safe" injecting practices:

> *"I get regular check-ups at the clinic. All my blood's clean, there's no hep C, no hep B and all that because I make sure I do it [injecting] the right way" (Garth 17–25, heroin-heroin)*

Other participants acknowledged the risk in their injecting practice and implications for HCV acquisition:

> *"It was reckless and I was playing with my life" (Jasmine 17–21, heroin-heroin)*

A minority of participants claimed that they had not been tested and that there was "no reason" to be tested. One participant claimed that he had been tested about two years before the interview, but had not been back to get the results. This participant stated that "it doesn't really bother" him whether he has HCV or not.

In total, six participants stated that they had contracted the HCV virus. Two of these claimed to have acquired HCV at a young age and during incidents unrelated to injecting. One female claimed to have purposefully given herself HCV to empathise with her partner who had the virus.

> *"My fiancé had it and because I was that deeply in love with him I – actually this is sick – I actually wanted to get it, to have hepatitis C, and purposely infected myself with it, so I could share his pain and understand what he was going through and now he's fucking dead. I wish I never fuckin' did that. So, now what happened, I feel sick. So, it's fucked, man, it's stupid." (Grace 14–17, 'speed'-heroin)*

Three participants stated that they had acquired hepatitis C through injecting, one by sharing equipment in jail (Scott 14–21, 'speed'-'speed'). Scott (14–21, 'speed'-'speed') and Rob (19–24, heroin-heroin) both acknowledge a direct relationship between sharing injecting equipment and acquiring HCV: "I used somebody else's needle and I caught hep from it" (Scott). Clint (15–19, 'speed'-heroin), who also has HCV, did not make this direct association between sharing equipment and acquiring the virus. In fact, he claimed to be unsure how he had acquired the virus. He reported reusing spoons and had only reused a needle once, and only after he had "washed it out".

10.4 RISK

A number of issues relating to risk were explored in the qualitative interviews. Risk practice will be examined in terms of the use of equipment at various stages of injecting career (initiation and later use) as well as levels of knowledge about risk.

Equipment used at first injection

All participants in the qualitative study were able to describe the source of equipment used for their first injection and their involvement in obtaining that equipment. Participants' experiences ranged from being given equipment by someone else to being themselves active in obtaining equipment from a vending machine, pharmacy, or other secondary outlet. Involvement in obtaining equipment did not appear to be related to the type of drug first injected or the situation in which first injection occurred.

More than half the qualitative sample described being provided injecting equipment used for their first injection experience, but not able to describe the specific origin of that equipment.

Most insisted that the needle and syringe was "clean" and that they remembered the equipment being taken out of its wrapping.

> *"They just gave me a clean needle" (Jocko 16–16, 'speed'-'speed')*
>
> *"It was his stuff. He pulled it out and goes 'here you're looking at a brand new in the packet, it's not been used'. And I was like 'alright, sweet, as long as that's the way you know'" (Garth 17–25, heroin-heroin)*

Most initiation occurred in a group setting. Participants claimed that clean needles were available for all those injecting. These comments focused on the needle and syringe only; participants did not describe the source of other equipment (spoons, tourniquets etc).

A small number of participants were actively involved in obtaining the equipment they used at initiation. The source of injecting equipment most frequently reported was a pharmacy. No participant in the qualitative sample stated that they obtained equipment directly from a primary NSP for their initiation experience. Some who purchased their initiation equipment from a pharmacy stated that they were unaware of NSPs until some time after they began injecting. Others claimed that there were no NSPs in their local rural area. The following equipment sources were each used by one participant: a vending machine in Kings Cross, a hospital emergency unit, a facility accommodating homeless youth.

Three women reported that their sexual partner injected them for the first time. In each case the partner obtained and supplied the equipment. All three participants claimed the equipment was "clean" but, as above, the emphasis was on needle and syringes rather than other equipment.

> *"He always ends up doing himself first and then he does me, but it's always with a clean needle" (Alice 23–25, 'speed'-'speed')*

One of the participants Clint (15–19, 'speed'-heroin), who claimed that he had his own injecting equipment for his first injection experience, nevertheless stated that he shared the mix of drugs ('speed').

Relationship between knowledge of safer injecting and equipment source at initiation

Most participants did not know much about HCV or safer injecting at initiation beyond "common sense" about sharing needles. General knowledge or "common sense" around "AIDS and never to share needles" (James 17–23, 'speed'-heroin; Jack 18–21, 'speed'-heroin; Jon 18–24, 'speed'-'speed') was gained from school or media but did not include specific details about HCV or other issues of safer injecting.

There were few reported incidents of detailed information being passed on at initiation. Jon (18–24, 'speed'-'speed') claimed that awareness of safety issues around injecting "comes later on as you find out". This was typical for most participants.

Participants, who were supplied with their injecting equipment by someone else at time of initiation, appeared to have less knowledge about safer injecting practices than those who were actively involved in obtaining their own equipment.

Those who did not know the source of the initiation injecting equipment but said that they had been given a 'clean' needle (or saw it come out of a packet) typically said that at the time of initiation they did not know much about safer injecting.

A minority of participants did seek information or advice prior to initiation. Snowball (16–19, 'speed'-'speed') claimed that she had gathered information about safer injecting while "hunting down piercing rods" and that she "sussed it all out first". Jim (15–16, 'speed'-heroin) said he had found out about safer injecting through "being on the streets" and accessing youth services. Jill (18–23, 'speed'-heroin) was initiated by her partner, and Lux (20–24, heron-heroin) by his flatmate. Both claimed the equipment used was clean. These two participants both claimed they had researched the effects of drugs rather than safety with regard to blood-borne viruses: "the effects of it, the health risk" (Jill); Lux said he consulted a pharmacological textbook.

However, the information obtained prior to initiation may not have been sufficient to ensure safer injecting practices and may have reinforced misleading emphasis on *who* was involved, rather than what risk behaviours were involved. Garth (17–25, heroin-heroin) recalled that the initiation equipment with which he was supplied probably had come out of a packet (as he would recognise it now). He claimed that he discussed injecting before initiation and was assured by a friend that he would be safe if he was initiated by someone "decent and reliable".

Some participants did report being given information at initiation which went beyond "common sense" notions of not sharing needles and syringes to include other equipment.

Beth (22–23, 'speed'-'speed') was initiated by her partner who told her about "hep C and..what you can contract and clean needles and how to swab and tournie and I wouldn't have known that". Also, Josephine's (19–20, heroin-heroin) initiator told her "not to share equipment".

One participant claimed he had some knowledge about safer injecting as both his parents had acquired HCV from injecting (James 17–23, 'speed'-heroin).

Information of relevance to initiates

Although one focus of this study was participants' knowledge of prevention of blood-borne viruses, the information relevant to this sample of young IDUs is broader than this specific issue, and includes safer injecting and other issues.

Kerrie (15–23, 'speed'-heroin) claimed that "I think us older ones educate the younger ones a lot" and specified that she passes on information such as, "don't pass on tourniquets and … that could have the tiniest speck of blood on it".

However, only a minority of participants who passed on information to new or other IDUs, included in this information facts about safer injecting and BBVs. Other information that was passed on included: reminders to clean up the mess associated with injecting (Jon 18–24, 'speed'-'speed'), washing hands before injecting (Beth 23–23, 'speed'-'speed'), reminders not to leave needles on the ground (Grace 14–17, 'speed'-heroin), warnings against injecting into hands (James 17–23, 'speed'-heroin), warnings against using with someone else and against "shooting up dodgy stuff", descriptions of what different drugs would feel like (Kerrie 15–23, 'speed'-heroin) and details about drug filtering (Jasmine 17–21, heroin-heroin). Jon's (18–24, 'speed'-'speed') view of safer injecting also concerned possible adverse effects of injecting such as blood poisoning, abscesses and air bubbles. Snowball (16–19, 'speed'-'speed') was concerned about not ending up with a habit.

Information sources after initiation

A number of sources of information were used by participants once they began injecting more frequently, such as:

- Services (Scott, Homer, Alice, Kerrie, Garth, Dennis, Jasmine)
- Friends (Scott, James, Jack, Kerrie, Chris)
- Streetwise magazines (James, Jasmine)
- Word of mouth (Rob), through the traps (Sam), street culture (Rob)
- Users News (Sam, Jasmine)
- Courses (Dennis, Alice)

Clint (15–19, 'speed'-heroin) claimed that he did not know "anything about hep C until [he] was diagnosed" with it.

Use of equipment since initiation

Participants were also asked to describe their subsequent and current injecting practices. Although most participants claimed that their injecting practices were "very clean" and "safe" some indicated instances when they had shared equipment or where practices were sub-optimal for safety.

Participants used strong language to emphasise their contempt for sharing equipment and to stress that there is no need to share equipment because it is readily available:

> *"I won't use an old one of mine, I won't use an old one of his, I just won't use an old one of anything or if somebody else has used it. I won't do it…Any risk, any risk and I just won't" (Beth 22–23, 'speed'-'speed')*
>
> *"I've never used anyone else's, that's why I don't have hepatitis, don't have AIDS, don't have anything" (James 17–23, 'speed'-heroin)*
>
> *"No need to reuse equipment as far as I'm concerned. It's free if you know where to get it" (Lux 20–24, heroin-heroin)*

There were a number of situations described where participants had allowed others to reuse their injecting equipment or been asked for equipment, despite their disapproval.

> *"You've got all this availability, virtually at your fingertips. So I can't understand why people say can I borrow your equipment when you are finished. It's like mate, that's pretty sick, bro" (Dennis 17–25, heroin-heroin)*

Other participants broke the tips off their needles so that their equipment could not be reused.

James (17–23, 'speed'-heroin) stated that he had passed his used equipment on to other people when it was difficult to access equipment and that he was "completely comfortable handing the equipment on". James was confident that he did not have hepatitis C and assured his friend that they would be safe.

Rob (19–24, heroin-heroin) described a change in his practice of letting others reuse his equipment since he was diagnosed with HCV:

> *" Oh yeah, particularly after learning that I had Hep C, you know what I mean? Like straight up wouldn't let anyone use the same spoon as me and that kind of stuff, the same vial of water, things like that. Probably pedantic and over conscious".*

There were a number of situations in which participants described sharing including inadvertent sharing, with sexual partners, in jail, limited access to equipment and with a choice of injecting partner.

Steve (13–17, heroin-heroin) acknowledged that he shares equipment but said that he chooses "clean" injecting partners and sterilises equipment between uses.

"Like I've used dirty picks and that, but it's like I've used dirty picks with people that I known that are clean ... when we do use picks, it's done properly. Like metho, fuckin' bleach, fuckin' a mixture like we put fuckin' like seven different types of fuckin' sterilisers through it. Just to make sure it is clean."

Jasmine (17–21, heroin-heroin) had shared injecting equipment with her female partner. She explained that her partner had "never had sex with men" and that they both went for blood tests frequently. Sharing occurred when they had forgotten to "mark who's [equipment] was who's". Jasmine would wipe the spoon with an alcohol wipe and use boiling water to rinse the needles but "never really boiled them in water or bleached them". Jasmine evaluated this as "reckless…and I was playing with my life".

Kerrie (15–23, 'speed'-heroin) claimed that limited availability of methadone injecting equipment leads to sharing. The large barrel syringes favoured for methadone injecting were not available from NSPs and as a result, reuse of this equipment occurred because of the expense of purchasing new equipment for each injection. Kerrie also claimed that restriction of water, spoons and tourniquet distribution from NSPs leads to sharing. Further, Kerrie described the sub-optimal performance of one brand of syringe distributed by NSPs which "sticks" and leads to multiple injection attempts in the one injection episode.

Most participants claimed that they do not to reuse their own equipment in similarly strong and emphatic language as they used to describe their aversion to borrowing equipment. However, reuse of own equipment sometimes occurred after washing the equipment and sometimes without attempt to clean the equipment before reuse.

"well, you know, we don't use protection and when we do shoot it up, we reuse our needles. We try not to, the fact is, if we score and the chemist is closed, it's late at night, or yeah, you know." (Jack 18–21, 'speed'-heroin)

10.5 TRANSITION OUT OF INJECTING

A related issue explored in the qualitative data was patterns of drug use in reducing or attempting to reduce drug use. The Australian Study of HIV and Injecting Drug Use (ASHIDU) provides detailed information about changing drug user patterns (Carruthers, Loxley, & Bevan, 1998). The ASHIDU data show that younger users or those with injecting habits of less than 5 years were less likely to want to change drug than those with longer injecting careers. Reducing drug use in those with shorter injecting careers is important as one means of reducing exposure to HCV risk, as the risk of HCV infection increases with time since injection.

Compared with stimulant injectors, opioid injectors reported many more and a greater diversity of attempts to reduce their drug use, including both professional treatment and self-management strategies. Stimulant users were more typically not interested in reducing their drug use or had tried only one or two treatment options.

Table 10d. Self-management strategies and professional treatments undertaken by opioid and stimulant users to reduce drug use (often more than one strategy attempted)

Strategies for reducing drug use	Primary drug used		
	Opioids	Stimulants	Opioids + Stimulants
Geographical	Jill, Garth, Dennis, Rob, Sam, James		
Break/slow down	Jack, Jim, Clint, Grace	Alice, Homer	Chris
Cold turkey	Jack		
Beer/other drugs	Jack		
Methadone	Kerrie, Clint, James, Lux, Sam		
Buprenorphine	Jasmine, James		
Detox (residential or home)	Kerrie, Lux, Jasmine, James	Scott, Beth	
Rehabilitation		Beth	
Counselling	Lux		

Participants could be grouped according to their current intention or actions with regard to reducing drug use in one of the following categories:

No change intended

Liz (18–21, 'speed'-'speed') and Josephine (19–20, heroin-heroin) both expressed their intention to continue or increase their drug use. Liz was intending to sniff heroin and try methadone. Josephine expressed resistance to any change in her drug use: "I don't think I have drug issues. Everyone else wants to put an issue on it. I don't see there is an issue".

Grace (14–17, heroin-heroin) described herself as a "positive user": "I've that much pain in my life I want to keep using drugs". Jim (15–16, 'speed'-heroin) agreed that his life "revolved" around using. However, both had taken short breaks from drugs—Grace for 2 ½months and Jim for 3 days.

Change intended but no action taken

The reasons for reducing drug use stated by those who had not yet taken steps to do so, included, being sick of the lifestyle, career and health concerns, family and legal issues. Health concerns referred to general health as well as being pregnant for one of the female participants who stated it is "now or never" (Jill 18–23, 'speed'-heroin). Steven (13–17, heroin-heroin) at 17 years of age, claimed that his drive to reduce drug use related to concerns over incarceration in adult prisons.

Alice (23–25, 'speed'-'speed') and Jill (18–23, 'speed'-heroin) both spoke about the difficulty of reducing drug use while still being involved in drug using networks. Alice felt that she continued to use because of "the people I'm around … because they keep doing it, I'm enticed to keep doing it". Jill claimed that while she was with her current partner she wasn't able to "get away from drugs".

Action taken to reduce drug use (including cycles of attempts)

This category included people who had managed to reduce their drug use, who had made previous attempts to reduce their use and/or who currently expressed an intention to reduce their drug use.

Those who had managed to cut down drug use included a number of people who had experienced a major negative event – such as, their house burning down (Snowball 16–19,

'speed'-'speed'), a car accident (Jon 18–24, 'speed'-'speed'), or an overdose (Scott 14–21, 'speed'-'speed'), which he regarded as a "wake up call". For Jon, he had reached a "point where priorities shift in life" and he described his drug use as "refined now, not a priority". Family concerns and fear of jail were also given as reasons for cutting down.

For those who, to date, had not been successful in cutting down their drug use, the catalysts for their past attempts were similar as those described above. Being sick of the lifestyle and family issues were noted by participants. In addition, Jasmine (17–21, heroin-heroin) described the need to be an autonomous person: "I'm 21 soon and 21 year-olds don't depend on their parents".

11

SUMMARIES: QUANTITATIVE AND QUALITATIVE DATA

This section summarises the findings of this research and points to health promotion or other interventions suggested by our data.

Overall, our data characterise initiation of injecting drug use as occurring after a history of illicit drug use, in a social setting with friends and/or partner present, typically with little planning, in the initiator's own home or the home of a friend, and with limited awareness and perception of risk at the time. Our data show that drug injection is typically initiated for reasons of experimentation, fun and availability and is accepted as part of social network activities. However, for some, initiation into injecting may be for reasons of emotional release. These findings are similar to those of another Australian study of 102 young injectors conducted in Brisbane (Williams, 1999).

11.1 SAMPLE DEMOGRAPHIC AND KEY VARIABLES BY LOCATION

In the quantitative data, there were a number of location differences in demographics and key variables. The quantitative data show that participants recruited in Sydney, compared to those in Brisbane and Northern Rivers, were on average about a year younger. Further, a significant difference was found in the class of drug injected most frequently by young injectors located in Sydney (opioid) versus those in Brisbane and Northern Rivers (stimulant). These differences may relate to sampling biases, drug market forces (e.g. greater availability of opioids in Sydney, and of stimulants in Brisbane and Northern Rivers) or to subcultural factors. Differences found in education and employment (Sydney participants had higher educational levels and were more likely to be in full-time employment) may also suggest regional differences in educational patterns and employment opportunities.

Reports of social networks among IDUs were highest in Brisbane and the Northern Rivers area which corresponds to the finding that Sydney participants were less likely to have a partner who injected.

The findings show interesting differences in risk practice and self-reported HCV status. Sydney and Brisbane participants reported higher levels of HCV infection (around 25%) than

Northern Rivers, although Sydney participants reported less borrowing of equipment than the other two locations. Although reports of lending injecting equipment were low in all sites (but highest in Brisbane), this is a concern. Both borrowing and lending of injecting equipment should be addressed in strategies to reduce injecting risk.

11.2 CIRCUMSTANCES PRIOR TO AND AT INITIATION

Just over half of the survey sample injected stimulants on their first occasion of injecting. Regional and cultural factors may influence local drug markets, subsequent drug injecting networks and opportunities for drug initiation (McKetin et al., 2000). Exposure to other injectors within families may be a significant predictor of initiation. Among our survey participants, 16% indicated that their family members injected at the time of their own initiation. Although the general population rates of lifetime use of illicit drugs is relatively high at 37.7%, the rate of injecting drug use is 1.8% in the Australian population (Australian Institute of Health and Welfare, 2002). In this way, our respondents may be quite different to others who use illicit drugs and who do not go on to inject drugs.

In this sample, stimulants were in more frequent use in Brisbane and Northern Rivers than in Sydney, where opioids were more commonly used. The greater use of non-injection drugs at initiation by Northern Rivers participants may also be related to drug cultures and networks. However, we know participants' location at time of interview, not location at time of initiation.

The qualitative and quantitative data suggest that initiation is typically a social event, often with a number of people present. Others present at initiation were usually described as being of the same age or older. This is consistent with previous research (Barnard & McKeganey, 1990) relating to information passed on to initiates by other, more experienced injectors.

Approximately 60% of participants indicated that their initiation experience was not at all or not very planned which is lower than the 74% reported by Copeland et al. (1999). A higher proportion of Sydney initiates than initiates from other locations indicated that their first injection was planned. This is an interesting result when considered in conjunction with results about use of drugs by non-injection routes prior to injection and degree of exposure to other injectors prior to injection. Sydney participants, most of whom injected opioids, more frequently reported having used opioids prior to first injection than other participants. However, the qualitative data indicate that stimulants, more than opioids, were used by participants in non-injection ways (snorting, drinking).

The National Drug Strategy Household Survey asks participants to name the drug they thought of when people talked about a drug 'problem'. The 2001 survey results showed that 50% of the respondents associated heroin with a drug 'problem' and only 5% associated amphetamines with a drug 'problem' (Australian Institute of Health and Welfare, 2002). Although the figures are very low, 3.2% of the 2001 survey respondents indicated that amphetamines were acceptable for regular use by adults compared to 1.1% for heroin. These results must be interpreted with caution as they sample the general population, not those with significant early drug use as this sample shows. Nevertheless, if there are differences in folk pharmacology around different drugs, with opioids positioned at the bottom of a hierarchy of acceptability (perceived as being more problematic in terms of addiction and other social consequences), it may be easier for stimulant users than for opioid users to agree to the offer of injectable stimulants. This is an interesting issue which requires further investigation.

Reasons for initiation given by survey participants were clustered around issues of experimentation and fun as well as availability and opportunity. These issues have been discussed

previously in the literature (Blogg et al., 1997; Casriel et al., 1988; Kelsall et al., 1998; Williams, 1999). The quantitative and qualitative data indicate that issues of economy were not primary reasons for initiation of injecting. However, the economy issue has been a focus of previous initiation research (Casriel et al., 1988; Hando & Hall, 1993)

The qualitative data highlighted the use of drugs as a means of achieving emotional release or provide support, particularly for those who used opioids as the first drug injected. The literature does not emphasise the need for emotional release in relation to reasons for injection initiation.

Almost all participants reported a history of illicit drug use prior to initiation of injection. Our participants were in this way not unusual compared to the general population. The National Drug Household Survey findings indicated that use of illicit drugs is a relatively common experience with 41% of males and 34% of females indicated that they had used illicit drugs at some time and 20% of men and 14% of women (16% of total) indicating that they had used illicit drugs within the last 12 months (Australian Institute of Health and Welfare, 2002). The qualitative data elaborate the survey responses by adding detail of drug use progression. The survey results showed differences in the types of drugs used prior to initiation. Again, these differences may be related to sampling bias, local drug markets and/or availability.

Peer pressure was actively dismissed by some participants in the qualitative interviews as a reason for their initiation. However, it was given by about a quarter of survey participants as a reason for initiation, and the influence of peers was also important in the qualitative data in structuring social norms around drug use and the opportunity and exposure to drugs. In the literature, acceptance of injecting among peer groups and social scenes has previously been recognised as encouraging initiation (Barnard & McKeganey, 1990). The frequently reported presence of friends at the initiation experience, and observation of others injecting prior to initiation are further evidence from the quantitative survey of the importance of social networks in influencing decisions to inject drugs, or to attend injecting scenes.

There appear to be differences by recruitment location in social networks at initiation. Sydney participants were more likely to plan their initiation, and inject themselves for the first time, and were less likely to indicate that other people at their initiation were also injecting for the first time.

The qualitative data indicate that issues of gender may be relevant to initiation for some women. Although survey participants most frequently reported that friends were present at initiation, a substantial minority also reported their partner's presence. Having an IDU sex partner has been demonstrated as a risk for initiation of injection, especially for women (Powis et al., 1996; Taylor, 1998). The qualitative data suggested that pressure from male partners was a factor in some women's decisions to initiate or sustain injecting drug use.

Some Australian data suggest that a significant proportion of initiates first inject in public places (Copeland et al., 1999). The quantitative data replicates this finding with one-quarter of participants first injecting in public space. This is an interesting comparison given that the sample drawn by Copeland et al. (1999) was from NSW Juvenile Justice detainees who may have had significantly different experiences than the community sample drawn in this study. Although the majority of our participants reported initiating at their homes or a friend's home, similar to other Australian reports (Williams, 1999), those who initiate injecting in public spaces may be at higher risk than those who initiate in more controlled environments. This is an interesting issue for further research.

A high proportion of participants (highest in Sydney) reported obtaining equipment for first injection from a more formal source. However, the qualitative data indicate that the survey responses should be interpreted with caution. A typical pattern in the interview data was for

participants to describe the equipment used at initiation as "clean" but then describe that someone else provided the equipment and that the initiate was told the equipment was new or clean. The finding that primary NSPs were not used as sources of injecting equipment for those who *did* obtain equipment for initiation is of interest. Initiates, and their friends, accessing equipment from pharmacies and vending machines, will not have access to the range of other information and services provided by primary NSPs especially in regard to safer injecting practices. This suggests that non-NSP sources of injecting equipment extend efforts to provide safe injecting information.

11.3 DIFFERENCES BETWEEN CURRENT OPIOID AND STIMULANT INJECTORS

Opioid use was more prevalent in Sydney than in Brisbane or Northern Rivers. It appears that opioid injectors are at greater risk than stimulant injectors for adverse outcomes, including higher likelihood of HCV, higher dependence on drugs, fewer positive life events and more negative life events. Again, we cannot determine whether some of these factors precede or follow diagnosis with hepatitis C. Opioid injection is also related to early initiation (also found by Swift et al.), although it is not related to early school leaving or lower education levels.

Although opioid use was related to hepatitis C status, the rate of risk practice (i.e., borrowing of injecting equipment) was similar for both stimulant and opioid users. This finding did not appear to be related to an artifact of measurement (i.e., measurement of risk was associated with greater risk of hepatitis C infection). It may be that the injecting networks of opioid and stimulant users do not significantly overlap and that the pool of hepatitis C infection has been relatively contained within opioid user networks. As the social aspects of stimulant and opioid use are different, it may take other strategies to effectively reach and make an impact on injecting practices of stimulant users.

In the survey sample, a significant difference was found in the age of initiation among current opioid and stimulant injectors. Current opioid initiators were significantly younger (mean 18.2 years) than current stimulant injectors (mean 18.8 years) at initiation. These findings are the reverse of those reported by Swift et al. (1997) where stimulant users were younger at initiation than opioid users.

Initiation of opioid injection occurs in less social settings than initiation of stimulant injection. Opioid initiators were more likely to report injecting *themselves* at initiation or being in the company of just one other person. Stimulant initiators were more likely than opioid initiators to report being in company, and taking other drugs at initiation (e.g., alcohol or marijuana). Thus, we may be able to characterize stimulant initiation as occurring in more of a "party" scene than opioid initiation.

About one-quarter of respondents "swapped" injection drugs (i.e., reported a change in drug class from drug initiated to drug most frequently injected in the last 6 months). The swap occurred more frequently *to* opioids, rather than *from* opioids.

11.4 DIFFERENCES BETWEEN EARLY AND LATE INITIATORS

The average age of initiation to injecting drug use among the quantitative sample was 18.5 years, which is similar to previous reports (Battjes et al., 1992; Griffiths et al., 1994; Stowe & Ross, 1992; Swift et al., 1997).

Early initiators, compared to late initiators, were more likely to have been recruited in Sydney, to identify as Aboriginal or Torres Strait Islander, to inject more frequently, to have left school at a younger age, and to have used needles and syringes and/or injecting equipment after others. The latter point is consistent with previous findings (Fennema et al., 1997). As a group, early initiators were not more likely to be opioid users than stimulant users, although current opioid injection was related to younger age at initiation. These findings illustrate the complexity of interpreting drug use patterns, and require further investigation to offer fuller explanation.

The qualitative and quantitative data point to an association between age of initiation and stability of accommodation at the time of initiation. Younger initiates described being in less stable accommodation (being homeless, living in squats or hostels) than older initiates. Differences in living at home (home of origin) were also noted in the qualitative data but this issue was not explored in the quantitative survey.

Younger initiators tended to have lower educational attainment. There is a complex relationship between age of initiation, education levels/school leaving age, in which causality cannot be determined. Were younger initiates excluded from school because of drug use or did difficulties experienced at school allow opportunity for exposure and experimentation with drugs? In whichever case, longer time in formal education appears to be protective against early initiation to injection drug use, which, in turn, is predictive of a range of negative outcomes (positive and negative life events, social involvement with IDUs, HCV status, borrowing of equipment). This suggests a main avenue of intervention would be to support students at risk of school dropout in maintaining connection with formal education structures in some way.

The group, who leave school early and initiate injecting drug use early, may be at a further disadvantage in that their exposure to health- and biomedical-preventive information may be limited compared to those who continue their education to a higher level. In other words, opportunities to develop "common sense" awareness of injecting risks, as described by some interview participants, may be fewer for early school leavers.

Retention in formal education may be a strategy for delaying initiation to injection. As illicit drug use occurs at an early age for the majority of people who later inject, supportive school environments are required: especially in efforts to promote inclusion and reduce marginalisation of young people who are at risk of greater drug use. The findings of Fuller et al. (2002) support this recommendation. These authors argue that at the time of high school drop out, heavier drug use (i.e., initiation to injecting) may be imminent. For those injectors who do complete formal schooling and are later initiators, broader educational experiences which touch on issues such as drug use and safe use may also help to ensure higher levels of safe injecting knowledge or "common sense" at the time of initiation.

It is interesting that neither age at initiation nor time since initiation was related to severity of dependency, although drug most frequently used was related to dependency: opioid use was related to higher dependency scores.

In the quantitative survey, the sources of information described by participants did not differ by age at initiation. However, at time of initiation there may have been differences in source of information. The qualitative data showed that early initiates were typically not in contact with services providing information on safer injecting and BBVs.

Of concern are the findings that early initiates are more likely *at time of interview* to be unaware of their hepatitis C status and that they report higher levels of borrowing of injecting equipment. Testing and management of HCV provide opportunities to reinforce safe injecting messages and to establish contacts with other services. These findings indicate the need for enhanced efforts to encourage early initiates to be tested.

Variables associated with time since injecting, such as hepatitis C status, support other research about negative outcomes (National Centre in HIV Epidemiology and Clinical Research, 2001). Again, it is alarming that injectors with greater experience report increased borrowing rates despite having higher knowledge of BBVs and STIs.

11.5 HCV STATUS

Overall, 24% of survey participants and 6 of the 24 interview participants reported being HCV positive. These rates are different to those reported in the 2001 data of the National NSP Survey which found an overall HCV positive rate of 58% and 41% among those aged less than 25 years (MacDonald & Zhou, 2002). Our data showed that 33% of participants did not know their HCV status, the National Survey Data (all participants) showed that 12% had not been tested or did not report whether they had been tested. It appears that this study has recruited a group of injectors with less experience of health services and with lower testing rates for HCV.

This study supports the strong association between duration of injecting and HCV positive serostatus (Carruthers et al., 1997; Crofts et al., 1997; Garfein et al., 1998; NCHECR, 2001, 2002). In the survey study, 34% of those who had injected for 25 months or more reported being HCV positive. Conversely, 80% of people who reported being HCV positive had injected for 25 months or more.

Compared with other groups, HCV positive participants tended to be older, to have attained lower levels of education, to inject more frequently, to have shared injecting equipment in the last 6 months (this point is consistent with the finding of (Garfein et al., 1998), to be opioid users, to be more dependent on the drug they inject, to pass on information to others and to have experienced more categories of negative life events since starting to inject. Compared to untested participants, those who knew their HCV status were older, and also knew more about prevention, acquisition, and treatment of BBVs and STIs. It is evident that there is a need for more than education campaigns to effect change in injecting practice and hence, rates of hepatitis C infection.

In the qualitative data, a number of participants considered their injecting practice to be so safe that, in their view, they did not need to be tested for HCV. Given the low level of knowledge about risks associated with injecting equipment at the time of initiation it is doubtful that this was justified. These participants claimed to have never "shared" but their definition of sharing may be limited to needle and syringe sharing. The issue of misinformation or limited information among younger injectors is important.

The findings raise the alarm about the likelihood of borrowing and lending equipment among HCV seropositive injectors. Those with HCV were more likely to have greater knowledge about STIs and BBVs and to pass on information concerning safe injecting, but they also reported higher rates of (themselves) lending and borrowing equipment. Borrowing of equipment may occur after diagnosis of HCV in the belief that it does not matter anymore, but reuse of injecting equipment could result in reinfection and other negative outcomes (e.g., bacterial infections). Also, a third or a fourth user of the equipment might be at risk of HCV infection.

11.6 DIFFERENCES BETWEEN RISK TAKERS AND NON-RISK TAKERS

Just under half the survey sample indicated that they had reused others' injecting equipment in the last six months. Although there are differences in time frame, the 2001 from the National NSP Survey show that 81% of participants had *not* re-used a syringe after someone else in the last

month. In terms of other equipment, between 15% and 30% of participants in the National NSP survey in 2001 had re-used the drug mix, tourniquet, spoon etc (MacDonald & Zhou, 2002).

From the quantitative data, risk takers (i.e. those who borrowed equipment, versus those who did not) were likely to be younger at initiation, to live with others, to be HCV positive, to have initiated for "fun", to be stimulant users and to have lower education levels. There are some interesting relationships to examine here. Risk takers may be early initiates who left school early and became involved in injecting drug social networks in their early teenage years. However, these data do not clarify the relationship between onset of sharing and HCV status. Use of borrowed equipment may occur after, rather than before, HCV diagnosis (in which case it could not be the cause of the infection although it might lead to reinfection).

Greater borrowing of equipment was associated with current stimulant use, greater social involvement with IDUs and living with others. These findings suggest that the social milieu around stimulant injecting may encourage greater risk practice. In the quantitative survey, a majority of respondents indicated that the needle and syringe used at their initiation was obtained from a NSP, chemist, or other safe place. In the qualitative data, however, NSPs were not reportedly accessed. This discrepancy may be related to assumptions made about the source of the equipment provided to the initiator.

The quantitative data suggested that NSPs and pamphlets were the most common source of information about HCV and safe injecting. This almost certainly refers to the information obtained during the whole of a drug using career, and not at initiation. Data from the qualitative interviews show that, at initiation, participants were not typically in contact with services such as these and relied instead on the information passed on by their initiator or by other persons present. Ad hoc acquisition of information at initiation is further suggested by the survey results showing that the majority of participants did not plan their initiation to any degree and became initiated because they wanted to have fun, or to experiment, or because injection was available.

At the time of initiation, the knowledge of safe injecting practices as described by participants was at best rudimentary. Both the quantitative and the qualitative findings suggest that information about safe injecting practices is not always available or accessed from popular media or from school curricula. Also, for some participants, the messages received from these sources were sufficient only to pass on awareness of the dangers of needle sharing. Information about the risks posed by sharing other equipment was not available via these means, and the majority of young injectors did not find out about these risks until quite some time after initiation, in one case only after diagnosis with HCV.

In relation to information passed on to others, the quantitative data indicate almost half the participants did not pass on any information to other injectors and that more information was passed on about NSPs and safe disposal of equipment than about blood-borne viruses. This finding was mirrored in the qualitative data where participants described a broad range of information passed on to injectors about matters other than BBV prevention.

At the time of interview, there was no difference in knowledge scores between risk takers and non-risk takers. There appears to be a complex relationship between testing status, risk, HCV status and knowledge (having been tested for HCV is related to increased knowledge scores; being HCV positive is related to higher risk; knowledge is not related to risk). The knowledge scores of risk takers and non-risk takers was high, the groups achieved a score of about 12 from a possible total of 16. Increasing information dissemination efforts only will not have the desired effect of decreasing injecting risk practice. These findings support literature in health education fields generally, that knowledge is necessary but not sufficient to prompt behaviour change (Conner & Norman, 1996). Information dissemination should be couched within a suite of intervention strategies to effect change on risk behaviours.

The findings also shed some light on the issue raised in the literature review concerning the protective effects of initiating with older injectors. Two alternative hypotheses were presented: that initiating in the company of older people would decrease risk as older injectors could pass on information about safety and BBVs. Alternatively, older injectors could pose a risk to initiators as they were more likely to have HCV. The present data demonstrate that *risk takers* were more likely to report having had older people present at their initiation. Hence, we cannot rely on "passive" peer education to occur at initiation: i.e., that injectors will acquire safe injecting information and pass it onto their peers and that this will be effective in reducing borrowing of injecting equipment. Specially trained and motivated peers are required to reach networks of injectors, initiates and near-initiates.

11.7 METHODOLOGICAL COMMENT

Peer Interviewers

As far as possible, peer interviewers were employed to conduct the surveys with injecting drug users in each area. Previous research has shown the benefit of peer interviewers in reaching drug user networks which are not available to university-based researchers (Donoghoe & Wodak, 1998; Williams & Roche, 1999). However, this study provided some valuable insights into the support and monitoring required when peer interviewers are involved. The data from one (rural) setting were not eligible for analysis. We believe that, in the absence of adequate training, supervision and support, the peer interviewers in this area may have conducted groups, and used group decision making, to complete a number of questionnaires. Although this may have been a usual and an effective manner in which to run other peer activities (e.g. education), it was not the protocol for this study which involved individually-administered questionnaires. This experience led to the development of more detailed protocols for future projects in which peer interviewers will be trained, supported, and monitored throughout both by university-based researchers and, where appropriate and feasible, by partners from user organisations.

Reliability, Validity and Credibility of Data

In relation to studying IDUs, a large variety of research methods have been used. The present study used both quantitative and qualitative methods, with retrospective self-report by young IDUs themselves.

Some questions have been raised about the reliability and the validity of IDU self-report (Bourgois, 1998). In relation to reliability, interview responses of IDU couples in New York City about their own and their partner's demographic, drug-related and sexual risk behaviours were compared in order to assess reliability. The findings revealed that IDUs were generally reliable in their reports of both demographic and AIDS risk behaviours (Goldstein et al., 1995). Menoyo et al. (1998) found support for the validity as well as the reliability of self-report data regarding needle and syringe sharing and HIV serology, by comparing self-report with analysis of blood traces on used syringes.

Questions have also been raised with regard to the validity of drug use data obtained through qualitative techniques. However, Loxley and Ovenden (1995) discuss these methodological concerns, and conclude that qualitative techniques are generally valid provided certain conditions are met: namely, protection of respondents' privacy, guarantees of confidentiality, and independence of researchers from treatment services or law enforcement. They also advocate the use of peers (i.e., current or ex-drug users) as researchers. In relation to peer researchers, Power and Harkinson (1993) found that respondents interviewed by peers were less likely to provide false information, including false information about their drug use and sexual

behaviours, than were respondents interviewed by researchers with no personal history of drug use.

Sampling

The qualitative sample included some people who had been injecting for more than 5 years, although they were all 25 years of age or less. This is evidence of the long history of some injectors recruited as a sample of "youth". Similarly, although the selection criteria for the quantitative arm of the study specified that participants should have been injecting for four years or less, the quantitative sample included 3 (0.9%) participants who had been injecting for 49 months or more, but less than five years. We believe there are a number of barriers to working with younger injectors. Injectors with a shorter injecting history tend to be in less contact with treatment and other services than more experienced injectors. Also, younger injectors tend to be more suspicious of researchers than those who have been involved in research previously.

Study design

The participants in both the qualitative and quantitative arms of this study were all injecting drug users. This study design does not offer opportunity to compare various experiences of injecting drug users with non-injecting drug users. Of particular interest would be comparisons between these groups on early drug use (i.e., whether there are similarities in progression of licit and illicit drug use; whether there are age differences in the use of drugs between injectors and noninjectors).

Impact of the heroin "drought"

Some data collection for this project coincided with what has been referred to as the Australian heroin "drought" (Weatherburn, Jones, Freeman, & Makkai, 2003). A reduction in supply of heroin in Sydney and other large capital cities was noted from around Christmas 2000 with a resultant increase in price and decrease of purity, consumption and expenditure on heroin. Increase in the use of other drugs, notably cocaine, was confirmed in IDRS findings (Topp et al., 2002). The impact of this historical event should be considered in interpreting these findings; however the direction of effect on any result is unclear.

11.8 RECOMMENDATIONS

1. Retaining at-risk youth in school environments. Our data show that earlier school leaving is associated with earlier initiation into injecting drugs which is in turn associated with a range of negative outcomes. Retaining youth at-risk for injecting drugs in school environments may delay initiation and so derail negative consequences. The Ted Noffs Foundation has been providing counseling interventions in a number of state and some non-government high schools with young people who have drug-use related difficulties (their own or that of others including parents). This program aims to retain young people in school/education, promote inclusion, educate school staff and provide specific harm reduction information to a target group of youth who are mainly cannabis users and non-injecting users of stimulants. Numerous services may be aware of at-risk youth including school counselors, youth services, family services and juvenile justice. The need for confidentiality and sensitive handling of already marginalised young people is important to keep them in touch with services and be successfully referred to education retention programs. The Ted Noffs Foundation has developed a protocol with the NSW Department of Education that ensures confidentiality, and is protective of the safety of the school and students.

2. Expansion of peer education activities in terms of scope and content. Our data show that initiates or near to initiates are typically not in touch with services which can provide safe injecting information. The role of older, more experienced peers in providing information, modeling safe injecting practices or even discouraging injection should be further explored. The main site of education would be located at the drug use scene – typically a site in which government-funded services do not seek to work. Hence, non-government services, which can adopt a more flexible approach to education and service delivery, would be better placed to conduct front-line education and training for peer educators. This requires adequate funding and resourcing. Large numbers of specially trained peer educators would be required to access small groups within drug use networks. This recommendation also calls for a shift away from print-based resources to an investment in a large peer education workforce equipped with specialised training and access to up to date accurate information about risk and prevention messages. However, this model of peer education must be careful to support, train, supervise and encourage workers and in particular, provide real assistance when they want to leave the scene.

3. Families. Our data shows a significant minority of young injectors report a family member who also injects. This is a sensitive topic which should be the subject to specialised recommendations. Family members who use injecting drugs should not be considered "drug use networks" for peer education interventions. As with the case for at-risk youth, numerous services in touch with a family may seek to make appropriate referrals.

4. Practical safe injecting information. Knowledge of safe injecting practices is currently provided in the form of printed resource materials. These lack the practical application as has occurred in other contemporary health education programs. For example, sex education routinely includes demonstrations of condom use. Our results suggest that similar practical demonstrations of injecting practice would enhance safe injecting. For example, a prosthetic arm is used by the Medically Supervised Injecting Centre in Sydney to demonstrate injecting practice. Similar demonstrations should be considered in wider applications.

5. Acknowledging embedded social disadvantage and inequality. Our results show that those who suffer most disadvantage in our communities are also likely to be at-risk for injecting relating harms. We call on all health and welfare services to acknowledge this and develop strategies for targeting the most vulnerable within our societies.

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APPENDIX 1

See next page.

YOUNG PEOPLE'S INITIATION AND TRANSITION TO INJECTING DRUG USE

This survey is trying to find out how young people get into injecting, what their first hit was like, and what their use has been like since. This information will be used to guide education and prevention programs to reduce the spread of HIV/AIDS, hepatitis B and hepatitis C. The survey is anonymous and we don't record anybody's name on the survey or anywhere else. Filled in surveys are kept completely confidential and will only be seen by researchers. Do you have any questions?

Before we start, I need to ask <u>you</u> a few questions to make sure you're okay to be in this study.

- How old are you? ➨ *If not between 17 & 25 explain you can't survey them*
- How long ago did you first inject drugs? ➨ *If over 4 years ago explain you can't survey them*
- How long ago was your last injection? ➨ *If over 6 months ago explain you can't survey them*

Fine. I'm now going to read out a set of questions to you. In some cases a question will have a number of options and you need to choose the option that best fits you. When that happens, please wait till I've read all the options before you answer. If you'd like me to repeat or explain anything just ask.

SECTION A

I'm going to start off by asking you some general questions about yourself.

1. Are you doing any studying or training at the moment?

☐ No

	Yes	No
Primary school	☐	☐
High school	☐	☐
TAFE/college	☐	☐
University	☐	☐
Apprentice/trade	☐	☐
Other _____	☐	☐

☐ No response

2. How old were you when you left school, if you have left school?

☐ Still at school
☐ _____ years old
☐ No response

3. What's the highest level of education you've completed?

☐ Primary school only
☐ Up to and including Year 10
☐ Up to and including Year 12
☐ Diploma or trade certificate
☐ Attended university
☐ Completed undergraduate degree
☐ Completed postgraduate degree
☐ No response

4. What's your <u>main</u> source of income at the moment?

☐ Full-time work
☐ Part time/casual work
☐ The dole or other temporary benefit
☐ Pension (e.g. disability)
☐ Student allowance
☐ Supported by others (e.g. parents)
☐ No income
☐ Other _____
☐ No response

5. What's your occupation? (e.g., student, bartender, sex worker)

_____
☐ No response

6. Where are you currently living?

☐ Rented house or flat
☐ Privately owned house or flat
☐ Boarding house/hostel
☐ Mental hospital/halfway house
☐ Alcohol or drug rehab/detox
☐ Shelter/refuge
☐ Prison/detention centre
☐ Caravan park
☐ Squat
☐ No usual residence/homeless
☐ Other _____
☐ No response

7. Who do you live with?

- ☐ Alone
- ☐ With your current partner
- ☐ Alone with child(ren)
- ☐ With your current partner and child(ren)
- ☐ With your parent(s)
- ☐ With other relative(s)
- ☐ With friend(s)
- ☐ With children and friend(s)/family
- ☐ Other _____
- ☐ No response

SECTION B

I'm now going to ask you some questions about your current and recent drug use.

1. In the last month, which of the following have you had? ***(read list)***

- ☐ Nothing

	Yes	No
Alcohol	☐	☐
Heroin	☐	☐
Methadone	☐	☐
Pot	☐	☐
Benzos	☐	☐
Speed _____	☐	☐
Cocaine	☐	☐
Ecstasy/E/eccies	☐	☐
Trips/acid	☐	☐
Steroids	☐	☐
Other _____	☐	☐

- ☐ No response

2. In the last month, which of the following have you injected? ***(read unshaded list)***

- ☐ Not injected

	Yes	No
Alcohol	☐	☐
Heroin	☐	☐
Methadone	☐	☐
Pot	☐	☐
Benzos	☐	☐
Speed _____	☐	☐
Cocaine	☐	☐
Ecstasy/E/eccies	☐	☐
Trips/acid	☐	☐
Steroids	☐	☐
Other _____	☐	☐

- ☐ No response

3. In the last month, how often have you injected any drugs?

- ☐ Haven't injected in the last month
- ☐ Once a week or less often than that
- ☐ More than once a week but not every day
- ☐ Once a day
- ☐ 2 to 3 times a day
- ☐ More than 3 times a day
- ☐ It varied a lot
- ☐ No response

4. In the last <u>6 months</u>, which of the following drugs have you had? ***(read list)***

	Yes	No
Alcohol	☐	☐
Heroin	☐	☐
Methadone	☐	☐
Pot	☐	☐
Benzos	☐	☐
Speed _____	☐	☐
Cocaine	☐	☐
Ecstasy/E/eccies	☐	☐
Trips/acid	☐	☐
Steroids	☐	☐
Other _____	☐	☐

- ☐ No response

5. In the last 6 months, which of the following have you injected? ***(read unshaded list)***

	Yes	No
Alcohol	☐	☐
Heroin	☐	☐
Methadone	☐	☐
Pot	☐	☐
Benzos	☐	☐
Speed _____	☐	☐
Cocaine	☐	☐
Ecstasy/E/eccies	☐	☐
Trips/acid	☐	☐
Steroids	☐	☐
Other _____	☐	☐

- ☐ No response

6. One of the things we'd like to know is if the way you use has changed over the last 6 months. In the last 6 months, was there a time when you were injecting: *(read list)*

	Yes	No
Once a month or less often than that	☐	☐
About once a month	☐	☐
More than once a month but not every week	☐	☐
Once a week	☐	☐
More than once a week but not every day	☐	☐
Once a day	☐	☐
More than once a day	☐	☐

☐ No response

7. In the last 6 months, which drug did you most frequently inject?

☐ Alcohol
☐ Heroin
☐ Methadone
☐ Pot
☐ Benzos
☐ Speed _____
☐ Cocaine
☐ Ecstasy/E/eccies
☐ Trips/acid
☐ Steroids
☐ Other _____
☐ No response

8. In the last 6 months, did you ever think your use of this drug was out of control? *(read list)*

☐ Never or almost never
☐ Sometimes
☐ Often
☐ Always or nearly always
☐ No response

9. In the last 6 months, did the thought of missing a dose of it make you very anxious or worried? *(read list)*

☐ Never or almost never
☐ Sometimes
☐ Often
☐ Always or nearly always
☐ No response

10. In the last 6 months, did you worry about your use of it? *(read list)*

☐ Not at all
☐ A little
☐ Quite a lot
☐ A great deal
☐ No response

11. In the last 6 months, did you wish you could stop using it? *(read list)*

☐ Never or almost never
☐ Sometimes
☐ Often
☐ Always or nearly always
☐ No response

12. In the last 6 months, how difficult was it to stop or go without it? *(read list)*

☐ Not difficult
☐ Quite difficult
☐ Very difficult
☐ Impossible
☐ No response

13. How long ago was the last time you injected?

☐ Today
☐ Yesterday
☐ _____ days
☐ _____ weeks
☐ _____ months
☐ Don't remember
☐ No response

14. When you last injected, what did you inject?

☐ Alcohol
☐ Heroin
☐ Methadone
☐ Pot
☐ Benzos
☐ Speed _____
☐ Cocaine
☐ Ecstasy/E/eccies
☐ Trips/acid
☐ Steroids
☐ Other _____
☐ No response

15. Did you use any other drugs at the same time?

☐ Nothing else

	Yes	No
Alcohol	☐	☐
Heroin	☐	☐
Methadone	☐	☐
Pot	☐	☐
Benzos	☐	☐
Speed _____	☐	☐
Cocaine	☐	☐
Ecstasy/E/eccies	☐	☐
Trips/acid	☐	☐
Steroids	☐	☐
Other _____	☐	☐

☐ No response

16. What's your drug of choice at the moment?

☐ Alcohol
☐ Heroin
☐ Methadone
☐ Pot
☐ Benzos
☐ Speed _____
☐ Cocaine
☐ Ecstasy/E/eccies
☐ Trips/acid
☐ Steroids
☐ Other _____
☐ No response

What about alcohol?

17. How do you generally use this drug?

☐ Inject it
☐ Eat/drink it
☐ Smoke it
☐ Sniff/snort it (powder)
☐ Inhale it (vapour)
☐ Shelve it/shaft it/put it up your bum
☐ No response

18. In the last 6 months, have you injected in any of the following places? *(read list)*

	Yes	No
Own home	☐	☐
Friend's home	☐	☐
Current partner's home	☐	☐
Dealer's home	☐	☐
Work	☐	☐
Car	☐	☐
Train	☐	☐
Paid shooting room/gallery	☐	☐
Squat	☐	☐
Private party	☐	☐
Club/dance party	☐	☐
Public toilet	☐	☐
Street/park/beach	☐	☐
Detention/prison	☐	☐
Other_____	☐	☐

☐ No response

19. In the last 6 months, have you injected when you're by yourself? *(read list)*

☐ Never
☐ Sometimes
☐ Usually
☐ Always
☐ No response

20. In the last 6 months, who have you injected with?

	Yes	No
By yourself	☐	☐
Your current partner	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

☐ No response

21. In the last 6 months, who's injected you?

	Yes	No
Injected yourself	☐	☐
Your current partner	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

☐ No response

22. Have you learnt to inject <u>yourself</u>?

☐ Yes ➡ *QUESTION 25*
☐ No
☐ No response

23. Which of the following statements do you most agree with, when it comes to learning to inject yourself? *(read list)*

☐ You don't want to learn
☐ You're not sure whether you want to learn or not
☐ You'd like to learn but you're not ready yet
☐ You'd like to learn but you've not got round to it
☐ You'd like to learn but you want to learn to do it safely
☐ Other _____
☐ No response

24. Who would you ask to show you how to inject?

☐ No-one
☐ Your current partner
☐ A family member
☐ Schoolmates
☐ Workmates
☐ Dance or club buddies
☐ A friend with medical training
☐ A friend
☐ Your dealer
☐ A needle exchange worker
☐ A youth worker
☐ Someone from a users' group
☐ A doctor or nurse
☐ Other _____
☐ No response

25. When did you start injecting yourself?

☐ Never done it
☐ From the very first injection
☐ Day of first injection
☐ _____ days
☐ _____ weeks
☐ _____ months
☐ Don't remember
☐ No response

26. Have you learnt how to inject <u>others</u>?

☐ Yes
☐ No
☐ No response

27. How did you learn to inject?

☐ Don't know how to inject ➡ *QUES 32*

	Yes	No
By doing it yourself *Prompt:* Had you watched anyone before you had a go?	☐	☐
By watching others	☐	☐
From your current partner	☐	☐
From family members	☐	☐
From schoolmates	☐	☐
From workmates	☐	☐
From dance or club buddies	☐	☐
From friends	☐	☐
From a friend with medical training	☐	☐
From acquaintances	☐	☐
From dealer	☐	☐
From a pamphlet	☐	☐
At a needle exchange	☐	☐
At a youth service	☐	☐
At a users group	☐	☐
From a doctor or nurse	☐	☐
Other _____	☐	☐

☐ No response

28. How long was it before you injected anyone else?

☐ Never done it ➡ *QUESTION 32*
☐ Day of first injection
☐ _____ days
☐ _____ weeks
☐ _____ months
☐ No response

29. In the last 6 months, have you injected anyone else?

☐ No, only injected self

	Yes	No
Your current partner	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

☐ No response

30. Have you ever given anyone their very first injection of anything?

☐ No-one ➨ *QUESTION 32*

	Yes	No
Your current partner	☐	☐
Ex-partners	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

☐ No response

31. How many people have you given their first injection to?

☐ One person

☐ _____ people

☐ Don't know

☐ No response

32. If you have a regular sexual partner such as a boyfriend or girlfriend, do they currently inject?

☐ Don't have a current partner

☐ Yes

☐ No

☐ Don't know

☐ No response

33. Do any of your friends currently inject? *(read list)*

☐ None

☐ A few

☐ Some

☐ Most

☐ All

☐ Don't have any friends

☐ Don't know

☐ No response

34. Do any of your family currently inject?

☐ None

	Yes	No
Mother	☐	☐
Father	☐	☐
Brother	☐	☐
Sister	☐	☐
Aunt/uncle	☐	☐
Cousin	☐	☐
Others _____	☐	☐

☐ Don't have any family

☐ Don't know

☐ No response

35. How much of your time is spent with people who inject? *(read list)*

☐ None

☐ A little

☐ Some

☐ Most

☐ All

☐ Don't know

☐ No response

36. Who knows <u>you</u> inject?

	Yes	No
Your current partner	☐	☐
Ex-partners	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Local cops	☐	☐
Health workers/doctors	☐	☐
Other _____	☐	☐

☐ Don't know

☐ No response

37. How does injecting fit into your life? Do you… *(read list)*

	Yes	No
Use to party	☐	☐
Use because you need to	☐	☐
Use recreationally	☐	☐
Use to bond with your partner	☐	☐
Use to bond with your friends	☐	☐
Use for sex	☐	☐
Use when you're unhappy	☐	☐
Use because you want to	☐	☐
Use because the drug's there	☐	☐
Use because of peer pressure	☐	☐
Use but you're not addicted	☐	☐
Use on special occasions	☐	☐
Use out of habit	☐	☐
Other_____	☐	☐

☐ No response

I'm now going to ask some questions about the equipment you use to inject.

38. In the last 6 months, how often did you re-use <u>your own</u> fit? *(read list)*

☐ Never ➨ *QUESTION 40*
☐ Rarely
☐ Sometimes
☐ Often
☐ Every time
☐ No response

39. In the last 6 months, when re-using <u>your own</u> fit, how often have you cleaned it? *(read list)*

☐ Never
☐ Rarely
☐ Sometimes
☐ Often
☐ Every time
☐ No response

40. In the last 6 months, how many times have you re-used <u>someone else's</u> fit, even if it was cleaned? *(read list)*

☐ Never ➨ *QUESTION 44*
☐ Rarely
☐ Sometimes
☐ Often
☐ Every time
☐ No response

Including your partner's? *(If yes ➨ QUES 40)*

41. In the last 6 months, how many different people have used a fit before you have?

☐ One person
☐ Two people
☐ 3-5 people
☐ 6-10 people
☐ More than 10 people
☐ Don't know
☐ No response

42. Who were these people?

	Yes	No
Your regular sex partner	☐	☐
A casual sex partner	☐	☐
A friend	☐	☐
An acquaintance	☐	☐
A family member	☐	☐
Don't know	☐	☐
Other_____	☐	☐

☐ No response

43. In the last 6 months, when re-using <u>someone else's</u> fit, how often have you cleaned it? *(read list)*

☐ Never
☐ Rarely
☐ Sometimes
☐ Often
☐ Every time
☐ No response

44. Could you describe how you clean your fits?

☐ Never re-use fits
☐ Never clean fits
☐ No response

_____
_____
_____
_____
_____

45. In the last 6 months, have you used any of the following after someone else? *(read list)*

	Yes	No
Spoon	☐	☐
Swab	☐	☐
Filter	☐	☐
Tourniquet	☐	☐

☐ No to all ➨ *QUESTION 48*
☐ No response

46. How often have you used any of these after someone else? ***(read list)***

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Every time
- ☐ No response

47. Whose was this equipment?

	Yes	No
Your regular sex partner	☐	☐
A casual sex partner	☐	☐
A friend	☐	☐
An acquaintance	☐	☐
A family member	☐	☐
Don't know	☐	☐
Other_____	☐	☐

☐ No response

48. In the last 6 months, how many times has someone used <u>your</u> fit after you've already used it? ***(read list)***

- ☐ Never ➨ *QUESTION 50*
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Every time
- ☐ Don't know
- ☐ No response

49. Who's used your fit after you?

	Yes	No
Your regular sex partner	☐	☐
A casual sex partner	☐	☐
A friend	☐	☐
An acquaintance	☐	☐
A family member	☐	☐
Other_____	☐	☐

- ☐ Don't know
- ☐ No response

50. In the last 6 months, which of the following places have you got your fits from? ***(read list)***

	Yes	No
Needle exchange	☐	☐
Chemist	☐	☐
Dealer	☐	☐
Vending machine	☐	☐
Hospital	☐	☐
Friend	☐	☐
Other_____	☐	☐

☐ No response

51. Are you currently in any of the following types of drug treatment? ***(read list)***

☐ No treatment

	Yes	No
One-on-one counselling	☐	☐
At home detox	☐	☐
Residential (live-in) detox	☐	☐
Day program rehab	☐	☐
Residential (live-in) rehab	☐	☐
Methadone	☐	☐
Naltrexone	☐	☐
Go to a GP	☐	☐
Go to a drug treatment clinic	☐	☐
Go to a users' group clinic	☐	☐
NA or other 12 step program	☐	☐
Other _____	☐	☐

☐ No response

SECTION C

I'm now going to ask you some questions about the very first time you injected <u>any</u> drug.

1. How long ago did you first inject?

- ☐ _____ days
- ☐ _____ weeks
- ☐ _____ months
- ☐ _____ years
- ☐ No response

2. How old were you when you first injected?

- ☐ _____ years
- ☐ Don't remember
- ☐ No response

3. What was the first drug you injected?

- ☐ Alcohol
- ☐ Heroin
- ☐ Methadone
- ☐ Pot
- ☐ Benzos
- ☐ Speed _____
- ☐ Cocaine
- ☐ Ecstasy/E/eccies
- ☐ Trips/acid
- ☐ Steroids
- ☐ Other _____
- ☐ Don't know
- ☐ Don't remember
- ☐ No response

And you hadn't injected anything else before that, even once? *(If yes* ➨ *QUESTION 3)*

4. Had you used the drug in any other way before you injected it?

- ☐ No
- ☐ Ate/drank it
- ☐ Smoked it
- ☐ Sniffed/snorted it (powder)
- ☐ Inhaled it (vapour)
- ☐ Shelved it/stuck it up your bum
- ☐ Don't know
- ☐ Don't remember
- ☐ No response

5. That time you had your first hit, did you use any drugs other than what you were injecting, or drink any alcohol?

- ☐ No

	Yes	No
Alcohol	☐	☐
Heroin	☐	☐
Methadone	☐	☐
Pot	☐	☐
Benzos	☐	☐
Speed _____	☐	☐
Cocaine	☐	☐
Ecstasy/E/eccies	☐	☐
Trips/acid	☐	☐
Steroids	☐	☐
Other _____	☐	☐

- ☐ Don't know
- ☐ Don't remember
- ☐ No response

6. Where did you have your first injection?

- ☐ Own home
- ☐ Friend's home
- ☐ Home of your partner at the time
- ☐ Dealer's home
- ☐ Work
- ☐ Car
- ☐ Train
- ☐ Paid shooting room/gallery
- ☐ Squat
- ☐ Private party
- ☐ Club/dance party
- ☐ Public toilet
- ☐ Street/park/beach
- ☐ Detention/prison
- ☐ Other _____
- ☐ Don't remember
- ☐ No response

7. How many people other than you were there at your first injection?

- ☐ No one else ➨ *QUESTION 16*
- ☐ _____ person(s)
- ☐ Don't remember
- ☐ No response

8. Did you know them? *(read list)*

- ☐ None
- ☐ Some
- ☐ Most
- ☐ All
  - ☐ Don't remember
  - ☐ No response

9. Who was there?

	Yes	No
Your partner at the time	☐	☐
Family members _____	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

- ☐ Don't remember
- ☐ No response

10. Are you still in touch with any of them? ***(read list)***

- ☐ None
- ☐ Some
- ☐ Most
- ☐ All
- ☐ Don't know
- ☐ No response

11. How many of the other people there were also injecting? ***(read list)***

- ☐ None
- ☐ Some
- ☐ Most
- ☐ All
- ☐ Don't remember
- ☐ No response

12. What sex were the other people there?

- ☐ All male
- ☐ Mostly male
- ☐ A mix of male and female
- ☐ Mostly female
- ☐ All female
- ☐ Don't remember
- ☐ No response

13. Were they about the same age as you?

- ☐ Yes
- ☐ No, mostly older
- ☐ No, mostly younger
- ☐ A mixture
- ☐ Don't know
- ☐ Don't remember
- ☐ No response

14. Was anyone there also having their very first injection?

- ☐ No ➨ *QUESTION 16*

	Yes	No
Your partner at the time	☐	☐
Family members _____	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

- ☐ Don't know
- ☐ Don't remember
- ☐ No response

15. Were <u>they</u> about the same age as you?

- ☐ Yes
- ☐ No, older
- ☐ No, younger
- ☐ A mixture
- ☐ Don't know
- ☐ Don't remember
- ☐ No response

16. Who scored the drugs for your first hit?

	Yes	No
You did	☐	☐
Your partner at the time	☐	☐
Family members _____	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

- ☐ Don't know
- ☐ Don't remember
- ☐ No response

17. Who paid for the drugs?

	Yes	No
You did	☐	☐
Your partner at the time	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

- ☐ Don't know
- ☐ Don't remember
- ☐ No response

18. Who got the fit?

- ☐ You did
- ☐ Your partner at the time
- ☐ Family member_____
- ☐ Schoolmate
- ☐ Workmate
- ☐ Dance or club buddy
- ☐ Friend
- ☐ Acquaintance
- ☐ Dealer
- ☐ Other _____
- ☐ Don't know
- ☐ Don't remember
- ☐ No response

19. Do you know where the fit came from?

- ☐ Needle exchange
- ☐ Chemist
- ☐ Dealer
- ☐ Vending machine
- ☐ Hospital
- ☐ Friend
- ☐ Other _____
- ☐ Don't know
- ☐ Don't remember
- ☐ No response

20. Was any of the following equipment new or used? ***(read list)***

	New	Used	Don't know
Fit	☐	☐	☐
Spoon	☐	☐	☐
Swab	☐	☐	☐
Filter	☐	☐	☐
Tourniquet	☐	☐	☐

- ☐ Don't remember
- ☐ No response

21. Here are some reasons people give for why they injected the first time. Which applied to you? ***(read list)***

	Yes	No
The rush/high	☐	☐
To experiment/curiosity	☐	☐
Peer pressure	☐	☐
Felt it's quicker	☐	☐
Felt it's cleaner/safer	☐	☐
Felt it's cheaper	☐	☐
Didn't like other ways	☐	☐
Needle fixation/like needles	☐	☐
It was available	☐	☐
It was already prepared	☐	☐
It was offered	☐	☐
You were out of it	☐	☐
For the fun of it	☐	☐
Other _____	☐	☐

- ☐ Don't remember
- ☐ No response

22. How planned was your first injection? Was it: ***(read list)***

- ☐ Not at all planned
- ☐ Not very planned
- ☐ Fairly planned
- ☐ Very planned
  - ☐ Don't remember
  - ☐ No response

23. Thinking of your first injection, which comes closest to how you felt? ***(read list)***

- ☐ You had no idea it would happen
- ☐ You thought it might happen
- ☐ You hoped it might happen
- ☐ You knew it would happen
- ☐ You made sure it would happen
- ☐ You didn't care if it happened or not
  - ☐ Don't remember
  - ☐ No response

24. How did you feel just before you had the injection? Were you: ***(read list)***

	Yes	No
Out of it	☐	☐
Nervous	☐	☐
Excited	☐	☐
Unhappy	☐	☐
Frightened	☐	☐
Afraid of the needle	☐	☐
Unsure what would happen	☐	☐
Feeling you were cool	☐	☐
Sure of what would happen	☐	☐
In control	☐	☐
Happy	☐	☐
Other _____	☐	☐

☐ Don't remember
☐ No response

25. Who first injected you?

☐ Injected yourself ➡ *QUESTION 28*
☐ Your partner at the time
☐ Family member_____
☐ Schoolmate
☐ Workmate
☐ Dance or club buddy
☐ Friend
☐ Acquaintance
☐ Dealer
☐ Other _____
☐ Don't remember
☐ No response

26. Did you tell them this was your first time?

☐ Yes
☐ No
☐ Don't remember
☐ No response

27. How do you feel towards this person now? Do you feel: ***(read list)***

☐ Grateful
☐ Hate them
☐ They're one of your best friends
☐ You wish you'd never met them
☐ You have mixed feelings about them
☐ Other _____
☐ No response

28. Right after your first injection, how did you feel? Did you feel: ***(read list)***

	Yes	No
Sick	☐	☐
Calm	☐	☐
Great	☐	☐
Had a rush	☐	☐
It was the best thing that had ever happened to you	☐	☐
Like vomiting	☐	☐
Out of control	☐	☐
In control	☐	☐
Disappointed	☐	☐
Sleepy	☐	☐
Out of it	☐	☐
Unsure that it was working	☐	☐
You felt nothing	☐	☐
Other _____	☐	☐

☐ Don't remember
☐ No response

29. What did you do then? Did you: ***(read list)***

	Yes	No
Talk	☐	☐
Vomit	☐	☐
Have sex	☐	☐
Go to a club/dance party	☐	☐
Go to a private party	☐	☐
Go to sleep	☐	☐
Have another injection	☐	☐
Inject someone else	☐	☐
Drink some alcohol	☐	☐
Take other drugs _____	☐	☐
Nod off	☐	☐
Do nothing	☐	☐
Other _____	☐	☐

☐ Don't remember
☐ No response

30. On that occasion, how many times did you inject or get injected?

☐ Once
☐ _____ times
☐ Don't remember
☐ No response

31. Were you worried about getting hepatitis B at the time of your first injection?

- ☐ Yes
- ☐ No, you hadn't even heard of it
- ☐ No because you didn't know of the risk
- ☐ No because you were using a new fit
- ☐ No because you didn't care
- ☐ No because you didn't think of it at the time
- ☐ No, other _____
- ☐ Don't remember
- ☐ No response

32. Were you worried about getting hepatitis C at the time of your first injection?

- ☐ Yes
- ☐ No, you hadn't even heard of it
- ☐ No because you didn't know of the risk
- ☐ No, because you were using a new fit
- ☐ No, because you were using all new equipment
- ☐ No, because you didn't care
- ☐ No because you didn't think of it at the time
- ☐ No, other _____
- ☐ Don't remember
- ☐ No response

33. Were you worried about getting HIV/ AIDS at the time of your first injection?

- ☐ Yes
- ☐ No, you hadn't even heard of it
- ☐ No because you didn't know of the risk
- ☐ No, because you were using a new fit
- ☐ No, because you didn't care
- ☐ No because you didn't think of it at the time
- ☐ No, other _____
- ☐ Don't remember
- ☐ No response

34. At the time, how risky did you think your first injection was, in terms of getting these viruses? *(read list)*

- ☐ Not at all
- ☐ A little
- ☐ Quite a lot
- ☐ A great deal
- ☐ Didn't think about risk at all
- ☐ Don't remember
- ☐ No response

SECTION D

I'm now going to ask some questions about your life at the time you started injecting.

1. Where were you living at the time you started injecting?

- ☐ Rented house or flat
- ☐ Privately owned house or flat
- ☐ Boarding house/hostel
- ☐ Mental hospital/halfway house
- ☐ Alcohol or drug rehab/detox
- ☐ Shelter/refuge
- ☐ Prison/detention centre
- ☐ Caravan park
- ☐ Squat
- ☐ No usual residence/homeless
- ☐ Other _____
- ☐ No response

2. What was the postcode where you were living at the time? Or the suburb if you don't know the postcode.

☐☐☐☐ Suburb_____

- ☐ No response

3. Who were you living with at the time you started injecting?

- ☐ Alone
- ☐ With your partner at the time
- ☐ Alone with child(ren)
- ☐ With your partner and child(ren)
- ☐ With parent(s)
- ☐ With other relative(s)
- ☐ With friend(s)
- ☐ With children and friend(s)/family
- ☐ Other _____
- ☐ No response

4. Were you doing any studying or training at the time?

- ☐ No

	Yes	No
Primary school	☐	☐
High school	☐	☐
TAFE/college	☐	☐
University	☐	☐
Apprentice/trade	☐	☐
Other _____	☐	☐

- ☐ No response

5. What was your main source of income at the time you started injecting?

- ☐ Full-time work
- ☐ Part time/casual work
- ☐ The dole or other temporary benefit
- ☐ Pension (e.g. disability)
- ☐ Student allowance
- ☐ Supported by others (e.g. parents)
- ☐ No income
- ☐ Other _____
- ☐ No response

6. What was your occupation at the time?

_____

- ☐ No response

7. Before your first injection, had you tried any of the following? *(read list)*

	Yes	If yes, how old were you?
Alcohol	☐	____
Heroin	☐	____
Methadone	☐	____
Pot	☐	____
Benzos	☐	____
Speed _____	☐	____
Cocaine	☐	____
Ecstasy/E/eccies	☐	____
Trips/acid	☐	____
Steroids	☐	____
Other _____	☐	____

- ☐ No response

8. At the time you started injecting, did you know anyone who injected?

- ☐ No ➡ *QUESTION 10*

	Yes	No
Your partner at the time	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

- ☐ No response

9. At the time you started injecting, did any of your family inject?

- ☐ Don't have any family
- ☐ No

	Yes	No
Mother	☐	☐
Father	☐	☐
Brother	☐	☐
Sister	☐	☐
Aunt/uncle	☐	☐
Cousin	☐	☐
Other _____	☐	☐

- ☐ Don't know
- ☐ No response

10. Before you started injecting, had you seen anyone inject?

- ☐ No

	Yes	No
Your partner	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

- ☐ No response

11. Did any of your friends or family start injecting around the same time you did? (*read list)*

- ☐ None
- ☐ Some
- ☐ Most
- ☐ All
  - ☐ Don't know
  - ☐ No response

12. At the time you started injecting, were you in any of the following types of drug treatment? *(read list)*

☐ None

	Yes	No
One-on-one counselling	☐	☐
At home detox	☐	☐
Residential (live-in) detox	☐	☐
Day program rehab	☐	☐
Residential (live-in) rehab	☐	☐
Methadone	☐	☐
Naltrexone	☐	☐
Went to a GP	☐	☐
Went to drug treatment clinic	☐	☐
Went to a users' group clinic	☐	☐
NA or other 12 step program	☐	☐
Other _____	☐	☐

☐ No response

13. At the time you started injecting, had you been in any trouble with the law because of drugs?

☐ No

☐ Yes ➨ *READ LIST BELOW*

	Yes	No
Been warned/cautioned	☐	☐
Been in a lock-up/in the cells	☐	☐
Was facing charges	☐	☐
Was out on bail	☐	☐
Been in youth detention centre	☐	☐
Been in an adult prison	☐	☐
Out on parole	☐	☐
Other _____	☐	☐

☐ No response

SECTION E

I'm now going to ask you some questions about your life since your first injection.

1. Since your first injection, have any of the following happened to you? *(read list)*

	Yes	No
You've had trouble concentrating	☐	☐
You've gone back to study	☐	☐
You've quit or been sacked from work	☐	☐
You've made new friends	☐	☐
You've had relationship problems	☐	☐
Your social life has got better	☐	☐
You've had trouble finding work	☐	☐
You handle problems more easily	☐	☐
You've been ill	☐	☐
Your work life has been more stable	☐	☐
Your family have rejected you	☐	☐
Your finances have got better	☐	☐
You've given up school or study	☐	☐
You've had more energy	☐	☐
You've been violent	☐	☐
You've had more self-esteem	☐	☐
Your social life has got worse	☐	☐
You've had less motivation	☐	☐
Your relationships have got better	☐	☐
You've had less energy	☐	☐
Your family's been more supportive	☐	☐
You've been a victim of violence	☐	☐
You've had less self-esteem	☐	☐
You've had money problems	☐	☐

☐ No response

2. Since you started injecting, how many times have you: *(read list)*

	Time(s)
Been in treatment	_____
Been in trouble with the law because of drugs	_____
Been in trouble with the law for other reasons	_____
Been in prison/detention	_____
Been homeless	_____
Had a holiday from injecting	_____
Tried to give up injecting	_____
Given up injecting	_____

3. Have you been in prison or a detention centre in the last 12 months?

☐ Yes

☐ No

☐ No response

4. Have you ever injected in prison?
- ☐ Yes, in the last 12 months
- ☐ Yes, before the last 12 months
- ☐ No, never
- ☐ Never been in prison or detention
- ☐ No response

5. Since you started injecting, which of the following have applied? ***(read list)***

	Yes	No
You've stuck with the same drug you first injected	☐	☐
You inject the drug you first injected but also other drugs	☐	☐
You've injected different drugs at different times	☐	☐
You've gradually injected more and more often	☐	☐
You immediately started injecting every day	☐	☐
How often you inject has varied	☐	☐
The amount of drug you inject is more now than when you started	☐	☐
At times you've cut down on the amount you injected	☐	☐
You've learned how to get your drugs easily	☐	☐
The amount you inject has varied	☐	☐
Other _____	☐	☐

- ☐ No response

SECTION F: SEX

I'm now going to ask you some questions about your sex life. I'm going to ask about sex with regular partners such as boyfriends and girlfriends, but also about sex with casual partners such as one night stands.

1. Do you think of yourself as ***(read list)*****:**
- ☐ Straight/heterosexual
- ☐ Gay/lesbian/homosexual
- ☐ Bisexual
- ☐ Unsure
- ☐ Other _____
- ☐ No response

2. How many sexual partners have you ever had (not including clients)?
- ☐ None ➨ *QUESTION 12*
- ☐ One partners
- ☐ 2–4 partners
- ☐ 5–10 partners
- ☐ 11–20 partners
- ☐ More than 20 partners
- ☐ No response

3. In the last 6 months, how many regular or casual sexual partners have you had?
- ☐ None
- ☐ One partner
- ☐ 2 partners
- ☐ 3-5 partners
- ☐ 6-10 partners
- ☐ More than 10 partners
- ☐ No response

4. How many regular sexual partners have you ever had, including the current one if you have one?
- ☐ None ➨ *QUESTION 9*
- ☐ One partner
- ☐ _____ partners
- ☐ No response

5. Are you currently in a sexual relationship with a regular partner?
- ☐ Yes, with a woman
- ☐ Yes, with a man
- ☐ Yes, with both
- ☐ No ➨ *QUESTION 7*
- ☐ No response

6. How long have you been in this relationship?
- ☐ Less than a week
- ☐ One week
- ☐ 2–4 weeks
- ☐ 1–2 months
- ☐ 3 months
- ☐ 4–6 months
- ☐ 7–12 months
- ☐ 1–2 years
- ☐ More than 2 years
- ☐ No response

7. In the last 6 months, have you had vaginal or anal sex with a regular partner?
- ☐ Yes
- ☐ No ➨ *QUESTION 9*
- ☐ No response

8. How often did you use a condom? *(read list)*
- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Always
- ☐ No response

9. In the last 6 months, have you had any casual sex?
- ☐ No casual partners ➨ *QUESTION 12*
- ☐ Yes, with women
- ☐ Yes, with men
- ☐ Yes, with both
- ☐ No response

10. In the last 6 months, have you had vaginal or anal sex with a casual partner?
- ☐ Yes
- ☐ No ➨ *QUESTION 12*
- ☐ No response

11. How often did you use a condom? *(read list)*
- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Always
- ☐ No response

12. In the last 6 months, have you had a sexually transmitted disease (eg, herpes, gonorrhea)?
- ☐ Yes, _____
- ☐ Yes, but don't want to say which
- ☐ No
- ☐ No response

13. Have you ever been paid for sex? *(read list)*
- ☐ Never ➨ *NEXT SECTION*
- ☐ Once
- ☐ A few times
- ☐ Many times
- ☐ No response

14. In the last 6 months, have you been paid for sex?
- ☐ Yes
- ☐ No ➨ *NEXT SECTION*
- ☐ No response

15. How often have you used condoms when you've been paid for sex? *(read list)*
- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Always
- ☐ No response

SECTION G

In the last part of this survey I'm going to ask you a few more general questions.

1. *(Tick the person's sex unless unsure, then ask)*
- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ No response

2. So how old are you now?
- ☐ _____ years
- ☐ Don't know
- ☐ No response

3. What's the postcode where you live now? Or the suburb if you don't know the postcode.
- ☐☐☐☐ Suburb _____
- ☐ No response

4. What country were you born in?
- ☐ Australia
- ☐ Other _____
- ☐ Don't know
- ☐ No response

5. What's your ethnic background?

- ☐ Mixed _____
- ☐ Aboriginal Australian
- ☐ Torres Strait Islander
- ☐ Anglo-Australian
- ☐ British
- ☐ Cambodian
- ☐ Lebanese
- ☐ New Zealander
- ☐ Vietnamese
- ☐ Other _____
- ☐ Don't know
- ☐ No response

6. Which scene or group do you <u>most</u> feel a part of at the moment (eg, surfers, taggers)?

- ☐ Surfers
- ☐ Bikes/cars
- ☐ Goth
- ☐ Feral
- ☐ Hippie
- ☐ Homeboy/homie
- ☐ Gym/body building
- ☐ Gay/queer
- ☐ Westie
- ☐ Clubber/raver
- ☐ New age
- ☐ Drinkers/pub scene
- ☐ Musicians/artists
- ☐ Students
- ☐ Punk
- ☐ Local gang/crew
- ☐ Taggers
- ☐ Street kids/homeless
- ☐ Alternative
- ☐ None
- ☐ Other _____
- ☐ No response

7. How would you describe your general physical health over the last 6 months? ***(read list)***

- ☐ Poor
- ☐ Fair
- ☐ Good
- ☐ Excellent
- ☐ No response

8. In the last 6 months, have you had any of the following because of your drug use? ***(read list)***

	Yes	No
Overdose/dropped	☐	☐
Abscesses/infections	☐	☐
Dirty hit (made you feel sick)	☐	☐
Bruising	☐	☐
Track marks/scarring	☐	☐
Gangrene	☐	☐
Severe headaches	☐	☐
Collapsed veins	☐	☐
Difficulty injecting	☐	☐
You freaked out	☐	☐
Other _____	☐	☐

- ☐ No response

9. In the last 6 months, how many times have you overdosed or dropped?

- ☐ Never
- ☐ Not sure if you've dropped/OD'ed
- ☐ _____ time(s)
- ☐ Don't know
- ☐ No response

10. Do you have any tattoos?

- ☐ Yes
- ☐ No ➨ *QUESTION 12*
- ☐ No response

11. Where did you get your tattoo(s) done?

	Yes	No
Parlour/professional	☐	☐
In prison	☐	☐
Friend not in prison	☐	☐
Did it yourself	☐	☐
Other_____	☐	☐

12. Do you have any body or ear piercings?

- ☐ Yes
- ☐ No ➨ *QUESTION 14*
- ☐ No response

13. Where did you get your piercing(s) done?

	Yes	No
Parlour/professional	☐	☐
In prison	☐	☐
Friend not in prison	☐	☐
Did it yourself	☐	☐
Other_____	☐	☐

- ☐ No response

14. How would you describe your general mental and emotional health over the last 6 months? *(read list)*

- ☐ Poor
- ☐ Fair
- ☐ Good
- ☐ Excellent
- ☐ It varies
- ☐ No response

15. In the last 6 months, have you generally felt *(read list)*:

	Yes	No
Emotionally up-and-down	☐	☐
Panicky	☐	☐
Happy	☐	☐
Paranoid	☐	☐
In control	☐	☐
Confused	☐	☐
Mellow	☐	☐
Depressed	☐	☐
Aggro	☐	☐
Confident	☐	☐
Schizo	☐	☐
Other_____	☐	☐

☐ No response

16. When were you last tested for hepatitis B?

- ☐ Never been tested ➨ *QUESTION 18*
- ☐ Less than a week ago
- ☐ 1-4 weeks ago
- ☐ 1-6 months ago
- ☐ 7-12 months ago
- ☐ 1-2 years ago
- ☐ 2-4 years ago
- ☐ More than 4 years ago
- ☐ No response

17. What was the result of your most recent hepatitis B test?

- ☐ Negative
- ☐ Positive
- ☐ Don't know
- ☐ No response

18. Have you ever had a hep B vaccination?

- ☐ Yes
- ☐ No
- ☐ Not sure
- ☐ No response

19. How likely do you think you are to get hepatitis B? *(read list)*

- ☐ You've already got it
- ☐ You've already had it
- ☐ Very unlikely
- ☐ Unlikely
- ☐ Likely
- ☐ Very likely
- ☐ Don't know
- ☐ No response

20. When were you last tested for hep C?

- ☐ Never been tested ➨ *QUESTION 22*
- ☐ Less than a week ago
- ☐ 1-4 weeks ago
- ☐ 1-6 months ago
- ☐ 7-12 months ago
- ☐ 1-2 years ago
- ☐ 2-4 years ago
- ☐ More than 4 years ago
- ☐ No response

21. What was the result of your most recent hepatitis C test?

- ☐ Negative
- ☐ Positive ➨ *QUESTION 23*
- ☐ Don't know
- ☐ No response

22. How likely do you think you are to get hepatitis C? *(read list)*

- ☐ Very unlikely
- ☐ Unlikely
- ☐ Likely
- ☐ Very likely
- ☐ Don't know
- ☐ No response

23. When were you last tested for HIV/AIDS?

- ☐ Never been tested ➨ *QUESTION 25*
- ☐ Less than a week ago
- ☐ 1-4 weeks ago
- ☐ 1-6 months ago
- ☐ 7-12 months ago
- ☐ 1-2 years ago
- ☐ 2-4 years ago
- ☐ More than 4 years ago
- ☐ No response

24. What was the result of your most recent HIV/AIDS test?

- ☐ Negative
- ☐ Positive ➨ *QUESTION 26*
- ☐ Don't know
- ☐ No response

25. How likely do you think you are to get HIV/AIDS? *(read list)*

- ☐ Very unlikely
- ☐ Unlikely
- ☐ Likely
- ☐ Very likely
- ☐ Don't know
- ☐ No response

26. Where have you got information about hepatitis C and safe injecting from?

	Yes	No
Your current partner	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Pamphlets	☐	☐
Needle exchange	☐	☐
Youth service	☐	☐
Drug treatment service	☐	☐
Doctor or nurse	☐	☐
Fit packs	☐	☐
Taught about it at school	☐	☐
Other _____	☐	☐

☐ No response

27. Have you told anyone you know about hepatitis C and safe injecting?

- ☐ No-one ➨ *QUESTION 29*
- ☐ Don't know anything about them

	Yes	No
Your current partner	☐	☐
Family members	☐	☐
Schoolmates	☐	☐
Workmates	☐	☐
Dance or club buddies	☐	☐
Friends	☐	☐
Acquaintances	☐	☐
Dealer	☐	☐
Other _____	☐	☐

☐ No response

28. Have you told anyone about any of the following? *(read list)*

	Yes	No
Hepatitis B	☐	☐
Hepatitis C	☐	☐
HIV/AIDS	☐	☐
Needle exchanges	☐	☐
Safe disposal of equipment	☐	☐
The law in relation to injecting	☐	☐

☐ No response

29. I'm now going to read out some statements. For each one, I want you to tell me if it's true, false, or you don't know *(read list)*

	T	F	DK
You can get hepatitis C from tattooing and body piercing	☐	☐	☐
Apart from HIV, all STDs can be cured	☐	☐	☐
You can get hepatitis B from having sex	☐	☐	☐
You can get hep C from sharing razors or toothbrushes	☐	☐	☐
You can get vaccinated against hep B	☐	☐	☐
You can get vaccinated against hep C	☐	☐	☐
Getting hep C has no long term effects on your health	☐	☐	☐
You can get hep B more than once	☐	☐	☐
You can get hep C more than once	☐	☐	☐
You can get hep C from sharing filters	☐	☐	☐
It's safe to share fits with your partner	☐	☐	☐
The only people who need to worry about hep C are those who inject drugs	☐	☐	☐
It's safe to share tourniquets and spoons	☐	☐	☐
There's no treatment for hep C	☐	☐	☐
Flushing your fit with tap water makes it safe for others to reuse	☐	☐	☐
You can get more than one type of hep C	☐	☐	☐
Sharing equipment is safe as long as it's with people you know	☐	☐	☐

For the next few statements, I want you to tell me if you strongly disagree, disagree, agree or strongly agree with each of them.

30. If you inject you're going to get hep C, no matter how hard you try to avoid it.
- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree
- ☐ Don't know
- ☐ No response

31. Hep C is less of a threat because not so many people are getting it.
- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree
- ☐ Don't know
- ☐ No response

32. I'm less worried about hep C infection than I used to be.
- ☐ Strongly disagree
- ☐ Disagree`
- ☐ Agree
- ☐ Strongly agree
- ☐ Don't know
- ☐ No response

33. Hep C is a less serious threat than it used to be because of new treatments.
- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree
- ☐ Don't know
- ☐ No response

34. New hep C treatments will take the worry out of injecting.
- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree
- ☐ Don't know
- ☐ No response

35. If you had the chance to say one thing to someone about to have their first injection, what would you say?

_____
_____
_____

That's the end of the survey - thanks a lot for your time. Is there anything you'd like to ask me about or add?

_____
_____
_____