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The course and consequences of the heroin shortage in New South Wales

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The course and consequences of the heroin shortage in NSW

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Executive Summary

Chapter 1. The NSW heroin market in the 1990s

- The 1990s was a time of significant change in the heroin market in NSW.
- Sydney remained central to the importation and trafficking of heroin.
- The role of law enforcement in the heroin market was affected by inadequate funding, long standing corruption in NSW and the effects of enquiries into this corruption in the mid 1990s.
- South East Asian heroin trafficking groups obtained a significant share of the heroin market in Australia following disruption of the supply of South East Asian heroin to the United States.
- Rising heroin use was reflected in a steep increase in opioid overdose deaths and increasing numbers of people entering methadone maintenance treatment.
- Drug users reported heroin availability increased, purity was high and price decreased.
- There was an increase in the number of locations or "markets" from which heroin was distributed, to include Kings Cross, Redfern and Cabramatta. Heroin was easily available from all these locations.

Chapter 2. Documenting the heroin shortage

- In early 2001, heroin supply decreased as indexed by: an increase in time taken for regular drug users to purchase drugs; a decrease in the proportion of regular injecting drug users reporting heroin as 'easy to obtain'; an increase in the price of heroin in 2001, having decreased steadily since 1996; and a reduction in purity as reported by drug users and NSW Police heroin seizures.
- The peak period of the shortage appears to have been January to April 2001.
- The market appears to have stabilised, though it has not returned to pre-2001 levels: heroin prices have decreased in NSW for street grams, but 'caps' remain high; and heroin purity in NSW has remained low, with perhaps a 10% increase above the lowest recorded levels.

Chapter 3. Changes in patterns of drug use

- A reduction in heroin supply was associated with a reduction in heroin use among regular IDU and probably in the extent of heroin use in the community.
- In the short term, drug substitution occurred, with some users clearly using other drugs in a risky manner.
- A shift by some IDU to cocaine injection was clearly documented and was reflected in community level data regarding calls about cocaine use.
- Methamphetamine use has been increasing in recent years but there was no clear shift at the time of the heroin shortage.

- Benzodiazepine use was mentioned by KI and users but not reflected in community level data, suggesting that although some groups may have switched to this drug use, they were small in number.

Chapter 4. Changes in injecting drug use

- A sustained, State wide reduction in distribution of needle/syringes followed the reduction in heroin supply.
- There appeared to be an overall reduction in the frequency of heroin injection and a concurrent increase in the frequency of injection of other drugs, particularly cocaine and benzodiazepines, among some groups in the months following the reduction in heroin supply.
- Increased injecting risk behaviour associated with cocaine use was reported, however, given the contraction in the heroin population, it is unclear if the prevalence of these behaviours increased during the heroin shortage.
- A range of injection related problems was reported among some groups, mainly associated with cocaine and benzodiazepine injection, concurrent with the reduction in heroin availability.
- The number of notifications of HIV and hepatitis B do not appear to have been affected by the heroin shortage in the short term.
- The number of hepatitis C notifications appears to have decreased, especially among younger age groups.

Chapter 5. Changes in the number of heroin users

- Making estimates of the number of regular heroin users is difficult, and particularly when there have been changes in the extent of drug supply, need to be viewed with caution.
- A range of indirect estimates from a range of data sources were used as part of work completed for another study.
- It was estimated that the number of regular heroin users in NSW decreased following the reduction in heroin supply.
- The extent of the reduction appeared to be similar for males and females, suggesting that both groups of heroin users may have been affected by the reduction in supply in a similar way.
- There appeared to be different changes according to age, with greater reductions occurring among younger age groups. This was consistent with key informants who reported that younger users may have reduced or ceased heroin use following the reduction in heroin supply.
- These estimates, although suggesting that the number of *regular heroin users* declined, do not imply anything about the number of *illicit drug users* in total. There was suggestive evidence that the extent of injecting drug use declined, but evidence also suggested that users probably switched to a range of other drug types including benzodiazepines, cocaine and methamphetamine (perhaps administering through non-injecting routes).

Chapter 6. Changes in health effects of drug use

- There was a large and persistent decrease in the number of non-fatal heroin overdoses in early 2001. There was also a significant decrease in the number of deaths in which heroin was detected. Lower rates of non-fatal and fatal heroin overdoses have been maintained since early 2001.
- The decreases in fatal and non-fatal heroin overdoses were of a similar magnitude for males and females, but varied among different age groups. The reduction in heroin availability did *not* have as much impact upon older heroin users' likelihood of overdose as it did upon younger users.
- Following the onset of the heroin shortage, many heroin users appeared to experience significant withdrawal symptoms. There was no observable increase, however, in attendances at health services, suggesting that most heroin users probably managed withdrawal without requesting formal medical assistance.
- There was an increase in emergency department presentations for cocaine overdose but no detectable change in the number of other non-fatal drug overdoses.
- There was a short term increase in drug induced psychosis. The transitory nature of this change was probably due to a decrease in the availability (and use) of cocaine.
- There was no detectable increase in the number of pregnant women with problematic drug use accessing health services, but some evidence that polydrug use among those pregnant women engaged with services may have increased.
- There were differences across the different drug markets, with suggestions that Kings Cross had higher increases in cocaine related harms and relatively greater decreases in heroin related overdoses than in other areas. This was consistent with other data suggesting that cocaine use was concentrated in this area.

Chapter 7. Changes in drug treatment

- The reduction in heroin supply had no observable effect on treatment seeking among persons who had previously been in opioid pharmacotherapy, possibly a more entrenched group of heroin users.
- There were *fewer* new treatment registrations (i.e. treatment seeking among treatment naive persons) for opioid pharmacotherapy among younger users following the reduction in heroin supply. This suggests that when heroin became less available, those who had not been enrolled in pharmacotherapy did not seek to enter it.
- Adherence to pharmacotherapy improved among those in treatment when heroin was less available, but retention in treatment did not change.
- Among younger users there were increases in the number of treatment episodes for cocaine and amphetamine type stimulant (ATS) problems. Treatment seeking among older users was unrelated to changes in heroin supply.
- These patterns of treatment seeking suggest two things: 1) that older, heroin dependent persons were less likely than younger persons to become problematic users of psychostimulant drug types when their primary drug (heroin) became less available; and 2) the motivation of younger heroin users to enter pharmacotherapy was decreased after a reduction in heroin supply, perhaps because they were more likely to switch using other, more available, illicit drugs.

- Treatment seeking among those with psychostimulant use problems is complicated by a lack of appropriate treatment options and a perception by users that psychostimulant use (and the subsequent development of problematic use) is fundamentally different to heroin use and dependence. This was often reported by key informants in this study and is consistent with previous research (Hando, Topp et al. 1997).
- There has been a gradual increase over time (following the shortage) in the small numbers of treatment episodes for problematic benzodiazepine use.

Chapter 8. Changes in drug crime

- Drug distribution in NSW appeared to change around the time of the heroin shortage. High level distribution of heroin, cocaine and methamphetamine may have remained somewhat discretely managed by different organised crime groups, but greater collaboration may have occurred between these groups.
- Among mid level distributors, there appeared to be a shift in emphasis from heroin to methamphetamine, ecstasy and cocaine distribution.
- Low level dealers may have made a short term shift from heroin to cocaine distribution.
- The nature of low level drug dealing also appeared to shift following the heroin shortage according to key informants in all drug market areas, with movement towards mobile, less overt methods of dealing.
- The heroin shortage had clear effects on street drug market visibility. In Kings Cross, Cabramatta and Redfern, key informants all reported short term increases in visibility but in the longer term key informants in all areas reported *decreased* visibility of the drug markets, as dealing became more covert.
- There were significant decreases in incidents of heroin possession/use reported by police. These decreases were more marked in Fairfield-Liverpool, among males and those aged 20-29 years. At the same time, increases were observed in incidents for cocaine possession/use, which primarily occurred among younger males, particularly in the Inner Sydney area. This was consistent with reports of some short term drug market displacement from Cabramatta to the inner city, particularly Redfern.

Chapter 9. Changes in crime associated with drugs

- It was difficult to document changes in the criminal activity of those involved in drug distribution, particularly organised crime groups. Nonetheless, information suggested that some groups diversified into, or increased their activity in, other crime types such as motor vehicle re-birthing, factory break-ins for saleable goods, credit card fraud and distribution of firearms. Examination of police data on these crime types suggested that although there was no detectable change attributable specifically to the heroin shortage, there have been increasing rates of crime types such as fraud in recent years, which supports the reports collected for this study.
- There were consistent KI reports of a short term increase in acquisitive crime committed by heroin users. Indicator data on these offences was equivocal in some instances and significant changes were not observed in some of these indicators.
- There appeared to be an increase in street based sex work among some heroin users, many of whom were reported to have used cocaine when heroin supply was reduced. A

statistically significant increase in police incidents for illicit sex work was noted and the number of illicit sex work incidents remained higher than before the reduction in heroin supply.

- The short term increase in some acquisitive crime types and illicit sex work may have been related to the increased use of cocaine by some heroin users, given the behavioural effects and more expensive costs associated with this drug.
- The lack of a sustained increase in acquisitive crime incidents was probably linked to two factors: a reduction in the number of heroin users (Chapter 5), and the relatively short length of time with which cocaine use appeared to be increased among this group (Chapter 3).
- There were reports that the nature of criminal acts changed immediately following the onset of the heroin shortage, with more impulsive and violent criminal acts. This is supported by a significant increase in the incidence of robbery offences at the time of the heroin shortage.
- The lack of effect on incidents of robbery with a firearm, weapons offences, assaults and homicides may reflect the limited access to guns in Australia.

Chapter 10. Impact upon law enforcement operations

- No fundamental change occurred in the aims of drug law enforcement at either the Local Area Command or State level.
- The understanding by law enforcement of the drug market increased as heroin availability declined, as other drugs became more available or apparent and as some criminal groups shifted activities to different commodities.
- There was some reallocation of resources previously committed to the policing of the heroin market to the investigation of other illicit drugs.
- New opportunities emerged to have an impact on illicit drug markets other than heroin.
- Drug Units in some Local Area Commands increased in number and personnel.
- Outcome and monitoring tools that were more indicative of the impact of law enforcement on the market than the traditional measures of seizures and arrests were developed.
- More emphasis was placed on research and multi-agency approaches to the drug market.

Chapter 11. Changes in health agency operations as a result of the shortage

- Increased numbers of clients presented for problems other than heroin withdrawal due to the increased use of drugs such as cocaine, methamphetamine and benzodiazepines.
- The consequences of the change in drug use included drug induced psychosis, increased levels of aggression and violence, increased staff stress and more support required from mental health services (drug induced psychosis) and law enforcement (violent incidents).
- Staff responded with training programs (including aggression management), protocol review, client education programs, staff debriefings, critical incident response training and modifications to buildings to improve safety.

- Decreased numbers of clients presented to needle/syringe program services.
- Health services were initially unprepared for the sudden and broad changes that occurred during the heroin shortage but were able to make modifications to the way they did practice in order to cope effectively.

Chapter 12. Conclusions

- The heroin shortage followed a period of unprecedented heroin availability in Australia. In early 2001 the price, purity and availability of heroin in NSW dramatically and unexpectedly decreased; this decrease was felt most strongly in the months January to April of that year. Although the market appears to have stabilised, it has not returned to pre-shortage levels.
- The shortage had a number of clear effects across a wide range of domains. Heroin use decreased – as did the estimated number of regular heroin users.
- According to the data available, there was a clear increase in the use of psychostimulants (particularly cocaine) associated with the shortage. There was a reported increase in the use of benzodiazepines but this increase was not apparent in any of the indicators examined. It may have occurred for a small number of users only and manifested as an increase in injecting and greater harms. The increased use of psychostimulants and benzodiazepines probably resulted in an increase in risky injecting among this group but it is unclear whether they form a large proportion of the injecting drug user population.
- Despite these increases, there was a marked *decrease* in the distribution of needles and syringes shortly following the heroin shortage. This decrease could be partially accounted for by an increase in the re-use of needles and syringes as is consistent with cocaine (e.g. van Beek, Dwyer et al. 2001) and benzodiazepine (e.g. Ross, Darke et al. 1997) injecting. But given the magnitude of the decrease in needle and syringe distribution, this explanation alone is considered unlikely, particularly given that the number of notifications of hepatitis C *decreased* following the heroin shortage, most markedly among younger age groups. These two findings (decreased NSP activity *and* decreased hepatitis C notifications) suggested a decrease in the extent and number of injecting drug users in NSW.
- Younger, novice heroin users probably (though not necessarily) fared better than older, more entrenched users. For example, heroin overdose deaths decreased dramatically during this period, with the largest decreases among younger people. This was accompanied by an overall increase in the number of admissions for cocaine overdose and a brief increase in the number of drug-induced psychoses, though not of the same magnitude as the decrease in heroin related deaths.
- Younger people were observed to have increased treatment episodes for psychostimulant use and there was a decrease in the number of treatment naive users seeking opioid pharmacotherapy. There was no observable change in the number of persons seeking treatment who had previously been in opioid pharmacotherapy, but although treatment retention did not improve, those enrolled in treatment showed greater treatment adherence.
- For those who continued to use heroin and other drugs, the heroin shortage was associated with increased levels of crime and aggression.

- Short-term increases in illicit sex work and acquisitive crime were also very likely related to the reduced availability. However, in the longer term, these reductions were likely to be offset by an apparent overall sustained decrease in acquisitive crime.
- These changes to drug use patterns, health and criminal activity of heroin users required health and police services to respond, often compromising their ability to deliver appropriate and necessary services. Responses were varied and reflected the dynamic nature and resourcefulness of many services. On the whole the skill bases of services increased and, while many of the acute/negative impacts of the shortage dissipated, many of the positive changes remained.
- Despite the many changes observed, as with any observational research, the findings detailed in this report reflect associations between the heroin shortage and the issue of interest.