

Chapter 4: Prevention and Harm Reduction

4.1 What is prevention?

Various strategies have been used to prevent drug problems, such as law enforcement approaches to prevent and disrupt production and supply, community based information and awareness raising programs, and strategies that aim to prevent and/or reduce problems in those who are currently engaged in drug use. In their extensive review of the literature on prevention, Loxley and colleagues (2004) defined prevention as:

measures that prevent or delay the onset of drug use as well as measures that protect against risk and reduce harm associated with drug supply and use (p.xiii).

Prevention approaches are typically generic to all drug types and may be adapted to address a specific drug class, such as amphetamine-type stimulants (ATS). The most common classification for these strategies is as follows:

1. Primary prevention – prevent and reduce initiation of drug use (for example, education programs warning of the risks of drug use and supply control strategies);
2. Secondary prevention – reduce the up-take of high-risk drug use, such as injecting and dependence, to prevent problems in those already engaged in drug use (for example, targeting interventions to current users to ensure that they avoid injecting); and
3. Tertiary prevention - prevent behaviours that lead to significant social and/or individual harms among dependent users (for example, reducing the risk of HIV or Hepatitis; reducing the risk of overdose).

An alternative conceptualisation of prevention was suggested in 1994 by the United States Institute of Medicine, and based on the level of risk of disorder in various target groups, as follows:

1. Universal prevention – target whole populations at average risk;
2. Selective prevention – target specific groups at increased average risk;
3. Indicated prevention – target individuals with early emerging problems.

According to both these models and, as indicated in the definition of prevention provided above, the nature of and methods used in any prevention strategy will depend on the specific aims and intended audience or targeted behaviour/contexts. Strategies that aim to inform the broad community about drug use and drug risks are likely to be distinguished from strategies that are aimed at preventing use among school aged children, and strategies that aim to reduce the problems arising from injecting behaviour.

The range of different ATS prevention strategies therefore includes broad strategies (e.g., targeting the whole community, through mass media campaigns; focusing on all school-aged children, through school drug education; preventing use and problems among

employees, through workplace programs); programs aimed at those who are identified as at risk of engaging in drug use and experiencing related problems (e.g., targeting vulnerable families and/or communities; targeting people affected by mental health problems); and programs that target current users (e.g., peer education to reduce the risk of HIV or drug overdose). The range of potential prevention strategies was summarised by the Australian National Council on Drugs (ANCD) (2007):

The means of implementing prevention strategies varies from strengthening societal infrastructure (e.g., providing opportunities for education, employment and recreation), educating young people about the harmful effects of drugs (e.g., school-based prevention programs), to early interventions and peer-based outreach programs aimed at reducing problematic patterns of drug use (e.g., injecting drug use and HIV risk behaviour). Media campaigns have also been used successfully to reduce a range of unhealthy behaviours, including drug use (p.6).

The nature and impact of various drug prevention strategies, including harm reduction measures, are reviewed elsewhere and will not be considered in detail here (for example, see review by Loxley et al., 2004). However, in the sections that follow, a brief commentary on some common illicit drug prevention and harm reduction strategies is provided, before discussing their application to ATS. For the present purposes, measures that prevent or delay onset of drug use will be referred to as prevention strategies, while measures targeting related harms for those already using drugs will be referred to secondary prevention and/or as harm reduction strategies. Measures that address or alleviate the effects of use (e.g., dependence, psychological problems, overdose, withdrawal) will be considered in the separate section on 'treatment'.

4.2 Preventing drug use

In their review of the literature, Loxley and colleagues (2004) reviewed several key strategies targeting prevention of the uptake of drug use. These pertained to particular developmental stages such as pregnancy (e.g., health assessments, home visiting); infancy and early childhood (e.g., parent education, school preparation programs); primary school (e.g., school-based drug education; school organisation and behaviour management); and adolescence (peer intervention and education; youth recreation programs, mentorship, community-based drug education). Other strategies are more broad-based and may target potential drug use as one component within a broader set of goals (e.g., crime prevention, mental health promotion); be workplace interventions (e.g., pre-employment screening; drug testing; workplace health promotion); community-based interventions (e.g., health promotion, social marketing); or target at-risk sub-populations (e.g., those with co-existing mental health problems, programs for some Indigenous communities). Following is an overview of those prevention campaigns most commonly adopted and their application to ATS. Harm reduction strategies are presented in the same format in a subsequent section, followed by discussion of the particular challenges of targeting ATS use.

Specific issues raised during the consultations are outlined in the relevant section. Some general comments related to the content of prevention and harm reduction campaigns. It was suggested that campaigns need to refer to ATS in their entirety. That is, the focus

should cover the full range of different ATS and not just focus on one particular drug (e.g., methamphetamine). It was considered important to emphasise that ecstasy is an ATS and its apparent separation from the harms associated with more potent forms, such as methamphetamine, should be addressed. However, other participants raised some concerns about the apparent segmenting of particular drugs and proposed that there was a need to have programs that targeted drug use in general, not just ATS.

A large proportion of participants in the forums raised concerns about the apparent glamorisation and/or portrayal of ATS as relatively 'soft' or benign drugs. It was argued that there needed to be a concerted response to the perception among some people that ATS were fun and socially acceptable drugs with no major risks or harms. A number of participants observed that many ATS users underestimated the range and severity of risks associated with use. This issue was also addressed in some of the written submissions. For example, Drug Free Australia (DFA) raised concern at the apparent acceptability of ATS in some groups and observed that:

In terms of amphetamine type stimulants Australia, which has the highest illicit drug use in the developed world, would do well to emulate the policies of the country [Sweden] with lowest use.

Mass Media Campaigns

Mass media campaigns are universal prevention strategies designed to raise awareness and provide information. However, the aims of mass media campaigns are diverse. For example, they may variously aim to ensure that the community is informed about related activities (e.g., random breath testing), is informed about particular risks of drug use or where to get help, or may have a broader aim of preventing or reducing drug use. While such campaigns have the potential to effectively prevent licit drug use, one common criticism has been that they are rarely subjected to adequate evaluation (Palmgreen & Donohew, 2003) and in particular, evidence is limited regarding their impact with illicit drugs (e.g., see Loxley et al., 2004). They are most likely to have impact when they are part of a multifaceted approach (e.g., raising awareness of the impact of drugs on driving, raising awareness of law enforcement approaches to deter and detect drug impaired driving and road-side drug testing).

In order to be effective, mass media campaigns require substantial exposure (in other words, short term initiatives are likely to be ineffective) and have a basis in advanced marketing strategies that effectively target, and communicate with, the desired audience. That is, for example, by focusing on issues that are subjectively relevant for the target audience. The evidence indicates that the effectiveness of a mass media campaign is contingent upon targeting a well-defined audience, understanding the dominant attitudes and beliefs of this audience, in this context designing credible messages, and frequent presentation of these messages to the audience (Bertram et al., 2003). Thus, the aim of the prevention message needs to be matched with the beliefs, attitudes and characteristics of the targeted segment of the community such that it is communicated in a relevant manner. Therefore, it is critical to pre-test prevention messages regarding their impact and appropriateness to the target audience (National Institute on Drug Abuse, 2002).

It is important to recognise that, as with other strategies, mass media campaigns have the potential for unintended consequences, for example by creating interest in a drug where none previously existed, paradoxically glamorising a drug, or introducing naïve members of the community to information about how to use a particular drug. Some campaigns risk stigmatizing and/or marginalising users, reducing the likelihood that they will seek or be able to access treatment. This underlines the critical importance of trialing and evaluating campaigns to ensure that they avoid conveying messages that have the unintended effect of increasing the acceptability or appeal of a drug, or stigmatizing users in a way that hinders the successful implementation of a range of prevention, harm reduction and treatment interventions.

During the consultations, a number of participants suggested that there was a need for mass media campaigns that highlight the risks associated with methamphetamine use, while other participants cautioned that simple ‘scare campaigns’ are rarely effective and, like all interventions, should be evidence-based and subject to proper evaluation. For example, two separate participants commented that:

Those like the Grim Reaper create fear and alienation; they do not change behaviour.

For those who feel socially disconnected, scare tactics may have the reverse effect.

An example of a broad-based initiative is The National Drugs Campaign, which includes, but is not exclusively focused on, ATS. This social marketing drug prevention campaign was initiated by the Australian Government Department of Health & Ageing and launched in May 2001. It initially targeted the broader community, with a particular focus on parents. The campaign specifically focuses on “speed, ecstasy and cannabis”, and includes television commercials, print advertisements, booklets, posters and wallet cards. From April 2005, the emphasis shifted towards targeting youth, with the development of specific advertising strategies, information and resources on crystal methamphetamine targeted at the 18 to 25 year old market, to be made available through settings such as nightclubs, festivals and party venues.

A campaign that specifically targeted ATS was ‘Putting the Brakes on Speed’. This community awareness program commenced in 2006 and involved the distribution of a large number of colourful and informative posters and related materials. The aim was to increase awareness in the community and specifically targeted the chemical industry, hotel/motel associations, real estate industry, scientific suppliers, and pharmacies of the existence and indicators of clandestine laboratories. The project encouraged members of the public to report all suspicious behaviour or purchases to the State Drug Investigation Unit Chemical Diversion Desk.

School-based prevention activities

Many school-based prevention activities are examples of primary prevention that are designed to prevent the initiation of drug use, and to a lesser extent, prevent problems that may arise from drug use. In considering how to plan activities to address a specific drug type, it is noted that school-based drug prevention approaches usually address the broad range of drug use – that is, they aim to prevent the uptake of drugs rather than any

specific drug (Spath et al., 2006). The evidence also indicates that effective school-based prevention programs do not just rely on passive information exchange or a singular focus on skills related to drug use (for example, drug refusal skills), but also include a focus on more generic personal self-management and social skills (Botvin & Griffin, 2003; Midford & Munro, 2006).

In Australia, the *Principles for school drug education* (Department of Education, Science and Training) were developed to encourage the development of evidence-based school drug education. The principles are as follows (see Meyer & Cahill, 2004):

1. Base drug education on sound theory and current research and use evaluation to inform decisions;
2. Embed drug education within a comprehensive whole school approach to promoting health and wellbeing;
3. Establish drug education outcomes that are appropriate to the school context and contribute to the overall goal of minimising drug-related harm;
4. Promote a safe, supportive and inclusive school environment as part of seeking to prevent or reduce drug-related harm;
5. Promote collaborative relationships between students, staff, families and the broader community in the planning and implementation of school drug education;
6. Provide culturally appropriate, targeted and responsive drug education that addresses local needs, values and priorities;
7. Acknowledge that a range of risk and protective factors impact on health and education outcomes, and influence choices about drug use;
8. Use consistent policy and practice to inform and manage responses to drug-related incidents and risks;
9. Locate programs within a curriculum framework, thus providing timely, developmentally appropriate and ongoing drug education;
10. Ensure that teachers are resourced and supported in their central role in delivering drug education programs;
11. Use student-centred, interactive strategies to develop students' knowledge, skills, attitudes and values; and
12. Provide accurate information and meaningful learning activities that dispel myths about drug use and focus on real life contexts and challenges.

These principles informed development of the Resilience Education and Drug Information (REDI) program (www.redi.gov.au). This is a set of resources designed to support the implementation of a resilience approach to school drug education in Australia, conceptualised as one component of promoting the health and wellbeing of students and school communities. Materials are available for use in the classroom (both primary

and secondary), for professional development, for parents, and in preparation for tertiary education. These are the first school drug education resources to focus on preventing and reducing harm from drug use by building resilience and connectedness in students.

To date, there is a stronger evidence base for the effectiveness of school-based campaigns in targeting licit drugs, such as alcohol and tobacco, compared to illicit drugs, including ATS (Loxley et al., 2004). A major criticism of such approaches is their limited capacity to address the complex variety of factors associated with the uptake and continuation of drug use (Stubbs et al., 2004). An additional concern is that those young people most in need of such information and assistance are those who may not currently be attending school (e.g., engaged in truancy, been suspended or expelled). Consequently, the 'Reconnecting Youth Program' targets youth at risk of dropping out of school and those with multiple problems (Eggert et al., 1994). This program incorporates personal growth classes, social activities and school bonding to teach resiliency skills that moderate the effect of risk factors for drug abuse and has shown evidence of improving school performance as well as enhancing several psychological and emotional attributes of participants. Strategies targeting at-risk youth outside of educational institutions include peer education and those outlined below in the sub-section on 'young people'.

The issue of the effectiveness of school-based drug education campaigns generated contention and debate at some consultation forums. While some participants held that these strategies were important and effective, others argued that school-based programs can be problematic. In particular, concern was raised about the uptake of evidence based school drug education, as decisions to implement such programs were locally determined (e.g., by school principals) leaving a significant proportion of schools without effective and evidence-based programs. Two comments illustrate some of the issues:

People are not always keen to take on the responsibility for the policy context of these campaigns or to deliver them at the school level.

Although the curriculum includes a Health component dealing with drugs, its delivery is dependent on schools and the inclination and capacity of staff.

Some participants recommended that there was a need for specialist educators and perhaps also ex-drug consumers to address school students as part of the drug education programs. Others suggested that rather than focus on drugs per se, a broader approach was needed to address psychosocial and cultural factors that improved general health and well being, such as social emotional wellbeing, self esteem and life skill programs. Others argued that any program adopted should be evidence-based:

Best practice for school drug education is to focus on social skills such as resilience, decision making rather than respond to specific drug phases.

Despite some debate about the best approaches to school drug education, there was consensus around the need to develop the capacity of teachers to implement school based drug prevention and harm reduction programs. There was also general agreement that school drug education programs should be ongoing, as opposed to short term, for example being repeated and reinforced in each school year. It was suggested that drug education programs should commence as early as Year 6 or 7 of primary school, and

be applied regularly and systematically thereafter. Another common view was that drug education should be continued in post-secondary and tertiary education institutions given the high prevalence of ATS use among the 20 to 29 year age group (see 2004 National Drug Strategy Household Survey; NDSHS). As indicated, there was general agreement that school-based drug education should be informed by the evidence.

Peer education

Peer-based prevention approaches have been variously used to prevent the uptake of drugs and to reduce problems for those already using drugs. Such strategies have the advantage of being able to access groups who might not otherwise attend general health or drug specialist services. Access may instead be facilitated through outreach or centre-based programs delivered by peer educators and professionals (Substance Abuse and Mental Health Services Administration, 2003). As noted above, peer education may be particularly helpful in targeting young people, during and after their formal education, and during transition periods (e.g., transition to post-secondary education or transition to work) when they may be at increased risk of being exposed to drugs and or make a transition to problematic drug use. Information and advice delivered in this manner may be more likely to have impact. It has been observed that much of the knowledge about drug use, both accurate and inaccurate, is sourced from peers:

... information from a personal source rather than a booklet, or other printed material or some other 'official' source is more likely to be understood and assimilated. For these reasons, most knowledge about using drugs is almost exclusively derived from other drug users. (Moore, 1992, p.87)

Peer education strategies usually involve the use of peers who are selected on the basis that they are credible and influential. Klee and Reid (1995) cautioned that, in the case of primary prevention (as opposed say to harm reduction), peers are not best selected from people who are already using ATS – they may have strong values supporting particular choices about using illicit drugs. Thus, primary prevention peer education may best be served by employing non-using peers. Peer educators receive training to help them to provide information and advice to current users to reduce potential drug related problems to themselves and others. While the evidence in regard to the effectiveness of peer education is variable, it has been concluded that initiatives that are well designed and sufficiently supported can be effective in reducing drug use and related problems (McDonald, 2003). These authors noted that, in general, peer education can have a positive influence on knowledge and, to a lesser extent, attitudes, skills and behaviour. There is also evidence to suggest that, for young people, peer education may be more effective than adult-led education. This could be because peer initiatives are more interactive and often occur outside formal settings (McDonald, 2003).

Beyond primary prevention, the Australian Injecting and Illicit Drug Users League (AIVL) developed a framework for peer education for drug-user organisations (AIVL, 2006). How 'peer education' is defined will have obvious implications for how it is implemented. In relation to this point, AIVL (2006) states:

Peer education exists independently and predates the existence of funded, externally supported structures or projects...Damon Grogan describes peer education as a “naturally occurring, organic process that occurs within such groups independently of governments or organised structures, but which may be resources and utilised to more effectively achieve positive outcomes (p.4).

Guided by this perspective, AIVL (2006) propose the following principles for formal peer education by drug-user organisations: equality, self-determination and ownership, pragmatic learning, developing community, harm reduction, privacy and confidentiality. In their written submission, AIVL stated:

A strong argument for the use of peer education lies in...the importance of identity and identification within marginalised populations, and the credibility that is generally accorded to both the messenger and the message...Peer education provides a way to access hidden populations which is crucial for ATS given the diversity of communities using these drugs. Making use of new media technologies, such as the internet and mobile communication, and involving ex-/consumers in the planning, delivery and evaluation of prevention programs were also recommended. One individual submission suggested that campaigns needed to acknowledge the positive experiences expressed by ATS users if they were to be perceived as accurate and balanced in their approach. However, it was also recommended that caution be exercised not to glorify or enhance acceptability of drug use.

While there is very limited information that specifically addresses the impact of peer education on ATS use, there is no reason to believe that outcomes with other illicit drugs would not be replicated with ATS users (Allsop et al., 1999). One example of a peer education initiative is the RaveSafe program delivered by VIVAIDS with funding from the Victorian Department of Human Services. This program aims to increase the capacity of individuals and organisations involved in the rave and dance party scene to reduce potential harms of drug use. RaveSafe trains key peer educators recruited from the dance scene to host ‘chill out’ spaces in 12-15 dance events annually and also ensure that minimum safety standards are maintained at such events. ‘Safer party packs’ are also distributed that include a condom, lubricant and information on STIs. Positive feedback from those using RaveSafe initiatives were obtained from the RaveSafe Survey (VIVAIDS, 2005).

Similar projects are conducted in other states and territories. ‘Keep It Simple’ (KIS) is peer education project conducted in the Sydney dance scene. It involves peer educators attending nightclubs, festivals and events and actively engaging attendees with drug information and related issues, including mental and sexual health information, and referrals to available services. External evaluation of the project suggested that attendees viewed the peer educators as approachable and credible in delivering harm reduction messages. ‘Ravesafe Initiative’, ‘Ravesafe Peer Helper Program’ and ‘Amphetamine Peer Outreach Education Project’ are all peer-based strategies operating in Queensland that provide information about drugs and harm reduction practices to young people.

Strategies targeting vulnerable groups and/or high risk behaviours

It has been observed that some individuals are at higher risk for drug problems. For example, people who live in dysfunctional families, where one or both parents use illicit drugs or are hazardous drinkers, who are disconnected from family and social networks and/or who experience mental health problems are more likely to use and be affected by a range of drug problems (e.g., see Loxley et al., 2004). Strategies that aim to reduce social and other inequities and strategies that address factors that increase the risk of drug use (e.g., effective management of mental health problems; effective parent education and support initiatives) have been found to reduce use and problems related to illicit drug use (e.g., Loxley et al., 2004).

Given the diversity of ATS users, the goal of targeting particular groups is particularly relevant to ATS use. Identified groups need to be targeted both in preventing ATS use, and in reducing harms associated with ATS use following initiation of use. In this section, issues related to some of the potential target groups for preventing ATS use are outlined. This includes young people, at-risk occupational groups, Aboriginal and Torres Strait Islander people, and Culturally and Linguistically Diverse populations. In addition, families of users and the general community also represent targets for information provision and assistance. Other target groups, such as gay, lesbian, bisexual and transgender populations, injecting drug users, and ecstasy users have to date been targeted in relation to reducing harms associated with ATS use, and are therefore outlined in a subsequent section. However, given that these groups have been identified as users of ATS, targeting campaigns to prevent uptake of ATS among these groups is an area in need of development.

Young people

In addition to the potential harms and risks associated with ATS use that apply to the general population, some specific issues pertain to use by young people. Of note are the potential effects of ATS use on brain maturation and development, which could result in various neurological and psychiatric consequences (Rawson et al., 2007). While no published brain imaging studies have reported on methamphetamine use by young persons, animal studies suggest that methamphetamine exposure results in different alterations in central nervous system serotonin and dopamine alterations in adolescent animals than in adults (Dewey et al., 2006).

An example of a broad-based prevention campaign targeting youth is The Drug Offensive Amphetamines Campaign, 'speed catches up with you'. This campaign used both television and radio commercials, and targeted non-users and occasional users between the ages of 15 and 25 years. It aimed to deter potential users from trying amphetamine as well as alerting occasional users to the potential harms and risks of becoming more regular users. An evaluation found that while the campaign was effective in raising awareness among the target groups, it had minimal impact on drug use behaviour (Hando & Hall, 1997).

A more recent example is the Drugaware Amphetamine Education Program currently being conducted by Drug Aware (a program run by the Western Australian State Government Drug and Alcohol Office) in partnership with the WA Network for Alcohol and other Drug Agencies (WANADA). The target group for the campaign is 12 to 29-year-olds who are at risk of ATS

use, use ATS infrequently, and use ATS regularly. Youth communication mediums have been used including street press, community youth radio stations, convenience advertising, community-based education initiatives and other services (such as treatment services and needle and syringe programs) to provide information and assistance relating to ATS. As this is a relatively new initiative, its impact has not yet been evaluated. Operating in conjunction with Drug Aware in WA is the Night Venues and Entertainment Events Program (NVEEP), which includes a drug user education program, staff risk management training, and policy development, implementation and enforcement to reduce risk factors within night venues.

While some strategies targeting young people are school-based (outlined previously), others may target a particular drug (such as ecstasy) or context of use (such as nightclubs). However, it has been noted that both prevention and harm reduction strategies need to better target high-risk youth outside of these settings, such as homeless youth, those in juvenile justice environments and so on. Streetwize Communications developed a psychostimulant-specific comic, entitled 'On the Edge', targeted at these groups through distribution at venues such as youth centres and refuges. One key aspect to developing the resource was conducting focus groups to determine the information needs of young psychostimulant users to ensure the publication was relevant and appropriate. The information provided relates to issues of side-effects of use, harm reduction strategies, and treatment options, with preliminary evaluation showing recall of content four months after reading the material and sharing the resources with friends (www.streetwize.com.au/publications).

Peer-based strategies also have a potential role in harm reduction, as well as being used to prevent ATS uptake. For example, such strategies can be used to prevent drug-related harms such as sexual risk behaviours, transitions to injecting drug use, transmission of blood-borne viruses and preventing and responding effectively to drug overdose. Peer education and support have been shown to be effective, both overseas and in Australia, as risk reduction strategies to prevent infection with HIV in injecting drug user communities (e.g., Dowsett et al., 1999). Further, it has been asserted that peer education can be effective in increasing knowledge about hepatitis C, preventing further transmission of hepatitis C and encouraging behaviour change (e.g., Sansom 2001).

During consultations, there was widespread recognition of the need to target campaigns to certain audiences. With regards to young people, campaigns needed to be variously targeted, such as:

- segmented into programs for specific age groups, for example, primary school, 14 to 18 years old and 18 to 21 years old;
- those who are frequently absent from school;
- those who leave school after Year 10 and are in the transition from school to post secondary/tertiary education and/or work;
- 'at risk' children, as identified from the evidence base regarding social determinants of use; and
- young offenders in detention centres.

Examples of particular periods that might be appropriate to target young people were offered, including School Leavers week and 'O' week (Orientation week) at university. For example, one participant observed that there was:

a need to identify the risk factors of the problematic group of 17-21 year olds as they apply to depression, anxiety, early childhood experience; and to understand the nature of the drugs they are ingesting, and behaviours that lead to addiction.

Across almost all consultation forums, a number of participants suggested that 'new' media such as the Internet offer a means to communicate with many at risk groups, particularly young people. In relation to the Internet, one suggestion in particular was to link to sites accessed young people, such as 'YouTube' and 'MySpace'. Written feedback from one participant stated:

The vast majority use on recreational/occasional basis and so won't use treatment services – not necessary or relevant to them. Therefore need to focus on harm reduction via peer education and use of Internet and other new technologies.

It was also acknowledged that the Internet could be a source of inaccurate information and misinformation, and indeed, some law enforcement agencies were concerned about the role of the Internet in producing and distributing precursor chemicals and ATS. Peer education was raised as an underused approach by a number of participants. Peers can function as providers of information and education. Given their sense of responsibility for others, the skills of peers can be built up such that they can also be involved in strategies that focused on, as one participant put it:

... tak[ing] care of yourself and your mates.

A few written submissions made note of recommendations put forward in the recent Parliamentary Joint Committee Inquiry into amphetamines and other synthetic drugs (2007). In particular it was highlighted that:

The Committee recommends that public education and demand reduction campaigns for illicit drugs be factual, informative and appropriately targeted. The Committee also recommends that such campaigns seek input from young people, and take account of user experiences of amphetamines and other synthetic drugs (AOSD) (p.ix).

Primary prevention approaches were reflected in a number of written submissions. For example, Headspace, the National Youth Mental Health Foundation, argued that young people aged 12 to 25 years need to be identified as a priority target group. Similarly, a submission from Drug Arm argued for school drug education from Years 9 through 12. Such approaches might be enhanced by using emerging communication approaches and such approaches were currently being developed. For example, in their submission, the National Drug and Alcohol Research Centre (NDARC) noted that a school-based prevention utilising computer-based delivery is currently being developed in conjunction with St Vincent's Hospital that will include both a mental health and substance use strand.

Peer education approaches were also emphasised in some submissions. For example, the Northern Territory AIDS & Hepatitis Council Inc provided an outline of the Youth

Amphetamine Information Project (YAIP) that was established as a six month pilot project. The aim of the project was to develop up-to-date and accurate information on amphetamines and to implement a peer-based education training program targeting young people at risk of amphetamine use. In conducting the project, it was noted that: young people lacked knowledge about amphetamine and related harms; young people stated that they preferred to receive drug education from people who they consider to have drug use experience (namely, peer education); it was important to engage young people via accessible communication tools such as text messages, interactive web-based tools and email; and, it was important to be strategic in selecting venues for conducting workshops, to maximise participation.

The Red Cross Save a Mate Project (SAM) incorporates peer education with other prevention and harm reductions strategies. SAM is a drug education and first aid program, which aims to reduce incidents of harm and death associated with the use of alcohol and other drugs. The program is aimed specifically at at-risk youth, school children, nightclub staff, inmates in correctional facilities and those in drug rehabilitation programs. Volunteers aged 18 to 30 are selected and trained in harm minimisation and first aid strategies to deliver the three components of the program: alcohol and other drug specific First Aid training; pubs, clubs and venue initiative (includes training venue staff in responding to emergencies); and peer education teams (includes attendance at events to promote safer partying and harm reduction strategies to young people). SAM operates in New South Wales, Queensland, South Australia, ACT and Northern Territory, and will shortly commence in other states.

However, as already indicated, aside from some basic monitoring and evaluation strategies with a number of programs, the evidence base about ATS specific primary prevention strategies is limited. For example, to date, only one study has reported on prevention strategies specifically targeting methamphetamine use among adolescents. Spoth and colleagues (2006) concluded that effective prevention strategies should focus on brief universal interventions that incorporate: reducing early initiation into drug use (alcohol, tobacco, cannabis); skills-building opportunities; alternative activities; and family and/or peer support. At a recent meeting of the United Nations Office on Drugs and Crime, the following strategies for preventing the use of methamphetamine by young people were suggested: school-based activities (e.g., life skills training, teacher training, use of positive reinforcement techniques); careful targeting of high-risk families for pre-school interventions; using peer-based techniques to deliver information and skills; and empowering communities to reduce drug-related harm (United Nations Office on Drugs and Crime, 2006).

These various reports suggest that at-risk young people should be a particular target of prevention and harm reduction strategies. This in turn indicates that organisations that are involved in providing services to at-risk young people should be a component of any prevention or harm reduction strategy, and any program should include strategies to enhance their capacity (resources and skills) to recognise and intervene in escalating ATS use, including identification of those at high-risk of developing problematic patterns of use. Such activities and interventions need to be accessible and relevant to young people, and accurately describe the potential risks and harms involved with ATS use.

At-risk workplaces

There is increasing evidence about the use of ATS in association with work, with associated risks of working under the influence of drugs and impact on absenteeism. The impact of ATS use in the workplace can result in:

- Overwhelming tiredness at the onset of the working week;
- Otherwise unaccountable irritability, agitation or mood swings;
- Difficulty concentrating and reduced performance;
- Mental health problems, such as paranoia, delusions, feeling despondent or depressed;
- Lack of concern about otherwise serious matters; and
- Health problems, such as palpitations, infected injection sites or lesions (National Centre for Education and Training on Addiction, 2006).

As outlined earlier (see 'use in the workplace', section 2.4), the use of ATS is more prolific in some industries than others. In particular, use in the transport industry, especially among long distance drivers, has been identified as one key area of concern in relation to the workplace. A report commissioned by the Motor Accidents Authority found evidence of widespread tolerance and lack of discouragement of drug use within transport companies (Quinlan, 2001). The use of stimulants by truck drivers in Australia was demonstrated in one study that detected stimulants in 23% of truck drivers compared to 4.1% of all drivers in road traffic crashes in three states (Drummer et al., 2003). In addition to concerns that ATS use may contribute to road injuries and fatalities, for drivers and innocent third parties, there are concerns about the health problems experienced by drivers as a result of prolonged use, including: high blood pressure; renal problems and kidney damage; heart and lung damage; stroke; liver damage; depression and other mental health issues (NSW Health, 2005).

Recently, a project was conducted by the NSW Injury Risk Management Research Centre in collaboration with the University of NSW into stimulant use by long distance truck drivers (Williamson et al., 2006). The first study aimed to identify factors that may predict drug use by reanalysing data from previous national surveys with long distance truck drivers, while the second study aimed to update and expand this information by conducting an in-depth survey of drivers. The strongest predictors of stimulant use by long distance truck drivers, according to self-reported reasons for use, were fatigue and productivity-based payment systems. The second study found that one in five truck drivers used stimulants at least sometimes and more than half had used these drugs at some point in their career. The most common stimulants used were illicit forms of amphetamine-type stimulants.

As a result of concern about ATS use in this population, some state-based strategies have been introduced. In NSW, the Roads and Traffic Authority has developed educational materials, including information booklets and posters, for drivers and operators highlighting the dangers of using drugs and the need for more appropriate fatigue management strategies.

Roadside drug testing is now being developed and implemented in a number of jurisdictions as a means to deter and detect drug impaired driving. While not restricted to the transport industry (indeed most governments have indicated an intention to target various high-risk groups and locations) this strategy will have direct relevance for the industry. In NSW, for example, a Drug Driving Working Party was convened to manage research and field trials in preparation for commencement of legislation to implement drug testing of drivers. This included the introduction of random roadside drug testing for the presence of certain illicit drugs, and compulsory drug testing of any driver involved in a fatal traffic accident. Similarly, random drug testing was introduced in Victoria in 2004, and while various trials and evaluations are still underway, roadside drug testing has been implemented or is currently being considered in most other states and territories (Lenne, 2007).

At a number of consultations, concern was expressed regarding the use of ATS in relation to work and it was suggested that the workplace should be a site for prevention and harm reduction strategies. Some participants suggested that there was a need to identify and disseminate models of managing ATS use in the workplace, some identifying current programs such as recently developed programs in the Department of Defense and guidelines for responding to drug problems developed by organisations such as Work Cover. For example, one participant observed that:

Some industries, such as the construction industry, do undertake screening and offer drug education programs and use employment contracts which make provision for drug treatment or dismissal although there is a concern that some ATS users know how to beat the screening process.

In their written submission, the National Indigenous Drug and Alcohol Committee (NIDAC) stated that:

The use of alcohol and other drugs has a significant impact on Australian workplaces in terms of accidents, lost productivity and absenteeism. While alcohol and other drug use may impact on the way people work, so may work related factors such as stress influence the way people use drugs. Occupational settings including transport, forestry, construction, industrial and hospitality industries have been noted as areas that have an association with the prevalence of ATS use.

Information gaps: Aboriginal and Torres Strait Islander People and Culturally and Linguistically Diverse Populations

Concern was raised during the consultation process that there is only minimal drug and ATS specific research within both Aboriginal and Torres Strait Islander people and communities and Culturally and Linguistically Diverse (CALD) communities. This relates not only to the use of ATS among these populations, but also how to target effective prevention campaigns to current users and those at-risk. Prevalence rates of use are variable and a lack of specific information makes it difficult to determine not only the need, but also the nature of any prevention strategy.

The consultation forum with Aboriginal alcohol and drug workers in Western Australia conducted by the Drug and Alcohol Office, and submitted to the ATS Strategy project team, resulted in the following recommendations in any approach to prevent and respond to ATS use among Indigenous people:

- Need to strengthen aspects of Aboriginal identity, including families, culture and community capacity;
- A holistic approach focusing on family and group interventions in appropriate settings should be used to address alcohol and other drug (AOD) use;
- Develop specific strategies to support Aboriginal grandparents and others who are carers of children due to parental use;
- Educate ATS users on harm reduction strategies, including prevention of blood borne virus transmission;
- Develop youth specific treatment programs provided in a range of settings;
- Improve coordination between AOD, mental health and acute health sectors in early detection and management of co-morbid mental health and AOD problems;
- Need for workforce training programs to develop drug related and knowledge/skills of Aboriginal culture;
- Improve shared case management between AOD, corrections and child safety agencies to enhance continuity of care and reduce barriers to accessing assistance;
- Expand drug diversion programs for Aboriginal people in coordination with local Aboriginal communities; and
- Incorporate aspects of Aboriginal culture and law into justice programs.

Discussions at consultations regarding Indigenous communities indicated that patterns of ATS use and risk of use varied from community to community and it would be important to develop specific strategies at a local level, including core materials, to ensure relevance of the style and content of the intervention. Suggestions about the needs of Indigenous people included:

- Identify and promote positive Indigenous role models for children, such as through a mentoring program;
- Enlist the support and guidance of elders in the community;
- Design specific, separate programs for men, women and children that involve activity-based, recreational activities and for some, “going bush”;
- Develop parenting/carers programs that take place within the home;
- Develop and implement programs that address socioeconomic factors related to unemployment and homelessness; and
- Employ visual media when aiming programs at Indigenous people.

A number of organisations have been involved in developing responses that have specific relevance for Indigenous people and communities. For example, AIVL, in conjunction with the Australian Federation of AIDS Organisations (AFAO), conducted a consultation with Indigenous injecting drug users in response to evidence of an increase in HIV diagnoses in Indigenous communities. The project aimed to explore their experiences in view of developing a national campaign to address the issue of intravenous drug use by Indigenous people (Coupland et al., 2005). The West Australian Substance Users Association (WASUA) and Derbarl Yerrigan developed the video, *Blood Relations: Injecting Drug Use and Hep C in Indigenous Communities* to provide critical health information about blood awareness to the injecting community. The Top End Division of General Practice (Darwin NT) and CONGRESS (Alice Springs NT) are currently trialing initiatives that take into account mental well being and substance misuse in Indigenous communities. Indigenous comics and computer-based animation programs have been effective methods of communicating with children in the NT, particularly those with poor literacy and numeracy skills. Aboriginal Drug and Alcohol Council (ADAC) have been funded by the Office for Aboriginal and Torres Strait Islander Health (OATSIH) to develop a comic, brochure and web presence on crystal methamphetamine.

Parents and families

Consultations also raised the issue that parents/carers and families have limited knowledge about patterns of use and particular risks associated with use. In addition, many have remained unclear about the various treatment and other options for intervention. As potential sources of support for a drug user, families that are well-informed can be an effective site for intervention. In addition to being knowledgeable about the effects of drugs and associated risks, families may also need information on where to get help and how to access support services. It is therefore important that information is made available on a wider level so that those affected indirectly by ATS use have a better understanding of the issues and available resources.

Discussions during the consultations highlighted the need for support and help for families. This was stated not only in relation to assisting a family member who is a consumer, but also for family members to access support for themselves as someone affected by another's ATS use. Thus, families need information about what services are available, treatment options and opportunities for respite. Particular mention was made in regards to Indigenous families and the large number of grandparents caring for children due to parental use. Issues of poverty, threats of violence, and a sense of despair and desperation often permeate these circumstances and there is heightened need for support.

In all consultations it was noted that parents/carers/families needed enhanced access to information (warning signs, drug types etc), knowledge of available services for their children and, in some cases, how to get support themselves. This is a particular issue with some ATS because it was noted that some of the behavioural and mental health problems accompanying ATS use created particular problems for families. It was observed that parents represent a resource and support for their adolescent children and can be used in this capacity to prevent ATS use in the first instance and help children who have already begun to use. The need to strengthen and improve communication between parents and

young people was noted in the submission from Drug Free Australia, which referred to evidence supporting the conclusion that:

... teens who have a positive relationship with their parents are less likely to engage in risky behaviours,

and consequently recommended a need to:

Expand the development of resources to support parents in the education of their children about harmful drugs such as ATS.

Others were concerned about child protection issues, both in relation to exposure to parental ATS use and to clandestine laboratories. Where parents/carers are involved in ATS production, the risks associated with clandestine laboratories were a particular concern. It was agreed by many participants that there was a need to develop a range of child protection measures across the range of situations, including exposure to:

- Parental drug use during pregnancy;
- Parental drug use during the various developmental stages; and
- The risks of clandestine laboratories.

Community

The 2004 NDSHS provides some indication of the public perception of ATS. Small proportions of the community identified meth/amphetamine (5.5%) and ecstasy (2.6%) as drugs perceived to be related to a 'drug problem' (Australian Institute of Health and Welfare, 2005a). This was matched by equally small proportions that reported that they perceived use of meth/amphetamine (3.1%) and ecstasy (4.2%) as 'acceptable'. With regards to law enforcement, very few supported any legalisation of personal use of meth/amphetamine, and the small degree of support for such changes had declined from previous surveys (6.8% in 2001 versus 4.7% in 2004). Proportions in favour of increasing penalties for meth/amphetamine sale and supply remained stable and high (83.7% in 2001 versus 85.7% in 2004). Respondents were also asked what actions should be taken for those found in possession of these drugs for personal use. The greatest proportions of respondents nominated 'referral to treatment/education program' for both meth/amphetamine (42.6%) and ecstasy (41.1%). A 'fine' was nominated by 19.7% for meth/amphetamine and by 24.6% for ecstasy, and 'prison sentence' by 20.8% for meth/amphetamine and 14.8% for ecstasy.

The consultations indicated that there was general agreement that there was a need to educate the community about the nature and prevalence of ATS related harm – for example, many participants believed that in the community heroin was considered the major drug of concern, with little consideration of the harms arising from ATS.

For the community, much of the information about ATS use is provided by the popular media, which is sometimes sensationalist and/or inaccurate, and might contribute to barriers to effective prevention, law enforcement and treatment initiatives. It is suggested that, as well as implementing effective information and education campaigns, one needs to address sources of misinformation. For example, a number of commentators have suggested that

media guidelines should be developed similar to those for media reporting of suicide and mental illness (Penrose-Wall, Baume & Martin, 1999). Further, the Internet and peers also represent potential sources of misinformation. Thus, any campaigns related to ATS use, whether targeting current consumers, community members or preventing the uptake use, need to ensure the credibility of information sources and adopt strategies to regulate the quality and accuracy of the information provided.

In all community consultations strong concerns were expressed about the media's portrayal of ATS use and some commented that this had resulted in a kind of 'hysteria' that was ill-informed. In particular, there was concern about the over-emphasis on crystal methamphetamine use, and with the use of terms such as 'party drugs'. In addition, it was felt that significant emphasis had been placed on psychosis and little on the more prevalent mental health problems such as anxiety and depression. Such stories contributed to inaccurate understanding of ATS use and the associated harms and that they could have the unintended consequences of: glamorising or creating interest in ATS: confounding effective prevention and law enforcement strategies; contributing to misdiagnosis (for example, a number of people commented that any agitation was being inappropriately diagnosed as psychosis); and further marginalising consumers, having an impact of the probability of seeking and/or receiving treatment. It was suggested that guidelines or a code of conduct be developed in partnership with the media about reporting about drug use, in particular ATS use. This approach was emphasised in the submission from the Australian Psychological Society (APS), which stated that there was a need to:

develop more sophisticated and informed responses and advocacy to the media on the issue of ATS and advocate for the development of a Media code of conduct around the reporting of ATS and other drug incidents.

Similarly, Turning Point Alcohol and Drug Centre noted that:

...the recent media focus on the extreme effects of crystal methamphetamine has not been helpful in encouraging users into treatment. These media reports may result in users who are less severe believing that they do not require intervention unless they are experiencing extreme problems, and also becoming more reluctant to seek treatment for fear of being classified as a 'hard drug user'.

4.3 Reducing associated problems

While many campaigns are directed toward reducing the appeal of drugs and preventing, or delaying, the onset of use, others aim to reduce specific drug-related problems and risky behaviours among current users. Thus, the prevention of drug-related problems needs to be able to identify and reduce significant patterns and contexts of risky drug use. Adapting a classification system developed by the World Health Organisation (WHO), Loxley and colleagues (2004) outlined four main categories of drug use patterns that need to be addressed in terms of related risks and potential harms. These are: mode of administration (e.g., swallowing, inhaling, smoking, injecting); intoxication; regularity of use; and, dependence. Each of these categories may have effects in several domains, such as: developmental effects (e.g., use during pregnancy); physical health effects (e.g., blood borne virus transmission, nutritional deficiencies); personal safety issues (e.g., injury to self

and/or others); mental health effects (e.g., depression, psychosis); and impact on social wellbeing (e.g., legal problems; financial issues).

The key aims of such strategies have been described to include: preventing harm to other people; preventing transition to injecting drug use; promoting healthy lifestyles and drug-free activities; raising awareness of the harms and negative consequences of drug use; and, informing users of the legal implications of their use (e.g., see NSW Health, 2005). Thus, it is argued, important aims are to: inform users about the risks of, and other consequences (e.g., legal) of, use; identify high-risk users and prevent their transition from occasional use to heavy use patterns and/or riskier methods of use, such as injecting and, in the case of crystalline methamphetamine, smoking; and prevent harm to other parties (e.g., children; parents/carers; associates and friends).

To reduce harms among those already engaged in regular ATS use, attention to date has included reducing the risk of infectious disease, managing sleep and nutritional disorders, and helping avoid and manage relationship problems. With specific regard to the recent use of crystalline methamphetamine, examples of possible targets for campaigns include information about the particular risks of smoking and injecting, information on blood borne viruses, amphetamine-induced psychosis, depression, and anxiety, awareness of the consequences of the 'binge-crash' cycle, and improving contact with health care services. In order to achieve this, it will be necessary to explore users' own perceptions of what information is important to them and identify the current barriers to service use.

As identified in the Inquiry into Amphetamines and 'Party Drug' Use in Victoria (Drugs and Crime Prevention Committee, 2004) a range of harm reduction strategies have been employed with ATS. These have included:

- Mass media education and information campaigns;
- Safe rave or safe dance party guidelines aimed at club owners and rave promoters;
- The use of outreach workers to provide support and assistance to those who use 'party drugs' (often located at raves and venues);
- Testing stations or kits for 'party drug' pills and tablets;
- 'Self regulation' harm reduction measures of users themselves;
- Information pertaining to harm reduction and 'safe' drug use provided and shared at international and national conferences and seminars; and
- Harm reduction strategies and education campaigns that are targeted at particular times of the year where it is thought ('party') drug use may be particularly prevalent. (p.502).

An example of a harm reduction campaign for current amphetamine users was the 'Speedwise-Speedsafe' campaign. This campaign used postcards distributed at nightclubs, dance venues, pubs, needle and syringe programs, health services and shops. Information related to hydration, nutrition, avoiding 'binge' use, harms of combining alcohol with amphetamine, and risks related to HIV infection if injecting. This campaign was not rigorously evaluated, with feedback obtained from 34 amphetamine users (Berg,

1994). Significant improvements were only found in regards to knowledge of syringe cleaning procedures and the associated risk of concurrent alcohol and amphetamine use (Kamieniecki et al., 1998).

Targeted campaigns

As with prevention campaigns, strategies aimed at reducing harms associated with ATS use need to be targeted toward those known to be at risk of such harms or towards high risk behaviours/contexts of use (e.g., use in relation to driving; use at work). Thus, campaigns may be targeted toward particular sub-populations such as gay, lesbian and transgender populations, injecting drug users and ecstasy users, or toward particular types of ATS, with regard to form and content or to particular settings such as entertainment venues or in relation to particular work practices.

The issue of targeting specific risk and harm factors was raised in a number of written submissions. NDARC made mention of the need to reduce the risk of blood borne virus (BBV) transmission among injecting ATS users, and targeting messages warning of the risks associated with BBV infections toward young people prior to uptake of injecting ATS use. Also, the need to address sexual risk behaviour was emphasised, particularly among methamphetamine injectors who report higher levels of such behaviour than other injecting drug users, and among men who have sex with men. Because of the particular risks associated with certain patterns of ATS use, the Australian Drug Foundation (ADF) highlighted a need to target strategies that address polydrug use and bingeing among ATS users. In their submission, the private company 'Convenience Advertising', suggested that it was important to disseminate strategically planned public health communication programs, termed 'narrowcasting', in campaigns to target ATS use, particularly for young people, men who have sex with men, and those working in the hospitality industry.

The issue of the diversity of patterns of ATS use demanding diverse responses was noted in the written submission from the Victorian Alcohol and Drug Association (VAADA):

Given the diversity of patterns of ATS use, it is highly unlikely that any blanket response to ATS use would be successful. ATS users are very diverse, and it is unlikely that they all have the same treatment needs. Potential ATS users will be drawn from a similar assortment of social groups, and it is improbable that a monolithic treatment campaign would effectively target all the different people who might potentially use ATS.

The recommendation for targeted campaigns was also a central theme across consultations. However, there were diverse views concerning the exact nature of interventions. Some participants argued for strategies that aimed at specific subgroups of consumers (e.g., young people), while others were of the opinion that strategies should be designed around particular patterns of use (e.g., 'binge' use). Some suggested focussing on stages of use (e.g., "recreational" users, or those using occasionally) with others suggesting that the different types of ATS indicated the need for drug specific interventions (e.g., ecstasy versus methamphetamine). A fifth categorisation was proposed in relation to the various functions of particular drugs for consumers (e.g., people who use ATS to facilitate workplace performance versus those who use ATS as part of a social activity). It was acknowledged that any targeting of harm reduction strategies would need to take account

of the fact that frequently people who use ATS may well be using other drugs. For example, some use a variety of drugs to manage the come down effects of ATS, while some will be coincidentally intoxicated on ATS and alcohol. In addition, a large number of participants commented on the challenge of accessing the 'hard to reach' and/or 'hidden populations' who use ATS, particularly given that the perceptions of use and patterns of use might not bring many consumers into contact with helping services. It appears that while there is some agreement on the need for targeting strategies, there needs to be some work focusing on how such targeting should be informed.

Gay, lesbian, bisexual and transgender populations

As noted in Chapters 2 and 3, global research indicates an association between drug taking and unsafe sexual practices among men who have sex with men (MSM). In particular, methamphetamine use has been associated with increasing STI/HIV transmission rates among this population (Boddiger, 2005; Halkitis et al., 2001). This highlights the need for prevention campaigns targeted specifically at ATS use within these populations, particularly in light of the social stigma experienced by these groups that creates difficulties in access and delivery of services.

In 2005, ACON and NDARC conducted research of crystal methamphetamine and GHB use among gay, lesbian, bi-sexual and transgender populations (GLBT) in NSW (Degenhardt et al., 2005). This report identified the following key issues for GLBT:

- Limited understanding of psychosis amongst those using methamphetamine;
- Consumers presenting to GPs did not disclose their methamphetamine use;
- There was an increase in consumers seeking treatment for methamphetamine use, however few treatment modalities and culturally appropriate interventions are available;
- Community concern tends to focus on drug use among gay men, however, use of crystal methamphetamine appears to be as prevalent among lesbian and bisexual women;
- More information on methamphetamine and associated harms needs be provided to consumers, frontline services and workers in the HIV sector; and
- Culturally sensitive GLBT training needs to be conducted with generalist AOD services.

It is pertinent to note that research is currently being conducted that may inform future initiatives. For example, the Australian Research Centre in Sex Health, La Trobe University is investigating patterns of crystal methamphetamine use among homosexual populations of both genders.

Interventions have been demonstrated to reduce risks, and drug treatment services are an effective site for intervening in high-risk behaviours and in particular reducing HIV risk behaviours among methamphetamine users. In particular, cognitive behaviour therapy (CBT) -based treatment approaches have been developed specifically to reduce sexual risk behaviour among gay and bisexual males (Shoptaw et al., 2005). A recent study by Mausbach and colleagues (2007) examined the efficacy an intervention for reducing sexual risk behaviour among HIV-positive, methamphetamine-using MSM within the context of

ongoing drug use. That is, the exclusive focus was on changing sexual behaviour only. The study found that those assigned to the safer sex behavioural intervention engaged in significantly more protected sex acts at both 8-month and 12-month assessment times (Mausbach et al., 2007). However, in general, there are few HIV prevention interventions that target drug-using MSM, particularly non-injectors.

Injecting Behaviours

Injecting behaviours are a particular concern in relation to people who are dependent on ATS (generally, dependent on methamphetamine). In Australia, the majority of dependent methamphetamine users inject the drug, and methamphetamine accounts for around one-third of injecting drug use in Australia (Iverson et al., 2006). This has important implications for the spread of blood-borne viruses, such as HIV and particularly hepatitis C, which is endemic among injecting drug users in Australia (National Centre in HIV Epidemiology and Clinical Research, 2007).

While earlier research suggested that those who inject methamphetamine do not appear to differ in their level of HIV risk behaviour compared to their heroin injecting counterparts (Hall et al., 1993), some evidence indicates that those who use ATS have a lower perception of risk. For example, HIV is perceived as a risk for people who inject heroin, as opposed to a risk for those who inject any drug, including amphetamine (e.g., Vincent et al., 1999). Consequently, it has been argued that a comprehensive strategy needs to be maintained to reduce the risk of blood borne virus transmission among all injecting drug users, including those who inject methamphetamine.

Harm reduction messages warning of the risks of blood-borne viral infections (BBVIs) associated with injecting drug use are also indicated. These messages should, perhaps, particularly target young people prior to their uptake of injecting drug use, because much of the literature indicates that early onset injecting drug users are also higher risk takers in relation to their health (such as increased risk of sharing needles) (Fennema et al., 1997; Battjes et al., 1992). Thus, newer and younger initiates to injecting drug use are at greater risk of contracting and transmitting blood borne viruses.

Commencing in August 2002, AIVL conducted a research project to investigate the hepatitis C transmission risks amongst methamphetamine injecting drug users that was completed in March 2003. A questionnaire (the PSU Tool) was developed and 182 injecting psychostimulant users were interviewed across Australia. The findings were reported in the 'National Snapshot on Hepatitis C Transmission Risks Amongst Injecting Psychostimulant Users' (available from AIVL website). Among the main findings were that, although almost the entire sample reported seeing hepatitis C information, there were mixed levels of knowledge about the condition. In addition, approximately 29% were 'concerned a great deal' about contracting hepatitis C, while responses to other items revealed that many were engaging in unsafe injecting practices. One of the conclusions drawn from the research is that opiate users may be more aware of the risks associated with injecting than psychostimulant users, as opiate users have more commonly been the focus of harm reduction messages associated with blood borne virus transmission.

Sexual risk behaviour is a further consideration in the context of HIV transmission among those who inject methamphetamine because they report high levels of sexual risk behaviour, for example when compared to heroin or other injecting drug users (Klee, 1997; Vincent et al. 1999; Zule & Desmond, 1999). The risk of sexual transmission of HIV is further exacerbated by the concurrence of other sexually transmitted diseases, such as Chlamydia and Gonorrhoea, which have recently been described as being at epidemic levels among injecting drug users in Australia (National Centre in HIV Epidemiology and Clinical Research, 2007).

With regards to strategies targeting injecting drug users, a number of participants in the national consultations noted the need for Needle and Syringe Programs (NSPs) to provide out-of-hours access to information and advice, and build links to other services, such as drug withdrawal and treatment services, especially for otherwise hard to reach groups that might not access treatment services. Also, given the high risk of BBVs for those who do inject, it was argued that a variety of health and community services could enhance the provision of information about the risk of BBV and, where possible, particularly encourage at-risk groups, including health staff, to access Hepatitis B vaccinations.

Ecstasy users

A variety of ATS harm reduction strategies were implemented in the 1990s, mostly directed at the use of drugs such as ecstasy. Some related to adopting a 'healthy settings approach', which recognises that the effects of any particular setting on an individual's health are related to the general conditions within that setting (WHO, 1997a). Focusing on ecstasy use within nightclubs, Bellis and colleagues (2002) illustrated the wide range of factors, in addition to any focus on drug use, which might need to be considered in an effective harm reduction approach:

- Dehydration and hyperthermia;
- Fire risk;
- Noise levels and damage to hearing;
- Sexually transmitted infections (STIs) and unwanted pregnancy;
- Accidents;
- Violence;
- Drink/drug driving, and
- Tobacco use.

This broad range of risks led them to suggest that there was a need to train venue staff (e.g., door staff) to be able to effectively discriminate risks associated with intoxication from various drugs and effectively and safely manage patrons, ensure that there is adequate lighting and ventilation, ensure effective public transport system and liaison with law enforcement staff.

Other researchers have likewise suggested a broad range of strategies to reduce drug related risks (in particular those associated with ATS use) at entertainment venues, including:

- Preventing overcrowding;
- Managing ambient temperature at low risk levels;
- Providing cool or 'chill-out' areas;
- Providing free and ready access to water; and
- Providing a first aid room.

(See Drugs and Crime Prevention Committee (2004) for a more detailed summary).

Similarly, Hando and colleagues (1998) argued that Australian protocols for entertainment venues (i.e., clubs and dance party) were needed to ensure the provision of adequate water, ensure effective ventilation and ambient temperature management, effective crowd control and provision of first aid areas, chill out rooms and regular monitoring of patrons well being. This led to work on Australian guidelines for rave promoters and nightclub owners to increase the safety of dance parties. The National Protocols for Conducting Safer Dance Parties were subsequently developed and made recommendations related to adequate provision of water, ventilation, 'chill-out' areas, medical assistance, security checks, and information for users.

Further guidelines were produced from the 'Reducing Drug Harm in the Dance Party Scene Project' conducted Drug and Alcohol Services South Australia (DASSA) and South Australian Police. 'The Guidelines for Safer Dance Parties' related to:

- Basic safety;
- Temperature and ventilation;
- Chill-out areas;
- Availability of drinking water and food;
- Alcohol licensing;
- Venue capacity and crowd management;
- Security and door staff;
- Communication systems;
- First aid and medical emergency action;
- Community education;
- Toilets;
- Emergency service consultation;

- Cleaning up;
- Transport options, traffic management and signage;
- Insurance; and
- Consultation (DASSA & SA Police, 2006).

The Drug and Alcohol Services Council (DASC) in partnership with the Office of the Liquor and Gambling Commissioner, Australian Hotels Association (South Australian Branch), Clubs SA and South Australia Police targeted use in licensed venues in conducting the 'Illicit Drugs and Licensed Premises' project. The project aimed to reduce harms associated with illicit drug use in and around licensed premises by enhancing the ability of licensees to respond to illicit drug issues. The project led to development of a kit that included patron education resources, strategies for licensees to adopt to reduce the prevalence and associated harms of illicit drug use, answers to commonly asked questions, and a checklist of individual signs and symptoms of drug use. A successful pilot of the project was followed by distribution of 1000 kits to liquor licensees in 2002.

These issues were also raised during consultations. It was proposed by a number of participants that entertainment venues should take more responsibility for looking after their patrons, for example, by providing water, and encouraging the presence of outreach workers in clubs and at dance event.

Given that many ecstasy users do not come into contact with treatment services, targeting ecstasy users through peer education has also been utilised as a harm reduction strategy, as outlined earlier. Other harm reduction interventions have focused on information provision using various media to communicate information about particular risks. 'Project E', conducted in 1997, included the dissemination of brochures, fridge magnets and postcards providing information and advice to users. Street press, such as 'Onion' in South Australia and 'Big Book on Party Drugs' in Victoria have also been used to promote harm reduction messages. 'Project E', an ecstasy education kit was launched in 1997, and various information booklets are available such as 'Rave Safe' and 'Ecstasy: Facts and Fiction' (see Dillon, 2000). All these resources provide young people with information about the various drugs, the short- and long-term effects of use, associated risks, advice on how to increase the safety of use, and emergency responses to adverse effects (Stubbs et al., 2004). Finally, internet sites such as 'Somazone', 'pillreports' and 'bluelight' all provide information about drug content, the effects of ecstasy use, and how to reduce related problems. Unfortunately, as is the case across this area, comprehensive evaluation is limited and bold conclusions cannot be reached about the value of particular approaches.

New research by Duff and colleagues (2007) aimed to explore the social and cultural context of use of ecstasy and related drugs (ERDs) in Victoria. Using a combined research methodology consisting of participant observation by field workers, interviews with current users, case studies of current and ex-users and key expert interviews, the researchers proposed several recommendations for both prevention and harm reduction approaches to ERDs, as follows. Recommendations for prevention strategies are:

1. Need to be sensitive to relevant cultural and contextual differences in relation to both populations and geographical regions;
2. Involve more extensive and meaningful peer-to-peer components by integrating initiatives into existing peer networks;
3. Include peer education strategies;
4. Messages about potential risks associated with use must be evidence-based and even-handed;
5. Emphasise the more 'ordinary' risks, such as social embarrassment, harm to relationships, comedown;
6. School-aged prevention strategies should retain abstinence focus, while adhering to the recommendations above;
7. Consider strategies to strengthen and improve communication between young people and their parents;
8. Make use of information networks of most relevance to young people, such as the internet and mobile information technologies;
9. Develop context-specific ERDs prevention materials (e.g., in bars and clubs, rural settings etc) further tailored to particular sexual and cultural communities; and
10. Need specialised materials tailored to young and novice members of clubbing and rave communities.

Duff and colleagues (2007) also made the following recommendations for harm reduction strategies:

1. Focus on reducing the incidence and prevalence of polydrug use and binge ERDs use;
2. Pilot a 'clubsafe' initiative to deliver ERDs-specific harm reduction materials in non-rave settings (e.g., clubs and bars);
3. Continue collaboration with key stakeholders (e.g., club owners, DJs), including delivering harm reduction messages within venues;
4. Convene local club and bar stakeholder working groups to oversee and coordinate all local ERDs initiatives in licensed settings;
5. Undertake a formal pill-testing pilot in conjunction with Victoria Police Forensic Services;
6. Develop context-specific ERDs harm reduction materials (e.g., in bars and clubs, rural settings etc) further tailored to particular sexual and cultural communities;
7. Increase users' awareness of the harms they are experiencing via delivery of a self assessment tool through the internet and general health services;
8. Tailor interventions according to different points in drug use career; and
9. Use a variety of formats, including improved electronic delivery.

Assessing the risks of illicitly manufactured drugs

One area of contentious debate has revolved around the fact that illicitly manufactured drugs are of varying potency and purity, and, it is argued, this is relevant for strategies that seek to prevent and reduce drug related problems. Due to their illicit status, ATS cannot be monitored and batches of illegal drugs, particularly adulterated ecstasy tablets, have been reported in relation to increased risk of morbidity and mortality. For example, the media reports of 'Doctor Death' refer to PMA (para-methoxyamphetamine) being sold as ecstasy and resulting in the death of a young person in Sydney. Thus, some have argued that more regular forensic analysis of seized drugs and information from health, police and consumer groups should be assessed and alerts made for particular risks and disseminated (e.g., see Webb, 2003).

Variation in illicit drug potency and purity, and consequent variations in hazards has resulted in contention about the role of 'pill testing kits'. Large scale testing of ecstasy tablets at parties and agencies of the Drugs Information and Monitoring System has been undertaken in the Netherlands since 1992. Laboratory analyses using gas chromatography and mass spectrometry have identified a range of substances including LSD, amphetamine, 4-MTA, DOB, 2CB, atropine and wide variations in the amount of MDMA detected (Henry-Edwards, 2001). Testing of tablets, by volunteers, has also been conducted in the US by the 'Dance Safe' organisation.

However, in Australia, unlike some areas of Europe, pill testing contravenes legislation regarding the possession and supply of controlled substances (Camilleri & Caldicott, 2005). Any pill testing in Australia has been conducted by volunteer harm reduction organisations and individuals conducting their own testing using the most common testing kit which employs a chemical mix called a 'Marquis Reagent'. It can indicate the presence of MDMA-type substances (MDMA, MDA, MDE), amphetamine, 2CB/2CI, dextromethorphan (DXM) and opiates. The 'Mandelin Reagent' also tests for MDMA-type substances and amphetamine, so using the two tests in conjunction increases the reliability of the results for these two substances. In addition, the 'Mandelin Reagent' test indicates the presence of ketamine and PMA (Enlighten, 2005).

Although reagent pill testing kits provide some information about the content of pills, there are limitations in the information that such kits can provide. First, pills sold as ecstasy may contain more than one psychoactive compound, yet reagent testing kits will only indicate the most prominent substance. Second, while indicating the presence of a substance, testing kits are unable to indicate the amount in a pill so, critically, they do not provide information on purity. Third, there is concern about the subjective nature of the interpretation of test results, which may potentially lead to inaccurate conclusions. Fourth, the results of such analyses have varying degrees of reliability, depending on which substance is indicated, and the number of tests used. Finally, although both the Marquis and Mandelin kits can identify the presence of MDMA-type drugs (MDMA, MDA, MDE), they cannot differentiate between these drugs. Further criticism of 'pill testing programs' is that they could be interpreted as condoning drug use (Dundes, 2003; Murray et al., 2003; Winstock et al., 2001) and any implication they have 'passed' the pill test potentially offer an additional incentive to take the drug (Dundes, 2003; Murray et al., 2003; Winstock et al., 2001). It is also important to point out that while particular formulations and purity levels may be detectable, high levels of purity may still be associated with substantial drug, environmental and individual risk factors.

Despite these limitations, some people have argued that pill testing has potential as a harm reduction measure. It has been suggested that the approach can be viewed as consistent with the harm reduction perspective of promoting the right of drug users to make informed decisions about their own drug use and its consequences (EMCDDA, 2001). For example, some have proposed that on-site pill testing facilitates the avoidance of specific pills or may otherwise modify drug use based on test results. An unpublished study conducted at an outdoor rave in South Australia found that 83% of people who received an unexpected test result stated they would do something other than just take the pill, including the most common response to not take it (26%) (Caldicott, 2005, cited in Johnston et al., 2006). It has also been argued that potential users of ATS are likely to pay more attention to health messages if they are perceived as reliable and this may directly relate to the perception of obtaining accurate information about pill content. Others have suggested that pill testing programs have the capacity to function as early warning campaigns if pills are identified that pose an acute health threat (van de Wijngaart et al., 1999). Thus, on-site pill testing programs may facilitate links between event organisers, first aid and security staff through the exchange of information about the pills in circulation at events, and anticipated drug-related problems (Benschop et al., 2002; European Monitoring Centre for Drugs and Drug Addiction, 2001; van de Wijngaart et al., 1999). They may also have the potential to enhance existing public health surveillance of synthetic drug markets (Benschop et al., 2002; European Monitoring Centre for Drugs and Drug Addiction, 2001; Spruit, 2001) by providing data collection opportunities.

However, as already indicated, there is opposition to pill testing and examination of this is also pertinent. First, aspects of the procedures are contrary to some legislation. Second, many of the pill testing kits provide modest information, that may be quite risky if there is a lack of clarity about what the results do and do not tell a person. Third, even the knowledge that a pill is totally or mostly what the person thought it was (e.g., pure MDMA) does not confer an indication of safety – many adverse reactions to ecstasy have occurred as a consequence of consuming high purity MDMA. Fourth, the evidence about the alleged benefits is largely lacking and concerns about the potential negative effects (condoning use; encouraging use) not sufficiently allayed. For example, Winstock and colleagues (2001) noted:

In a recent study of over 1000 UK clubbers, subjects were asked how the quality of ecstasy pills would influence the amount of drug they consumed. Subjects indicated that if the quality of pills was considered to have become worse over 20% would take more, just over a third would take less, with 40% reporting no impact upon their ecstasy use. Conversely, and perhaps more worrying, if pills were thought to improve, 40% reported they would take more, just over 10% would take less, with nearly half reporting that it would make no difference to their use (pp.1145-1146).

The issue of pill-testing was raised at almost all consultations and it was evident that the issue was contentious, with some strongly supporting the approach and others strongly opposed. Concerns were expressed about the efficacy of testing kits, the impact of such initiatives and whether any endorsement or support of pill testing appeared to condone use or imply a 'pure' drug was a 'safe' drug.

4.4 Challenges of applying prevention and harm reduction strategies to amphetamine-type stimulants

There are a number of challenges in any attempt to apply prevention and/or harm reduction approaches to ATS use and related problems. In particular, a large number of ATS users do not perceive themselves as drug users and do not access many of the services or resources that may be accessed by other drug consumers. Furthermore, as indicated above, there are diverse target groups suggesting that there may be a need to develop specifically targeted and appropriate approaches.

At present, there is only limited evidence to guide the implementation of ATS-specific strategies to prevent and reduce problems, and most of this has focused on specific campaigns and peer-interventions. Although a range of interventions have been implemented, most reports are descriptive and thorough evaluation and formal publication are often lacking. Based on a general analysis of prevention, Hando and colleagues (1999) suggested the following key principles be adopted in designing harm reduction strategies:

- Comprehensive and consider the full range of social influences and institutions on use;
- Sustainable;
- Clearly targeted, particularly regarding age and stage of drug use;
- Developmentally appropriate and culturally sensitive;
- Based on research knowledge and use of sound methods;
- Clear objectives;
- Reduce risk factors and increase protective factors; and
- Evaluated for both positive and negative effects.

Gowing and colleagues (2001) reviewed prevention activities specifically in relation to ecstasy. As in other research, they noted that it was critical to base any prevention strategies on an understanding of the subjective functions that the drug might serve. Consistent with research with other drugs, they observed that subjective functions of drug use are likely to be more influential on decisions to use and continue using than knowledge or experience of negative effects. Observing no compelling evidence for preference for any particular approach, they identified the criteria that underpinned successful programs. These included:

- Target clearly identified settings and cultures;
- Subsequently tailor interventions for specific groups;
- Adopt a multifaceted approach (e.g., schools, families, broad media; community and health services);
- Ensure integrated and consistent approaches and messages;

- Involve community and target groups in identifying/defining problems and solutions; and
- Implement longer-term programs, which have a more enduring impact.

In a review of drug use among young males in the United Kingdom, Boys and colleagues (1999) similarly noted that it was important to understand the factors that were related to ATS use and had influence on future use. The researchers also noted that positive reasons for using might well be more influential than potential and actual negative consequences of use. It was found that:

For amphetamines and ecstasy, There may be a tendency for social/contextual but not mood altering functions to be more influential on future use. ...

...our findings support the recommendation that educators and prevention programme planners should recognise the complexity of the reasons behind substance use and then encourage young people to seek alternative ways of fulfilling them (p.1049).

Such evidence is not an argument that people should not be made aware of risks and problems arising from drug use. Rather, it emphasises that the subjective nature of perceptions of risk and negative consequences should be taken into account in designing interventions and that focusing on negative consequences alone may be insufficient. This underlines the earlier observation regarding the limited impact of 'scare tactics'. It also underlines the argument for targeted interventions in their own right and accompanying broader, mass media campaigns:

It means mediating the monolithic messages of ... broad based campaigns and translating them into messages (and media) more appropriate to the numerous and overlapping social worlds which make up modern pluralistic societies. (Moore, 1992, p.89).

It is also pertinent to comment on the implications of recent communication developments. Many people access information (accurate and inaccurate) about ATS via the Internet. As already noted, concerns have been expressed that drug production and distribution are being facilitated by the Internet. For example, Klee (2001) advised that this was an emerging concern:

The range of information available through the Internet is unprecedented and some is potentially dangerous – not only on how to use the drugs but also how to make them. (p.31)

And:

The information about drugs that is available through the web is competition to be reckoned with and needs to be taken into account when mounting official information sites. (p.90)

The Inquiry into Amphetamine and 'Party Drug' Use in Victoria (DCPC, 2004) reported that various organisations had developed or were developing information and other interventions for use over the Internet, for example targeting young people (Drug Aware, Drug and Alcohol Office, WA; RaveSafe, Victoria; Somazone, Australian Drug Foundation). However, again there is limited research into the potential role of the Internet (and other emerging electronic media) in encouraging ATS use and/or in preventing use and reducing problems,

but a number of studies are now underway. For example, researchers at the National Drug Research Institute (NDRI) are exploring how web-based communications provide accurate and inaccurate information about illicit drug use, while researchers at the University of Tasmania are currently examining the effectiveness of internet-based delivery of harm reduction information.

A number of other findings from the Victorian Inquiry (Drugs and Crime Prevention Committee, 2004) can inform us how we might maximise the effectiveness of ATS-specific prevention strategies. It was emphasised that there was a need to consider the reasons potential and actual consumers, such as young people, cite for using ATS, on both personal and social levels. Thus, for example, a recent international report on global trends in psychostimulant use identified that there is a common perception that amphetamine and ecstasy are more benign and socially acceptable than drugs such as heroin (United Nations Office for Drug Control and Crime Prevention, 2001). ATS may be attractive to some people, particularly young people, if they perceive that such drugs are associated with sociability, having less health risks, are relatively low cost, and have mood-enhancing effects (United Nations Drug Control Programme, 1996).

As in other reports, the Victorian Inquiry (Drugs and Crime Prevention Committee, 2004) also concluded that multifaceted approaches were likely to be the most effective. For example, it was recommended that any campaign addressing ATS should include:

- Peer-based strategies, including delivering information and education to prevent uptake of use and presence at events to provide harm reduction information and assistance;
- Youth media such as popular radio stations, should be used to communicate information and advice to young people who were regarded as one high risk group. Other electronic media were identified as pertinent in any approach that aims to engage young people;
- The Internet to communicate information and advice, not only to young people, but also parents, club owners, licensees, people working in the entertainment industry, and school staff;
- Information specifically targeting the needs of parents/carers/families;
- Information specifically targeting professionals who respond to ATS; and
- Interventions tailored to meet the needs of specific populations such as Aboriginal and Torres Strait Islander people, or high-risk groups such as people in the gay community.

In summary, it is again indicated that the various, and overlapping, target groups and the diverse patterns and contexts of ATS use and related problems, and the apparent limited impact of any single approach, demands the need for multifaceted approaches applying several strategies tailored to specific needs and circumstances.

4.5 Building the capacity of the workforce to engage in prevention and harm reduction

As many people at risk of, or currently using, ATS, do not come into contact with treatment agencies, or have a tenuous link with such services, workforce development strategies need to target a range of health professionals. Those likely to be affected include GPs, psychiatrists, mental health workers, accident and emergency staff, ambulance officers, youth workers, community health workers, staff from needle and syringe programs and consumer organisations. Thus, people in the workforce who come into contact with ATS users need to be appropriately informed and skilled to respond effectively to problems arising from the use of these drugs. This issue is addressed more comprehensively in Chapter 5 ('Treatment'), but briefly introduced here.

Given the identification of GPs and community health services as services commonly accessed by ATS consumers, it was suggested by a number of participants at consultations that GPs could take a critical role in communicating harm reduction messages and information. It was suggested that many patients might attend their GP for problems that are potentially ATS related (e.g., sleep disorders; depressed mood). As noted by one participant, these clinical encounters provide an opportunity to screen for ATS use and provide information about harm reduction and, where indicated, referral for further treatment:

Primary health care providers such as GPs, represent an entry point and should be mobilised into a harm reduction role and given better referral pathways.

It was suggested that screening programs for ATS use could be established at a range of points of contact where high-risk individuals congregate or present for advice, such as sexual health clinics, community health centres and so on. For example, one participant who self-identified as a youth worker, argued it was important to:

Engage consumers in an appropriate environment and context to provide immediate support and referrals whilst offering safer sex products and practical harm reduction information.

Health workers need to be aware of the warning signs of escalating use and increase the capacity for self-assessment among users (NSW Health, 2006). In addition, information is needed regarding drug pharmacology and interactions, and the immediate and long-term effects of ATS use. Given the unpredictable nature of some ATS presentations, training in effective interventions, dual-diagnosis, primary mental health assessment skills, de-escalation skills and risk-management skills are likely to enhance worker confidence and capacity to manage acutely intoxicated users (NSW Health, 2006). In order to ensure staff and client safety, such education and training needs to be supported by the development of policies and procedures for working with ATS users, including the management of potentially violent clients.

A major project to develop training materials for health professionals working with ATS users was initially undertaken in Victoria under funding from the National Drug Strategy. This led to the development of a comprehensive training kit, 'From Go to Whoa: Amphetamines and Analogues, The Trainers Package for Health Professionals (Pead et al., 1996).

The pack included a video, trainers' notes, overhead transparencies, slides and a participant workbook. Materials were intended for those in primary health care settings and covered basic knowledge and attitudes, problems associated with ATS use and withdrawal. The package was disseminated through a national train-the-trainer workshop and evaluation concluded that it was an effective and low cost strategy for dissemination and utilisation of a training package (Allsop et al., 1999).

The 'From Go to Whoa' training package was subsequently revised by Turning Point Alcohol and Drug Centre in Melbourne to bring it up to date with current knowledge on psychostimulants. In 2007, the Australian Government Department of Health and Ageing provided funding for a national dissemination of this resource to assist in increasing skills and knowledge on psychostimulants, which will enhance the capacity of a range of workers to provide appropriate interventions to psychostimulant users.

Another national training program is the 'Amphetamine Education Resources (AER) Project' and the related 'National Amphetamine Training Package (NATP)'. In 2005/2006, Queensland, New South Wales, South Australia and Victoria collaborated to develop the AER, and by the end of 2006, all states and territories were involved. The resources are designed to assist Needle and Syringe Programs (NSPs), alcohol and drug workers, and other frontline workers in the delivery of brief interventions with amphetamine users. The resources included topic-specific information cards to assist frontline services conducting brief interventions, a recovery guide for consumers, and a manual for NSP workers and other healthcare professionals. NATP is delivered by Anex and provides train-the-trainer courses around the AER across the country. As the context of amphetamine use may differ across jurisdictions, the NATP was developed to be flexible and able to address local circumstances.

4.6 Summary

Many of the prevention activities that target illicit drug use in general have relevance for ATS use (e.g., school drug education; school drug policy; building community and individual social capital). Unfortunately, while there are a number of activities that aim to specifically prevent and reduce ATS use and related problems, there is a dearth of quality evaluations and scientific literature that can attest to the value of many of these strategies.

The Australian Government's National Drug Strategy includes funding for community awareness programs as a means of preventing drug use. Prevention and harm reduction strategies aim to prevent or delay the onset of drug use, protect against associated risks and reduce associated harms. Prevention strategies include, but are not limited to, mass media campaigns, school-based activities, peer education, and strategies targeted at specific groups or behaviours at high risk for drug use and/or related problems.

Mass media campaigns aim to raise awareness and provide information at a broad population level. Examples include the National Drugs Campaign and in relation to ATS, the 'Putting the Brakes on Speed' campaign. School-based activities are largely designed to prevent the initiation of drug use and are implemented in the education context. The Australian Department of Education, Science and Training has developed 'Principles for School Drug Education' to guide such activities, which, for example, have been applied

in designing the Resilience Education and Drug Information program. Peer education approaches have been used both to prevent the uptake of drug use and to reduce problems in those already using. Evidence suggests peer education is particularly suited to younger persons and in accessing populations that would not otherwise present to health or drug specialist services. AIVL has developed a framework for peer education and an example of such an initiative is RaveSafe, delivered by VIVAIDS in Victoria. With regard to ATS, campaigns are needed that specifically target young people; certain workplaces; Aboriginal and Torres Strait Islander people and CALD populations; parents and families; and the general community.

Harm reduction strategies generally target risks and harms of drug use associated with particular routes of administration, intoxication, regularity of use and dependence. Within these categories, strategies may be aimed at developmental effects, physical or health outcomes, personal safety issues, mental health consequences or impacts on social wellbeing. As with prevention strategies, particular groups and/or behaviours are associated with higher risks and harms. With regards to ATS, some targets that have been identified include gay, lesbian, bisexual, transgender populations; injecting behaviours; and regular users of ecstasy and related drugs. Also of consideration in harm reduction is the potential role of methods to assess the risks of illicitly manufactured drugs, such as tests of purity and content.

There are a number of challenges to applying prevention and harm reduction strategies to ATS use and related problems. Of note is the large number of ATS users who do not identify themselves as drug users and are therefore unlikely to access services or resources. Another issue in designing strategies is the need to target a diverse range of ATS users, using environments and user practices. At present, there is limited evidence to guide activities targeting ATS use.

A related issue is the need to build the capacity of the workforce to engage in and successfully implement prevention and harm reduction strategies. Again, this is complicated by the absence of contact many ATS users have with health and other services, and therefore a range of professionals need to be informed and trained in relation to ATS.

Both the literature and experience of many involved in the consultations indicate that the development of campaigns must anticipate outcomes which are evidence based. Strategies need to be targeted to particular populations (e.g., injecting users, professionals, long distance drivers), regions (e.g., urban, rural and remote), contexts of use (e.g., nightclub scene, home use) and specific types of ATS (e.g., campaigns will be different for ecstasy than for methamphetamine). They need to be informed by theories of attitudinal and behavioural change, and may benefit from the involvement of current or ex- ATS users in developing campaigns. Finally, a variety of media outlets including night venues, internet and other new technologies (e.g., mobile phones) should be used for wide dissemination of materials.