

# **INHALANT POLICY: WHAT CAN WE LEARN FROM THE NATIONAL DRUG STRATEGY?**

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## **Introduction**

Inhalants, or volatile substances sit between the legal drugs, alcohol and tobacco, on the one hand and illicit drugs on the other. The substances themselves are generally ordinary, everyday useful substances which are readily available and fairly cheap. With a few notable exceptions their normal uses do not include ingestion by humans which sets them apart from both legal and illegal drugs.

Inhalation of volatile substances for their psycho-active properties has a long history and concern regarding volatile substance abuse has recurred in a cyclical fashion throughout the 20<sup>th</sup> Century and into the 21<sup>st</sup>. This concern has largely focussed on use by adolescents and children who, in modern times, are the group most likely to engage in volatile substance use. This use is alarming, dangerous and highly stigmatised. Attempts to develop appropriate responses have highlighted the complexity of the issues surrounding volatile substance abuse. and, when I listen to people talking about it, I often sense a feeling that this problem is too hard and that we don't know how to respond.

I am no expert in this area, and I don't come with a magic toolbox to solve the problem of volatile substance abuse, but I would like to suggest that the National Drug Strategy and the associated action plans for Alcohol, Tobacco and Illicit Drugs provide, not only a structure and a framework for thinking about volatile substance abuse and responses to it, but also a menu of specific strategies which we can examine for their suitability for application to volatile substance abuse.

## **The National Drug Strategy**

The key principle underpinning the national drug strategy is the minimisation of harm to individuals and society resulting from the use of alcohol and other drugs through a balance between supply reduction, demand reduction and harm reduction. This provides us with a structure for consideration of policies and strategies and emphasises that we need a comprehensive approach to volatile substance abuse.

In order to achieve a comprehensive approach, the strategy is founded on five key factors

- Coordination and integration
- Partnerships
- Balance
- Evidence
- Social justice.

While all of these factors are important, Evidence and Social Justice appear to be particularly relevant in considering responses to volatile substance abuse.

Evidence informs our understanding of

- the causes, nature, extent, meanings and patterns of substance use,
- the characteristics of users
- harms to individuals and communities
- the effectiveness of interventions, and
- interactions between different interventions.

Evidence can often surprise us by challenging our assumptions and beliefs. A classic example of this occurred in relation to heroin overdose where research in the 1990s overturned the prevailing understanding of the causes of overdose and led to a range of new strategies to reduce the risk of overdose and death.

In comparison to alcohol, tobacco and illicit drugs such as cannabis and heroin the evidence relating to volatile substance abuse is limited. However, the Victorian Inquiry into the Inhalation of Volatile Substances provides an excellent evidence base and highlights where more research is needed.

Evidence from around the world shows a strong link between volatile substance abuse and social deprivation. Social justice approaches ensure that strategies to address volatile substance abuse target the groups and communities most affected and take into account the broader context within which use occurs.

An important theme throughout the national drug strategy documents is the need to consider three interacting components influencing drug use and drug problems.

- The individuals and communities involved
- The social, cultural, economic and physical environment
- The substances being used.

### **Individuals and Communities Involved**

Most volatile substance abuse is concentrated among children and adolescents with use peaking at age 12-13 years when up to one third of children may try it. Adolescent users can be classified as:

- Experimental
- Regular recreational
- Chronic

Although for the most part volatile substance use declines with age a number of groups of adult users also can be identified.

- Disadvantaged and homeless adults who are chronic users
- Professional groups who abuse anaesthetic gases to which they have access
- Adults who use volatile substances as part of the drug and party scene
- Those in the gay community who abuse amyl and butyl nitrites to enhance sexual pleasure.

These groups comprise a variety of different markets which use different types of products and have different motivations for use. Interventions need to be carefully tailored to the circumstances and motivations of each target group.

### **Social, Cultural, Economic and Physical Environment**

The social, cultural, economic and physical environments affecting each of these groups are likely to vary considerably. Among adolescents, volatile substance abuse tends to be episodic and cyclical, suddenly appearing in an area only to disappear just as quickly and reappear in another area in an unpredictable fashion. Most young people use with friends, usually outside in secluded places and see volatile substance abuse as a group social activity. Experimental use is largely motivated by adolescent curiosity, rebellion and risk taking, to have fun and be part of a peer group and by boredom and lack of alternative activities.

Among the group of regular adolescent users, volatile substance abuse is frequently associated with antisocial behaviour and low socio-economic status and may be related to a group culture of 'being good at being bad'. Although volatile substance abuse occurs across all social classes there is a strong association with deprivation, particularly as use becomes more chronic. Chronic daily users, tend to be severely disadvantaged and marginalised and such use is higher among children in care, those in the juvenile justice system and those in remote aboriginal communities. Similarly, adult chronic users tend to be homeless and severely disadvantaged.

However, for other adult users, deprivation is not an issue. Use of nitrous oxide and amyl and butyl nitrite, for example, tends to occur as part of a pattern of poly drug use among people who are better educated and of higher socioeconomic status and whose drug use revolves around partying and having fun, or enhancement of sexual pleasure. Professionals who use anaesthetic gases are also relatively advantaged and use revolves around the workplace and may be a response to on the job stress.

## **Substances**

Volatile substances can be classified into four distinct types.

- Volatile solvents – glues, paint or paint thinner, dry cleaning fluids, degreasers, plastic cement, petrol, correction fluid and felt tip pens. These products commonly contain an organic solvent such as toluene or xylene.
- Aerosols – spray paints, deodorant, hair sprays, insect sprays, vegetable oil sprays, fabric protectors, fire extinguishers and many others. In most cases it is the propellant or solvent, rather than the main ingredient which is sought after by users.
- Gases – medical anaesthetics such as ether, chloroform, halothane, and nitrous oxide; and fuel gases such as butane, propane and domestic gas; and the gases used in refrigeration. The most commonly abused substance in this group is nitrous oxide found in whipped cream dispensers.
- Nitrites – amyl and butyl nitrite. Nitrites act as vasodilators and muscle relaxants and are primarily used to enhance sexual activity.

In practice groups tend to only use one or two products, depending on which products are the subject of local fads. Substances used also tend to vary between groups. Most recently, adolescent users in Australia have commonly used chrome paints while in the UK the use of butane is most common. Chronic use among disadvantaged adults also tends to involve these products, but use among young adults in the party drug scene most usually involves nitrous oxide. Nitrites are primarily used in the gay scene to enhance sexual pleasure but there are increasing reports of their use as a part of poly drug use in the dance party scene.

## **Strategies from the National Drug Strategy**

The national drug strategy includes a wide range of responses to legal and illegal drugs targeting supply reduction, demand reduction and harm reduction. Because of the unique position of volatile substances it is helpful to examine strategies addressing alcohol, tobacco, and illicit drugs for their applicability to volatile substance abuse. I have selected a number of examples for discussion in the rest of this paper. The list is not exhaustive and there are many other possible strategies which could be examined. Similarly time does not allow the detailed exploration of the appropriateness and feasibility of these examples. They are offered as a stimulus to discussion about a comprehensive response to volatile substance abuse.

## **Supply Reduction**

The large number of volatile substances which can potentially be abused makes supply reduction particularly challenging. Banning or scheduling as controlled drugs is not an option for most volatile substances because of their other legitimate uses and the range of substances means that if one is not available users will turn to others. The systemic and regulatory responses which apply to tobacco, and alcohol are likely to be more appropriate. Some examples of these include:

- Restriction on sales to those under 18, intoxicated persons, and if abuse is suspected.
- Regulation of retail sales by restricting sales to certain outlets.
- Registration or licensing of retailers.
- Regulation regarding safe storage, displays and placement within stores to reduce physical access.
- Development of industry codes of practice and partnerships to promote responsible sale of solvents.

Some of these have been implemented already in relation to solvent based products such as chrome paints, particularly in Victoria and Western Australia. In assessing these types of initiatives it is important to consider potential unintended consequences, such as displacement from regulated substances to other potentially more harmful substances. For example, in the UK, restriction of access to glues led to young users switching to the more harmful butane gas and an increase in VSA related deaths. Balloon effects, where restricting access in one area leads to the problem moving to another area may also occur. Also of significant concern is that singling out certain substances may alert young people to which products have psychoactive effects and so encourage them to seek them out.

Restriction of sales to people under 18 may be effective for some substances, however, for others it may not affect the desired target group. For example, nitrous oxide is primarily used by those over 18 and so restricting its sale to under 18s would not target those most likely to use it.

Given that many abusable substances are normal household products and are readily available from supermarkets and hardware stores supply reduction strategies are likely to lead to difficulties for legitimate users. There would need to be considerable consultation with industry, retailers and community groups in the development of strategies to restrict and regulate the availability of such products.

A further area for investigation is the possibility of collaboration with industry to identify alternative less harmful ingredients and reformulation of some products. This is analogous to the substitution of alternative fibres for hemp in ropes, paper and fabrics which occurred when cannabis was made illegal in the early part of the 20<sup>th</sup> Century. Examples of possible strategies in relation to volatile substances might be the promotion of water based paints and non toxic glues rather than more harmful products containing organic solvents such as toluene and xylene and chlorinated hydrocarbons. Similarly, finding alternative methods of delivery for aerosols, such as pump packs could be investigated to reduce the supply of volatile substances.

## **Demand Reduction**

Demand reduction results from two main types of interventions – prevention and treatment. Prevention initiatives are largely focused on preventing or delaying uptake of drug use while treatment aims to reduce or eliminate demand for drugs among existing users. (I will address prevention of harm in the section on harm reduction).

## Prevention

The National Drug Strategy Prevention Agenda is currently under development. The proposed strategy is intended to be broadly based and to take a developmental approach addressing social and structural determinants of health and wellbeing and risk and protective factors to strengthen the resilience of young people. Given the strong relationship between volatile substance abuse and deprivation the prevention agenda is likely to be very important in the prevention of volatile substance abuse. The agenda is likely to involve a significant change of emphasis from traditional prevention activities such as school drug education, media campaigns and other information approaches although these also have their place as part of a comprehensive strategy.

Media and information approaches to preventing volatile substance abuse are generally not appropriate for volatile substance abuse as there is evidence that approaches which publicise the behaviour or substances involved, particularly to non users, can escalate the problem and lead to new epidemics of use. For similar reasons, school drug education also needs to be handled with care in order to avoid alerting non users to the behaviour. Education approaches should be carefully targeted to experimental, recreational and chronic users who should be separated from each other as much as possible. It is recommended that as much as possible school education regarding volatile substances should occur as part of the health and safety curriculum, and focus on safe handling of toxic substances during legitimate use.

Health warnings on product labels have been an important prevention and harm reduction strategy for alcohol and tobacco. The Victorian Drugs and Crime Prevention Committee concluded that this was not an appropriate strategy for prevention of volatile substance abuse as health warnings would badge the products which have a psychoactive effect and assist young people to seek them out.

A key plank of the tobacco strategy, and to a lesser extent strategies for other drugs is the creation of a social, cultural and physical environment which discourages, or at least, is not supportive of use. For tobacco this has been a long slow process but there has been considerable progress. A wide range of strategies have contributed to this change including the banning of advertising, and banning of smoking in various venues. While such strategies cannot be directly transferred to volatile substances there are a number of steps which could be taken. The Victorian report recommended that use of terms such as 'chroming' should be avoided as they could glamorise the behaviour and make it more attractive. Similarly, advertising of volatile substance abuse or substances which can be abused through portrayal in news bulletins, newspapers, film and television should be avoided as much as possible. The education of the media and development of media codes of conduct, similar to those that exist regarding the reporting of suicide may be of benefit.

The contribution of law enforcement in creating a climate which discourages substance abuse is emphasised in the National Action Plan on Illicit Drugs. This also applies to volatile solvents, particularly in relation to maintaining safe environments and improving community amenity.

The illicit drugs action plan also includes investigation of approaches to productively influence youth culture away from substance use. Approaches should be based on a detailed understanding of the antecedents of use at the local level. A number of initiatives could be applied to volatile substance abuse to influence the culture of use including:

- reinforce gutter drug image, make it uncool,
- look at local social context and address reinforcing factors
- remove heavy users from experimental groups
- form peer groups around healthy activities
- provide opportunities for alternative activities.

Urban design is recognised in the alcohol strategy as a significant influence on drinking behaviour and also is a factor in crime prevention. It is possible that this could also be the case for volatile substance abuse. Possible urban design strategies include the provision of appropriate facilities for recreational activities and safe places for young people to meet as well as such things as appropriate lighting and open spaces for visibility and accessibility.

## **Treatment**

The national drug strategy includes a wide range of treatment modalities which can be classified in a number of ways. In relation to Volatile Substances it can be helpful to think of four types of treatment.

- Treatment of acute health problems, intoxication and withdrawal. Treatments of this type are usually short term and focus on specific symptoms.
- Early and brief interventions aim to motivate users to change their using behaviour. They have been extensively studied in relation to alcohol and tobacco but there is increasing evidence of their effectiveness for other substances. They are most suitable for experimental and recreational users.
- Treatment of chronic use and dependence is more intense and of longer duration.
- Treatment of long term sequelae including brain damage.

A comprehensive approach to treatment should include all of these types of treatment. There is a need for further research regarding the most effective treatments for volatile substance abuse although there has been an excellent resource produced by the Department of Human Services in Victoria for community care and alcohol and drug services.

Young people in the criminal justice system are a high risk group for volatile substance abuse and so consideration could be given to Police Diversion programs for volatile substance users and programs in prisons and juvenile correctional institutions.

## **Harm Reduction**

The concept of harm reduction has been contentious in relation to volatile substance abuse, particularly because of the young age of the majority of users. However, it is a fundamental part of the national drug strategy and while not all strategies will be appropriate to volatile substances some are worth consideration. Evidence from the illicit drugs field has shown that the appropriateness and effectiveness of harm reduction strategies are enhanced when users are involved in planning. Their unique perspective ensures that the local situation is taken into account and that strategies are appropriately targeted.

Examination of harm reduction strategies for alcohol and illicit drugs indicates a number of approaches which may be applicable to volatile substances.

Place management to reduce hazards for people who do use and to improve community amenity is emphasised in both the alcohol and illicit drugs strategies. The design and management of venues and public spaces to reduce physical hazards, and to reduce use and overdose in isolated or poorly ventilated spaces is one part of such a strategy. Others include strategies to increase the human presence in public spaces and to make them safer and more attractive.

Pricing and taxation has been used for both alcohol and tobacco to reduce use and harm and there is pressure for taxation of alcoholic beverages to be higher for those with higher alcohol content. The role of increased price as a deterrent to use is also an important rationale for law enforcement activities in relation to illicit drugs. For volatile substances it may be possible to introduce higher tax rates on more harmful products to encourage users to move to cheaper less harmful products as a harm reduction measure.

While current Dance Party Guidelines are largely focused on reducing harm from the use of ecstasy and related substances the growing use of nitrous oxide in this environment means that these guidelines may need to be reviewed and expanded to include strategies to reduce harm relating to volatile substance use including risk of injury while intoxicated.

The heroin overdose strategy provides an effective model for interventions to reduce the risk of acute toxicity and injury while intoxicated. The strategy includes peer education regarding the risks of use and promotion of a number of clear messages including:

- look after your mates,
- don't use alone,
- use small amounts,
- call an ambulance if someone gets into trouble

These messages are supported by the development of protocols for police and ambulance services to reduce the fear that calling an ambulance will result in police attendance.

By their nature, volatile substances are highly flammable and there is risk of fire and explosion in poorly ventilated spaces or in the vicinity of smokers or other heat sources. The development of community partnerships to reduce the inappropriate disposal of equipment such as cans, bags, rags etc similar to those in place to reduce the inappropriate disposal of injecting equipment may be of benefit in reducing the risk of harm to both users and the community.

## **Conclusion**

The National Drug Strategy provides a structure and framework for analysis of the problems of volatile substance abuse and for planning a comprehensive coordinated response. It also provides a range of specific strategies which can be considered for their appropriateness to volatile substance abuse and modified as necessary for inclusion in that response.

As the National Drug Strategy documents make clear, strategies for supply reduction, demand reduction and harm reduction need to be supported by a solid foundation of workforce development and research to improve the evidence base and contribute to monitoring and evaluation.

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