Volatile Solvents

A Resource for Schools

Health and Safety Guidelines

Developed and written by R. Bellhouse, G. Johnston, A. Fuller and C. Guthrie December, 2000

Forward

The Department of Education and Training (DE&T) is committed to providing relevant drug education resources for use by schools. This resource has come about as a result of collaboration and cooperation from schools and their communities and various community agencies. This resource reflects the dedication of these parties to ensuring that schools and young people are equipped to build and strengthen strategies that reduce the harms associated with drug misuse and abuse.

Volaltile Solvents, A Resource for Schools is a comprehensive resource that provides: a broad framework for addressing issues related to volatile solvents, primary and secondary curriculum materials and information on volatile solvents. Advice to principals on legal issues and policy development and leadership in drug education is also provided within the resource.

The resource also highlights particular known facts derived from recent Australian studies about volatile substance use. These include:

- The vast majority of young people will never inhale volatile solvents for the purpose of intoxication.
- Experimental users are generally in junior secondary school and use volatile solvents only once or twice.
- Regular use is often part of a social group dynamic.
- Chronic users have a preference for volatile solvents and are often intoxicated daily.
- Lack of qualitative research hinders an epidemiological understanding of volatile substance use.

There are a number of approaches that are relevant to drug education in relation to volatile substance use.

- It is recommended that volatile solvents use drug education should be considered within the context of Health and Safety and Environmental education.
- A classroom response to Volitale Solvent use should be considered only where there is widespread use.
- Teachers are advised to discuss issues with school welfare staff and school administration before initiating prevention and intervention responses.
- When responding to incidents involving volatile solvents, the general principles are the same as for all drug-related incidents, although teachers should be aware there is a slight possibility of 'sudden sniffing death'. If members of staff suspect volatile substance use, they should ensure students are kept calm and see that sudden or strenuous activity is avoided.
- Intervention and restoring wellbeing should be planned and monitored. The support of personnel with appropriate training and expertise should be obtained.
- Messages about hazardous substances and chemical safety should be reinforced by safe practices at home cultivated through information provided to parents.

I commend this resource to you

Michael White

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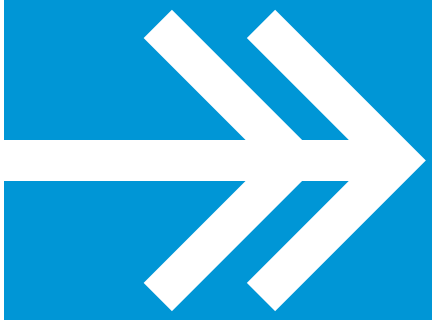


Introduction

Volatile solvents are gases, such as butane gas fumes, or liquids, such as gasoline or paint thinner, that vaporise at room temperature. If inhaled their propellant gases can cause psychoactive effects. Regular use can lead to dependence and a range of associated health problems. Over one thousand products found in sheds, cupboards and fuel tanks around the home and the community contain volatile solvents and this list continues to grow.

Volatile solvents are cheap, easily accessed and legal. Consequently, those who use them as an inhalant need little money, require few contacts and take relatively low risks in relation to the law when experimenting. In other words, many of the barriers to entry that apply to both legal and illicit drugs do not apply to volatile solvents. They are most commonly the province of inexperienced younger adolescents who tend to use them experimentally.

Evidence is also emerging to suggest that volatile solvent use, even experimentation, may indicate a heightened interest in drugs and future or existing problematic drug use.

In conducting research into volatile solvent use in Victoria, some unique characteristics become apparent that differentiate volatile solvents from other drugs. These characteristics act as protective and risk factors that either reduce experimentation (protective factors) or promote regular use (risk factors).

The intention of this resource is to enhance protective factors and reduce risk factors by providing information and guidelines that will help schools develop appropriate responses to volatile solvent issues.

In considering these issues, a major review of the literature on volatile solvents has been undertaken, as well as extensive consultation with teachers, workers and young people in both urban and regional areas of Victoria. This was to ensure that guidelines are relevant to the Victorian context.

Guidelines provided:

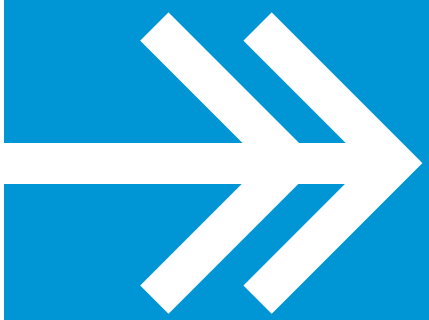
→ recognise that volatile solvent use requires a unique response

→ recognise and use the protective nature of existing attitudes towards volatile solvents

→ recognise that prevention is best achieved through broad-based health and welfare programs

→ aim to avoid initiatives that unintentionally risk increasing volatile solvent use above current levels.

Responses developed by schools should be incorporated into other drug-related health and welfare policies. Guidelines should also be considered with reference to the *Framework for Student Support Services in Victorian Government Schools, Get Wise* and *Get Real*, since they provide a complete context for the delivery of drug education and student wellbeing.



Section 1:

Policy guidelines, rationale and background information summary

Policy guidelines provided are based on the best available information regarding the nature of volatile solvent use in Victoria.

School communities are encouraged to discuss and incorporate the following guidelines into their policies and practice.

Summary of guidelines

Guideline 1

Teaching about volatile solvents as drugs should not be included in the mainstream drug education curriculum.

Guideline 2

Volatile solvent education should be provided in the preventive context of Occupational Health and Safety. Young people should be taught about the appropriate use of chemicals, alerted to the hazards, and equipped with strategies to prevent or reduce possible harm. Direct reference to volatile solvents as drugs should be avoided.

Guideline 3

In circumstances where a group of students is particularly at risk from volatile solvent use, or where volatile solvent use is widespread, a specific classroom or group response may be appropriate.

Guideline 4

Intervention and restoring wellbeing should be planned and reviewed. The support of personnel with appropriate training and expertise should be used.

Guideline 5

Teachers are advised to discuss issues with school welfare staff and school administration before initiating prevention and intervention responses.

Guideline 6

When responding to incidents involving volatile solvents, the general principles are the same as for all drug-related incidents, although teachers should be aware of the slight possibility of a death as a result of sniffing 'sudden sniffing death'. If staff suspect volatile solvent use, ensure students are kept calm and avoid sudden or strenuous activity.

Guideline 7

Intervention programs should be based on the principles of the *Framework for Student Support Services in Victorian Government Schools* and recognised drug treatment practice. There should also be awareness that volatile solvent use can be related to marginalisation and socio-economic status.

Guideline 8

Personnel in networks or regions should be trained to respond to issues concerning volatile solvents.

Guideline 9

Messages about hazardous substances and chemical safety should be reinforced by safe practices at home cultivated through information provided to parents.

Guideline 10

An approach that involves the community should be considered when responding to volatile solvent issues.

Rationale for guidelines

Guidelines 1 and 2

Teaching about volatile solvents as drugs should not be included in the mainstream drug education curriculum.

Preventive volatile solvent education should be provided in the context of Occupational Health and Safety. Young people should be taught about the appropriate use of chemicals, alerted to the hazards, and equipped with strategies to prevent or reduce possible harm. Direct reference to volatile solvents as drugs should be avoided.

Rationale

Approaches to prevention are typically practised in one of two ways:

- an overt program of volatile solvent education may be included in the mainstream drug education curriculum and taught in the same context as other legal and illegal drugs
- a more cautious program excludes volatile solvents from mainstream drug education but, where necessary, provides programs as part of an intervention strategy for students at risk.

The United Kingdom has an overt volatile solvents public health program. It widely acknowledges that volatile solvents are drugs and includes them in mainstream school-based drug education programs. This is understandable in the United Kingdom context where volatile solvents have been responsible for the deaths of between one and two young people per week for ten years and are clearly a major public health problem.

The Victorian context, however, varies greatly from the United Kingdom experience. Historically drug education programs in Victoria have taken a more cautious view and have consciously avoided discussing volatile solvent use with students. Reasons for this approach include:

- low death rates attributable to volatile solvent use
- low rates of use by young Victorians
- protective factors that discourage use
- the nature of risk factors that may influence use.

Low death rates attributable to volatile solvent use

In general, volatile solvent use is not seen as a major public health issue as only three deaths were recorded in Victoria as a direct consequence of volatile solvent use between 1996 and 1999.

While some may suspect this understates the deaths caused by volatile solvent use, these figures indicate that the level of death from this form of drug use is significantly lower than in countries such as the United Kingdom.

Low rates of use by young Victorians

Surveys about levels of volatile solvent use by young people vary from as high as 25% among some age groups to as low as 1% among others.

These variations may be caused to some extent by the way the questions are framed and subsequently interpreted by young people. For example, many young people may have sniffed a volatile solvent from curiosity, by accident, or because they just liked the smell. However, their essential purpose might not have been to become intoxicated.

Another group of young people might acquire a quantity of volatile solvents, along with the hardware for inhalation, as part of a plan to become intoxicated.

If the former group is included in the figures, it is likely the number of users who have ever tried volatile solvents will be far greater than those who have used expressly for the purpose of intoxication.

A recent Victorian survey commissioned by the Department of Human Services "Improving the Lives of Young Victorians in Our Community" 2000 reported that 6% of young people in Victoria has ever used volatile solvents for their intoxicating effects.

Consultations with health professionals and young people have also been consistent in the view that volatile solvent use is avoided by an overwhelming majority of our young population.

While the evidence is inconsistent, when considered in the light of Victoria's relatively low rates of death from volatile solvents, the conflicting survey results and the views of many alcohol and drug workers, it becomes difficult to believe that volatile solvent use is widespread among young people in Victoria. Tobacco, alcohol and cannabis are clearly preferred by young people.

Protective factors that discourage use

Consultations have been consistent in the view that young people aware of the psychoactive effects of volatile solvent use consider volatile solvents to be 'gutter drugs' that are very hazardous. This stigma acts as a protective factor discouraging experimentation and use.

Risk factors that may influence use

While the stigma associated with volatile solvent use acts as a protective factor, volatile solvent use also has a range of unique characteristics that are perceived as risk factors. These include:

- → the young age of users
- → the accessibility of volatile solvents

- → the legal status of volatile solvents
- → the episodic nature of outbreaks
- → the possibility of copycat behaviours that can be instigated through promotion of incidents.

All of the above provide little encouragement for Victoria to follow the United Kingdom practice of including volatile solvents within the mainstream drug education curriculum.

Guideline 1 affirms the traditionally cautious approach of the majority of Victorian schools, unless circumstances dictate that a school requires an alternative response. This guideline also aims to avoid interfering with the existing perceptions of most students that protect them from perceiving volatile solvents as drugs of choice, as well as reducing the risk of initiating curiosity and perhaps experimentation.

Prevention programs initiated by schools should support existing protective factors and avoid unnecessarily promoting the risk factors mentioned above.

For this reason, preventive volatile solvent education should avoid reference to volatile solvents as drugs and should be provided in the context of Occupational Health and Safety. Young people should be taught about the appropriate use of chemicals, alerted to the hazards, and equipped with strategies to prevent or reduce possible harms.

(See pg22 for more information about risk and protective factors.)

Guideline 3

In circumstances where a group of students is particularly at risk from volatile solvent use, or where volatile solvent use is widespread, a specific classroom or group response may be appropriate.

Rationale

When student use of volatile solvents is widespread, it may become necessary to respond to the issue through direct class or group intervention. This approach is only advised if members of staff are confident that the students involved are aware of the use of volatile solvents for the psychoactive effects.

A group strategy may be appropriate if welfare staff become aware that volatile solvent use is occurring as a social activity. In these instances, a change in the behaviour of individuals might be achieved by tackling the attitudes and behaviours of the group.

Such a response should be planned to avoid glorification of the situation and should be supported by experienced health workers.

Guideline 4

Intervention and restoring wellbeing should be planned and monitored. The support of personnel with appropriate training and expertise should be obtained.

Rationale

The episodic nature of abuse of volatile solvents and the associated risk factors require that consultation, counselling, communication, education, monitoring and ongoing support be planned, sensitively handled and adequately resourced. Since the use of volatile solvents is often correlated with a range of other serious health risks, school-based personnel need to remain aware of the limits to their role, responsibilities and expertise.

It is important to ensure that resources are available to provide:

- → an holistic response
- → continuity of staff
- → comprehensive individualised assessment
- → a coordinated service plan
- → routine monitoring and follow-up
- → inter-agency collaboration
- → time for review.

Providing appropriate resourcing and expertise is often beyond the capacity of a school. In these circumstances, regional and/or community support should be sought.

Guideline 5

Teachers are advised to discuss issues with school welfare staff and school administration before initiating prevention and intervention responses.

Rationale

The potentially episodic nature of volatile solvent use, requires responses to be thoughtful and informed.

To ensure an appropriate response and to protect staff, ensure that adequate consultation and planning has been undertaken.

Staff members planning to teach about hazardous substances need to be aware of:

- → connections between hazardous substances and volatile solvent use
- → classroom strategies to respond to discussion of volatile solvents as drug.
- → reporting and intervention processes, if concerned about individual students.

Discussions with welfare staff and approval by school administration can provide teachers with support and access to necessary information.

The above will also provide welfare and administrative staff with insight into school-based issues relevant to use of volatile solvents, and opportunities for monitoring and ensuring adequate expertise.

Guideline 6

When responding to incidents involving volatile solvents, the general principles are the same as for all drug-related incidents, although teachers should be aware of the slight possibility of A DEATH AS A RESULT OF 'sudden sniffing death'. If staff suspect volatile solvent use, ensure students are kept calm and avoid sudden or strenuous activity.

Rationale

The immediate hazards associated with volatile solvent use are similar to those for other drugs, with one notable exception; the slight possibility of sudden death. Sudden death can occur because of a heart attack or a respiratory seizure.

A respiratory seizure can occur as an overwhelming response to the sudden intake of toxic chemicals into the air passages. This causes lungs to fill with fluid, or may even cause the airways to cease functioning or seize up. The risk of respiratory failure depends on the type of inhalant used. Butane gas has been commonly associated with this type of effect.

Heart attack or cardiac arrest from using volatile solvents is often referred to as 'Sudden Sniffing Death Syndrome'. It occurs when the hydrocarbons in solvents increase the amount of adrenalin in the body, which in turn causes the heart rate to increase. When a volatile solvent user is startled for some reason, the sudden surge of adrenalin, in addition to the already raised levels of adrenalin, may cause the heart to jump to an irregular pattern causing a heart attack.

The risk of Sudden Sniffing Death Syndrome makes a panic reaction, or sudden or strenuous activity, more dangerous than is normally the case. Clearly, both of these reactions will further raise the adrenalin levels in a person's body. Information about the risks associated with volatile solvents and training in first aid is useful. However, the approach recommended in *Get Real* and *Get Wise* remains as relevant to volatile solvents as to other drugs.

Guideline 7

Intervention programs should be based on the principles of the *Framework for Student Support Services in Victorian Government Schools* and recognised drug treatment practice. There should also be awareness that volatile solvent use can be related to marginalisation and socio-economic status.

Rationale

Regular volatile solvent users come with a variety of histories, but often with some similarities; they may be isolated individually or belong to a marginalised group and/or they are often of lower socio-economic status.

Volatile solvent use is generally a social activity. Once a young person becomes a regular user of volatile solvents, the 'gutter drug' or 'loser' status can become a risk factor, especially if the use becomes widely

known. A young person who uses risks being labelled 'a loser' and may feel there is little option but to stay with the 'losers'. In some marginalised groups, the 'gutter' status becomes a badge of honour; a source of identity and pride.

Community workers observe that a young person might use volatile solvents regularly for some time without any observable deleterious consequences, until suddenly there seems to be a rapid, observable and frightening deterioration physically, socially, intellectually and emotionally. At this point the young person might be termed a 'chronic' volatile solvent user. Chronic users are firmly addicted and the habit appears to be as difficult to break as it is for other highly addictive drugs.

Regular volatile solvent users may be attending school, although truancy is a likely part of their profile.

Intervention programs for regular volatile solvent users should be based on treatment principles for alcohol and other drugs.

Schools can assist with intervention programs by providing young people who use volatile solvents with opportunities to:

- → reconnect with their peers, school and community
- → discover areas in which they can experience success.

Guideline 8

Personnel in networks or regions should be trained to respond to issues concerning volatile solvents.

Rationale

Schools, networks and regions need to be proactive and prepared to effectively respond to volatile solvent issues. Being prepared requires training in developing and implementing effective programs, policies and procedures.

Depending on local circumstances, schools, networks and regions need to decide how many personnel should have specialised training in this area.

Networks or regional personnel could provide professional development for school-based staff to ensure schools are aware of the special circumstances relevant to volatile solvents, and could also support incident management teams, if required.

Guideline 9

Messages about hazardous substances and chemical safety should be reinforced by safe practices at home cultivated through information provided to parents.

Rationale

Information that reminds parents about some of the safety issues around hazardous chemicals, and activities that encourage young people to discuss safety issues with their parents, might be useful in encouraging appropriate role modelling, safe practices and a consistent approach between school and home.

Guideline 10

An approach that involves the community sector should be considered when responding to volatile solvent issues.

Rationale

Young people using volatile solvents, particularly regular or chronic users, require a holistic response. Most students who use volatile solvents do so away from school; that is, at home or in the community. Many of these young people will also be truanting, some on a regular basis. Some young people may be marginalised, economically disadvantaged and in need of a range of services, including those that maintain or attempt to establish community connectedness. To be effective in meeting the needs of students, schools may need to engage the broader community in an effort to:

- establish important community links
- benefit from the range of networks, services and expertise available
- maximise protective factors and minimise risk factors within the community.

In some communities, the implementation of strategies that restrict access to volatile solvents can be beneficial. Implementation of such strategies would also require involvement of other sectors within the community, for example local traders. A more comprehensive discussion of information about volatile solvents follows.

Section 2:
Background information

What are inhalants?

Inhalants are chemicals that vaporise at room temperature. The vapours have psychoactive qualities that can induce intoxication. Inhalants fit into three categories: volatile solvents, nitrites, and anaesthetics. This resource is predominantly concerned with addressing issues related to volatile solvent use.

1. Volatile solvents

Volatile solvents are gases, such as butane gas fumes, or liquids, such as gasoline or paint thinner, that vaporise at room temperature. Their intoxicating effects are caused by their propellant gases.

Over one thousand products containing volatile solvents are on the market. This list is continually growing.

Volatile Solvents	
Adhesives:	model aeroplane glue, rubber cement, household glue
Aerosols:	spray paint, hair spray, air freshener, deodorant, fabric protector
Solvents and gases:	nail polish remover, paint thinner, type correction fluid and thinner, toxic markers, pure toluene, lighter fluid, gasoline, carburettor cleaner, octane booster
Cleaning agents:	dry cleaning fluid, spot remover, degreaser
Food products:	vegetable cooking spray, dessert topping spray (whipped cream)
Gases:	nitrous oxide, butane, propane, helium

2. Nitrites

Amyl nitrite is the most commonly used substance in the nitrate category. Amyl nitrite is used by heart patients with angina and for diagnostic purposes as it dilates the blood vessels and makes the heart beat faster.

It is also used for achieving psychoactive effects. The immediate effects include decreased blood pressure, followed by an increased heart rate, flushed face and neck, dizziness and headache.

Amyl nitrite is a clear, yellowish liquid that is packaged in small bottles or vitrioles (cloth-covered sealed bulbs).

Street names for amyl nitrite include ‘poppers’, ‘snappers’, ‘rush’, ‘bolt’, ‘climax’ and ‘throb’.

3. Anaesthetics

Anaesthetics are used by the medical profession to induce a partial or complete insensibility to pain. Substances include nitrous oxide, ether and chloroform. In this category, the principal substance of possible abuse is nitrous oxide. A colourless, sweet-smelling gas used by doctors and dentists for general anaesthesia, nitrous oxide is called 'laughing gas' because it often induces a state of giggling and laughter.

Effects of volatile solvents

The specific effects of volatile solvents depend on:

- the substance used
- the amount inhaled
- the method and duration of use
- the sniffer's previous experience and expectations
- the environment in which the substances are used
- the user's physical and psychological profile.

Apart from food products in pressure packs, volatile solvents have been manufactured for purposes other than ingestion. They have not been subjected to the same tests or standards as other recognised drugs. The wide range of solvents available and lack of testing makes prediction of possible effects difficult.

In spite of the above, volatile solvents have many similarities to other drugs:

- they often produce an effect that is similar to alcohol
- they are often used by young people to have fun or to relieve boredom
- they have depressant and hallucinogenic qualities
- they are often used within a social context.

And like many illicit drugs, it is difficult:

- to regulate the amount of the psychoactive substance ingested
- to know the properties of the other chemicals in a product
- to anticipate the side effects.

The longer-term effects of volatile solvent use are uncertain and the extent to which these effects are reversible is largely unknown. Substantial evidence links volatile solvent use with brain, nerve, liver, kidney, lung, blood and bone damage. Those who work with regular and chronic volatile solvent users consistently report observable intellectual, physical and psychological deterioration. Furthermore, it should be remembered that the risk of sudden death, not to mention the general toxicity of volatile solvents, infers that there is no safe level of volatile solvent use.

Possible short-term effects

Volatile solvent users may experience some of the following:

- euphoria
- uninhibited behaviour
- decreased heart and breathing rates
- loss of touch with their surroundings
- hallucinations
- nausea
- coughing
- runny or bloody nose
- eye irritation
- vomiting
- diarrhoea
- headache
- chest pains
- double vision
- tiredness
- bad breath
- lack of coordination
- ringing in the ears
- loss of appetite
- irritation, mood swings, aggression
- unconsciousness
- death.

Possible long-term effects

Users of volatile solvents may experience some of the following:

- weight loss
- hand tremors
- sores/rash around mouth and nose
- fatigue, muscle fatigue
- electrolyte (salt) imbalance
- brain, liver, kidney, blood and bone marrow damage
- impaired respiratory system
- impaired coordination and intelligence.

Dependence

Psychological dependence on solvents occurs when the need to keep taking them is compulsive. Clinicians report that it is difficult for young solvent users to stop their habit once it is entrenched.

Physical dependence occurs when the body has adapted to the presence of inhalants and withdrawal symptoms occur if use is stopped abruptly. Some chronic users, although by no means all, suffer chills, hallucinations, headaches, abdominal pains, or delirium tremors.

Sudden death

Sudden death is caused by cardiac arrest or asphyxiation.

Cardiac arrest is often referred to as 'Sudden Sniffing Death Syndrome' and occurs when the hydrocarbons in solvents increase the amount of adrenalin in the body, which in turn causes the heart rate to increase. When a volatile solvent user is startled for some reason, a sudden surge of adrenalin, in addition to the already raised levels of adrenalin, may cause the heart to jump to an irregular pattern causing a heart attack.

This is the major reason why it is best to avoid startling young people if they are suspected of using volatile solvents.

Another potential cause of sudden death from inhaling volatile solvents can occur when high concentrations of toxic chemicals cause suffocation by displacing oxygen in the lungs, or by depressing the central nervous system so much that breathing slows down until it stops. This cause of death has been commonly linked to volatile solvents such as butane gas.

Suffocation can also occur if users inhaling from a plastic bag cover all airways during use. If a person's central nervous system is slowed to the extent that they are verging on unconscious or become unconscious, the plastic bag may not be removed, restricting the flow of oxygen.

Death may also be attributable to accidents due to impaired judgement leading to reckless and dangerous behaviour.

Patterns of use

Statistics

The proportion of young people using volatile solvents in Victoria is difficult to assess with confidence. Estimates of the secondary school population who have experimented at some time range from 1% up to 25%.

If the former group is included in the figures, it is likely the number of users who have ever tried volatile solvents will be far greater than those who have used expressly for the purpose of intoxication.

A Victorian survey commissioned by the Department of Human Services "Improving the Lives of Young Victorian in Our Community" 2000 reported that 6% of young people in Victoria have ever used volatile solvents for the intoxicating effects.

The Victorian Corononers Court and the Institute for Forensic Medicine recorded 44 deaths associated with inhalants between 1991 and 2000.

While some alcohol and drug workers believe this understates the deaths caused by volatile solvent use, they indicate that the level of harm from this form of drug use is significantly lower than in the United Kingdom.

Consultations with health professionals and young people, including alcohol and drug workers, have also been consistent in the view that volatile solvent use is generally avoided by an overwhelming majority of our young population.

Consequently, while the evidence about levels of volatile solvent use is inconsistent, when it is considered in the light of:

- Victoria's relatively low rates of death from volatile solvent use
- the conflicting survey results about levels of use
- the views of many health professionals, young people, and alcohol and drug workers.

it seems probable that volatile solvent use is not widespread among young people in Victoria.

Tobacco, alcohol and cannabis are clearly preferred by young people. Less contentious findings of a 1996 survey conducted by the Anti-Cancer Council of Victoria found that:

- inhalant use peaks among 12 year olds and decreases thereafter
- girls and boys experiment with inhalants in similar proportions
- most students who use inhalants, do so infrequently.

Levels of use and gender

Slight differences occur between genders in terms of levels of use and regularity of use with some recent trends indicating an increase in the proportion of young women experimenting with volatile solvents. However, caution needs to be exercised when analysing trends because of the episodic and erratic nature of volatile solvent use.

Volatile solvent use as an indicator of problematic drug use

While research is lacking about young people and volatile solvent use, some evidence is emerging to suggest that volatile solvent use, even experimentation, is an early indicator of possible problematic drug use.

Dinwiddie, Reich and Cloninger (1987), using data from a large family study of alcoholism, found that 'Inhalant users began using other drugs significantly earlier than those without a history of inhalant use, and any history of inhalant use increased the odds of using other psychoactive drugs by factors of 5-10 fold'.

In a later review Dinwiddie (1994) cites a range of related studies before concluding, 'any history of inhalant use - even if the practice is soon given up - is an indication that the user is in a group at high risk for progression to other drug use and addiction'.

The implication for school communities is that while they want to avoid stigmatising a young person who has experimented with a volatile solvent, they may also avoid future problems by thoroughly assessing and addressing the needs of that young person.

Polydrug use

Mixing volatile solvents with other drugs multiplies the risks. Using inhalants while taking other depressant drugs, such as tranquillisers, sleeping pills, or alcohol, increases the depressant effect and the risk of losing consciousness and succumbing to coma or death.

Why young people use volatile solvents

Ask young people why they use volatile solvents and they will generally say that it is to relieve boredom or to have fun.

Ask adults why young people use and they will generally say 'peer pressure'.

Ask researchers and they will give a recognisable list of the usual suspects: age, fast intoxication, poor school attendance, delinquency, disrupted families, parent alcohol and drug abuse, weak parental influence, homelessness, lack of opportunity, low socio-economic conditions, low intelligence, psychological problems, emotional problems, weak or negative future orientations, low self-esteem, high adolescent rebellion, strong peer drug influence, and institutional care or incarceration.

However, there are some special characteristics associated with volatile solvents, and these are listed below.

Age, accessibility, legality and price

Users of volatile solvents are overwhelmingly at the younger end of the drug-use spectrum. These substances are cheap, easily accessible and legal. Consequently, those who use them as inhalants need little money, require few contacts and take relatively low risks in relation to the law when experimenting. In other words, many of the barriers to entry that apply to both legal and illicit drugs do not apply to volatile solvents. Over one thousand products with psychoactive qualities can be found on ledges and benches, and in shops, sheds, cupboards and fuel tanks.

The nature of outbreaks

While many consider peer pressure to be an important element in the use of most 'recreational' drugs, volatile solvent use seems vulnerable to rapid, intense, episodic and geographically specific outbreaks. In one region of a city a high proportion of senior primary and junior secondary school students might be using volatile solvents, while in another area there might be no reports of use. Six months later, the outbreak might be over. Many workers in the field feel that it is in part due the 'copycat factor'.

Copycat factor

The copycat factor is judged accountable for increased incidence of use when the behaviour is promoted. Promotion of volatile solvent use can occur when there is:

- → observation of others using the substances
- → discussion of the effects and methods of use
- → inappropriate reporting by the media.

The copycat factor is relevant to all drugs, however, the copycat factor with regard to volatile solvent use causes great concern because of the age group of experimenters and the accessibility of the substances.

These factors, when combined with other unique characteristics of volatile solvent use, have greatly contributed to the development of guidelines 1, 2 and 3 in section 1 of this resource.

Legal status

There is no legislation controlling the personal use of volatile solvents. However, it is an offence for a proprietor or persons to sell a deleterious substance (including volatile solvents) to another person if they know or reasonably ought to have known that these will be used in a harmful or hazardous way. The law also covers situations in which a proprietor knowingly sells a volatile solvent to a person who will pass it onto another person for use.

Police do not have the power to apprehend users, however, they have a duty of care to assist any person, including children under 17 year of age, who appear to be in need of care due to drug use.

Both police and schools also have a duty of care to ensure that young people using volatile solvents get medical attention and referral on to appropriate health professionals.

Poverty and marginalisation

While experimentation occurs among diverse groupings of young people, two indicators that seem more specific to volatile solvents than other drugs are poverty and marginalisation. The implication for school communities is that the best prevention efforts will be programs that broaden access to a range of pro-social opportunities while being inclusive and enhancing a sense of belonging.

Race and ethnicity

Volatile solvent use is significant to particular groups of people only to the extent that those groups are often socially and economically disadvantaged and/or marginalised.

Protective factors

While school communities need to be aware of the issues relating to volatile solvent use, they also need to be aware that the overwhelming majority of young people will never use. Furthermore, those who do use are most likely to do so experimentally, without progressing to habitual use of volatile solvents.

Some reasons for this may be:

- social disapproval - 'gutter-drug' status
- belief that these substances are particularly harmful
- little publicity or glorification (unlike cigarette smoking)
- unpleasant to ingest
- unpleasant side effects
- severe hangover.

Some of these protective factors may be threatened by inappropriate educational programs and/or sensational reporting by the media.

Gutter-drug status

Volatile solvents are considered by young people and many drug workers to be the lowest form of drug use. This gutter-drug status often works as a protective factor against experimentation. Some alcohol and drug counsellors make the following observations:

> 'It's definitely the lowest form of drug use. Very degrading.
>
> 'There're assumptions about what it means. Like when someone inhales fly spray everybody goes, "Yuck".'
>
> 'The process to get what you want is humiliating; like you stink.'

Once a young person becomes a regular user of volatile solvents, the gutter-drug loser status can become a risk factor, especially if the use becomes widely known. The user risks being labelled and may feel there is little option but to stay with the losers. In some instances, the gutter-drug status can even become a badge of honour; a source of identity and pride.

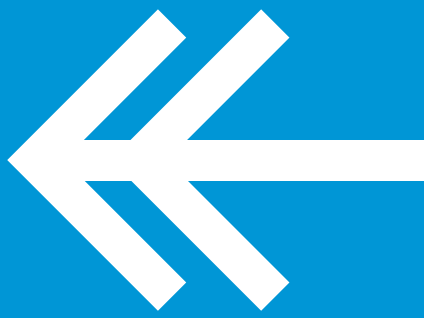
Consultations with health workers reveal the following:

> 'Regular chromers are often out of school, work and home. When developing any drug habit, a young person enters a drug sub-culture. They stop seeing their non-drug-using friends. Who young people mix with is an important part of the equation when determining behaviour.'

> 'For most young people, inhalants are a gutter drug. And for some young people that's the attraction. It's part of developing their identity. Some young people are into "grunge"; they wear their inhalant use as a badge of honour.'

The implication for schools is to avoid overreacting to volatile solvent use. Avoid sensationalising the behaviour, remain discreet and, where possible, confidential, and develop programs and practices that avoid stigmatisation.

Section 3:
Supporting strategies for schools



Response considerations

Incidents relating to the sniffing of volatile solvents might range from discovery of individual or group use, having a user at physical risk, or hearsay through a range of sources. The incident may occur during the school day or outside school hours, and may happen within or outside the school grounds. Whether or not the school is directly involved, in most instances a response will be required.

The immediate aim in responding to an incident is to ensure safety.

Advice about responding to incidents is similar to the principles for responding to other drug-related incidents, however, the nature of toxic fumes and the risk of sudden death require some special responses.

Immediate response

- → Stay calm
- → Assess the situation
- → Ensure safety and provide assistance to those overcome by effects
- → Seek further assistance, if necessary
- → Inform school administration
- → Contact parents/Guardians
- → If necessary, report the incident to the Victorian Workcover Authority (VWA)

Stay calm

A highly stressful situation combined with inexperience can pre-empt panic, and subsequent action could be detrimental. The first rule when responding to any incident is to stay calm.

Of course, nobody will feel calm; not even the most experienced street worker. Everybody feels stress when faced with a drug-related incident. The immediate challenge for a teacher when arriving at the scene of an incident is to give the appearance of calm and to help calm all others who are involved. This may be done through reassuring actions and words, by assessing the situation, removing any potential causes of further harm, and seeking assistance, including medical assistance, if required.

When volatile solvents have been ingested, maintaining a calm demeanour, and encouraging calm among others is particularly pertinent. If young people become panicked, or are startled by an unexpected intrusion, they are not only subject to the normal hazards of intoxication, they also risk 'sudden sniffing death' from cardiac arrest.

Assess the situation

Assessments are fluid processes. Rarely does a teacher or worker immediately know what to do. Appropriate action will require information. A teacher may need to gain confidence and reassure students before any useful understanding can be gleaned. While some degree of presumption can be useful, too

much carries its own set of risks. Information can be obtained through observation of behavioural and physical symptoms, as well as by 'gentle' questioning.

Questions to assist assessment

- How are you feeling?
- What happened?
- Which drugs or substances have been taken?
- By what method?
- In what quantities?
- How long ago?
- Is anybody else involved who might need help?

The willingness of young people to provide information will be aided by the teacher's ability to communicate in a supportive rather than in a threatening way and by the existing levels of trust between the school, teachers and students.

After maintaining calm and making the most informative assessment possible in the circumstances, a teacher will be in a position to fulfil the immediate aim of ensuring safety and providing assistance.

Ensure safety and provide assistance to those overcome by effects

If a person who has been using volatile solvents is unconscious, drowsy or in a semi-conscious state, has chest pains, is having difficulty breathing, has blurred vision, is vomiting, or has any other symptom that is causing concern, a teacher should:

- discourage exertion and keep the person calm (because of the small risk of sudden death)
- remove the product inhaled
- open doors and windows, if in an enclosed area
- loosen clothing to make breathing easier and clear breathing passages
- lay the person on their side to prevent vomit from being inhaled (unless the person has fallen and there is concern about a possible spinal injury)
- keep the person warm
- seek immediate medical assistance and call an ambulance
- retain the solvent and send it to hospital with the ambulance crew
- stay with the person until the effects have worn off, or until another adult takes over.

Dealing with group dynamics

Dealing with a group of volatile solvent users may be more difficult than helping a single user. Staff who are dealing with incidents need to be aware that volatile solvents can have similar effects to alcohol intoxication. Users may exhibit erratic or violent behaviour.

Group dynamics need to be considered. Users often have strong group loyalty. It may be necessary to balance the interests of all the young people in a group, respond to medical needs, maintain calm and modify erratic behaviour.

This will be best achieved by considering the following guidelines:

- → Approach in a non-threatening way
- → Try to focus your attention on those who are the most cooperative
- → Reassure the group that you only want to help; that you are not interested in punishment or discipline at this stage
- → Give constructive suggestions and avoid threats or ultimatums
- → Stay with the group
- → Engage with the group while planning the best course of action
- → Offer suggestions as to how you might help
- → Don't argue; consistently attempt to placate
- → Don't chase anybody or excite them
- → Consider the safety of all, including yourself

Seek further assistance if necessary

Further assistance might be required if there are concerns about the immediate health of students or the number of students involved.

Where possible, do not leave students unattended. Send a bystander to school administration for support. Some schools have excellent strategies in place for seeking emergency support.
These include:

- → using communication devices such as a mobile phones
- → having an emergency card that is given to another student to take to administration
- → doing yard duty in pairs

Inform school administration

An incident involving volatile solvents should be reported to school administration.

Depending on the severity and nature of the incident, it then becomes the principal's responsibility to fully document and report the incident to regional authorities and, where necessary, to the Victorian Workcover Authority (VWA). To facilitate reporting to the VWA, DE&T requires schools to notify the Department's Emergency and Security Management Branch on (03) 9589 6266 (24-hour emergency number), which will notify the VWA. For further information regarding this requirement, refer to executive memorandum 97/035.

Regional Offices and the Emergency and Security Management Branch can provide advice and support.

Contact parents/guardian

Parents/guardians of students involved in the incident should be contacted. You might also consider contacting the parents/guardians of students who were indirectly involved. This might be important if students are troubled, and it might also be a useful way of disseminating information discreetly while curtailing exaggerations.

When contacting the families/carers of young people who have been involved in a volatile solvent incident, some staff might be emotional due to the stress they have been subjected to, the risks to other students, the reputation of the school and a host of other considerations. Sometimes, it is important to take a breath and have somebody who is not directly involved make the required telephone calls. Before communicating with parents/guardians, try to put yourself in their shoes. Consider the following when planning contact:

- Parents are often traumatised when they find out that their child has used a volatile solvent.
- Apart from the dangers associated with volatile solvent use, there are also social stigmas attached.
- Parents might need some time to reflect and to talk to their child before feeling ready to decide on an appropriate response.
- Be aware that cultural perspectives influence attitudes, not only to drug use, but also to the role of schools in participating in family issues. Be sensitive to cultural perspectives and have strategies in place for communicating with parents who might struggle with English.
- The availability of information and reassuring and constructive advice might be useful.

Appendices 1 and 2 of this resource provide the following parent brochures:

- 'Advice For Parents'
- 'Information about Volatile Solvents'.

'Advice For Parents' is only for parents who suspect or know that their child has used volatile solvents.

'Information about Volatile Solvents' could be distributed more widely as a part of a parent education program.

Information is best provided to parents in person if they come to the school to discuss the issue.

Schools might also offer to organise individual or group information and counselling sessions with assistance from regional student support services officers including guidance officers and social workers, or community health professionals.

Managing the aftermath of an incident

Following an incident, personnel with appropriate experience and expertise will need to provide follow-up support. This is not to say classroom teachers and parents do not have an important role to play.

This resource helps to clarify:

- appropriate strategies
- the appropriate personnel for various tasks and roles.

To address volatile solvent use issues, it is advisable to establish an 'Incident Management Team'. In some schools such incidents would be the responsibility of the Emergency Management Team. It is the Incident Management Team's task to organise an appropriate response and access appropriate advice and expertise. Responses should be planned as part of the implementation of the '*Framework for Student Support Services In Victorian Government Schools*' and in conjunction with the school's 'Emergency Management Plan'.

The Incident Management Team may comprise:

- a student welfare coordinator
- a representative of school administration
- a year level coordinator
- a classroom teacher
- a school nurse
- student support services officers, such as a guidance officer or social worker
- a community representative, such as an alcohol and drug counsellor or other medical or mental health professional.

The Incident Management Team should:

- gather and verify information
- allocate tasks
- document information
- develop a communication strategy
- consider intervention and support
- consider sanctions
- monitor and evaluate.

The size of the team will depend on the impact of the incident and the scope of the intervention and/or restoring wellbeing strategy to be implemented. It might also fluctuate over time, depending on need. Striking a balance is important. Having a large group that is difficult to coordinate might be as limiting as having a group that is too small.

Gather and verify information

The sort of information that will assist the team to make a judgement about an appropriate strategy will include:

- what happened
- those involved
- those affected
- those who witnessed the incident
- the immediate consequences
- what the school can do to prevent future incidents
- any contingencies that might need to be covered with respect to possible future consequences

Allocate roles

When information has been gathered and the Incident Management Team is in a position to develop a strategy, various roles will become apparent. These could include:

- coordination
- documentation
- communication
- organising individual case management
- monitoring and evaluation (which may include reviewing the drug education curriculum and the development of a preventive educational response).

Depending on the strategy, some aspects of the intervention will be multi-layered and might require the services of more than one person. For example, the communication strategy might involve a range of people who might talk at a staff meeting, answer parent inquiries, handle media liaison and facilitate classroom discussions.

Document information

Documentation is necessary:

- to help clarify what happened
- to help form a consistent understanding
- as a source of future planning
- to avoid exaggeration
- for official or legal purposes.

Develop a communication strategy

Communication is an essential element in constructively handling the aftermath of an incident. A communication strategy might be necessary to inform stakeholders or deal with media inquiries.

In developing a strategy, remember that volatile solvents are considered by many young people to be 'gutter' drugs, something revolting and dirty; something bizarre and the habit of losers. While this serves as a protective mechanism for the majority of students who are aware of the practice, it also risks scorn and labelling of those students who use volatile solvents. If publicised, the incident may only serve to further marginalise students who are already disadvantaged in a range of behavioural, social and economic ways.

Paradoxically, volatile solvent use can also spread quickly among young people. As discussed in the background information, this is probably partly due to the copycat factor, as well as to the fact that volatile solvents are easily accessible, cheap and without some of the legal sanctions that apply to other drugs. Consequently, communication about volatile solvent use needs to be sensitive and carefully planned.

Inform all stakeholders

There is no formula for informing all those who are effected by an incident. Judgement is required. The following discussion gives some advice about ways of communicating with different audiences and in the process, hopefully provides useful information for a management team to consider when deciding the appropriate course of action. While communication is often a critical element when responding to an incident, issues of confidentiality and privacy are an essential part of that communication strategy.

Staff

How the school administration communicates with staff will to some extent depend on how public an incident has been. In some instances, a staff meeting might be called to advise staff about the incident, although it might not be necessary to identify the students involved.

In the best circumstances, staff will already be aware of the issues concerning volatile solvents. If they have not had professional development in this area, they will require background information about volatile solvents and related issues.

Once they are informed, staff should be given an opportunity to express opinions, and policies and procedures should be clarified. Information and some direction about procedures will encourage staff to act in a strategic and consistent way. This might be as simple as asking staff to be aware of the possibility of copycat behaviour. For example, if the solvent concerned is paint, staff might keep an eye out for paint stains on clothing and be aware of unusually bad breath and disoriented or withdrawn behaviour. Another measure might be to monitor school attendance with greater vigilance since truancy has a high correlation with drug use.

Parents

As is the case with the teaching staff, how a school communicates with the broader parent population will depend on how public the incident was that occurred. If there is the likelihood that news of the incident will be widespread, then communication is often necessary.

As the school needs to consider issues of privacy and confidentiality, it might not be at liberty to go into detail, other than to reassure parents that the incident is being attended to and the health and wellbeing of all students is being taken into consideration. A contact name and telephone number could be included for those wishing to discuss the issue further. It is often useful to enclose a copy of the school health and welfare policy, including the Individual School Drug Education Strategy, or if this seems too cumbersome, to include some of the salient points of the document. Schools might also consider whether letters should be posted directly to parents.

Students

An incident with volatile solvents will not only affect those who are directly involved, but might also have an indirect impact on others.

The likely effect is difficult to predict. If a young person who uses a volatile solvent is injured or becomes very sick, others might be deterred from experimenting with solvents and might even be traumatised. In other instances, there is the possibility that some young people will become curious and experiment themselves. To complicate things further, there will likely be a range of effects.

The effects on students and their perceptions are of central concern when framing a school response.

In some situations a group consultation may be necessary. If so, it is important to obtain expert advice. In some situations schools might consider a health professional working in tandem with the classroom teacher.

Group consultations need to be handled with great care. Schools are advised to discuss such a strategy with school administration and appropriate school support officers.

Responding to media inquiries

Media interest can sometimes increase the trauma associated with an incident. Being prepared is important. Preparation includes:

- → appointing and training a media liaison person
- → ensuring all staff are aware of the school's media liaison procedures
- → seeking regional, departmental and educational sector advice
- → when necessary, preparing a written statement
- → only releasing the statement to the media after appropriate approval
- → ensuring media liaison respects student and staff rights to privacy and confidentiality.

If additional support is needed to manage media inquiries, contact the DE&T Media Liason Unit and/or the Emergency and Security Management Branch.

The impact of media scrutiny after a widely publicised incident might be tempered by the effectiveness of the school's broader communication strategy, especially if the media has selectively reported an incident, sensationalised it, or formed debatable conclusions. A well-informed parent, staff and student population can be highly effective allies in the case of bad or misleading press.

Consider intervention and support

The Incident Management Team is also responsible for assessing the support needed by all those involved in or affected by the incident. Those affected might include the students found to be inhaling, other students who observed the incident, family and friends, staff who dealt with the immediate situation, those who provide support, including school administration and those on the Incident Management Team itself. Incident Management Teams are advised to map all those affected and develop specific strategies for the various individuals and groups identified. If debriefing is seen as necessary for some people involved in the incident, schools need to ensure that personnel responsible for this are appropriately trained.

As stated earlier, evidence is emerging to suggest that volatile solvent use, even experimentation, might indicate a heightened interest in drugs and future or existing problematic drug use.

Intervention and support for students is critical. A role of the Incident Management Team is to consider and organise this support.

Intervention should be well planned and monitored. School-based personnel need to remain aware of the limits of their role, their responsibilities and their expertise. The support of personnel with appropriate training and expertise should be used. Department student support services officers, such as guidance officers and social workers are responsible for the delivery of specialist services arising from such incidents. If expertise is beyond the capacity of the school, department student support services officers, support should be sought from the community sector. If outside expertise is engaged, schools still have a role in supporting students through the process.

Intervention programs should be based on the principals of *The Framework for Student Support Services in Victorian Government Schools* and drug treatment practice.

Case management

Case management is an intervention process for individual students. The Incident Management Team is responsible for:

- → selecting the most suitable model of case management
- → deciding who the case manager will be.

In some instances, school welfare staff in partnership with parents/guardians may be appropriate for dealing with issues. In other cases, medical and/or mental health professionals might be called in to help.

Alternatively schools might choose to establish a student support group that will develop a plan to care for students considered most at risk.

A student support group might include:

- the student
- a welfare coordinator
- parents/guardians
- a student advocate
- a health professional working with the student
- the classroom teacher or year-level coordinator

Involving the student and parents gives the young person and the family a greater sense of control, understanding and empowerment

Who would be an appropriate case manager?

In deciding who should be case managers, the quality of the relationship with the student is the first consideration. A recurring theme among alcohol and drug workers are words to the effect that a fundamental foundation of any intervention or treatment-centred approach when supporting a young person stands and falls on the quality of the relationship a support person develops with that young person. Some fundumental ingredients are trust, attitude, continuity, confidentiality, duty of care, time, perserverance and consistency. The requirements for each of these are amplified below.

- Trust: A support person needs to build trust and remain worthy of it
- Attitude: A support person needs to have an attitude that aims to build a level of mutual respect. This involves a curious and interested approach, which avoids assuming a superior position with attempts to control and dictate, but rather seeks to work with the young person
- Continuity: Implicit in any meaningful relationship is the need for continuity. Useful support is rarely enjoyed by young people who are put on the 'merry-go-round' where they move from one worker to the next. Unless someone is prepared to take some responsibility for supporting a young person over a period of time, the intervention will be doomed more often than not. Many young people have parents/guardians who make the long - term commitment. Some aren't so fortunate, and unless the school and community sectors attempt to fill the gap, the prospects for those young people are diminished
- Confidentiality: Consideration of the level of confidentiality that can be offered is important. Volatile solvent use often has a stigma attached. Intervention needs to be discreet. This includes talking to young people privately and only discussing issues with others who need to know. The process of confidentiality should be discussed with the young person, who should be fully aware of the ground rules from the beginning
- Duty of care: Under duty of care, teachers are not able to promise absolute confidentiality to

students. When there is a likelihood that students could encounter harm or danger, there is a duty to pass on information. Where issues of mandatory reporting are evident, there is a legal obligation under criminal law to act. In times when the volatile solvent use is considered life threatening, or if issues requiring a mandatory report emerge, no confidentiality can be offered

→ Time: An appropriate counselling intervention might last for one session, or it might go on for a student's entire schooling life. The amount of time available to a teacher or welfare coordinator is important when considering who should counsel a student. If the time commitment is more than a staff member has available, other options should be explored

→ Perseverance and consistency: Supporting a young person who is socially and/or behaviourally disadvantaged is a fluid process that has its successes and failures. The development of an adequately resourced plan will help staff to persevere and provide a consistent set of expectations for a young person. In turn, the young person will be more likely to develop an understanding of the school's expectations

Consider sanctions

Sanctions are a difficult issue for schools. On the one hand, to use a volatile solvent in school hours is a violation of school rules. As is the case for other drugs like tobacco or alcohol, breaking a school rule incurs a sanction. Since marginalisation and deprivation are correlated with volatile solvent use, schools might consider punishments that avoid further promoting these risk factors. Constructive sanctions involve greater supervision rather than less, and group activities with positive outcomes. Assisting with maintenance work, cleaning up the environment, gardening and other community service all fall into this category.

Perhaps the most important aim of any sanction is to get a commitment from a young person:

→ not to use volatile solvents at school

→ not to encourage other students to use volatile solvents intentionally or by accident.

Consequently, a clearly articulated agreement needs to be reached where students who have used volatile solvents comply with the above two conditions. Students need to be monitored, support needs to be given, as required, and messages need to be reiterated.

Often the best way of getting someone to make this sort of commitment is when they have acknowledged what they have done and recognised the negative effects of their actions on themselves and others. An interviewer who engages with a young person is more likely to achieve these insights than someone who gives a lecture. The most productive interview will be one that motivates the young person to willingly make a commitment.

In some cases the development of a contract between the student and the school can be useful.
A contract could include:

→ a statement of the school rule broken

→ possible harm, including harm to others, as identified by the student (health, educational, relationship, legal harms etc.)

- → strategies the student can put in place to avoid breaking school rules
- → strategies the school can put in place to support the student
- → date for follow up and review of the contract.

Monitor and evaluate

Sometimes an incident can be dealt with and the school can move on. On other occasions, the consequences will be ongoing and the Incident Management Team will need to monitor and evaluate the effectiveness of action taken for all those affected by the incident, including staff. The Incident Management Team should also be watchful for obvious signs of stress might not appear until sometime later. Consequently, the Incident Management Team should continue to meet until the intervention strategy has been implemented and a clear decision is made that meetings are no longer necessary.

The Incident Management Team should also be asked to review school prevention initiatives and to make recommendations to improve programs.

Working with young people who use volatile solvents

The importance of investigating the nature of use

As stated previously, volatile solvent use can be an indicator of many other risk factors in a young person's life, such as:

- → disorganised or multi-problem families, weakened parental influence, positive family attitudes to drugs
- → the use of volatile solvents to ease feelings of boredom, helplessness and/or depression (Volatile solvents usage also display high rates of hopelessness, anxiety, alienation, passivity and low self-esteem.)
- → poor school performance and academic development, absenteeism, early school leaving
- → anti-social behaviour. (Workers in the field report that volatile solvent users can become aggressive and regular users can be more disruptive, rebellious and antisocial than non-users. They might also belong to a peer group that is more deviant and marginalised than non-users.)

All of the above place young people at risk and require early intervention and strategies that will protect them from possible negative consequences.

Consequently schools have a role in identifying possible risk factors and facilitating intervention processes.

Talking to young people about drug issues

Teachers are not drug counsellors and can not be expected to perform such a specialised role. However, it is important to understand how they might talk to students to help determine whether a referral to a counsellor is necessary. Furthermore, sometimes teachers don't get a choice when students want to talk. To reject a student under such circumstances might be destructive.

Young people find school-based 'communication' useful when the teacher or counsellor:

- takes time to explain their role and what confidentiality they can offer
- is a good listener and easy to talk to
- shows respect and treats the student as an equal
- gives appropriate information
- takes further action
- has the ability to explore the student's world.

Assessment

When talking to a young person who has been using volatile solvents, it might be useful to avoid focusing on volatile solvent use and instead talk about:

- what they do
- their attitudes and beliefs
- the reasons for their behaviours
- their understanding of their predicament
- their plans for the future.

During this process, welfare staff or a counsellor will attempt to discover whether the young person is an experimental or regular volatile solvent user. If the young person is an experimental user, it is important to try and determine the degree of risk, provide information about volatile solvents and monitor the situation. If there is a chance that the young person will use again, or if the young person has contact with other potential users, an examination of some harm-reduction strategies might also be important.

Answers to the following questions will help to determine the degree of use as well as the degree to which the young person is at risk.

- What do you use?
- How do you use it?
- Do you use it alone or with friends?
- Tell me about a typical time that you have used. How long do the effects last? How do you feel afterwards? (It is important to find out the details of what leads to use as well as the how, when and where of a young person's use.)
- Have you ever stayed away from school to use?
- What don't you like about it?
- Have you ever tried to give it up? What happened?

- → Do you think that it is likely that you will continue to use in the future? How come?
- → Is there anything you want to tell me about? (Sometimes young people who use volatile solvents get into crime as well. If they say, 'no', it is useful to comment, 'Well, if anything changes your mind in the future and you need some help getting out of trouble, let me know'.)

During an assessment, other risk factors that can be associated with volatile solvent use, including suicidal thinking and/or other problematic behaviour, might become apparent.

If school-based staff determine that a young person is a regular user or is exposed to other serious risk factors, it is important to seek the expertise of a trained counsellor. The first port of call is to contact the DE&T guidance officers or social worker for your school or regional office. The regional office will organise for trained personnel to assist. This is particularly pertinent to crisis situations that might eventuate.

Other opportunities for accessing support include contacting the Emergency and Security Management Branch of DE&T, the Department of Human Services, local medical practitioners, the local hospital, local police or the Community Policing Squad.

Working with regular users

While much of the assessment process will be similar for experimental and regular users, the counselling process might be different. Once a young person is a regular solvent user, it makes little sense to be coy about the habit. The principles for counselling a regular volatile solvent user are similar to counselling for other drugs. As is the case for experimental users, the counsellor needs to take time to explore the regular volatile solvent user's world. As well as developing an understanding of the young person, the counsellor will be trying to establish how the young person perceives their drug use and whether they are at a point of trying to make some changes.

Timing

Timing is important when deciding when to discuss issues. Some counsellors have the ability to anticipate the mood of the young person and even at times to manufacture the 'right' climate. Other counsellors rely on patience.

Another aspect of timing is having an understanding of the young person's perspective of their volatile solvent use. When exploring options, a counsellor needs to be aware of a young person's readiness for change. Prochaska and Di Clemente developed a model of client's readiness for change by studying patterns of responses of smokers as they tried to break the smoking habit. They found that people move through the stages listed below and that intervention strategies should consider the stage a person is in.

- → Pre-contemplation - not thinking about cessation
- → Contemplation - considering drug use and cessation
- → Action - attempting cessation
- → Maintenance - continuing to abstain
- → Relapse - relapse prevention and relapse management

The counselling process

The following information is provided to inform school staff of the process a counsellor might follow when working with a young person. Knowledge of the process might also assist school-based staff to decide when a referral to counselling is appropriate, what might be achieved through counselling, and how they might better support a young person who is being counselled.

Counselling should only be undertaken by someone with appropriate experience and expertise. In some instances, a trained alcohol and drug counsellor might supervise a school-based staff member if this is considered to be the most appropriate course of action.

Together with the young person, the counsellor:

- → clarifies what the young person is doing and why they are doing it
- → develops an understanding of the young person's perceptions about volatile solvent use (e.g. the stage of the cycle; pre-contemplation, contemplation etc.)
- → explores the costs and benefits of the behaviour
- → explores harm reduction strategies
- → develops an awareness of the alternatives to the behaviour
- → motivates the young person to respond to these alternatives
- → develops strategies to pursue these options
- → motivates the young person to persevere
- → adjusts plans as circumstances change
- → develops coping strategies
- → finds effective ways of accessing help
- → reflects on progress being made.

Harm reduction

Young people who decide to continue to use volatile solvents and engage in practices that could be harmful and sometimes life threatening need to discuss possible harms and strategies to prevent these. Schools must be clear in understanding their role in helping young people to access such information.

School staff are advised to consider and, if appropriate, explore harm reduction strategies related to student health and safety, however, many harm reduction strategies are complex and beyond the experience, expertise and role of the school. Such information should be provided by trained health professionals.

Discussion of possible harm reduction strategies might take place with individuals or with a group. Working with a group is most effective when young people are consistently using together. However, where a group has only one or two regular users with the others still in the experimental stage, the decision to work with individuals or as a group is more problematic. The counsellor may decide to do both.

Initially, the counsellor needs to be aware that when discussing risk reduction with a group, he or she becomes a facilitator; not a counsellor. In other words, this is not a therapeutic session, it is a strategic session.

To begin with, the facilitator needs to take the curious and interested approach in an attempt to understand the volatile solvent using behaviours of the group. When an understanding of these behaviours has been gained, the hazards associated with that use can be examined, along with strategies for minimising these harms. For example, if young people are sniffing petrol or gas, the facilitator might inquire about the precautions the sniffers take if they are smoking.

A facilitator should also be careful to avoid assumptions. For example, while a facilitator might consider the risk of 'sudden sniffing death' to be a major issue, the sniffer might be far more concerned about bad breath, skin rashes and speech difficulties.

Risk reduction strategies might relate to:

- short-term and long-term health risks
- alternatives to volatile solvent use
- safe and unsafe places to use (e.g. away from machinery, traffic, deep water, heights and other places where accidents can occur)
- the importance of avoiding strenuous activity while intoxicated
- practices that can cause suffocation and strategies to avoid them
- the importance of minimising the risk of suffocation by not sniffing alone
- problems associated with using other drugs while using volatile solvents
- how to help friends or get help for friends who become ill or unconscious after use.

The facilitator should also be aware of those who might be seeking help to change their behaviour, but lack the confidence to do so in front of the group. These young people should be approached individually.

Once again, harm reduction strategies are best facilitated by a health worker with experience and expertise. The role of the school is to ensure student safety, provide referral options and monitor and support students.

Advice for Parents/Guardians of Children Who Have Used a Volatile Solvent

Talking to your child

Try to talk to your child in a calm and reassuring way. Anger, lecturing or a highly emotional response will not help communication. Poor communication will not help you find ways to work on solutions with your child.

A full discussion is important, but this may have to wait for a few days. Try to find out why your child tried sniffing and put yourself in their shoes. Let them know that they can talk with you. Try to show your support whatever the circumstances.

Listen when your child is talking. Try not to interrupt. An important objective in any discussion with your child is to have another discussion in the future, and not necessarily to get your child to agree with your point of view. You might also discover that your child has been trying to cope with other problems.

Other things that will help

As well as meaningful communication, parents/guardians can also help their child by:

- knowing about volatile solvents
- encouraging your child to be involved in activities where there is adult supervision and contact with a range of other young people
- finding support to cope with your child's issues (or family issues)
- showing pride in your child's achievements
- helping your child to develop confidence and social skills.

Teachers and other health professionals can help you with these things.

Parenting adolescents can be difficult

Sometimes young people go through stages when they find it difficult to communicate with their parents/guardians. This can be very true when children are entering adolescence. If your child will not talk to you, or is even abusive, hard as it might seem, try not to argue. As most parents will tell you, parenting an adolescent can be very difficult. Try to concentrate on the positive things in your child's life and, above all, persevere! At times you might be tempted to take action that on reflection could make things worse. Try to keep focused on what you are trying to achieve and not on how you feel at the moment.

Look after yourself

When trying to support a child through difficult times, parents/guardians sometimes forget about their own wellbeing. Some of the following tips might help you stay in shape for the long haul ahead:

- have a confidant
- take time out
- be realistic

→ be kind to yourself

→ seek help.

Have a confidant

Talking with someone who is supportive is often a good idea. You might get new ideas, a different perspective, or just the opportunity to get a few things off your chest. Your confidant might be another family member, a friend, a member of the clergy, a teacher or a health professional. The more you trust your confidant, the more helpful they will be.

Take time out

Make an agreement with yourself to stop thinking about your child every now and then. Do something for yourself, or with your partner or friends. Make it something that you enjoy; something that helps you to forget about difficulties.

Be realistic

Be realistic about what is possible to achieve, and what is beyond your control. In other words, do something about those things you can change or influence. Don't spend too much time speculating about things that might or might not happen.

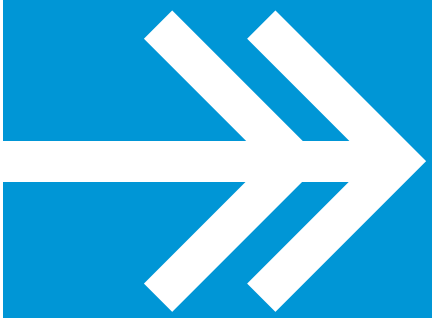
Be kind to yourself

Speak kindly and constructively to yourself. Don't blame yourself or dwell on negative things. Break things down into small steps and aim for achievements on a day-to-day basis.

Seek help

When supporting your child becomes difficult, seek help by contacting the school, or your local council or health service.

For further information about volatile solvents talk to school welfare staff or call the Drug Info Line on 13 1570.



Section 4:
Community programs

Community programs vary from a whole community approach, which requires some level of strategic planning, to partnerships between institutions, agencies and/or workers, and to liaison between workers and across sectors. They can be comprehensive, or they can focus on one aspect of welfare, such as prevention, early intervention, intervention or restoring wellbeing.

A school may become aware of use of volatile solvents by some of its students. In most instances this use will be due to a variety of social and community-based factors. Consequently, the effectiveness of any response by a school will be limited or enhanced by its relationship with its community.

A community program following the principles of harm minimisation will consider three approaches: control of supply, demand reduction and harm reduction.

Each of these can occur within a framework of prevention through to restoring wellbeing. However, when developing programs, communities should remember that fear, hope and connectedness are the strongest antidotes to volatile solvent use. Prevention of regular or problematic volatile solvent use shares similarities with conduct disorder or delinquency in the sense that two key risk factors associated with volatile solvent use are marginalisation and deprivation.

The keystones of successful community prevention programs are to:

- → 'de-glamorise' the behaviour
- → restrict supply
- → provide proactive early intervention, including the provision of opportunities to promote social interaction.

De-glamorise the behaviour

A culture should be supported where volatile solvents are de-glamorised and not seen as drugs, but rather as hazardous substances, poisons and toxins.

Restrict supply

Work with local businesses to reduce the availability of volatile solvents to young people. In one Victorian town, glue sniffing was dramatically reduced after the local hardware store moved its glue products to a position under a fluorescent light and easily visible from the check out. The quantity of each product on display was also kept to a minimum.

The Bunnings Hardware initiative

Volatile Substance Team workers and the management of Bunnings, a large hardware store in the Midland area of Perth, developed a simple, community-based strategy to reduce the incidence of sniffing-related problems in that store. These included the following:

- → Signs: 'We reserve the right not to supply certain substances to minors' was prominently displayed.
- → Staff training: The legal responsibilities of store staff was clarified with respect to the Occupational Health, Safety and Welfare Act, the Poisons Act and the Racial Discrimination Act
- → Management of sale of volatile solvents: Store staff were given a handout with simple verbal responses they could use when young people presented as definitely or potentially intoxicated.

- Liaison: Two outreach workers and local police were involved and named in the intervention flow chart given to staff.

The incidence of disruptive groups in the store fell from three a week to one and there were no problems with sniffers during a six-week follow-up period.

Staff reported feeling more supported by existing drug services and more empowered to deal with the problem.

Family and parent support

Access to family therapy and related health services, and training that teaches parents how to promote communication has been shown to be effective.

Proactive early intervention

In instances where a young person is experimenting with volatile solvents, or for some reason where there is concern about a young person or a group of young people being vulnerable to using volatile solvents (perhaps along with a range of other potentially harmful behaviours), the literature identifies marginalisation and poverty as highly correlated risk factors.

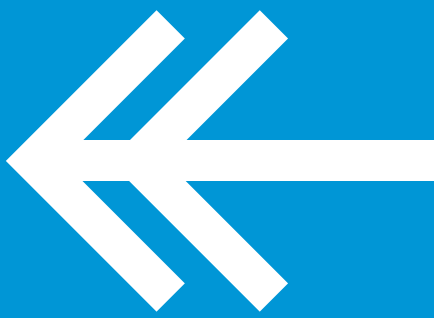
It follows that programs or activities offered by schools that will mitigate these risk factors will be those that:

- provide adult supervision
- provide opportunities for engagement in school and the community
- provide opportunities for relating to a range of non-drug-using friends
- present challenging activities
- encourage close relationships with adults, including through clubs, hobbies and mentor programs, and one-to-one discussions with preferred teachers at school
- monitor school attendance
- encourage participation in school excursions, camps and extracurricular activities.

These may include programs that encourage young people to participate in sporting clubs, creative arts programs, scouting, orienteering, spiritual groups, environmental organisations, voluntary organisations like St John Ambulance, local youth groups and the like. These activities provide supervision, positive role modelling, opportunities for positive relationships between generations, establish a range of peer networks, and encourage sociable behaviour.

Where individuals have been assessed, other programs may be seen as more appropriate.

Section 5:
Classroom Activities



Classroom Activities: Safety First - Lesson Materials for Primary and Secondary Classrooms

Classroom materials to contribute to existing protective factors that prevent experimentation with the inhalation of volatile solvents.

Contents

Safety First Part 1

Safety First Part 2

Purpose and approach

These materials have been designed to provide young people with information and strategies that will contribute to existing protective factors limiting experimentation with the inhalation of volatile solvents.

Schools are advised to treat prevention education related to the exploration of hazardous volatile substances from an occupational health and safety perspective. In doing so, care should be taken to avoid open discussion on the deliberate inhalation of volatile solvents for intoxication.

This approach differs from the approach used to teach about other drugs. There are compelling reasons to teach about volatile solvents differently. Two of the most significant factors are the potential for episodic outbreaks of volatile solvent use due to the copycat effect and easy access.

In schools where the use of volatile solvents is widespread, teachers are advised to tailor specific programs for their students. They will be able to do this by using information in the Background Information section. However, for the majority of students who do not intentionally sniff volatile solvents, we believe educating them in accordance with the activities in this appendix is the way to proceed.

Using these materials

These materials model a preventive approach to volatile solvent education while addressing CSF II learning outcomes. They are divided into two sections:

→ Safety First 1
→ Safety First 2

Safety First 1 is aimed at level 4 (upper primary) students as most inhalant experimentation occurs in the later phase of primary school and the early phase of secondary school. Provision of a program at this stage provides young people with information before the general commencement of experimentation. While these materials are developed for level 4, they can be adapted to suit the needs of level 5 students.

Safety First 2 has been designed for level 5 (lower secondary) students as activities reinforce earlier learning. It is also intended that these activities provide ideas for exploring safety strategies that should be in place in classrooms where the use of hazardous substances may be an issue.

During delivery of classroom materials, young people:

→ are alerted to the harm hazardous substances can cause if they get into eyes, are swallowed, placed on the skin, or their harmful fumes are inhaled

→ explore strategies for the prevention of possible harms.

Principles for teaching about hazardous substances

1. Conduct prevention education regarding the use of hazardous substances through an occupational health and safety perspective and avoid open discussion about the deliberate inhalation of volatile solvents for intoxication.

2. If guest speakers are invited to participate in classroom activities, ensure they understand the approach described above.

3. Lessons are best conducted by the classroom teacher.

4. Classroom teachers teaching about hazardous substances need to be aware that students may share or disclose information about the psychoactive effects of hazardous substances and need to be prepared to respond appropriately.

5. Before teaching about hazardous substances, classroom teachers should inform welfare staff of their intention and seek support if necessary.

6. All staff should be informed about the information in this appendix and the associated issues.

Dealing with student awareness or disclosure of volatile solvent use

The scenarios on which the activities in this unit are based have been designed to provide students with opportunities to explore issues without referring to personal experience. However, from time to time, students might publicly connect hazardous substances with their potential psychoactive effects. In these instances, teachers need to use judgement in controlling what is said. They are best advised to practise 'protective interrupting' and refocus the discussion on the scenario being discussed. They should follow the issue up later in a more private setting with the student/s who raised the issue and, if necessary, involve welfare staff or health professionals in appropriate intervention.

Initial activities in Safety First 1 and 2 have been included to evaluate students' existing knowledge. Teachers might also find it useful to check student perceptions by using these activities in the aftermath of any class discussion that raises concerns.

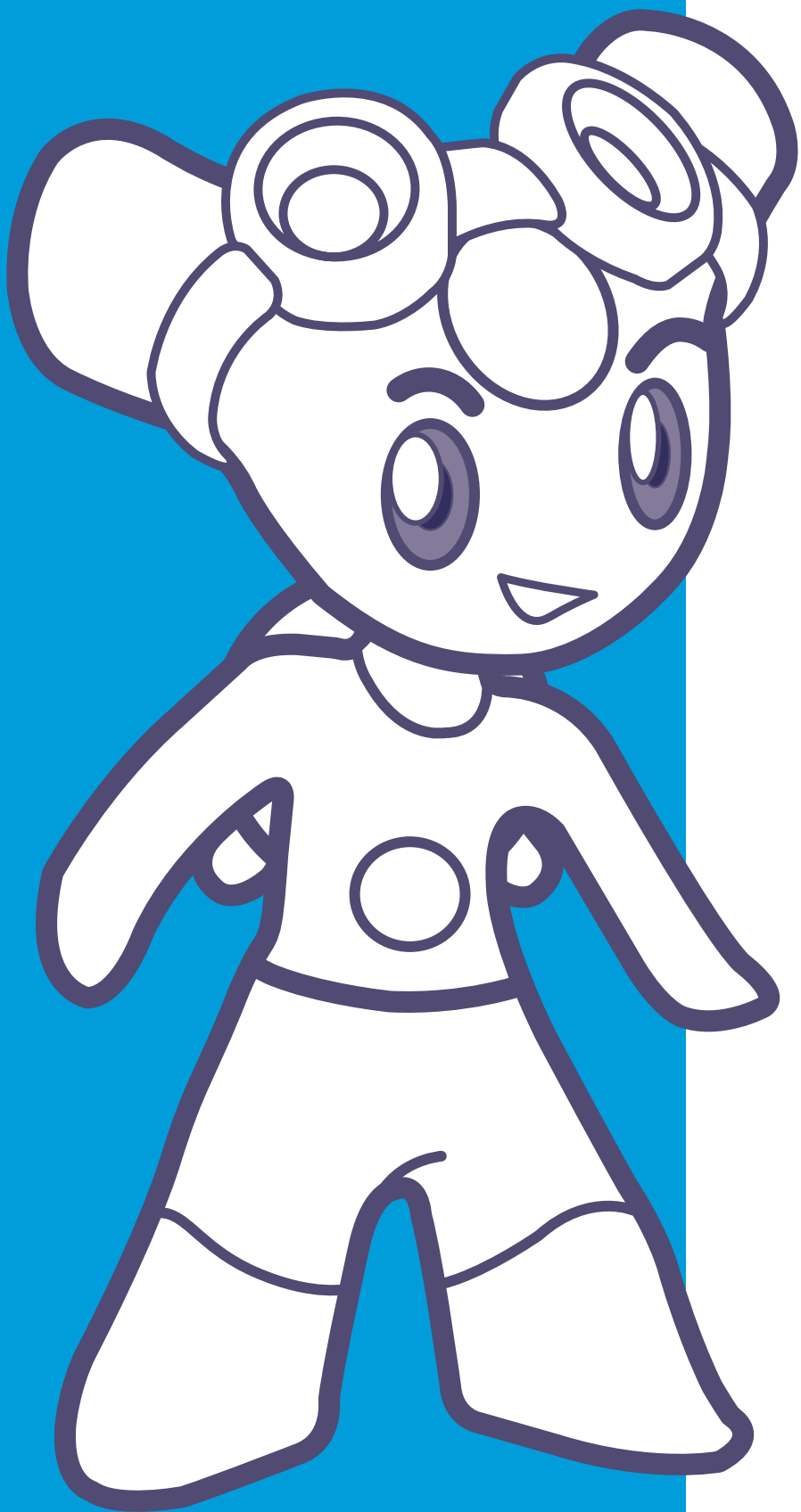
Adapting scenarios to ensure relevance to students

Due to cultural differences, the scenarios provided may not be relevant to students in all classes. Scenarios can be adapted to include characters, products, language and situations that are relevant to the lives of your students.

Safety First

Part 1

Classroom Activities



Links to CSF II - Level 4

KLA - Studies of Society and Environment

Strand - Economy and Society

Curriculum Focus
At this level students learn about factors that affect the use of resources. They study how the community defines, classifies and uses resources. They examine views about different types of work, and identify factors that make work satisfying, safe and effective. Check
Learning Outcome
SOSE0403 Analyse factors that make work at home, school and in the community satisfying, safe and effective.
Indicator
Identify factors that make work satisfying, safe and effective in a range of workplaces.

KLA - Health and Physical Education

Strand - Health of Individuals and Populations

Curriculum Focus
Students further develop their knowledge and understanding of personal safety. Learning and practising skills and strategies needed for safety in a variety of situations. They learn about their right to be safe in the home, school and community, and actions they can take if they fear for their safety.
Learning Outcome
HPIP0402 Plan and implement strategies to promote personal and environmental health and safety.
Indicator
This is evident when the student is able to: describe strategies for responding to situations that are potentially unsafe, harmful or risky in a range of settings and activities.

Unit Understandings

→ Many products used regularly around the house, garage, garden, school and workplace contain hazardous substances.

→ Hazardous substances can cause harm when swallowed, placed on the skin, if they get into people's eyes, or if their harmful fumes are inhaled.

→ There are many things we can do to prevent or minimise possible harms.

→ There are things that we can do to help people if they suffer harm as consequence of exposure to chemicals.

Health Education Competencies

→ Increased knowledge of relevant and accurate information

→ Increased student understanding of the risks associated with hazardous substances

→ Increased student understanding of strategies to minimise risks

→ Development of personal and social skills to deal with potentially harmful situations in a variety of contexts

→ Increased student knowledge and skills that equip them to take part in debate and discussions about chemical use and safety

Useful Contacts

The following organisations and agencies are able to provide useful information on hazardous substances and first aid.

→ Kidsafe (03) 9427 1008

→ Worksafe 1800 252 226

→ St John Ambulance 13 1394

→ Workcover Victoria (03) 9641 1555

→ Poisons Information Centre 13 1126

→ Royal Children's Hospital Safety Centre (03) 9345 5085

Activity 1: Warning Signs

Teachers note

Conduct this session a week before commencing the unit.

Purpose

This homework task is designed to:

→ tune students into the topic

→ encourage to examine possible dangers faced in every day living and the need for strategies to prevent these.

Resources needed

→ Worksheet 1 - Increase to A3 (see pg54).

→ A large piece of display paper with the heading, 'Warning Signs'.

→ Chemical Warning Symbols (see pg100).

Procedure

1. Ask students the following focus questions:
   → What are warning signs?
   → Why do we need them?
   → Where might they be found?
2. Explain the homework task to students.

   Over the next week, ask students to gather warning signs, or to take photographs, draw examples, or find pictures of ones that can be found around the home or community.
3. Each day ask students to share information about any warning signs found and have them attach their examples to the prepared display sheet.
4. When examples of warning signs have been collated, introduce and define chemical warning symbols and add these to the display.

Name:

Worksheet 1

Warning Signs

Instructions:

Over the next week, find examples of warning signs.

Bring them to school for our warning-sign display.

On the table below, draw some of the warning signs you find and describe why they are needed.

Warning signs found in the community

Warning sign	Reason for warning

Warning signs found around the house

Warning sign	Reason for warning

Warning signs found in the garage

Warning sign	Reason for warning

Activity 2: Harmful or Not?

Teachers note

This activity is an evaluation tool, not a discussion starter.

Students should be instructed to complete this task individually.

Do not engage students in discussion. This will help to ensure that students do not share information about the inhalation of volatile solvents.

If after conducting this session you discover that one or more students are well aware of substances that are used as inhalants, or are using a substance as an inhalant, refer to the 'Supporting Strategies for Schools' section of this resource for advice.

Purpose

This activity is designed to:

→ evaluate students' knowledge of hazardous substances

→ ensure understanding of the term 'hazardous substance'.

Resources needed

Worksheet 2 - Harmful or Not?

Procedure

Part 1

1. On worksheet 2, students:

   → indicate if the substances listed are safe or can cause harm

   → provide a definition for hazardous substances

   → list products that contain hazardous substances.

2. Collect the worksheets and use them to evaluate students' existing knowledge.

Part 2

3. Divide the class into groups.

   On a piece of display paper, instruct each group to write a definition for the term 'hazardous substance' and draw and label products that contain hazardous substances.

4. Ask groups to report back to the class.

5. Ensure students have a sound understanding of the concept.

Name:

Worksheet 2

Harmful or Not?

1. Place a blue circle around the items that are safe.
2. Place a red circle around items that could cause harm.
3. Write reasons that explain why items can cause harm.

Chocolate	Glue	Beer
Lighter fluid	Cough medicine	Vitamin pills
Oven cleaner	Headache pills	Salad roll
Paint	Coffee	Petrol

4. What is a hazardous substance?

5. List products that contain substances that could cause harm.

Activity 3: Product Search

Purpose

This activity is designed to:

→ assess knowledge and awareness of hazardous substances

→ draw attention to the vast number of products found around home, school or the community that are potentially harmful.

Resources needed

→ Magazines, store catalogues, newspapers.

→ Scissors, glue, felt pens.

→ Large pieces of display paper with the headings, 'Could be harmful', 'Not harmful' and 'Not sure' or refer to Worksheet 3A.

→ Chemical Warning Symbols (see pg100).

Procedure

1. Divide the class into groups.
2. Give each group magazines and store catalogues.
3. Instruct students to find the following:
   - → 3 products found in the kitchen
   - → 3 products found in the laundry
   - → 3 products found in the garage
   - → 3 products found in the bathroom
   - → 3 products found in the garden shed
   - → 3 products found in the medicine cabinet.

Please note

In explaining the term 'products', ask students to only include products that are chemically based and to exclude food and drink items.

4. As a group, ask students to sort their pictures under the categories of:
   - → Could be harmful
   - → Not harmful
   - → Not sure.
5. Reporting back
   - → Place the display paper with the headings on the floor.
   - → Ask each group in turn to name and place non-harmful products onto the display paper.
   - → When all groups are finished, ask if anyone would like to move any products to another group
   - → Repeat the above for the 'could be harmful' group.
   - → Repeat the above for the 'not sure' group.
   - → Try and reach consensus as to where products should be placed.
6. When consensus has been reached, ask students to place chemical warning symbols on the products displayed.

Name:

Worksheet 3A

Product Search

	Could be harmful	Not harmful	Not sure
Kitchen			
Laundry			
Garage / Garden shed			
Bathroom / medicine cabinet			
School			

Activity 4: Finding Out More

Purpose

This activity is designed to:

→ involve students in the development of the curriculum

→ extend general knowledge about hazardous substances.

Resources needed

Paper and markers.

Procedure

1. Generate a class list of questions about hazardous substances/products that can cause harm.

2. Go through the list and discuss ways to obtain answers.

3. Allocate questions to specific individuals or groups.

Activity 5: Hazardous Substances in the Workplace

Teachers note

In discussions with students you will be exploring dangers associated with hazardous substances and ways to prevent or minimise harm.

Encourage students to consider the possible effects of hazardous substances:

- → **the skin**
- → **in the eyes**
- → **if inhaled**
- → **if swallowed.**

Also encourage students to explore protective strategies, including:

- → **wearing protective clothing such as gloves, face masks, glasses, boots**
- → **keeping heat and flames away from hazardous substances**
- → **ensuring plenty of fresh air by opening doors and windows, using fans, and working outdoors.**

Purpose

This activity is designed to encourage students to focus on:

- → risks associated with hazardous substance
- → ways to prevent possible harm.

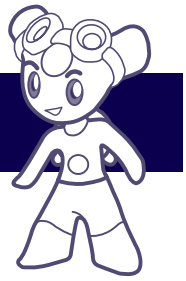
Resources needed

- → Worksheet 5A - Safety First Task Cards.
- → Worksheet 5B - Safety First Body Map (increase to A3).
- → Hazardous substance brochure.

Procedure

1. As a group explore the meaning of the term 'workplace' and how this term is relevant to all places where people work.
2. Divide the class into groups of four.
3. Provide each group with the following:
   - → Safety First Task Card
   - → Safety First Body Map
   - → Hazardous substance brochure.
4. Ask students to complete the task described on the task card.
   *** Students report back on their group work in activity 6.**
5. Homework task
   This task encourages parents and students to discuss safety issues related to hazardous substances.

Worksheet 5A



Safety First Task Cards

Safety First

People using hazardous substances need to be aware of the possible dangers and ways to prevent them.

Pesticide can cause harm if not used carefully.

Think about ways it can cause harm.

Can it damage your eyes?

Can it damage your skin?

Could the fumes be dangerous?

If you swallow it, what might happen?

Your task

Your grandmother is spraying the roses to kill aphids.

She puts the spray down to answer the phone.

Amal, your five-year-old neighbour starts using the spray.

On the body map provided, write and draw about the possible dangers.

On the back, list ways to prevent harm.

Safety First

People using hazardous substances need to be aware of the possible dangers and ways to prevent them.

Paint can cause harm if not used carefully.

Think about ways it can cause harm.

Can it damage your eyes?

Can it damage your skin?

Could the fumes be dangerous?

If you swallow it, what might happen?

Your task

Kim is spray painting a cane chair. It is a hot and humid day. She is in the garage and all the doors and windows are shut.

On the body map provided, write and draw about the possible dangers.

On the back, list ways to prevent harm.

Worksheet 5A

Safety First Task Cards

Safety First

People using hazardous substances need to be aware of the possible dangers and ways to prevent them.

Petrol can cause harm if not used carefully.

Think about ways it can cause harm.

Can it damage your eyes?

Can it damage your skin?

Could the fumes be dangerous?

If you swallow it, what might happen?

Your task

Ramesh is in the garage and has spilt a litre of petrol.

On the body map provided, write and draw about the possible dangers.

On the back, list ways to prevent harm.

Safety First

People using hazardous substances need to be aware of the possible dangers and ways to prevent them.

Glue can cause harm if not used carefully.

Think about ways it can cause harm.

Can it damage your eyes?

Can it damage your skin?

Could the fumes be dangerous?

If you swallow it, what might happen?

Your task

Maria is making dolls furniture with hobby wood and instant-stick, strong glue.

Her little brother is helping.

On the body map provided, write and draw about the possible dangers.

On the back, list ways to prevent harm.

Worksheet 5A

Safety First Task Cards

Safety First

People using hazardous substances need to be aware of the possible dangers and ways to prevent them.

Oven cleaner can cause harm if not used carefully.

Think about ways it can cause harm.

Can it damage your eyes?

Can it damage your skin?

Could the fumes be dangerous?

If you swallow it, what might happen?

Your task

Ellen is cleaning the oven with spray on oven cleaner.

On the body map provided, write and draw about the possible dangers.

On the back, list ways to prevent harm.

Safety First

People using hazardous substances need to be aware of the possible dangers and ways to prevent them.

Snail poison can cause harm if not used carefully.

Think about ways it can cause harm.

Can it damage your eyes?

Can it damage your skin?

Could the fumes be dangerous?

If you swallow it, what might happen?

Your task

Snail pellets have been placed around the garden where your baby brother plays .

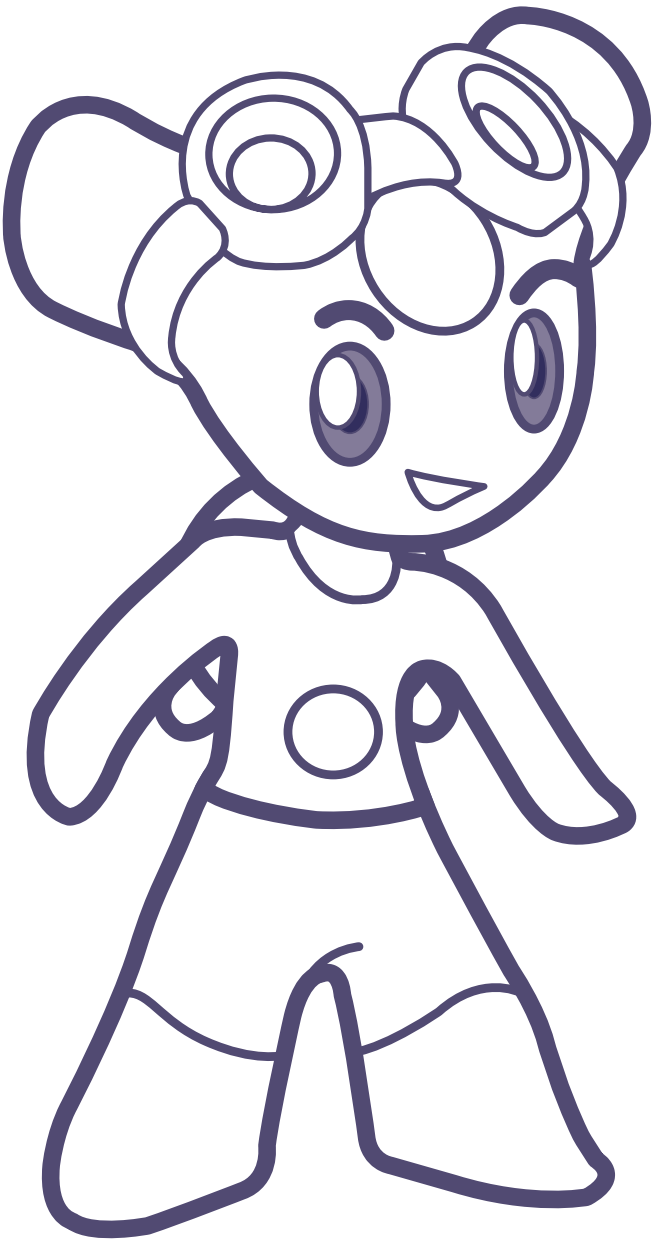
On the body map provided, write and draw about the possible dangers.

On the back, list ways to prevent harm.

Name:

Worksheet 5B (Increase to A3)

Safety First



Our product is: .....

This body map shows possible harm that could occur if safety precautions are not followed.

Activity 6: Expert Advice

Teachers note

In this activity you will invite a local expert to school to provide further information and advice.

It is essential to send them the sample letter provided to ensure your guest understands the aims of the visit and does not unintentionally discuss the inhaling of volatile solvents.

Purpose

This activity is designed to introduce a community expert who can provide further information and safety strategies.

Resources needed

→ A local professional, such as a fireman, chemist, doctor, police officer, occupational health and safety representative.

→ The sample letter provided to send to your guest/s (see pg69).
This letter confirms the visit and provides guidance for discussions with students.

Procedure

1. Groups report back on their work in activity 5.
2. Ask the class how they can be sure that safety strategies described will be effective.
3. Use brainstorming to list people or organisations that could confirm safety strategies.
4. Choose a person, or people, to invite to school who can provide further information and advice.
5. Invite guest expert/s.
6. Make copies of the work generated in activity 5 to send to the expert or experts that agree to attend.

   You can also use this opportunity to send your guest/s questions that were developed in activity 4.

Sample Letter

Dear .....,

Thank you for agreeing to visit our classroom and assisting us with the delivery of our health education curriculum.

As part of our curriculum we are exploring possible health hazards associated with the use of hazardous substances and ways to prevent these hazards.

A desired outcome of this unit is to alert students to the dangers of toxic fumes, which we hope will add to protective factors that deter students from experimenting with inhaling volatile solvents.

While this is a desired outcome, we are particularly cautious about the way we deal with this sensitive issue.

The Department of Education and Training (DE&T) has guidelines for education in this area. Schools are advised to treat volatile solvent prevention education through the exploration of hazardous substances from an occupational health and safety perspective.

Therefore, in discussions with students, please refrain from talking about inhaling chemicals for intoxication, however, feel free to explore dangers associated with hazardous substances and ways to prevent or minimise harm.

Encourage students to consider the possible effects of hazardous substances:

- → on the skin,
- → in the eyes,
- → if swallowed
- → if accidentally inhaled.

Also encourage students to explore the following protective strategies:

- → wearing protective clothing, such as gloves, face masks, glasses, boots
- → keeping heat and flames away from hazardous substances
- → ensuring plenty of fresh air by opening doors and windows, using fans, and working outdoors.

You may also like to share:

- → safety strategies you use in regard to hazardous substances
- → first-aid procedures for someone affected by chemical use.

Attached is a set of scenarios for which students have developed safety responses. Could you please consider and discuss their responses.
We are looking forward to your visit and appreciate the assistance you are providing.

Yours sincerely

.....

Activity 7: Safety-first TV Ads

Purpose

This activity is designed to be used as a tool to evaluate CSF II outcomes, unit understandings and drug education competencies described at the beginning of this unit.

Resources needed

→ Worksheets 7A and 7B (increase to A3).

→ Video camera (optional).

Procedure

1. Divide the class into groups.
2. Tell them they are going to make a TV advertisement that explores hazardous substances and safety.

   Describe the task outlined on the worksheet.
3. Ensure students show you their planner before rehearsing their advertisement.
4. Each group shows their advertisement to the class.
5. After each presentation, ask if there are any other strategies that could have been used.
6. Extension:

   Make a videotape of the advertisements. Invite parents or students from other year levels to special screenings.

Names:

Worksheet 7A

Safety First TV Ads

Your team is going to make a TV advertisement that will look at hazardous substances and safety. Your teacher will give you a situation to act out.

Discuss and plan your advertisement on the planner below.

Your advertisement must show each of the scenes described below.

Scene 1: Setting the scene

Write about:

→ What could go wrong.

→ Who's involved.

→ Where it is happening.

Scene 2: Information about dangers

An interviewer or reporter is describing the scene and pointing out the dangers.

List the dangers the reporter will comment on.

Names:

Worksheet 7A

Safety First TV Ads

Scene 3: Safety information

The interviewer is talking to an expert about safety advice.

List the advice that the expert will provide.

Scene 4: A safe and happy ending

Replay the scene with the safety strategies in place.

Worksheet 7B

Scenarios for Activity 7

Situation 1

It is a very hot and airless day. Louise is at home decorating the toilet with stencils and spray paint. The toilet windows and doors are shut.

Situation 2

Yen is cleaning the oven. He is in a hurry and not wearing rubber gloves. He has his head right in the oven.

Situation 3

Alan asks his neighbour if he can borrow some methylated spirits. The neighbour pours the metho into a lemonade bottle. When he gets home the telephone rings so he puts bottle of metho on a table near the garage. While he is away, Raymond, who loves lemonade finds the bottle.

Situation 4

Tranh is spray painting his bike in the garage. The doors and windows are shut.

Situation 5

A trades person is in your home putting new laminex on the bench tops. He is using very strong spray-on glue that really stinks. He wipes the extra glue off with a rag. Baby Michael takes the rag when the trades person isn't looking.

Situation 6

Erica is preparing to clean the shower recess with a really strong cleaner. The cleaner has bleach and ammonia in it.

Situation 7

Your baby sister gets hold of your grandmother's hair spray.

Situation 8

Paulo is in the garage filling a container with petrol. While he is walking to the door with the container, he slips on oil, falls over and knocks his head on a bench. The petrol spills everywhere. He lies unconscious in a puddle of petrol.

Activity 8: Dealing with Chemical Accidents

Teachers note

Please note that young people providing first aid might be inappropriate in some situations.

Students must be trained to ensure their own safety first and to get help from others as quickly as possible.

(See Get Real Lesson Materials for Primary Schools, Dealing with Emergencies activities for other lesson ideas.)

Purpose

This activity is designed to explore emergency and first-aid strategies for accidents that involve hazardous substances.

Resources needed

→ Contacts for first-aid advice (see pg52).

→ First-aid information sheet (see pg75).

→ Worksheet 8A and Worksheet 8B (see pg78 & 80).

Procedure

1. Divide the class in to groups of four or five.
2. Provide each group with Worksheet 8A.
3. Instruct students to:
   - → make a list of people or organisations that they can seek assistance from
   - → find out as much information as they can
   - → present what they find out to the rest of the class. (The presentation can take the form of a demonstration, play, project, poem, piece of artwork etc.)
4. Following the presentations, students make sets of postcards that describe emergency and first-aid procedures for the four situations described. The postcards can be sent to friends and family, placed in the school newsletter, or sent to local newspapers. Worksheet 8B.
   - → If someone you know got chemicals in their eyes, how could you help?
   - → If someone you know got a hazardous substance on his or her skin, how could you help?
   - → If someone you know was affected by chemical fumes, how could you help?
   - → If someone you know swallowed a hazardous substance, how could you help?

First-aid Information Sheet

General First Aid

→ Never put yourself in danger.

→ Get help as quickly as you can.

→ Call 000 for emergency help.

→ Read product labels for first-aid information.

First Aid for Poisoning

Swallowed poison

→ Do not try to make the patient vomit.

→ Pick up the container and take it to the telephone.

→ Call 000 or the Poisons Information Centre on 13 1126.

Poison in the eye

→ Flood the eye with water from a cup, jug or slowly running tap.

→ Continue for 10-15 minutes, holding the eyelids open.

→ Call 000 or the Poisons Information Centre on 13 1126.

Poison on the skin

→ Remove contaminated clothing, taking care to avoid contact with the chemical.

→ Flood the skin with cool running water.

→ Wash gently with soap and water and rinse well.

→ Call 000 or the Poisons Information Centre on 13 1126.

Inhaled Poison

→ Get the person fresh air quickly without placing yourself at risk.

→ Open doors and windows wide if safe to do so.

→ Call 000 or the Poisons Information Centre on 13 1126.

* Taken from Poisoning Advice Brochure produced by the Victorian Poisons Information Centre, Royal Children's Hospital, Melbourne, July 1999.

Activity 9: Extension Activity - Safer Alternatives

Teachers note

This activity provides opportunities to link this unit to other KLAs, such as Mathematics, Science and Technology.

Purpose

This activity is designed to:

→ develop understanding that removing hazards is an effective harm-minimisation strategy

→ expose students to a range of safer alternatives that could be used around the home or school

→ promote the use of safer alternatives within the school community.

Resources needed

→ Materials to make home-made cleaning and gardening recipes.

Procedure

1. Introduction:

   Explain to students that there are many books and home-made recipes available for making products that do not contain hazardous substances. These products are safer for people to use and are also safer for the environment. Ask the class if they know of any recipes that are used.

2. Explain to the class that they are going to prepare some of these recipes and sell the products they make at a market stall to raise money for the school.
3. Divide the class into groups.
4. Provide each group with a copy of one of the above references.
5. Ask groups to choose three recipes that are easy to make.
6. Have groups report back on the recipes they chose.
7. On the board, make a list of recipes chosen.
8. As a class, decide on a final list of products that will be made.
9. Allocate different products to various groups of students.
10. Tell the students that they also need to design packaging and product labels that are attractive and provide the following:
    - → the name of the product
    - → the ingredients, including quantities
    - → the purpose of the product
    - → the advantages of using the product.
11. Alternatively, the class could promote the use of safer products by producing a recipe book or series of recipes, which could be placed in the school newsletter.

Assessment and Reporting

When assessing this unit, there are three main sets of outcomes that are useful in assessing student progress:

→ CSF II learning outcomes

→ Unit understandings

→ Competencies in relation to effective health education.

Below are:

→ ideas to assist in this assessment

→ a sheet for recording individual student progress.

Assessment ideas

1. Activity 7: Safety-first TV Ad has been designed to use as a group evaluation tool. To evaluate individual progress, provide individual students with a Safety- first TV Ad scenario and planner. Ask them to draw and write their responses on the planner. Evaluate their work in accordance with criteria mentioned above.

2. Choose a selection of the different scenarios presented during this unit and ask individual students to:

→ identify potential dangers

→ identify safety strategies that could be used to prevent or minimise harm.

3. Provide students with worksheets 8A and 8B and evaluate accordingly (see pgs78-80).

Name:

Worksheet 8A (Increase to A3)

Safety First

1. Draw and label five products that contain hazardous substances that could cause harm if not used carefully.

Name:

Worksheet 8A (Increase to A3)

Safety First

2. Draw and label four ways that hazardous substances can harm people.

1.	2.	3.	4.

3. Describe how each of the harms above could be prevented.

1.	2.	3.	4.

Name:

Worksheet 8B (Increase to A3)

Safety First

1. The first rule in first aid should always be:

2. If someone you knew got hurt as a result of a hazardous substance, what could you do?
   Draw or write your answers below.

If someone got poison in their eyes, I could:	If someone got poison on their skin, I could:
If someone inhaled poison, I could:	If someone swallowed poison, I could:

Assessment Record

Name of student:

Sample assessment code:	Beginning = B Consolidating = C Established = E

Assessment of CSF II outcomes

		Code
KLA	**Studies Of Society and Environment**	
Strand	**Economy and Society** **SOSE0403**	
Outcome	Analyse factors that make work at home, school and in the community satisfying, safe and effective.	

KLA	**Health and Physical Education**	
Strand	**Health of Individuals and Populations** **HPIP0402**	
Outcome	Plan and implement strategies to promote personal and environmental health and safety.	

Assessment of unit understandings

Students have a sound understanding of the following:

Many products used regularly around the house, garage, garden, school and workplace contain potentially hazardous substances.	
Harms caused if hazardous substances are swallowed, placed on the skin, get into people's eyes, or if their harmful fumes are inhaled.	
Ways to prevent or minimise possible harms.	
What can be done to help people if they suffer harm as a consequence of hazardous substances.	

Assessment of health education competencies

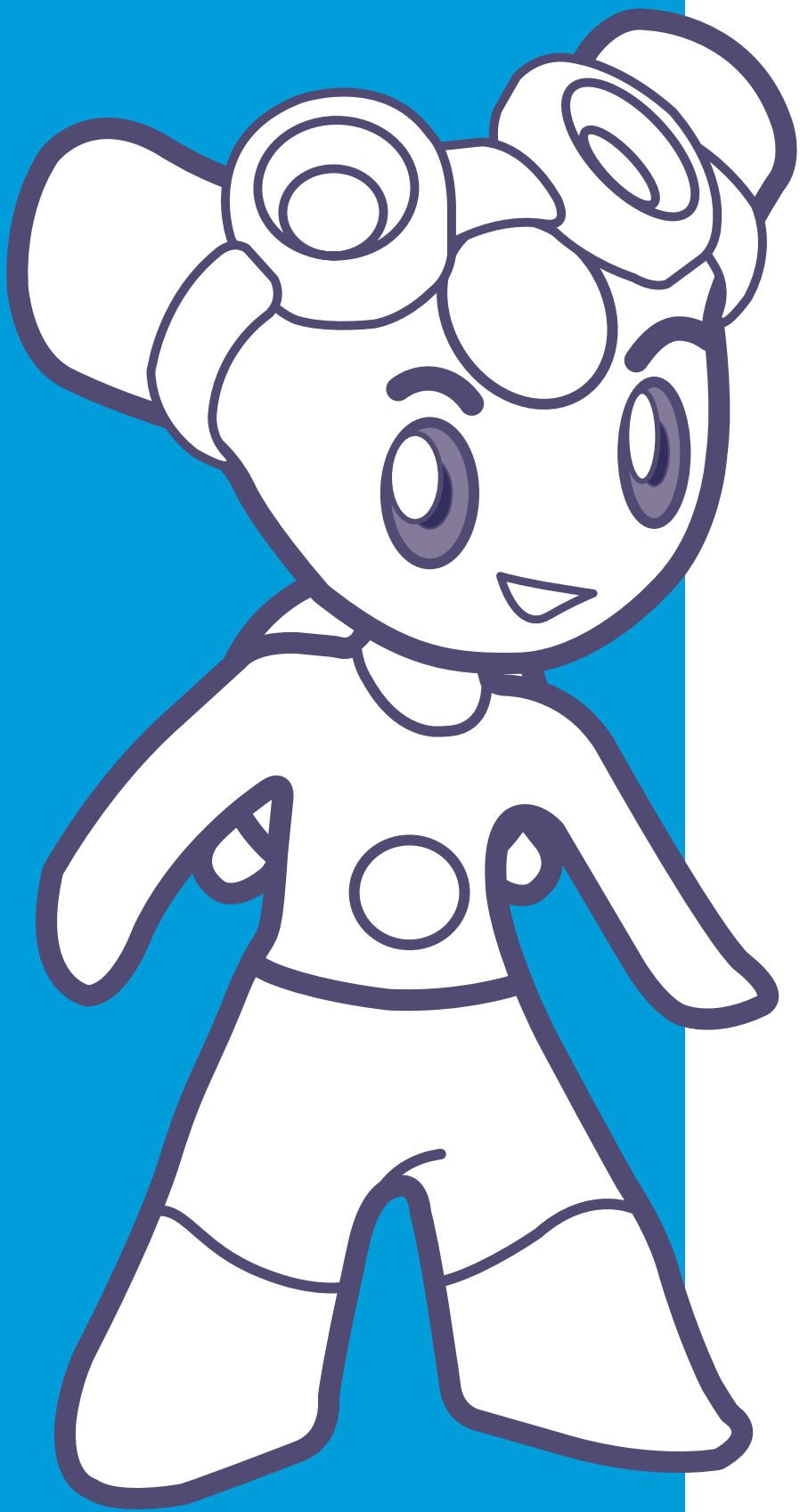
Students have the following:

Increased knowledge of relevant and accurate information.	
Increased understanding of the risks associated with hazardous substances.	
Increased understanding of strategies to minimise risks.	
Development of personal and social skills to deal with potentially harmful situations in a variety of contexts.	
Increased knowledge and skills that equip them to take part in debate and discussions about chemical use and safety.	

Safety First

Part 2

Classroom Activities



Safety First 2 has been designed for level 5 (lower secondary) students as activities to reinforce earlier learning. It is also intended that these activities provide ideas for exploring safety strategies that should be in place in classrooms where the use of hazardous substances may be an issue.

Links to CSF II - Level 5

KLA - Science
Strand - Chemical science

Curriculum Focus

They understand the need for safe handling in the use and disposal of hazardous substances in the classroom and the wider world. They can relate both appropriate and inappropriate methods of storage, handling and disposal to the properties of hazardous substances concerned.

Detail chemical hazards in the home after investigating safety warnings of hazardous substances in a range of packaged household and garden chemicals. Map HAZCHEM signs in a school or shopping precinct and recommend a counter disaster plan.

Learning Outcome

SCCS0502
Relate the safe use and disposal of substances to their physical and chemical properties.

Indicator

This is evident when the student is able to:
identify hazardous substances used in the classroom, home or community and describe and demonstrate safe techniques in the handling and storage of hazardous substances.

KLA - Technology
Strand - Materials

Curriculum Focus

Students are aware they are working with many potentially dangerous tools and items of equipment, and take specific precautions, including wearing safety equipment, such as a pair of goggles, a mask and a pair of ear muffs.

Learning Outcome

TEMA0501

Explain some of the social and environmental implications of using particular materials in products.

Indicator

This is evident when the student is able to describe and demonstrate the following for a range of products that contain hazardous substances:

→ Reasons for use
→ Possible harms associated with use
→ Safer alternatives.
→ Benefits of using this product
→ Safety strategies for the use of products

Unit Understandings

→ Many products used regularly around the house, garage, garden, school and workplace contain hazardous substances.

→ Hazardous substances can cause harm when swallowed, placed on the skin, if they get into people's eyes, or if their harmful fumes are inhaled.

→ There are many things we can do to prevent or minimise possible harms.

→ There are things that we can do to help people if they suffer harm as a consequence of using chemicals.

Health Education Competencies

→ Increased knowledge of relevant and accurate information

→ Increased student understanding of the risks associated with unsafe chemical use.

→ Increased student understanding of strategies to minimise risks.

→ Development of personal and social skills to deal with potentially harmful situations in a variety of contexts.

→ Increased student knowledge and skills that equip them to take part in debate and discussions about chemical use and safety.

Activity 1: Evaluating Prior Knowledge

Teachers note

Part 1

This activity is an evaluation tool, not a discussion starter.

Students should be instructed to complete this task individually.

Do not engage students in discussion. This will help to ensure that they do not share information about inhalation of volatile solvents.

If after conducting this session you discover that one or more students is well aware of substances that are used as inhalants, or is using a substance as an inhalant, refer to the 'Supporting Strategies for Schools' section of this resource for advice.

Purpose

This activity is designed to:

→ evaluate students' knowledge of hazardous substances

→ ensure understanding of the term 'hazardous substance'.

Resources needed

→ Worksheet 2 - Harmful or Not? (from Safety First 1 pg58).

→ Worksheets 1A.

→ Hazardous substances brochure see pg98.

→ Display paper.

→ Coloured markers.

Procedure

Part 1

1. Provide students with worksheet 2.
2. Give them time to complete the tasks described.
3. Collect their work to evaluate their existing knowledge.
4. Do not return the worksheets.

Part 2

1. Divide the class into groups.
2. Provide each group with worksheet 1A.
3. Ask the students to prepare a presentation on the following:

   → What are hazardous substances?

   → Draw and label

   - 4 hazardous substances found at home
   - 4 hazardous substances found at school (or in this classroom)
   - 4 hazardous substances found in the community.

   → How can hazardous substances affect people?

4. Students report back to the class.
5. In discussions with students ensure that students cover effects of hazardous substances:

   → on the skin

   → in the eyes

   → if swallowed

   → if inhaled.

Links: Activity 5 - Hazardous substances in the workplace. Safety First Part 1. 

Activity 2: Hazardous Substances and First Aid

Teachers note
This activity will take two sessions to complete.
Students will explore first-aid and prevention strategies for dealing with chemical accidents.

During discussions, encourage students to explore the following protective strategies to reduce possible harm:

- → **correct storage of hazardous substances**
- → **wearing protective clothing, such as gloves, face masks, glasses and boots**
- → **keeping heat and flames away from chemicals**
- → **ensuring plenty of fresh air by opening doors and windows, using fans, and working outdoors.**

See pg75 for first-aid information.

Purpose

This activity is designed to encourage students to focus on:

- → dangers of products that contain hazardous substances
- → ways to prevent possible harm
- → first aid for dealing with accidents involving hazardous substances.

Resources needed

- → Worksheet 2A - Scenarios Involving Hazardous Substances (pg89).
- → Worksheet 2B (pg90) - Hazardous Substances Task Cards (pg64).
- → Contact numbers for organisations that can provide further information (see pg52).
- → First-aid Information Sheet (see pg75).

Procedure

1. Divide the class into groups of four.
2. Provide each group with a scenario and a task card.
3. Tell the groups that they are to prepare presentations for the class that describe how scenarios could be dealt with and prevented. (Presentations can take the form of a short play, news item for television, demonstration, posters, articles for newsletters etc.)
4. Alternatively, students could develop scenarios based on possible hazardous substances that might be used in the classroom.

Extension Activity 7: Safety 1 TV Ads

Name:

Worksheet 1A

Hazardous Substances

	Could be harmful	Not harmful	Not sure
Home			
Community			
School			

Worksheet 2A

Scenarios Involving Hazardous Substances

Hot Hands

Adrian is cleaning the oven for the first time. He isn't wearing gloves. He got oven cleaner on his hands. After a few minutes his hands started to feel irritated and sore. Soon they felt like they were burning. Adrian becomes distressed and calls you for help.

Toxic Gas

Alex's mother usually uses cloudy ammonia to clean the house. Alex, is five years old. He decides to copy his mother and use the cloudy ammonia to clean his toys. As he is getting it out of the laundry cupboard, he drops the bottle and it spills all over the floor. The fumes of the ammonia get the better of Alex and he starts to have difficulty breathing. You walk in and realise that something is wrong.

Pesticide Problems

The school gardener is spraying the roses with a pesticide that kills aphids. She places the spray down when she is called to take a telephone call. Roxanne, a student at the school, picks up the sprayer and sprays two of her friends. One of her friends gets the spray in her eyes. Her eyes begin to sting really badly.

Only for Ants

It has been a bad summer for ants. Ants are always getting into the food cupboards of the Robinson's caravan. Mrs Robinson has had enough, so she puts ant tablets inside the cupboards. Rosie Robinson thinks the bright yellow tablets are lollies. She pops one in her mouth and starts to chew. She begins spitting out the foul-tasting tablet. Very soon she starts feeling sick. She tells Mrs Robinson what has happened.

Serious Slip-up

Paulo is in the garage filling a container with petrol. While he is walking to the door with the container, he slips on oil, falls over and knocks his head on a bench. The petrol spills everywhere. He lies unconscious in a puddle of petrol.

Toxic Vapour

Cheng is four years old. She has been watching her older brother Yen make a model aeroplane. He has been using a rag to wipe away the excess glue. He drops the rag on the floor. Cheng takes the rag and walks away. Ten minutes later Yen walks into the living room and sees Cheng almost unconscious on the floor. The rag is lying next to her face.

Worksheet 2B (Increase to A3)

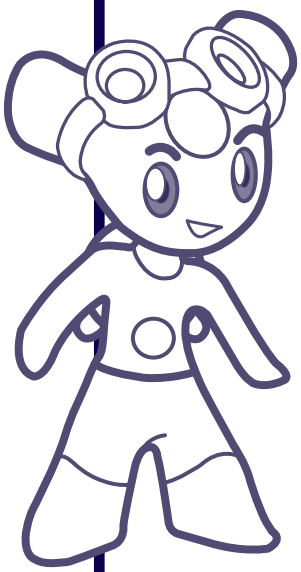
Hazardous Substance Task Card

1. Read your scenario.

2. Make a list of possible harms.	3. List what you could do to help.
4. List strategies to prevent this situation from happening.	5. How should the product in your scenario be stored and labelled?

6. How can you find out if your first-aid and prevention strategies are correct?
   - Make a list of ways you can find out.
   - Allocate tasks to people in your group.

7. Plan a presentation for the class.
8. Submit your plan to your class teacher.



Assessment and Reporting

When evaluating this unit, there are three main sets of outcomes that are useful in assessing student progress:

→ CSF II learning outcomes

→ Unit understandings

→ Competencies in relation to effective health education.

Below are:

→ ideas to assist in this assessment

→ a sheet for recording individual student progress.

Assessment ideas

Science

1. Presentations in activity 2 have been designed to use as a group evaluation tool. To evaluate individual progress, provide individual students with scenarios and a task card. Evaluate in accordance with the criteria mentioned above.
2. Following class presentations, ask students to redo individually the evaluation sheets given out in session 1. Compare and evaluate responses.
3. Choose a selection of the scenarios presented during this unit and ask individual students to:
   → identify potential dangers
   → identify safety strategies that could be used to prevent or minimise harm.

Technology

Choose a range of products and ask students to list:

→ reasons for using them

→ benefits of using them

→ possible harms associated with their use

→ safety strategies for the use of hazardous products.

Assessment Record

Name of student:

Sample assessment code:	Beginning = B Consolidating = C Established = E

Assessment of CSF II outcomes

		Code
KLA	**Science**	
Strand	**Chemical Science** **SCCS0502**	
Outcome	Relate the safe use and disposal of substances to their physical and chemical properties.	

KLA	**Technology**	
Strand	**Materials** **TEMA0501**	
Outcome	Explain some of the social and environmental implications of using particular materials in products.	

Assessment of unit understandings

Products used regularly around the house, garage, garden, school and workplace contain potentially hazardous substances.	
Harms caused if hazardous substances are swallowed, placed on the skin, if they get into people's eyes, or if their harmful fumes are inhaled.	
Ways to prevent or minimise possible harms.	
Strategies to help people if they suffer harm as consequence of chemical use.	

Assessment of health education competencies

Increased understanding of the risks associated with hazardous substances.	
Increased understanding of strategies to minimise risks.	
Development of personal and social skills to deal with potentially harmful situations in a variety of contexts.	
Increased knowledge and skills that equip them to take part in debate and discussions about chemical use and safety.	

Assessment Record

Name of student: :

Sample assessment code:	Beginning = B Consolidating = C Established = E

Assessment of CSF II outcomes

		Code
KLA	**Studies Of Society and Environment**	
Strand	**Economy and Society** **SOSE0403**	
Outcome	Analyse factors that make work at home, school and in the community satisfying, safe and effective.	

KLA	**Health and Physical Education**	
Strand	**Health of Individuals and Populations** **HPIP0402**	
Outcome	Plan and implement strategies to promote personal and environmental health and safety.	

Assessment of unit understandings

Students have a sound understanding of the following:

Many products used regularly around the house, garage, garden, school and workplace that contain potentially hazardous substances.	
Harms caused if hazardous substances are swallowed, placed on the skin, get into people's eyes, or if their harmful fumes are inhaled.	
Ways to prevent or minimise possible harms.	
What can be done to help people if they suffer harm as a consequence of hazardous substances.	

Assessment of health education competencies

Students have the following:

Increased knowledge of relevant and accurate information.	
Increased understanding of the risks associated with hazardous substances.	
Increased understanding of strategies to minimise risks.	
Development of personal and social skills to deal with potentially harmful situations in a variety of contexts.	
Increased knowledge and skills that equip them to take part in debate and discussions about chemical use and safety.	

Appendix 1: Further Reading on Volatile Solvents

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Ives, Richard & Wyvill, Barbara (1993), *Solvents, drugs and young people: a cross-curricular approach*, Daniels Publishing, Cambridge.

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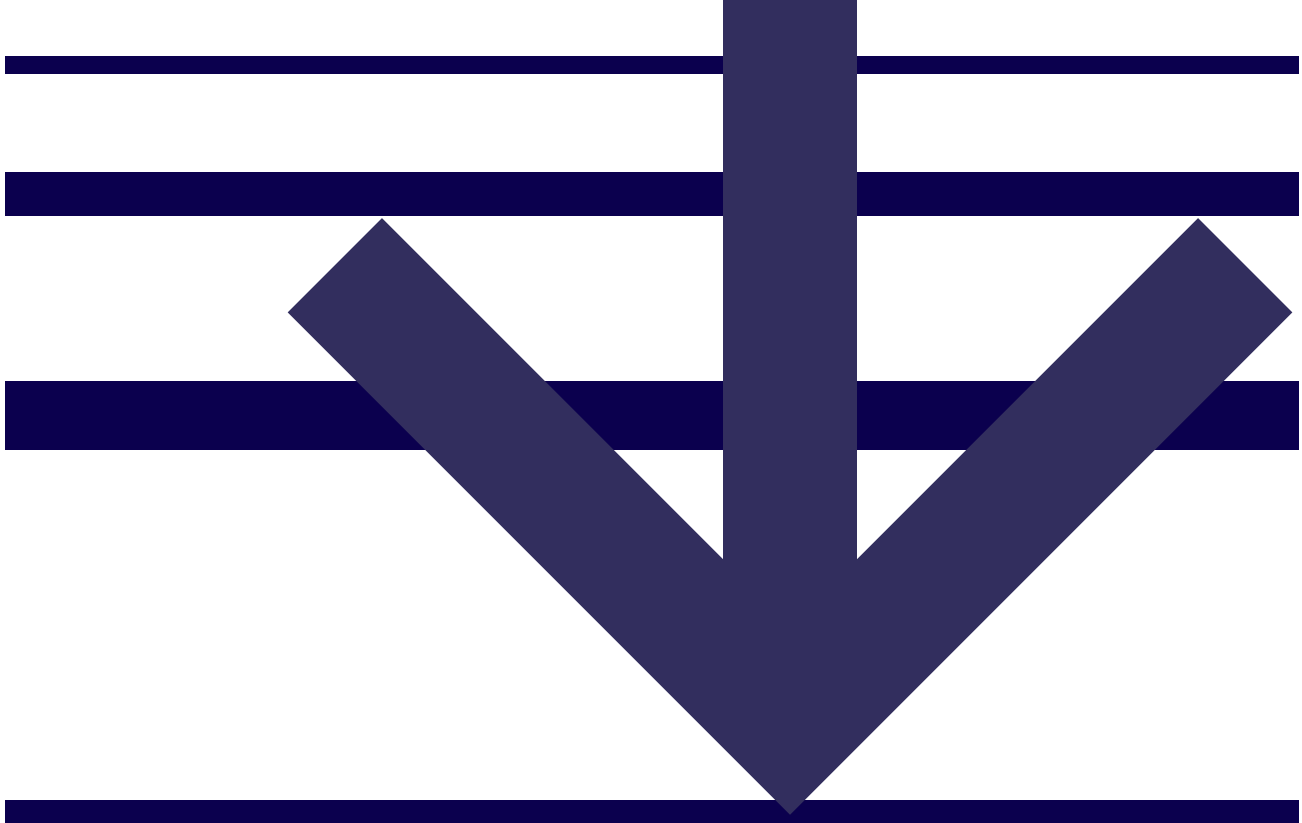

Hazardous Substances

Products with chemicals in them are used in all homes, gardens and workplaces in Australia. There are thousands and thousands of products on the market. They are used for:

- cleaning
- killing insects
- killing weeds
- curing illnesses
- preventing disease
- and a whole lot of other things.

but...**if not used properly they can cause great harm.**

This is because most products have chemicals that are classified as hazardous substances. Hazardous substances can cause huge problems if:

- they get in your eyes
- on your skin
- you inhale their toxic fumes
- you swallow them
- they are exposed to heat or fire
- they get into the environment and pollute the air, water, or soil.

If they get in your eyes

If hazardous substances get in your eyes, they make your eyes red, itchy and sore. They could even cause blindness.

If they get on your skin

If hazardous substances get on your skin they can cause skin irritations and bad burns.

If you inhale toxic fumes

If you smell the fumes of some hazardous substances they can cause dizziness, difficulty breathing and vomiting. The fumes of hazardous substances can also cause unconsciousness, suffocation and heart problems that can cause death.

If you swallow them

If swallowed, hazardous substances can cause mouth ulcers, pains in the stomach, vomiting, bad breath, organ damage, and even death.

If exposed to heat or fire

If some hazardous substances are exposed to heat they can cause fire and explosions.

If they pollute the air, water, or soil

All living things on the earth - human and non-human - need clean air, water and soil to survive. Large quantities of hazardous substances, or lots of smaller quantities all at once or over time can poison air, waterways and soil. This can reduce the quality of life, or even destroy the homes of plants and animals (including human animals).

But none of these things need happen if people:

- follow the instructions for safe use of hazardous substances
- only use them for the purpose they were made
- use safety gear, such as wearing protective clothing, gloves and glasses
- store the hazardous substances safely
- have rules in the home and the workplace to prevent injuries
- remove the hazardous substances and replace them with products that do not cause harm
- know what to do if someone needs help.

Chemical Warning Symbols

Please refer to www.worksafe.au for correct colour of the above warning signs