SOLVENT ABUSE

A GUIDE FOR PROFESSIONALS & PARENTS

Alcohol & Substance Abuse

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SOLVENT ABUSE

A GUIDE FOR PROFESSIONALS & PARENTS

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What is Solvent Abuse?
Solvent abuse is the deliberate inhalation of gases, chemical fumes or vapours in order to get a “high” or “buzz” similar to the intoxication produced by alcohol. Solvents are chemicals which change from liquid form into gases or vapours at ordinary room temperatures. A variety of terms are used to describe the practice such as “glue sniffing”, “solvent abuse”, or, technically, “Volatile Substance Abuse” (VSA). The term “glue sniffing” has been widely used in the media but is inaccurate for two reasons; firstly, a wide range of solvent-containing materials is used and secondly the material is not sniffed but actually inhaled deeply through the nose and mouth into the lungs. In this publication the term “Solvent Abuse” will be used throughout. While the involvement of young children and teenagers is a recent worrying trend, the use of chemical vapours and fumes to obtain a drug experience is believed to go back to pre-historic times.

The products abused
Many common household and industrial products, which are perfectly safe when used correctly, can be abused. Among the products which are known to be abused are the following:

- Anti-freeze
- Cigarette lighter fuel
- Dry-cleaning fluids
- Halon Fire Extinguishers
- Gas canisters and bottles
- Glues
- Hair lacquer
Insect sprays • Marker pens • Model aeroplane cement • Nail varnish and remover • Pain killing sprays • Paint thinner and stripper Paints and lacquers • Petrol • Plaster remover • Printing Industry solvents • Room and body deodorants • Shoe dyes, conditioner and polishes • Typewriter correction fluid and thinners.

These products contain a variety of different chemical solvents as shown in Appendix 1.

Who are the abusers?
Solvent abuse is primarily an adolescent phenomenon although it has been reported in younger children and in adults. Surveys indicate that the highest levels of experimentation with solvents are in 15 and 16 year olds. While it is widely believed that solvent abuse is confined to deprived inner city areas or to certain social classes, studies of large numbers of solvent abusers show that children from every social class and family background can become involved for a variety of reasons.

Why do they abuse?
Teenagers who have abused solvents report that it is exciting and that it made them forget the cares and troubles of growing up. Other reasons include curiosity, response to peer group pressure, attempts to gain status, to compensate for low self-esteem and feelings of inadequacy. Solvent abuse is usually a group activity which provides thrills and pleasure in situations where boredom is rife. It has the double attraction of involving risk taking and the breaking of
adult rules, features which are important to some young people. It must also be borne in mind that the substances used are cheap to buy or easy to steal and if one product or brand is unavailable then another can be easily substituted. For many young teenagers solvents are more easily available than alcohol.

People who inhale solvents fall into 3 broad categories:

1. Experimental users
2. Sporadic users
3. Chronic users

The largest group are the experimenters who try solvent abuse in a group once or twice and then stop. Either their curiosity has been satisfied, they felt sick or dizzy, their parents found out or the peer group was no longer interested. The activity is therefore very much a passing fad. The main risk to this group arises from the short-term hazards of the solvents.

The second group consists of those who continue to abuse solvents after the initial experimentation but on an occasional basis. The abuse is almost always a group activity which often stops of its own accord when the peer group
moves on to some new activity. Boredom can be a major contributory factor and if more pleasant or acceptable activities are provided, the abuse tends to stop. This group also is most at risk from the short-term dangers.

The third group is the smallest in that only a small proportion of those who ever try solvents (10% in one study) will continue their involvement on a regular, often daily, basis. For these teenagers and young adults, solvent abuse is not usually a group activity because they tend to indulge alone, often spending hours each day in an intoxicated state. It is this group which is at greatest risk not only from the short-term dangers but also from any possible long-term health effects. Many persistent, solitary sniffers have been found to be emotionally disturbed, immature, anxious, shy, tense or depressed. Some suffered from emotional deprivation and feelings of rejection, with a poor ability to deal with the frustrations and problems of life. A number had prior involvement in anti-social activities such as vandalism and theft.

**What do they do?**

A variety of techniques are used to increase the effect of the solvent by increasing the concentration of vapour and/or excluding the presence of air. Abusers can inhale the product from a soaked rag, a coat sleeve or lapel, a handkerchief, cotton wool, pillow or from a bottle. Typically some of the material is placed or sprayed into a plastic or paper bag (e.g. empty crisp packet) which is then held over the face, nose or head. Some people heat a product such as glue to release the vapours more quickly. For many products it is the vapour given off by the product which is used and the product itself, e.g. glue, is not ingested into the body. However, the reverse is often the case with the gas fuels and aerosols which are sprayed or released from the containers directly into the mouth.
What are the effects?
The intoxicating effects of solvents are similar to those of alcohol but they occur much more rapidly. This is because after inhalation, the solvent is absorbed very rapidly because of the large surface area of the lungs and the high blood flow through them and it is then delivered directly to the brain. Respiratory depression (slowed and difficult breathing) can occur because of the anaesthetic effect of all solvents on the central nervous system. Hallucinations — which range from extremely frightening to mild and pleasurable — distorted vision, delusions, clouding of consciousness and delirium may occur. Judgement may be impaired especially if alcohol is consumed at the same time and behaviour may be aggressive and uncharacteristically violent. These effects are short-lived and disappear within a few minutes to half an hour after inhalation stops. Abusers may therefore be able to conceal their activities although the smell of glue, in particular, may last on the breath for up to a day. A “hangover” with headache and poor concentration may occur but it has been described as less severe than that caused by alcohol.

What are the risks?
1. Sudden death
Sudden death can occur because of the direct, poisonous effects of particular solvents. A major concern in relation to such deaths is their unpredictability — because death can occur even the first time solvents are used.

In Ireland, butane gas has been involved in the most recorded deaths, followed by aerosols and typewriter correction fluid. Abuse of these substances may cause cardiac arrest if the abuser becomes stressed or engages in strenuous physical activity. The direct spraying of aerosols and butane gas into the mouth seems to be a particularly dangerous practice.
2. Accidents

Accidents (some fatal) can occur in a number of ways. Some abusers become unconscious and choke when they inhale vomit. Others are suffocated when they place a plastic bag over their heads and become either too intoxicated to remove it or else become unconscious.

In dangerous locations (e.g. high buildings, derelict sites, railway embankments, river or canal banks) accidents such as drownings, falls or burns (due to the flammability of the solvent) may take place. Such accidents are most likely to occur if the abuser is alone, because no one is available to summon help in an emergency.

3. Long-term damage to health

The results of surveys of chronic solvent abusers are reassuring in that they show that physical organ damage is not a significant or widespread problem for most abusers. Although the medical evidence is inconclusive at present it is known that some chronic abusers do suffer physical damage to their heart, brain, kidneys and liver. The degree and duration of abuse required to produce such harm is unknown but several years of regular abuse appears to be necessary.
4. Behavioural Problems
A range of anti-social and behavioural problems can arise from solvent abuse. Solvents, like alcohol, depress the part of the brain which controls judgement and self-control. It is easy to understand therefore that any existing violent tendencies could be released under the influence of solvents in the same way that some adults can become aggressive and violent after a few drinks. Shoplifting, other thefts and burglary are used to obtain money to buy solvents or more frequently the products themselves are stolen.

Family disruption is a common problem — due to the difficulty of having to deal with a child intoxicated with solvents, assaults on members of the family, legal difficulties resulting from the abuse and failure of the child to return home at night. Many parents are also frightened that their other children may imitate the abuser and start experimenting.

Other behavioural effects from solvent abuse include absenteeism from school ("mitching"), followed by a deterioration in their school performance with many chronic abusers dropping out of school altogether.

5. Dependence and addiction
A small number of solvent abusers find it difficult to give up the habit, though whether this dependence is psychological or physical in origin is largely unknown. Most habitual users develop tolerance to solvents and must inhale larger quantities to get the "buzz" or "high". Withdrawal symptoms including sleep disturbance, nausea, stomach cramps, general irritability and facial tics may take some weeks to occur.

6. Progression to other drugs
There is no firm evidence to suggest that solvent abuse leads directly to the abuse of drugs such as cannabis,
heroin or cocaine. Solvent abusers are more likely to move on to use and abuse alcohol than illegal drugs. A large number of solvent abusers already smoke cigarettes and drink alcohol, many reporting that these two drugs are used to enhance the effect of the solvent.

The problem in perspective

"While there are no complete statistics on the extent of solvent abuse in Ireland, the problem seems to be less than some other countries such as Australia, Britain and the U.S. However, surveys of Irish schoolchildren indicate that the numbers involved have increased since 1980. A survey of almost 2,000 second level pupils in the Dublin area showed that the percentage who had ever tried solvents had risen by 6% to 19% of pupils in 7 years. However the current use of solvents had declined from 5% to 3.9% in the same period. These figures are slightly less than those for cannabis but are significantly lower than the numbers of teenagers admitting the use of alcohol and cigarettes.

Deaths from solvent abuse have been reported from all parts of the country and involve all socio-economic groups. Young people are far more likely to die in road accidents than they are to die from solvent abuse. This attempt to put the extent of the problem and its dangers into some type of perspective is meant to provide a degree of reassurance to those parents whose children may be experimenting with solvents. It is not meant to justify any complacency about the serious risks to which even the first time solvent user is exposed."
A community response to solvent abuse necessitates the development of a comprehensive strategy to meet local needs based on an assessment of (1) the number of children involved; (2) the types of products being abused; (3) the likely sources of supply and (4) what is happening to the abusers. This is not an easy task, but it would be possible if the local community had an informal network of all those concerned with young people and their well-being. Such a network could be developed in the context of the DRUG QUESTIONS — LOCAL ANSWERS? course material produced by the Health Promotion Unit. A strategy arising from such local discussions could involve a range of activities as shown in Table 1 (page 16). In preventing any form of substance abuse it is essential to tackle the supply and demand aspects simultaneously.

**Reducing the supply of solvents**

Over the years a number of suggestions have been made to reduce the supply of solvents to young people. These include:

(i) Reformulation (removing the solvent from the product). However, the range of abusable products is so vast that removal from every one would be impractical.

(ii) Incorporation of repellent substances. These however may make the product unacceptable for its recommended use e.g. deodorant.

(iii) Warning notices on the products. These may be
successful but they may also draw attention to the abusable nature of the product.

**Legislation to reduce supply.**

"Because the many products containing solvents have such varied, legitimate and perfectly safe uses in the home and in industry, it is difficult to legally restrict access to all of them by potential abusers. However as a result of public concern over the extent of solvent abuse, the Government included solvent abuse in the 1991 Child Care Act. Under Section 74 of this Act it is an offence for any person to sell, offer or make available any substance to persons under 18, which they know, or have reasonable cause to believe is likely to be inhaled for the purposes of causing intoxication. Anybody found guilty of this offence is liable to a fine of up to £1,000 or to 12 months imprisonment or to both. This Section also permits a Garda to seize any substance in the possession of a child in a public place, which the Garda has reasonable cause to believe is being abused by that child. Any product seized in this way may be destroyed on the instructions of a Garda Superintendent.

Because of the wide range of products which could be abused, the Act does not specify any particular product or categories of products, restricting instead all substances which can lead to intoxication if inhaled.

While retailers in particular will have to be aware of this legal provision, it is vital that parents, schools, factories and garages all play their part in reducing access to abusable products by young people".
Reducing the demand for solvents

Because it is unlikely that the availability of solvents can be restricted completely, efforts must therefore be made to reduce the demand for them. This can be done by making solvent abuse less attractive to adolescents, by education in schools which helps teenagers resist peer pressure to use solvents, by increasing the self-esteem of youngsters and by providing teenagers with alternatives to solvent abuse.

The role of the school

Each school in consultation with parents and management should develop its own policy in relation to:

(a) preventive education, and
(b) dealing with an outbreak of solvent abuse.

If guidelines on informing parents, disciplinary procedures and referral are available, it can greatly help if and when a crisis occurs.

A useful first step is for the teachers to become educated about:

(1) the products abused
(2) their effects
(3) the signs and symptoms
(4) the techniques that are used.

If an incident does occur it is important that those in authority avoid using scare tactics.

It is preferable to include education about solvents in an existing school programme, e.g. health education, pastoral care, home economics, rather than treating solvent abuse as an isolated issue.

In the context of these existing programmes, students can be helped to develop self awareness, self esteem and decision making skills that enable them to make sensible decisions.
rejecting solvents and other drugs when presented with the opportunity to use them. Young people have a right to know the consequences of abusing solvents before they can make a rational decision. Information on the risks must be accurate; the unpredictability of sudden sniffing deaths can be emphasised. Negative aspects, such as the smell, rash and general dopiness involved in solvent abuse, as well as the vandalism and violence resulting from the practice may have more immediate relevance than physical damage to the body. It is NOT ADVISABLE to include information on the different products or on the techniques of sniffing. If, as it appears, the peak age is between 15 and 16 then it seems necessary to tackle the problem in both Primary and Secondary school. At primary level it might be useful to look at solvent abuse in the context of dangers facing young children in the environment, linking it to the dangers of poisonous berries, tablets etc.

**The role of parents**

Parents can help their children feel secure as individuals so that they are not forced, through feelings of inadequacy, anger or frustration, into potentially destructive solvent abuse.
Many young people who became chronic abusers have stated that solvents helped them overcome these feelings; but the reality is that solvent abuse will compound rather than solve these problems. Teenagers wish to develop their independence of their parents but they still have a need to feel loved, wanted and secure. It is important for parents to keep open two-way lines of communication with their teenage children through honest discussion on all topics including solvent abuse.

Because boredom is a contributory factor in experimentation with solvents for many teenagers, it is important to encourage children in the proper use of leisure and recreation.

**The role of the media**

The media can contribute to a reduction in the size of the problem by avoiding sensational reporting of incidents which can arouse curiosity about what appears to be a "novel" activity. Apart from de-sensationalising the problem, the media can also be of enormous help by not reporting products abused by brand name or type, using instead the general description "solvent". In the same way it would be helpful if actual techniques of inhalation, particularly if they are unusual, were not described in detail. It can be helpful to stress the unpredictable nature of the accidents and sudden deaths which occur when solvents are abused. Accurate reporting of the fact that the vast majority of young people are not involved in solvent abuse can help reduce peer pressure on young people to start using solvents.
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<th>Objective</th>
<th>Target</th>
<th>Method</th>
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<td>Reduce availability</td>
<td>Parents, Retailers, Manufacturers, Schools, Hospitals, Garages</td>
<td>- Keep solvents secure&lt;br&gt;- Limit access (behind counter)&lt;br&gt;- Warnings to Retailers&lt;br&gt;- Legislative Measures</td>
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<td>Increase resistance to experimentation</td>
<td>Non-abusers and experimenters</td>
<td>Health education: e.g.&lt;br&gt;- to resist offers&lt;br&gt;- provide alternatives&lt;br&gt;- increase self-esteem</td>
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<tr>
<td>Increase competency to deal with the problem</td>
<td>Teachers, health educators, medical personnel, social and community workers</td>
<td>- Professional and in-service training&lt;br&gt;- community-based action</td>
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<td>Harm reduction</td>
<td>Regular solvent abusers</td>
<td>Crisis intervention&lt;br&gt;Counselling&lt;br&gt;Early recognition</td>
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adapted from "Dealing with Solvent Misuse" TACADE.
The identification and recognition of a solvent abuse problem in an adolescent or young adult is frequently not an easy task. Solvent abuse is comparable to other forms of adolescent drug taking where some signs, linked with drug abuse, may also have perfectly innocent explanations related to normal adolescent development. In addition some of the physical signs associated with glue sniffing may not be relevant in situations where gas or aerosols are the products of choice. While it is essential that harmful and potentially fatal behaviours are identified as early as possible, it is equally vital that parents and other authority figures should not wrongly label a child as a solvent abuser.

**General signs and symptoms**

Among the signs which have been found useful are:-

1. Drunkenness.
2. Hallucinations.
3. Erratic or violent behaviour.
4. Fixed stare, blurred or double vision.
5. Restlessness, tiredness and lack of energy.
6. Groups of teenagers congregating in out of the way places.
7. Tubes of glue, gas canisters, aerosol sprays etc. found in unusual places such as waste ground, derelict buildings or hidden in the home.
8. Smell of solvent on breath or traces of solvent on the cuffs of jackets, on lapels, handkerchiefs, rags or in crisp packets, plastic bags or bottles.
9. Spots, boils or a red ring around the mouth and nose. ("Glue sniffer’s rash").
10. Persistent cough, runny nose and eyes.
As well as the general signs, the following groups might notice some or all of these additional signs:

**Parents and Residential Care Workers**

1. Unusual and extreme mood swings.
2. General air of secrecy about activities.
4. Withdrawal symptoms.
5. Smell of solvent in inappropriate parts of the house.
6. Unexplained burns.

**Teachers**

1. Increased truancy.
2. Habitual lateness for school with the pupil appearing tired, moody and irritable.
3. Sudden decline in school performance.
4. Unusual lack of attention in class.
5. Small groups congregating in bicycle sheds or remote parts of the school yard at break times.
6. Rowdy or unusually silly behaviour in class after breaks.
7. Unexplained loss of consciousness in class.

**Youth Leaders**

1. An unexplained falling off of membership or attendance.
2. A disinterest in organised activities, excessive horseplay and lack of co-operation with leaders.
3. Groups disappearing during the evening and reappearing later in an elated, “high” or dazed and unsteady state.
4. Reports of rowdyism, vandalism and clashes with the Gardai or general public after club meetings.
5. Court appearances of members who previously would not have been involved in delinquent activities.
6. Information learned from other members of the group, club or organisation.
General suggestions

1. The vast majority of young people who abuse solvents will require the minimum of treatment because they are either experimenters or sporadic casual users who will emerge unharmed from the experience. This does not mean that the behaviour of these children should be ignored. There are serious short-term risks involved and early intervention is needed to prevent the development of chronic abuse. It is the long-term abusers who are most at risk and in most need of intervention and assistance.

2. Some chronic abusers may need medical tests for brain, kidney or liver damage.

3. Specialist referral may be indicated in serious and difficult cases but most Social, Community and Youth Workers, Family Therapists and Child Guidance Counsellors already possess the necessary skills to deal with both solvent abuse and the emotional, personal and family difficulties which are often the "real" problems.

4. There is general agreement among those with experience of dealing with chronic abusers that there is an absolute need to involve the whole family in the treatment and recovery process.
Suggestions for parents

1. Do not send your child to buy solvent-containing products in local shops on your behalf.

2. If you find your son or daughter abusing solvents, do not panic! Avoid losing your temper. Your over-reaction could result in a sudden death. Follow the emergency procedures outlined on pages 35-37.

3. Don’t assume that it’s a “once off” situation — it may just be the first time they have been caught. Get advice as soon as possible from one of the individual services or groups listed in the resource section.

4. When the child is sober, find out in a caring but firm way what type of product is involved, how long the abuse has been going on, and how often the abuse has been taking place. Find out why they are abusing solvents: it may be related to anxieties about growing up, school, friends, the family or a need for excitement.

5. Be patient no matter how angry or let down you feel. Resist the understandable impulse to punish your child; it does not seem to do any good and may make matters worse. Listen and talk with your children without criticising or accusing them. When talking about solvent abuse, concentrate on the risk of accidents and delinquent behaviour.

6. Consider the following general points:-

   Spend time with your children  
   Involve them in healthy activities and hobbies  
   Show affection regularly  
   Allow them to express their own personalities  
   Encourage them to bring their friends home

Remember you have a tremendous influence for good on your children. Give them good example by being involved yourself in healthy leisure activities and avoid bad example such as smoking, excessive drinking and the inappropriate use of medication.
Suggestions for Youth Leaders

1. Know the signs and symptoms of solvent abuse. If you find a member abusing solvents, do not panic! Your over-reaction could result in a sudden death. Follow the emergency procedures on pages 35-37.

2. Consider carefully the question of expulsion of abusers from the club or group. While you have a clear responsibility to members who are non-abusers to help them stay that way, you also have a unique opportunity to help prevent further abuse by creating situations which minimise feelings of loneliness, inadequacy, boredom etc.

3. Arrange to discuss solvent abuse with those involved, in the less threatening atmosphere of the club. Use the "Solvent Abuse Programme" resource pack available from the National Youth Council to educate them about the effects and risks in a reassuring non-condemnatory way.

4. Organise alternative activities for those times when you have reason to believe that solvent abuse is most likely to take place. Provide something new and interesting to show ways of gaining excitement which are less hazardous than solvents.

5. It may be appropriate to advise teenagers about first aid procedures in the event of an accident involving one of a group of solvent abusers.
Suggestions for Schools and Teachers

1. Know the signs and symptoms of solvent abuse. If you find a pupil abusing solvents, do not panic! Your overreaction could result in a sudden death. Follow the emergency procedures outlined on pages 35-37.

2. Remember that solvent abuse is usually a group activity, so try to avoid picking on just one or two individuals and ascertain who else is involved.

3. If you learn or suspect that a pupil is abusing solvents, inform the Principal and contact the parents. Do not promise unrealistic confidentiality to the youngster. If you are uncertain about your “diagnosis” you should focus on the behavioural or academic difficulties which have arisen, without making a direct accusation which may be wrong or which may create antagonism. Refer the parents to an appropriate counselling agency.

4. Recognise that forbidding the practice will not stop it. Reduce its appeal by attacking its attractiveness. Avoid sensational or emotive lectures on the dangers of solvent abuse. Divert solvent abusers into other channels, recognising the need many young people have for excitement and access to new experiences.

5. Plan a coherent strategy of health education before problems occur.

6. Be vigilant about abusable products in Science Labs., Woodwork Rooms etc. In Boarding Schools the use of aerosols should be discouraged.

7. Teachers with experience of having to deal with an outbreak of solvent abuse in a school feel that it is preferable not to punish children involved unless there is continuing disruption of the class. In such cases the normal disciplinary procedures should apply.

8. It may be appropriate to advise teenagers about first aid procedures in the event of an accident involving one of a group of solvent abusers.
Suggestions for Social Workers and Probation Officers

1. Have confidence in the skills you already possess, and learn as much as you can about solvent abuse.

2. Encourage the child to talk about their attitudes to solvents, their friends, their families. Correct any myths and misconceptions the young person may have about the effects of solvent abuse.

3. Counsel the chronic abuser on ways of modifying behaviour and on how to plan gradual weaning away from the habit. Advice on diet, hygiene, daily routine can be useful in increasing self-esteem.

4. Work with and support the family throughout the recovery period. Reassurance and advice about the nature of the problem is important. Help parents recognise that rejection of the child may reinforce the problem by increasing any lack of self-esteem.

5. Liaise with the school about the child’s progress and general behaviour. Arrange medical and psychiatric examinations in cases of long-term abuse or where you have reason to believe it will continue.

6. While recognising the risk of being panicked into hasty decisions in a desire to “do something”, you should accept that some severely disturbed youngsters may require referral to special units or admission to residential care. You will be familiar with existing procedures for this in your own area.

7. It may be appropriate to advise teenagers about first aid procedures in the event of an accident involving one of a group of solvent abusers.
Suggestions for Gardaí, including Juvenile Liaison Officers

1. Inform local newsagents, hardware shops and supermarkets about solvent abuse. Warnings about the possibility of shoplifting and thefts from shops, factories, building sites etc. are also important.

2. While it is not an offence to inhale solvents, behaviour while intoxicated can lead to vandalism and acts of violence. In some cases it may be necessary to take an individual into custody and when dealing with an intoxicated person, the emergency procedures on pages 35-37 might be useful. It is particularly important to bear in mind the possibility of a sudden death if abusers are chased away or if an angry confrontation develops.

3. The J.L.O. would seem the best person to undertake the essential task of informing the parents of a child found abusing solvents. For the majority of experimenting or casual abusers, the fact of being brought home by a Garda may be sufficient to deter them from further involvement.

4. The J.L.O. can alert parents, in a quiet informal way, to the dangers of the practice and can offer advice and information on handling the problem.

5. Liaison within a local network comprising the caring agencies, specialist units, voluntary groups and concerned individuals can be useful in deciding whether cases need to be dealt with informally, by way of care proceedings or by prosecutions.
Suggestions for Community and Voluntary Groups

1. Make sure that your availability to provide help and support is widely known in your community. Posters in key areas such as the Post Office, local Pharmacy, Community Notice Board in supermarkets etc. can be useful.

2. Persuade parents in your area not to send youngsters to buy solvent-containing products in local shops on their behalf. Alert local shopkeepers to the dangers of selling solvents to young people.

3. Informal help can often be beneficial. Make use of parents who have had to deal with the problem in their own family. They will have more awareness of the feelings and problems being faced by a family in trouble and can provide valuable support and encouragement.

4. Liaison with local schools and Youth Service, the Gardai, Health Board personnel and other groups is vital. It is very difficult to work effectively in isolation from others who are also concerned with the welfare of young people.

5. Organise alternative activities during the periods of greatest risk for outbreaks of solvent abuse. Encourage as many parents as possible to take an active part in organising their children’s activities. Providing healthy outlets for teenage energy and exuberance is an essential part of prevention. It should not be left to the same small group of dedicated parents each time.
Treatment Agencies and Units

Drug Treatment Centre Board
Trinity Court, 30/31 Pearse Street, Dublin 2.
Telephone: (01) 6771122

Mater Dei Counselling Centre
Clonliffe Road, Dublin 3. Telephone: (01) 8371892

Alcohol and Drug Abuse Treatment Centre
(For Adolescents & Adults)
Arbour House, Douglas Road, Cork. Telephone: (021) 968933

Other useful contacts include

Drug and Addiction Counsellors
Health Education Officers
Community Care Workers, working with the various Health Boards
Juvenile Liaison Officers of An Garda Síochána

Community and Voluntary Groups

Youth Action Project
1A Balcurris Road, Ballymun
Dublin 11. Telephone: (01) 8428071

Waterford Drug Abuse Resource Group
52 Upper Yellow Road, Waterford. Telephone: (051) 73333

Mon, Wed & Fri 10 - 12 noon
Tues & Thur 8 - 10 pm
Community Awareness of Drugs
6 Exchequer Street, Dublin 2.
Telephone: (01) 6792681
Mon - Fri 10am-4pm.

Crosscare Drugs Awareness Programme
The Red House, Clonliffe College
Dublin 3.
Telephone: (01) 8360011

Overseas Groups

Re-Solv. (The Society for the prevention of Solvent and
Volatile Solvent Abuse)
30a High Street,
Stone,
Staffordshire ST15 8AW,
England.
Telephone: (0785) 817885.

Contact Person in Ireland:

Mrs. Rosie Smith
8 George's Place, Dun Laoghaire
Co. Dublin.
Telephone: (01) 2807788
ADDITIONAL SOURCES OF INFORMATION

A. Books

Sniffing Solvents

Solvent Abuse - The Adolescent Epidemic?

B. Reports and Publications

Solvent Abuse - A Report for Professionals working in Scotland. Published by the Scottish Health Education Group and the Intermediate Treatment resource Centre.


Solvent Abuse - A Corporate Approach including guidelines for Professionals and Concerned Individuals.

Obtainable from The Information Officer, Strathclyde Regional Council, 82 West Regent Street, Glasgow G2 2AF.

Dealing with Solvent Misuse by Ian S. Peers.
Available from TACADE (Teachers Advisory Council on Alcohol and Drug Education), Furness House, Trafford Road, Salford, Manchester. Tel: 0044 161 7458925.

Teaching about a Volatile Situation.
Institute for the Study of Drug Dependence (I.S.D.D.),
1 - 4 Hatton Place, Hatton Garden, London EC1 8ND.


An introduction to the practice, prevalence and chemical toxicology of volatile solvent abuse.


Petrol sniffer’s encephalopathy: study of 25 patients.

Drinking among postprimary school pupils.


Helping the Sniffers by R. Ives,
from Druglink - Sept./Oct. 1990 (Pages 10 -12)

by Ramsey J., Bloor K., & Anderson R.
Druglink - Sept./Oct. 1990. (Pages 8-9)
C. Training and Course Material

"Drug Questions - Local Answers?"
A multidisciplinary course produced by the Health Promotion Unit, 1988.

DAY Programme - Drink Awareness for Youth
The aim of the pack is to assist young people in developing for themselves the personal and social skills necessary to make informed, healthy and responsible decisions regarding their use of alcohol. National Youth Council of Ireland, 3 Montague Street, Dublin 2. Telephone: (01) 4784122/4784407

Solvent Abuse Programme, prepared by the National Youth Council of Ireland, the Health Promotion Unit (Department of Health) and the Youth Affairs Section (Department of Education).

On my own two feet - educational resource material for substance abuse prevention. Produced by the Psychological Service Department of Education, Health Promotion Unit, Department of Health and the Mater Dei Counselling Centre.

Available through the Substance Abuse Prevention Project (SAPP), Marino Institute of Education, Fairview, Dublin 3. ISBN 0-86387-0449

D. Audio-Visual Material

Available on loan from the Health Promotion Unit
Phone: (01) 6714711.

“A Bombshell - What every parent should know about solvent Abuse” ReSolv/Royal Society of Medicine.

“Don’t Let Them Have It” ReSolv. for retailers.

“Solvent Abuse - the Adolescent Epidemic” ReSolv. for professionals.
E. Leaflets and Information Packs

ReSolv Information Pack on sniffing solvents and volatile substance abuse.
Available from ReSolv. Chicken! Video with work book.

"Opening our eyes and facing glue sniffing together". Ballymun Youth Action Project.


‘Inhalants” - TAC Facts 1987, TACADE.

"Sniffing it - Snuffing it". by M. H. Scholtes, Hope Press Publications.

"What to do about glue sniffing". Health Education Council (London).


“Understanding Drugs” Health Promotion Unit.

“Facts about Drug Abuse in Ireland” Health Promotion Unit.


“Living with addiction (1)” Ballymun Youth Action Project.

“Living with addiction (2)” Ballymun Youth Action Project.
**APPENDIX 1**

**Solvent component of some abused products**

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Solvent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact adhesives</td>
<td>Toluene, acetone</td>
</tr>
<tr>
<td>Model aeroplane cement</td>
<td>Trichloroethylene</td>
</tr>
<tr>
<td>Dry-cleaning fluids, degreasing agents</td>
<td>Trichloroethylene, trichloroethane, carbon tetrachloride.</td>
</tr>
<tr>
<td>Typewriter correction fluids and thinners.</td>
<td>Trichloroethane.</td>
</tr>
<tr>
<td>Shoe dye and conditioner</td>
<td>Acetone, methylene chloride.</td>
</tr>
<tr>
<td>Nail polish remover</td>
<td>Acetone, amylacetate.</td>
</tr>
<tr>
<td>Gas lighter refills, bottled gas.</td>
<td>Butane, isobutane, propane.</td>
</tr>
<tr>
<td>Aerosol sprays (deodorants, paints, pain killing sprays, fly sprays).</td>
<td>Dichlorodifluoromethane (halons, or freons or C.F.C.).</td>
</tr>
<tr>
<td>Paint strippers</td>
<td>Deodorised butane and propane, Methylene chloride.</td>
</tr>
<tr>
<td>Fire extinguishers</td>
<td>Bromochlorodifluoromethane (B.C.F.).</td>
</tr>
<tr>
<td>Lacquer paints, vehicle finishing paints and thinners.</td>
<td>Toluene, n-hexane, xylene.</td>
</tr>
</tbody>
</table>
Information for medical personnel

The clinical features of acute solvent intoxication are similar to those of alcohol intoxication. Other symptoms can include tinnitus, blurring of vision, ataxia, headache, abdominal and chest pains, bronchospasm, nausea and vomiting. A number of solvent abusers may require emergency treatment because of trauma after falls or burns. In some cases a delirious state involving clouding of consciousness, delusional behaviour, feelings of omnipotence and hallucinations may be noted.

Fatalities are most likely to happen during this acute phase and can arise in different ways:

(1) Respiratory depression can occur with any solvent and could be described as the result of an overdose.

(2) Deaths may also occur due to the rapid cooling of the back of the throat by aerosols and butane which can cause vagal inhibition. This cooling effect could also cause death as a consequence of laryngeal oedema.

(3) Butane, aerosols and the solvent in typewriter correction fluid can sensitise the heart to the effects of adrenaline so that cardiac arrest occurs if the victim is in stress or engages in strenuous physical activity.

(4) Deaths have also occurred due to laryngospasm when aerosols and butane gas have been sprayed directly into the mouth.

Acute intoxication is usually a brief and self-limiting condition which can be adequately dealt with conservatively with fresh air, and oxygen if required. Cardiac and
respiratory emergencies will require appropriate resuscitative and supportive measures. Anaesthetists should be aware of the risk of an interaction involving Halothane in patients who have been exposed to trichloroethane-containing products (e.g. typewriter correction fluid.)

**Chronic Solvent Abuse**

Presenting symptoms may include abdominal pain (often without abnormal signs), nausea, vomiting, haematemesis, haematuria, pyuria and proteinuria. Neurologically the signs are mainly those of cerebellar deficits such as ataxia, tremor, nystagmus and titubation. Muscular weakness mimicking the Guillain Barre Syndrome and depressed cognitive functioning have also been reported. In the majority of cases no specific treatment is indicated because there is evidence that the signs of cerebellar dysfunction are reversed after cessation of the abuse. Aspects of general health should be attended to, e.g. the consequences of anorexia. Mild sedation may be necessary in cases where the distress of withdrawal symptoms (similar to those found with any CNS depressant) are likely to result in a relapse into abuse. In certain cases a neurological examination, tests for liver and renal function, as well as toxicological analyses may be indicated before referral of the individual and the family to a counselling service. In rare cases, referral to the psychiatric services may be necessary.
1. **DO NOT PANIC.** Approach the abuser in a firm, caring way avoiding confrontation. **DO NOT CHASE AFTER SOLVENT ABUSERS** as physical activity or stress may cause heart failure if particular types of solvent have been inhaled.

2. Remove the solvent and all solvent-stained materials especially from around the nose and mouth. If indoors, open windows and doors to improve ventilation.

3. Treating the abuser:-

   (i) **Check Breathing and Circulation**
   Check that the airway is open and the abuser is breathing. If not, begin the ABC of resuscitation (see pages 36 and 37).

   (ii) **If the abuser is breathing but unconscious, convulsed, collapsed or suffering severe chest pains**
   - place the abuser in the **recovery position** (see ABC of resuscitation). However if a spinal injury is suspected **DO NOT MOVE** unless difficulties in breathing make it essential.
   - Cover with a blanket or coat to maintain body heat. Do not interfere with breathing by placing covers close to the nose and mouth.
   - Call for help. Send someone to call the emergency services at 999 alerting the ambulance crew that solvent abuse is suspected. Send any solvent product to the hospital with the ambulance.
— Stay with the abuser and check that breathing is maintained. If breathing stops commence the ABC of resuscitation.

(iii) If the abuser is conscious but intoxicated

— Loosen clothing around the neck and chest. Advise the abuser to breathe deeply and slowly.

— If hyperventilation (very rapid breathing) occurs, instruct the abuser to breathe into a paper bag or into cupped hands until the rate of breathing slows to normal.

— Give nothing to eat or drink.

— Stay with the person until they are sober and if possible inform the parents.
**BREATHING**

Listen over the airway. Look to see if chest rises and falls. If not breathing, begin mouth-to-mouth breathing at once.

Pinch nose closed. Seal your lips around the victim's mouth and blow into his lungs. Give 2 quick breaths.

Watch to see his chest rise. Remove your mouth to let air escape from his lungs. Feel victim's pulse.

Feel the pulse beside the adam's apple, at the side of the neck, below the jaw. If no pulse present, start chest compression. Place heel of one hand approx. two inches above the lower end of the breast bone. Put your other hand on top and press downwards about 2 inches. Only the heel of one hand should be in contact with the breast bone. Pressure should be even and regular.

**CIRCULATION**

One rescuer 2 breaths for every 15 compressions

Two rescuers 1 breath for every 5 compressions

Compress the chest about 80-100 times per minute. Continue CPR until breathing is restored. Then place him in the recovery position.

NOTE WELL: It is essential to commence the ABC of Resuscitation immediately and to continue until medical help arrives.